TEACHER EDUCATION

CHALLENGES AND OPPORTUNITIES

An Anthology of Selected Papers Presented at
National Seminar on March 5, 2015

Organized by
GHG Khalsa College of Education, Gurusar Sadhar (Ludhiana) Pb.

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TWENTYFIRST CENTURY PUBLICATIONS
PATIALA
MESSAGE

I feel privileged that G.H.G Khalsa College of Education; Gurursar Sadhar, a premier institute recognised for imparting excellence in quality training in the field of teacher education since last 60 years, is organising a national level seminar on the theme, 'Teacher Education: Challenges and Opportunities' and also a panel discussion by eminent educationists from different universities and regions to update the teacher educators regarding implications of new norms by NCTE. This strives to become a meaningful platform to channelize the hidden potential and untapped energy of the students and the staff concerned.

I take this occasion to accolade the academic and administrative staff of the institution for putting their best efforts in the publication of this compilation. I extend my warm felicitation to the Principal and the staff who have enriched this publication with their grandiose concepts and ideas.
Dr. S.S. Thind  
Secretary  
Managing Committee  
G.H.G. Khalsa Institutes

MESSAGE

I am pleased to know that G.H.G Khalsa College of Education Gurusar Sadhar is organising a National seminar on 'Teacher Education: Challenges and Opportunities' and a panel discussion by eminent educationists from different universities. It makes me feel proud that this institute has always been a front runner in all educational endeavours and has been a role model for teacher education institutions.

The higher education system in India has gone through a sea change in the past century, essentially leading to one of the largest system of its kind in the world today. Education has the power to promote sustainable development and improve global cooperation-making it an essential foundation for advancement in many areas.

As educators, we are responsible for ensuring an excellent learning experience by providing the planning and resources that culminate to contribute for the achievement of programme outcomes in support of student's overall educational and professional goals.

I sincerely congratulate the laborious efforts of the Principal, Faculty and Students for the publication of the educational inputs of this National Seminar and preserving the valuable thoughts shared on this common podium. I wish this team greater success for scaling newer heights in the field of education.
It's a matter of great pleasure and pride that our college GHG Khalsa College of Education, Gurusar Sadhar is organizing a national seminar on a thought provoking theme 'Teacher Education: Challenges and Opportunities' on March 5, 2015.

The complexities of life have multiplied manifold in the modern world. People seem to have become alienated from 'self, society and nature.' With all the amenities of life one is not able to live a healthy, productive and creative life. There must be education for better living and higher thinking. Teacher educators would need to generate awareness among students for internalizing various strategies expected from the teachers in their classrooms. That's why teacher education in the present scenario is in dire need of transformation. Hence, the present venture will be an eye opener for the teaching personnel.

I am hopeful that the readers of this volume will be highly benefitted by the contribution made by the eminent educationists and learned faculty in their field of expertise.

I wish a greater success for my institute on this event and all the very best for untiring efforts by the editors and academic advisory board to publish this book.
Globalized trend of privatization, liberalization, digitalization and upsurge of knowledge economy impinges on the educational institutions to provide competent, skilled, creative and sincere human resources. It ultimately put emphasis on the teacher education to produce effective teachers who can lead the students to face the challenges of the present and future world. The introduction of RTE, SSA, RMSA, RUSA, NAAC, TEAAC, NITI AYOG etc., reflects India’s anxiety to deliver quality education. Recently, the NCTE has implemented Justice Verma Commission Report by drastically revising the norms & regulations of all the teacher education programmes. The NCTE-2014 Notification has generated hot debate amongst intellectuals of the country regarding the challenges, repercussions and the future of teacher education institutions.

Keeping in mind all above, Our college organized a National Seminar on the theme “Transforming Teacher Education in Changing Scenario” as well as a Penal Discussion on “New Norms for B.Ed. and M.Ed.” on March 05, 2015, in which eminent educationists from different universities like Prof. Anita Rastogi from Jamia Milia Islamia, New Delhi; Dr Romesh Chand, Dean, Education, HPU, Shimla; Prof. S.K.Bawa, Director, International Students & Additional Provost, Pbi. Univ. Patiala; Prof. Rajinder Singh Yadav, Kurukshetra University; Dr J.N. Baliya, Central University, Jammu; Dr N.R. Sharma, Dean, Education, PU, Chandigarh; Dr Amit Kauts, Dean, Education, GNDU, Amritsar; Dr Parmod Kumar from Central University, Jammu etc. enriched the deliberations as resource persons. Large number of Principals, faculty members from various Colleges of Education and Schools actively participated in the deliberations. More than 140 articles were submitted. A book entitled Transforming teacher education in changing scenario containing 56 articles was released in the seminar. Second volume of research journal i.e. GHG Journal of Sixth Thought was also made public. This is the second volume with remaining articles for wider distribution amongst stakeholders.

My sincere gratitude to Mr. Manjit Singh Gill, President, Governing Council and Dr S. S. Thind, Secretary, Managing committee for their whole-hearted cooperation and blessings. I extend my special thanks to all the resource persons, contributors, participants, coordinators, organizing committee, peer-review team, publishers, printers and all those who assisted in this endeavor.

Your suggestions are always welcome! Good Wishes to all the readers.

Pedagogically Yours’
Dr. Harjinder Singh Brar
Principal (Convener),
GHG Khalsa College of Education,
Gurusar Sadhar (Ludhiana) Pb.
Blank
# CONTENTS

<table>
<thead>
<tr>
<th></th>
<th>Title</th>
<th>Page Nos.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Innovations in Teacher Education</td>
<td>1-4</td>
</tr>
<tr>
<td></td>
<td>— Mrs. Harpeet Kaur Taneja &amp; Dr. Harmeet Anand</td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td>Perspectives in Teacher Education</td>
<td>5-9</td>
</tr>
<tr>
<td></td>
<td>— Dr. Parwinderjit Kaur</td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td>Transforming Teacher Education in Changing Scenario</td>
<td>10-15</td>
</tr>
<tr>
<td></td>
<td>— Ms. Shminder Kaur</td>
<td></td>
</tr>
<tr>
<td>4.</td>
<td>Teacher Education in India: Present Scenario</td>
<td>16-20</td>
</tr>
<tr>
<td></td>
<td>— Ms. Kanwaljit Kaur &amp; Ms. Preetika Singla</td>
<td></td>
</tr>
<tr>
<td>5.</td>
<td>Existing Scenario of Pre-Service Teacher Education and a Roadmap for</td>
<td>21-26</td>
</tr>
<tr>
<td></td>
<td>Transforming its Quality</td>
<td></td>
</tr>
<tr>
<td></td>
<td>— Dr. Sarbjit Kaur Ranu &amp; Ms. Satveer Kaur Gill</td>
<td></td>
</tr>
<tr>
<td>6.</td>
<td>Recent Trends in Indian Teacher Education</td>
<td>27-30</td>
</tr>
<tr>
<td></td>
<td>— Mr. Amritpal Singh Benipal</td>
<td></td>
</tr>
<tr>
<td>7.</td>
<td>Transforming Teacher Education Through Technology: Role of Mobile</td>
<td>31-36</td>
</tr>
<tr>
<td></td>
<td>Learning</td>
<td></td>
</tr>
<tr>
<td></td>
<td>— Dr. Vipinder Nagra</td>
<td></td>
</tr>
<tr>
<td></td>
<td>— Mr. Sudhir</td>
<td></td>
</tr>
<tr>
<td>9.</td>
<td>Role of Teacher in Changing Scenario</td>
<td>40-43</td>
</tr>
<tr>
<td></td>
<td>— Mr. Arashdeep Singh</td>
<td></td>
</tr>
<tr>
<td>10.</td>
<td>Teacher Education in the Indian Scenario</td>
<td>44-48</td>
</tr>
<tr>
<td></td>
<td>— Mrs. Geeta Kundi</td>
<td></td>
</tr>
<tr>
<td>11.</td>
<td>Innovative Practices in Teacher Education</td>
<td>49-54</td>
</tr>
<tr>
<td></td>
<td>— Mrs. Kulwanti Kaur</td>
<td></td>
</tr>
<tr>
<td>12.</td>
<td>Two Year B.Ed and M.Ed Programme : A Necessity</td>
<td>55-58</td>
</tr>
<tr>
<td></td>
<td>— Dr. Khushwinder Kaur</td>
<td></td>
</tr>
<tr>
<td>13.</td>
<td>Recent Trends in Teacher Education</td>
<td>59-62</td>
</tr>
<tr>
<td></td>
<td>— Ms. Bimaljit Kaur</td>
<td></td>
</tr>
<tr>
<td>14.</td>
<td>Innovations in Teacher Education</td>
<td>63-68</td>
</tr>
<tr>
<td></td>
<td>— Ms. Monika Rani</td>
<td></td>
</tr>
<tr>
<td>15.</td>
<td>Issues in Teacher Education</td>
<td>69-71</td>
</tr>
<tr>
<td></td>
<td>— Ms. Tejinder Kaur</td>
<td></td>
</tr>
<tr>
<td>16.</td>
<td>Relationship between Professional Commitment and Motivation of</td>
<td>72-77</td>
</tr>
<tr>
<td></td>
<td>Secondary School Teachers of Punjab</td>
<td></td>
</tr>
<tr>
<td></td>
<td>— Dr. Khushwinder Kaur &amp; Dr. Pushpinder Kaur</td>
<td></td>
</tr>
</tbody>
</table>
17. Innovations in Teacher Education  
   — Ms. Deepi Aggarwal  
   78-83

18. Creative Drama Method of Teaching: A Qualitative Innovation in Teaching Learning Process  
   — Dr. Anita Sharma  
   84-86

19. Attitude towards ICT Literacy and Implementation by Secondary School Teachers  
   — Dr. Anita Menon  
   87-90

20. Quality Issues in Teacher Education  
   — Dr. Parvinder Kaur  
   91-95

21. Shifting Paradigms of Instruction: Implication for Reforms in Teacher’s Role  
   — Ms. Reetu Sharma & Mrs. Malti  
   96-98

22. Changing Context of Teacher Education  
   — Ms. Sukhjitpal Kaur  
   99-103

23. Teacher Education in the Age of Globalization — A Study of Present Scenario of Teacher Education in India  
   — Mr. Rohit Jindal & Ms. Maneet Kaur  
   104-110

24. Innovations in Teacher Education  
   — Ms. NeelamKumari and Ms. Lakshmi Rani  
   111-114

25. Role of Teacher to Meet the Challenges in the Future  
   — Ms. Manjinder Singh & Ms. Pardeep Kaur  
   115-119

26. Role of Communication Skills in Teaching Learning Process  
   — Ms. Neelam & Ms. Harpreet Kaur  
   120-122

27. Innovative Practices in Teacher Education  
   — Mrs. Sonia Jindal  
   123-126

28. Contribution of Teacher Training Programme  
   — Ms. Ritika  
   127-130

29. The Council of Boards of School Education and Adolescence Education Programme  
   — Ms. Saranjeet Kaur  
   131-134

30. Professional Competence in Relation to Attitude Towards Teaching  
   — Ms. Gursangeet Kaur & Dr. Jagdish Kaur Bains  
   135-139

31. E-Communication  
   — Ms. Harpreet Kaur, & Ms. Gagandeep  
   140-145

32. Teacher Education Through Distance Mode  
   — Mr. Sukhdeep Singh Loomba & Ms. Navkiran Kaur  
   146-148

33. Career Long Learning Through Continuous Professional Development  
   — Ms. Monika Sharma  
   149-155

34. Innovations in Teacher-Education  
   — Ms. Neha Singla  
   156-162
35. **School Education Vs Teacher Education: Leader or Follower** 163-166
   — Ms. Cinimol Joseph & Jins Thomas

36. **Innovations in Teacher Education** 167-170
   — Ms. Inderpreet Kaur

37. **Consequences of Two Years Program in M.Ed. & B.Ed.** 171-173
   — Ms. Mandeep Kaur

38. **Need of Educational Technology for the Betterment of Teacher Education** 174-178
   — Ms. Manpreet Kaur & Ms. Jaspreet Kaur

39. **Transforming Teacher Education Institutions Through the System of E-Governance: Possibilities and Challenges** 179-186
   — Shubneet Sidhu

40. **Drastic Changes Made in Teacher’s Education Courses to Make it More Qualitative** 187-188
   — Dr. Kamaljit Kaur & Ms. Amandeep Kaur

41. **Quality and Excellence in Teacher Education: Issues & Challenges in India** 189-194
   — Ms. Neha Vats

42. **Trends and Innovations in Teacher Education** 195-199
   — Ms. Randeep Kaur & Ms. Jagdeep Kaur

43. **Innovation in Teacher Education** 200-203
   — Ms. Kiran Bala

44. **Teacher Education in Changing Scenario** 204-207
   — Ms. Sandhya Rani

45. **Teacher Education in Changing Scenario** 208-211
   — Ms. Neha Sachdeva

46. **Professional Ethics in Teacher Education** 212-214
   — Ms. Vanika Nagpal

47. **E-Learning in Present Scenario** 215-218
   — Mr. Anurag Amar

48. **Innovations in Teacher Education** 219-222
   — Mr. Navjot Singh & Ms. Kamaljit Kaur

49. **Adolescence Education Programme** 223-228
   — Ms. Ramandeep Kaur

50. **Transforming Teacher Education in Changing Scenario** 229-230
   — Dr. Ravinder Kaur

51. **Transforming Teacher Education** 231-233
   — Ms. Payal Kukreja

52. **Innovations in Teacher Education** 234-237
   — Ms. Manju Walia & Ms. Neeru Gupta
53. Refocussing Teacher Education: Role of Statutory Bodies 238-242
   — Dr. Ashima Bhandari
54. Transforming Teacher Education in Changing Scenario 243-246
   — Ms. Meenakshi Sharma
55. The Role of Teacher Educators in Changing Scenario 247-251
   — Ms. Beant Kaur & Ms. Amandeep Kaur
56. Recent Trends in Teacher Education 252-254
   — Ms. Navkiran Kaur & Mr. Harjit Singh
57. Role of ICT in Higher Education 255-262
   — Ms. Mini Sharma
58. Semester System Good or Bad 263-267
   — Ms. Navjot Kaur & Ms. Gundeep Kaur
59. Role of Computer Assisted Instruction in School Education 268-271
   — Ms. Jagjeet Kaur & Ms. Khushwinder Kaur
60. Impact of Mobile Learning on Student Education 272-274
   — Ms. Seema Gulati & Ms. Gurvinder Kaur
61. Emerging Trend and Innovations in Teacher Education 275-278
   — Ms. Deepa Singh & Ms. Manisha
62. The E-5 Instructional Model: An Innovation in Teacher Education 279-283
   — Ms. Harleen Kaur
63. ICT Based Learning in Higher Education 284-287
   — Ms. Inderjeet Kaur & Ms. Gagandeep Kaur
64. Teacher Education in India 288-293
   — Ms. Ramandeep Kaur
65. E-Communication 294-299
   — Ms. Harpreet Kaur & Ms. Gagandeep
66. Teacher Education Through Distance Education 300-303
   — Ms. Amanpreet Kaur & Ms. Gurpreet Kaur
67. Innovations in Teacher Education 304-309
   — Mr. Bikramjit Singh & Mr. Gurpreet Singh
68. Total Quality Management - An Imminent Need for Teacher Education 310-314
   — Ms. Jasvir Kaur
69. Innovations in Teacher Education 315-319
   — Ms. Jaswinder Kaur & Mr. Satkarsattar Singh
70. Problems in Teacher Education 320-322
   — Ms. Pawandeep Kaur & Mr. Ajay Kumar
71. Teaching Practice Weakest Link in Teacher Education 323-226
   — Dr. Pargat Singh Garcha
72. **ICT: Boon for Quality Enhancement in Teacher Education** 327-330
    — *Dr. Satwant Kaur*

73. **Innovative Teaching Practices** 331-333
    — *Sarabjit Kaur*

74. **Innovations in Teacher Education** 334-338
    — *Ms. Yogita*

75. **Innovation in Teacher Education** 339-344
    — *Dr. Pawan Kumar*

76. **Role of Teacher in Present Scenario: Follower to Leader** 345-347
    — *Mr. Gurwinder Singh*
INNOVATIONS IN TEACHER EDUCATION

Mrs. Harpeet Kaur Taneja* & Dr. Harmeet Anand**

The teacher education programme is said to be mechanical, stereotyped, traditional, dull, old-fashioned and passive unable to prepare effective and competent teachers. An innovative approach in teacher education called Wholistic Teacher Education has emerged with a view to improve present teacher education programme. The Wholistic view of thinking, which tries to encompass and integrate all aspects and dimensions of life, is more comprehensive, more practical, more student-centered, and more learning environment-centered and aims at all-round development of the individual. This method, unlike the old teacher education, approaches the real problem situation first and then moves to practice and finally comes to approaches the real problem situation first and then moves to practice and finally comes to theory. It uses integrated approach for making teacher education programme more effective.

“The highest function of education is to bring about an integrated individual who is capable of dealing with life as a whole”

(J. Krishnamurti)

Quality of human resource and manpower is largely dependent on the unfolding of human personality and increased opportunities for transmission of their interest, attitude, and values. This task is best performed by a sound system of education. Today the system of education needs to respond not only to national socioeconomic and political needs but also enable us to anticipate the system, which could fulfill the larger goals of human empowerment in the wake of globalization and knowledge explosion. Decline in quality in higher education can be ascribed to a number of reasons, which includes ever-growing number of students in classes, limited resources, and inadequate involvement of students in teaching learning; use of conventional methods and media of teaching learning; lack of autonomy to learners and institution; lack of feedback mechanism; lack of commitment among faculty and staff; lack of accountability; lack of systematic internal monitoring and review procedure; lack of management commitment for support, etc. The quality of education we provide to our children depends to a large extent upon the quality of teachers we inject into the education system, which in turn depends on the quality of teachers’ preparation programs. Therefore, programs are needed to update the teachers from time-to-time. The quality of output of any educational system depends to large extent upon the quality of instructional process, which in turn depends on the competence, commitment and resourcefulness of teachers. Teaching profession is a very challenging one, as each day and each classroom is a novel experience in itself. Each classroom offers ample opportunities to the teacher for learning through his/her experience. An innovative approach in teacher education called Wholistic teacher education has emerged with a view to improve present teacher education programme.

* Principal, Garden Valley International School, Machhiwara Sahib
* Principal, Mata Sahib Kaur Khalsa College of Education
of today is teachers who can ensure quality education with professional perfection; this can be attained through an integrated approach viz. Wholistic Teacher Education. The basic concern of wholistic teacher education is to enable teachers to make sense of life and develop their own potential.

The Wholistic concept refers to the idea that all the properties of a given system in any field of study cannot be determined or explained by the sum of its component parts. Instead, the system as a whole determines how its parts behave. A wholistic view of thinking tries to encompass and integrate all the aspects and dimensions of life. Wholistic teacher education aims at helping the pupil-teachers in all aspects. Teacher education with wholistic perspective is concerned with the all-round development of individual. This method, unlike the old teacher education, approaches the real problem situation first and then moves to practice and finally comes to theory. It uses integrated approach for making teacher education programme more effective.

**Wholistic Teacher Education imbibes**

- Knowledge, Trust, Comprehensive, Openness, Skills, Responsibility, Craftsmanship, Honesty, Self-learning, Sincerity, Collaborative learning, Politeness, Freedom to commit errors, Concerns, Risk taking, Autonomy, Physical development, Leadership, Mental development, Comradeship, Emotional development, Social development, Aesthetic development, Spiritual development, etc.

**Features of Wholistic Teacher Education**

- Learn and learning situation-centered, Learning through life situation, Autonomy of learning, Peer collaboration, Sharing of ideas and experience, Emphasis on experience, Dialogue an important tool, Integrated approach to teaching & learning, Practical rather than theoretical, Defragmented education, All round development.

**Why Traditional Teacher Education needs Wholistic Views**

- **Stereotyped Teacher Education**: The present system of teacher education is very dogmatic and stereotyped. It is confined to four walls of traditional education without any innovation. There is only one way of communication because teacher delivers lectures and creates a situation of monologue rather than dialogue. Students are just passive listeners instead of active learners.

- **Mechanical and Instrumental Procedure**: The present education system is mechanical and instrumental but the irony is that we are using this system on humans not on machines. Human nature always changes but this system fits on robots rather than teachers. No room is left for creative thinking for students.

- **Emphasis on theory rather than Practice**: The present education system lays stress on theory rather than practice. But teaching is such a profession where practice is more needed than theory. Rote learning is emphasized. No practical situations are there to make them think practically. Only theory is mugged or stuffed in their brains.

- **Isolation of Teacher Education and School Education**: Teacher education in our country is going in one direction and school education is going in another direction. There should be coordination between teacher and school education because it is the teacher alone who are
Innovations in Teacher Education

going to teach in schools.

**Fragmented Teacher Education:** There is lack of wholeness in the present system of education. It is divided into various fragments without any coordination. That is why we are unable to produce a whole a teacher.

**How traditional teacher education can be shifted to wholistic teacher education**

First of all we have to adopt flexible notions about teaching, training and learning in order to ensure wholistic teacher education. We have to take strong steps such as:

**Facing real teaching situation first, then theoretical knowledge:** As per the wholistic view instead of imparting the theoretical knowledge first, teachers should face the problem situations and then accordingly should proceed further. They themselves should invent the ways of overcoming the problems that come in the way of the teaching-learning process.

**Encourage motivating learning environment:** The teacher-training programme that has been replaced with the teacher education should be termed as teacher motivation with a view to motivate learning environment.

**Flexible notions about teaching learning:** The notions about teaching learning should not be rigid but flexible i.e. any new and more practical ways should always be welcomed and given due place.

**Connecting knowledge to outside the school:** Knowledge should not be confined to school boundaries. Instead, it should have its branches outside the boundary of the schools.

**Use ICT for joyful learning:** The use of modern information and technological advancement should be made to make the learning more joyful for maximum learning and minimum teaching.

**Self-learning:** The learners should be inspired towards self-learning, self-assessment, self-understanding and self-evaluation

**Preparing the teacher to transmit the curriculum based on real life situations:** The teacher should be prepared to design and transmit the curriculum in such a way that it enables the students to face real life situations.

**Moving towards full teaching responsibility:** Practice teaching should be viewed as a continuum of filed experiences beginning with observation.

**Internship in teacher education:** There should be internship in teacher educations as there is in medical stream to make teacher education more practical and effective. During the period of internship the teachers will be able to acquire all the skills and functional understanding of education psychology, methodology, instructional material and teaching aids with professional sincerity and professional ethics as the teachers will feel the real situation of teaching.

**Making examination system more comprehensive and practical:** The system of examination should be comprehensive and practical-oriented and not merely answering the questions.

**Integration among various aspects of teaching-learning:** Teacher education should be designed to achieve wholistic aims. For this lesson planning, lesson delivery, classroom situation analysis, psychological testing and experiments, guidance and counseling, diagnostic and remedial teaching, work experience, field experience, co-curricular activities, evaluation of student’s progress etc. should be integrated.

**Education should be imbibed with management:** Classroom management, school
management, administrative management etc are the areas in which more attentions to be paid. For example, in order to know the class management, things to look for might be seating arrangement, keeping attendance record, organizing assembly, timetable arrangement, library and laboratory utilization, making examination system more comprehensive and practical maintenance of records and registers, blackboards, notice-boards etc.

**Breaking the isolation by collaboration between universities, teacher-training colleges and schools:** The process of teacher education is a combined effort, Universities, teacher-training colleges and schools, all should work together to make this process successful.

**Coordination and cooperation among teachers and society:** Teacher education should be of such type, which would cater to the needs of the society.

**Strengthening pre-service and in-service teacher training programme:** Pre-service teacher education is really necessary to develop teaching competence and skills in the young generation for taking up the job of teaching. While in-service teacher education is primarily meant for serving teachers, it consists of all those courses and activities in which a serving teacher may get the training so as to brush-up and refresh their professional knowledge and skills.

**Integrated approach of teaching:** Instead of discipline-based and interdisciplinary to teaching, integrated approach to teaching should be preferred. For example:

Since ages teaching profession is considered as the noblest profession and the society is highly obliged to the teachers for shaping the future citizens of the country. Teacher education is the most important topic but generally it is neglected. We should not talk separately about microteaching, team-teaching, stimulated teaching etc, but should talk about wholistic view of teacher education to improve quality. For this purpose there should be internship programmes. Also there should be collaboration of universities, colleges and schools in order to make the teaching-learning process successful. The above paper lays emphasis on wholistic view of teacher education because no stone should be left unturned in making the venture of teacher education a success. To sum up, it is remarkable that the shortcomings of traditional teacher education should be overcome to pave the way for wholistic view of teacher education.

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Teacher Education in India holds the key to quality in schooling, particularly in the context of a fast expanding and diversifying school system. Nowadays the field of education is not only limited with books but has broadened in various new horizons. Development and changes in education have affected teacher education necessitating review and reforms. The pre-service and in-service teacher education programs have shown paradigm shift with its emphasis on globalization and individualization. Teacher education program should be structured and modified in a way that enables them to respond dynamically to the new problems and challenges in the field of education, then only teacher can help in national development.

Today’s world is rapidly moving towards a more open and global society, bringing opportunities for economic growth, peace, human rights and international partnership, but also creating new sets of problems related to changing patterns of labour, multi-cultural societies and environmental disruption. Knowledge is dynamic: what is true today, may have no value tomorrow. At the same time, access to information is perceived to be vital to economic development and power. The increasing variety of media sources and growing amount of accessible data create a situation in which the individual or community at the receiver end is increasingly becoming responsible for the selection of relevant, useful and accurate information, a responsibility requiring critical media awareness. Research on teacher education in India has increased greatly in the last 15 years. A community of professors from several institutions has developed the capability to conduct coordinated large-scale studies and to prepare doctoral students. The process of cultural borrowing greatly influences the structure and conduct of teacher education as well as the substance and design of the research. Most of the studies are constructed to test the fit of North American theories and innovations within the Indian cultural context (Joyce & Showers, 1985).

Teacher education system itself is in a mode of rapid expansion and diversification. Pressures of the contemporary age require people, communities and institutions to continually develop and utilise different kinds of knowledge frameworks, value systems, intelligences and skills in order to make sense of, adapt to and contribute to change in constructive and non-violent ways. There is a need for people to learn how to deal with the changing demands of our society and at the same time, develop the capacity that allows them to change in order to take control. Learning has become an essential condition for personal and societal growth and development. The report of the Delors Commission defines the vision of the coming century as one “in which the pursuit of learning is valued by individuals and by authorities all over the world, not only as a means to an end, but also as an end in itself” (Delors et.al., 1996). The creation of a statutory body like NCTE for accrediting programmes and institutions and for quality assurance in teacher education signifies
the wide acknowledgement of the criticality of quality in teacher education. In order to ensure that teacher education practices do not regress into routine processes, that on the other hand, they remain dynamic, vibrant and innovative, it is imperative that there is a need to build a firm research foundation for institutional practices in teacher education. This is all the more so, since teacher education is not merely to serve a reactive role to changes in school system, but it has to show the direction and set the pace for those very changes.

Kothari commission has very rightly said, “The destiny of India is being shaped in its classrooms.” Classroom efficiency in turn depends on teacher education. So lots of efforts should be made to improve teacher education. It is a program related with teacher proficiency and competence that would make them competent enough to face new challenges in the education. It demands understanding with investigative minds, assimilating the required transformations, accommodating and responding to the universal needs.

According to NCTE (1998) teacher is the most important element in any educational program. He plays a central role in implementation of educational process at any stage as the level of achievement of learner is determined by teacher competence. So the quality of education basically depends on the quality of teachers. Teacher education is a continuous process and its pre-service and in-service components are complimentary to each other. Education is instrumental in the preparation of teachers who can in their practice ensure transformative learning - where teacher and learner, learner and learner are co-constructors of knowledge.

Teacher education must create necessary awareness among teachers about their new roles and responsibilities. Education of teachers needs to strengthen and stress upon the main attributes of a profession, such as, the systematic theory, rigorous training over a specified duration, authority, community sanction, ethical code and culture, generating knowledge through research and specialization. It is acknowledged that formal professional training on continuous basis is necessary for becoming a good teacher as it caters to the development of one’s personality and sharpening of communication skills and commitment to a code of conduct.

Some Prospectives in Teacher Education

The new form of teacher education has had a significant positive impact on teachers’ beliefs and practices, students’ learning, and on the implementation of education reforms. Innovation is usually understood as the introduction of something new and useful, like introducing new methods, techniques, or practices or new or altered products and services. Schools or teacher education institutions can carry out innovations or experimentation on any aspect of their work related to teaching-learning, training or management of schools in order to improve efficiency of the institution to overcome problems and difficulties, they face in day to day functioning.

The present structure of teacher education is supported by a network of national, provincial and district level resource institutions working together to enhance the quality and effectiveness of teacher preparation programs at the pre-service level and also through in-service programs for serving teachers throughout the country. Pre-service teachers should be able to teach confidently in their domain by using new pedagogical approaches that are appropriate to their specific student’s requirements and also commensurate with the capabilities of students. They should be conversant with the learning stages of their students and also be critical, compassionate and socially engaged
knowledge imparter who can contribute in the process of teaching improvement and social change (Cochran-Smith, 2000).

In new arena a teacher must possess general pedagogical knowledge. This includes knowledge of learning environments and instructional strategies; classroom management; and knowledge of learners and learning. The subject-matter knowledge, knowledge of content and substantive structures and syntactic structures Knowledge of student context and a disposition to find out more about students, their families, and their schools in the day-to-day work of the schools should become the part of teacher duties. A multicultural perspective in teacher preparation is crucial for an effective program of teacher education and his professional development.

The modern perspectives demand knowledge and attitudes that support political and social justice as social realities. It makes teachers very important agents of social change. Teacher education is now becoming more complex to the emerging demands from the school system. Because the changing educational needs of the student and advancement in technology has widen the area of responsibilities of the teacher. Therefore, teacher has to perform various roles like encouraging, supporting and facilitating in teaching-learning situations which enables learners (students) to discover their talents, to realize their physical and intellectual potentialities to the fullest, to develop character and desirable social and human values to function as responsible citizens. According to Singh (2014), there is a need to train teachers with new perspectives. The training is needed at both pre-service and in-service levels such as:

**Redesigning the curriculum**: The courses of studies in theory and practice should be restructured. For this research should be conducted comprehensively to realize the goals of teacher education. The results of these researches should be given due importance in designing the curriculum of teacher education.

**Innovative methods of teaching**: The method of teaching in the teacher education should be reorganized according to the changing demand of education system. Special innovative programmes like seminars, workshops, conferences, projects and discussions should be organized regularly for the improvement of teaching learning process in various fields. The professional attitude should be developed by organizing various types of facilities like social work, field work, surveys, laboratory and other co-curricular activities.

**Regular inspections**: Regular inspections should be done to ensure quality in teacher education. The affiliating bodies for teacher education should frame such parameters which can enhance the teacher education program in qualitative aspect rather than quantitative aspect.

**Use of ICT**: Today we have competent teachers who have a whole new set of resources and techniques that evolve around the use of technology. Technological aid should not be seen as separate tool in learning rather it should be taken as an integral part in effective pedagogical process. Knowledge and skills on how to use technology in the curriculum. In a 2001 article in *Language Arts*, Evangeline Pianfetti lists a number of “virtual opportunities for professional development,” and also a number of Internet sites with information about grant providers that support professional development efforts to educate teachers about new technologies in the classroom.

**Bridging the gap between demand and supply**: State Education department can have
planning unit which can help in regulating the demand and supply of teachers at various levels of schools. As it has been observed that there is big gap between demand and supply in various states. The whole scenario of education is changing after Right to Education Act 2009, the demand for teachers at various level has tremendously increased. Moreover today is the time for inclusive education which leads to demand of special teachers/educators and we all are aware of the fact that there is scarcity of special educators. So a balance should to be maintained for better results.

Real teaching practice: The training or the teaching practice of pupil teachers held in the school should be closely associated with teaching staff in education collages in planning the content to be covered and method to be used by the pupil teachers to have useful implications for school rather than disturbing their routine schedule. Moreover the real teaching practice should be supervised by the teachers in a systematic way so that it fulfills the objectives of teacher training.

Demonstration school: It should be made mandatory that a teacher education department/institution should have a demonstration school which should have certain facilities such as laboratories, libraries and other important audiovisual equipments. This can be of great help to formulate the policies, program for refining the education system.

Teacher exchange programs: Extension programs and exchange programs with different universities within India and outside India enrich the teacher education programme enormously. So such programs should be sponsored by government and university so that different academicians from different disciplines can contribute in the qualitative aspect of teacher education.

Orientation programs: Refresher courses, general orientation courses, summer camps, seminars, conferences, workshops, symposium should be encouraged for the professional growth of in-service teachers. All the educationists can be oriented with new developments, changes, innovations in the field of education.

Correspondence courses: The whole system of education is changing at a greater speed. The teacher education department should conduct research on teaching curriculum and evaluation procedure in the corresponding university departments. Rigorous screening and strict admission procedure should be followed for correspondence courses for teacher education but the norms for the continuing education of in-service teachers should be relaxed.

Inclusive education: Inclusive education should be made an integral part of teacher education curriculum so that the pupil teachers are sensitized with children with special needs. Special inservice programmes like workshops/seminars should be arranged related with this topic. Teacher education department/institute should be connected with real life situations of classrooms so that the teacher educators and pupil teachers both get acquainted with different problems of classroom situations.

Conclusion

Since the teacher is the pivot of the entire educational system and is the main catalytic agent for introducing desirable changes in the teaching learning process, all attempts need be made for motivating teachers to become innovative and creative. Once teachers have a thorough understanding of the teaching content, they would never lose that expertise. So knowledge about
the subject matter and feeling comfortable in delivery are equally important for good teachers. It has been recognized that teacher education program should be structured and modified in a way that enables them to respond dynamically to the new problems and challenges in the field of education, then only teacher can help in national development.

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TRANSFORMING TEACHER EDUCATION IN CHANGING SCENARIO

Ms. Shminder Kaur*

Teacher education is an integral component of the educational system of any nation. It is intimately connected with society and is conditioned by the ethos, culture and character of a nation. The task of bringing qualitative change in institutional efficacy of the teacher education system in itself is a huge and challenging one. Various Commissions and Committees appointed by the Central and the State Governments in recent decades have invariably emphasised the need for quality teacher education suited to the needs of the educational system. The teacher education programmes shall focus on competencies and commitment in much greater magnitude in future. Gradually an indigenous approach and strategy would emanate and replace the alien practices that have remained in vogue in teacher education over the decades.

Enlightened, emancipated and empowered teachers lead communities and nations in their march towards better and higher quality of life. They reveal and elaborate the secrets of attaining higher values in life and nurture empathy for the fellow beings. Teachers are the torch bearers in creating social cohesion, national integration and a learning society. They not only disseminate knowledge but also create and generate new knowledge. They are responsible for acculturating role of education. No nation can even marginally slacken its efforts in giving necessary professional inputs to its teachers and along with that due status to their stature and profession. The educational expansion, universalisation of elementary education, vocationalisation of secondary education, higher and professional education and overall quality of education are major challenges before the country. Evidently the quality of education is a direct consequence and outcome of the quality of teachers and teacher education system. The task of bringing qualitative change in institutional efficacy of the teacher education system in itself is a huge and challenging one. The last five decades have witnessed several attempts to change, modify and indigenise the inherited system of teacher education. Teacher education is an integral component of the educational system. It is intimately connected with society and is conditioned by the ethos, culture and character of a nation. The constitutional goals, the directive principles of the state policy, the socio-economic problems and the growth of knowledge, the emerging expectations and the changes operating in education, etc. call for an appropriate response from a futuristic education system and provide the perspective within which teacher education programmes need to be viewed.

When India attained freedom, the then existing educational system was accepted as such because it was thought that an abrupt departure from the same would be disturbing and destabilising. Thus a predisposition to retain the system acquired preponderance and all that was envisaged by way of changes was its rearrangement. Consequently, education including teacher education largely remained isolated from the needs and aspirations of the people. During the last

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five decades certain efforts have been made to indigenize the system. The gaps, however, are still wide and visible. The imperatives for building the bridges may be as follows:

— to build a national system of teacher education based on India’s cultural ethos, its unity and diversity synchronising with change and continuity.
— to facilitate the realization of the constitutional goals and emergence of the new social order.
— to prepare professionally competent teachers to perform their roles effectively as per needs of the society.
— to upgrade the standard of teacher education, enhance the professional and social status of teachers and develop amongst them a sense of commitment.

These are but a few of the major concerns which call for an immediate action. A comprehensive, dynamic and responsive system of teacher education needs to be continually evolved keeping the overall scenario in view.

**Scenario of Teacher Education**

The need for improved levels of educational participation for overall progress is well recognised. The key role of educational institutions in realising it is reflected in a variety of initiatives taken to transform the nature and function of education — both formal as well as non-formal. Universal accessibility to quality education is considered essential for development. This has necessitated improvement in the system of teacher education so as to prepare quality teachers. Various Commissions and Committees appointed by the Central and the State Governments in recent decades have invariably emphasised the need for quality teacher education suited to the needs of the educational system. The Secondary Education Commission (1953) observed that a major factor responsible for the educational reconstruction at the secondary stage is teachers’ professional training. The Education Commission (1964-66) stressed that ‘in a world based on science and technology it is education that determines the level of prosperity, welfare and security of the people’ and that ‘a sound programme of professional education of teachers is essential for the qualitative improvement of education.’

India has a large system of education. There are nearly 5.98 lakh Primary Schools, 1.76 lakh Elementary Schools and 98 thousand High / Higher Secondary Schools in the country, about 1300 teacher education institutions for elementary teachers and nearly 700 colleges of education / university departments preparing teachers for secondary and higher secondary schools. Out of about 4.52 million teachers in the country nearly 3 million are teaching at the primary/ elementary level (GOI 1996-97). A sizeable number of them are untrained or under-trained. In certain regions, like the North-East, there are even under-qualified teachers. As far as in-service education is concerned the situation is not very encouraging. It is estimated that on an average 40% of the teachers are provided in-service teacher education once over a period of five years. Regarding non-formal education, though a number of models are in vogue in various states in the country, much more needs to be done to prepare teachers and other functionaries for the system.

The Programme of Action (POA 1992) has emphasised teacher education as a continuous process, its pre-service and in-service components being inseparable. The POA, among others,
has pointed out the following in respect of teacher education:

a) Professional commitment and overall competencies of teachers leave much to be desired.

b) The quality of pre-service education has not only not improved with recent developments in pedagogical science, but has actually shown signs of deterioration.

c) Teacher education programmes consist mainly of pre-service teacher training, with practically no systematic programmes of in-service training, facilities for which are lacking.

d) There has been an increase in sub-standard institutions of teacher education and there are numerous reports of gross malpractices; and

e) The support system provided by the State Councils of Educational Research and Training (SCERTs) and the University Departments of Education has been insufficient and there is no support system below the state level.

In pursuance of the NPE 1986 a major step was taken by the Central Government to enhance the professional capacity of a large number of teacher education institutions. Nearly 430 District Institutes of Education and Training (DIETs) have already been established by 1997-98. The DIETs are charged with the responsibility of organising pre-service and in-service programmes in addition to being the nodal resource centres for elementary education at district level. Likewise, Colleges of Teacher Education (CTEs) and Institutions of Advanced Study in Education (IASEs) have been given the responsibility of introducing innovations in teacher education programmes at the secondary and higher secondary stages and in vocational education.

The National Council for Teacher Education (NCTE) as a non-statutory body (1973-1993) took several steps as regards quality improvement in teacher education. Its major contribution was to prepare Teacher Education Curriculum Framework in 1978. Consequently, teacher education curricula witnessed changes in teacher preparation programmes in various universities and boards in the country. A similar effort was made in 1988.

During the last decade, new thrusts have been posed due to rapid changes in the educational, political, social and economic contexts at the national and international levels. Curriculum reconstruction has also become imperative in the light of some perceptible gaps in teacher education. Teacher education by and large, is conventional in its nature and purpose. The integration of theory and practice and consequent curricular response to the requirements of the school system still remains inadequate. Teachers are prepared in competencies and skills which do not necessarily equip them for becoming professionally effective. Their familiarity with latest educational developments remains insufficient. Organised and stipulatory learning experiences whenever available, rarely contribute to enhancing teachers’ capacities for self-directed lifelong learning. The system still prepares teachers who do not necessarily become professionally competent and committed at the completion of initial teacher preparation programmes. A large number of teacher training institutions do not practice what they preach. Several of the skills acquired and methodologies learnt are seldom practiced in actual school system. This highlights the need to bring realism and dynamism in the curriculum.

**Education of Teacher Educators**
The role of teacher educator is of prime importance for effective implementation of teacher education curriculum. Education and training of teacher educators is a pre-requisite for effective changes in the training and orientation of teachers. India has a large system of teacher education. There are more than 2000 elementary teacher education institutions, Colleges of Education and University Departments of Education. Nearly 30,000 teacher educators are engaged in the preparation of school teachers. In addition, there are teacher educators working in pre-primary training schools as well as institutions concerned with the preparation of teachers for the education of children with special needs and alternative education such as non-formal education, distance education etc.

It is well recognised that the overall quality in education mainly depends on the quality of teachers and a sound programme of professional preparation of teachers is essential for imparting quality education. However, Teacher educators’ own education leaves much to be desired. Teaching is an art which can be inculcated through a series of well designed activities in respect of education and training of teachers and is equally valid for professional preparation of teacher educators.

The teacher educators would not only be training pre-service and in-service trainees but would also be associating themselves with several other activities. New strategies and techniques of material development, the changing approach to evaluation, intensive interactions with the community, creating an activity-based environment in the training institutions, acquiring skills for resource mobilisation and several other such competencies at mastery level would be essential for professionals to function as teacher educators. Changes in the school curricula would be faster in the near future. Corresponding changes in training programmes and strategies shall have to be perceived and given a shape by the teacher educators.

In the context of universalisation of elementary education, teacher educators will be expected to display a deeper understanding of the issues pertaining to access, participation and attainment in their specific regions or areas. They need adequate professional competence to conduct such surveys and studies would reveal the region specific and area specific issues and problems which would help the functionaries of the education department and the community. They will prepare the trainees in responding to these issues during the training period and also in schools subsequently. The professional quality of teacher educator will determine the quality of the training of teachers, both pre-service as well as in-service. The professional level at which teachers are prepared will, in turn, determine the quality of school education. Again, teacher educators have to be fully familiar with the school realities, social environment and community expectations to realistically perform the challenging tasks before them. On the professional side, teacher educators need to be actively associated with policy formulations, implementation strategies and monitoring of programmes.

**Existing System**

At present, the only programme which is often treated as preparing teacher educators is that of M.Ed. Scrutiny of the curriculum of most of the M.Ed. programmes would reveal that these have not been specifically designed to prepare teacher educators. There are some M.Ed. programmes where provisions do not exist for writing a dissertation. The products of these programmes would certainly not be in a position to conduct research, initiate innovation on their
Prior to the establishment of the NCTE as a statutory body, NCERT acted as its secretariat and organised several professional development programmes for teacher educators in areas like micro-teaching and simulation, student teaching and evaluation, preparing research proposals, improvement of teacher education curricula and so on. The University Grants Commission (UGC) has been organising national and regional level workshops for improvement of the teacher education programmes. Through various schemes it offers financial support for seminars, workshops and research projects for teacher educators for such themes as higher education, educational technology, non-formal education, population education, environmental education, research methodology, etc. The National Institute of Educational Planning and Administration (NIEPA) organises programmes for Principals of Colleges of Education, Heads of University Departments of Education and other administrators concerned with teacher education. The SCERTs and State Boards of Teacher Education organise continuing education programmes for teacher educators on teaching methodologies for new subject areas and on innovations in education. Some University Departments of Education organise seminars, workshops, and orientation programmes for teacher educators on teaching, development of instructional skills, interaction analysis, teaching behaviour, educational technology, guidance and counselling and research methodology. Certain Colleges of Education and University Departments of Education have been upgraded as Colleges of Teacher Education (CTEs) and Institutions of Advanced Study in Education (IASEs) for taking up innovations in teacher education. NCTE after its establishment in 1995 as a statutory body, has initiated several programmes aimed at enhancing professional competence of teacher educators. These include seminars and workshops in the area of human rights and national values, indigenous thoughts in education, indigenous approach to teacher preparation, institutional networking and capacity enhancement and production of good quality enrichment materials for teacher educators. These institutions have considerable experiences in organising training and development activities. Based upon the experience gained they will have to evolve programmes of sequential nature with in-built mechanism for assessment and impact evaluation.

In the absence of an appropriate policy of recruitment, especially at the pre-primary, primary and elementary stages of teacher preparation, the manpower in the institutions of teacher education does not necessarily possess the professionally required qualifications for the preliminary stages. At the pre-primary stage one comes across teacher educators who have passed high school or higher secondary examination and possess a certificate in teacher training, not necessarily meant for the pre-primary stage; graduates or those with higher qualification with absolutely no training background or with the background not appropriate for that stage or level. As regards the primary and elementary stages, the teacher educators, generally, possess graduate or higher qualification with teacher training mostly at the B.Ed. level. There are serious lacunae in the recruitment policies in as much as the professional qualifications prescribed are not stage-specific and mostly not suited to the education of teachers for the stage or level concerned. This situation calls for fresh thinking regarding recruitment policies for teacher educators and well-planned programmes of education for teacher educators.

Conclusion: In the view of above we can conclude that the teacher education programmes shall focus on competencies and commitment in much greater magnitude in future. Such a
transformation in teacher preparation strategies would emerge only after due familiarity and adequate appreciation of indigenous thoughts developed over decades in India. Gradually an indigenous approach and strategy would emanate and replace the alien practices that have remained in vogue in teacher education over the decades.

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TEACHER EDUCATION IN INDIA: PRESENT SCENARIO

Ms. Kanwaljit Kaur* & Ms. Preetika Singla**

There is no denying that teacher occupies a place of paramount importance in any system of education. It is the teacher around whom the whole system of education revolves. A teacher leads the children from darkness of ignorance to the light of knowledge. He cannot fulfill his responsibilities effectively and efficiently unless he keeps himself enlightened continuously. Hence education is essential for an effective teacher. Without good teachers even the best of the system is bound to fail, with good teachers even the defects of a system can be largely overcome. Some of the eminent educational institutes may boast of their training; howsoever impressive a school building may be, the teaching materials and teaching methods may be progressively and scientifically evolved but without devoted teachers everything will reduce to nothingness. Teachers help to keep the lamp of civilization burning. But only the trained, educated teachers can perform this duty. Hence innovations in teacher education are required in the present times.

Teachers are vital to the achievement and success of education for all. The teacher training course varies from country to country & state to state. NCERT could not maintain the standards in teacher education despite its commendable work in academic fields. NCTE, then looked after the planned and coordinated development initiating in teacher education. In India, many teacher training colleges were opened after independence with a mission to cultivate best qualities among the future teachers. NCTE has issued new norms and standards for various teacher training programmes. The plan, curricula and other training aspects of teacher education are suggested to be carried out with help of effective alumni. The theory and the practical course needs to be re-organised to pinpoint the demand-supply which means the type of training required and the type of training that is being provided should be in coherence.

The curriculum and the methods taught during the teacher training courses need an overhauling which has not been taken up with seriousness of purpose. For addressing to human development, it has identified four phases of development- 1. Learning to know, 2. Learning to do, 3. Learning to live together and 4. Learning to be. To update teacher education in India, several goals are referred:

(a) cultural integrity to cultural fusion.
(b) From cohesion to democratic partnership.
(c) From economic growth to human development.

Brief History of Teacher Education

Teacher training in India is dated back to the times of the advent of Danish missionaries. A central school for the education of teachers was set up in Madras in 1826. Calcutta School Society took steps to train teachers in Bengal simultaneously. The Wood’s Despatch(1854) desired to see the establishment of teacher training schools in each presidency of India. The provision in

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Stanley Despatch to grant salary to the trained teaching staff gave impetus to teacher training programme. By 1881-1882, about 106 schools for opened to train teachers for elementary schools only. After Hunter Commission’s recommendations, 6 training colleges and 50 training schools came into existence by the end of 19th century. Govt. Revolution of 1904 recommended separate courses for graduates and undergraduates. The Calcutta University Commission in 1917 emphasized the need to open department of education in universities. Hartog Commission in 1929 recommended inservice education of teachers and the long duration of teacher training course. At the recommendations of Sargent Commission, refresher courses, research facilities were given a place in the teacher education programme. NCTE(National Council of Technical Education), NCERT(National Council of Educational Research & Training), SBTE(State Board of Teacher Education), UGC(University Grants Commission), SIE(State Institutes of Education) & ESE( Extension Service of Education) also contributed in the development of teacher education program.

From Teacher’s Training to Teacher Education

Improvement is needed in different fields of education. So teacher education is more comprehensive term. Teacher education is to be guided by more democratic values and procedures to make real contributions in the existing situations of the country. Indian educationists are to shape the philosophy related to teacher education in India. The broader concept of teacher education is connected with life. Teacher education responds to the philosophical needs of basic education.

According to Kilpatrick, “One trains circus performers and animals but one educates the teachers.”

Thus it is true that more stress is laid on the programmes to prepare the teachers through education rather than training. It refers to the total educative experience which contributes to the preparation of the person for a teaching position in a school but this term commonly employed to designate the programme of courses and other experiences offered by an educational institution for the announced purpose of preparing persons for teaching and other educational services. Teacher education is institutional based procedure which aims at the preparation of teachers. Previously it was known as teachers’ training but now the term is replaced by teacher education.

Types of Teacher Education

The development of teacher does not cease when he leaves the institution rather he now begins to learn from a different kind of experience. Concept of life long education has necessitated the continuation of the teacher education. Because of the need of teacher education and its continuation, teacher education is divided into two types:

A. Pre-service teacher education.
B. In-service teacher education.

Types of Institutions of Teacher Education

Pre-primary training schools: There are various types of courses offered i.e. Nursery,
Kindergarten, Montessori, Pre basic and Happy education etc. There are govt. run courses like certificate courses in pre-primary and nursery education, Diploma in pre-school education.

**Training schools for primary teachers:** Such course is generally called J.B.T. (Junior Basic Training). In most of the states such courses are conducted by govt. either in separate schools or in schools attached to college of education.

**Teacher training schools for undergraduates:** The course undertaken in these schools prepares the teacher for middle or lower secondary schools. It may lead to certificates or diplomas in teaching as T.D., C.T., L.T., and Dip. T. etc.

Colleges of education for secondary teachers: These colleges prepare teachers to teach middle, higher or high secondary classes. The duration of course is generally one year and leads to the degree of B.Ed.

**Regional colleges of education:** To meet the shortage of teachers in some subjects, some regional colleges were set up to serve particular regions like Regional college of education, Ajmer, Regional college of education, Bhuvaneshwar, Regional college of education, Mysore.

**Institutes for post-graduate teacher education:** One year M.Ed., two years M.A. in Education, 3 months - one year diploma courses run by NCERT, Ph. D. course in Education and training institutes for special subject teachers like in Music, Fine arts, Language, Physical education, Home science etc.

**Correspondence courses:** Some colleges offer degrees to clear the backlog of untrained graduate teachers. C.I.E., Jammu university, H.P. university, P.U. Patiala, P.U Chd., IGNOU etc. are some institutions which offer correspondence courses to educate teachers.

**Aims and Objectives of Teacher Education**

Major objectives of Teacher Education are to know the theoretical and practical aspects of the subjects which a teacher has to teach. He should be able to understand the process of child’s growth and development. He is to be acquainted with the purpose of education. He must know about the adjustment process so that he may help his students in their adjustment. Teacher’s ability is to be developed to contrive and use a number of teaching devices, AV aids and other instructional material. His ability is to be developed to organize and supervise co-curricular activities. He is to be trained to plan his lessons. He is to learn about evaluation criteria. A teacher must also be trained to help effectively in the guidance programme of the school.

**Latest Trends in Teacher Education Program**

TQM: Total Quality Management was originally used to achieve excellence in business organizations. Overtime, it has been adopted in the field of education also to improve the quality of educational institutions.

Technical accuracy: A great use of modern devices and technical appliances are added to the course of training the teachers.

Privatization of teacher education: Glancing at all India scenario, almost 95% institutions are being run by the private sector and less than 5% are under the government sector it shows the interest of government towards teacher education.

Teacher’s assignments: Community participation in institutional activities will strengthen the
teachers’ linkage with community through extension service like awareness camps, parents meet, social gatherings etc.

M. Ed programme of two years with the provision to branch out for specialization in curriculum and pedagogic studies and all the areas of emerging concerns in education.

CCE is another feature in this programme. Continuous comprehensive assessment is applied now for the evaluation process in teacher education programme.

Seminars, summer institutes and research symposia are also being arranged at more frequent intervals.

New teacher education institutions are located in multi and inter disciplinary environment.

Distance learning program and blended learning material is being developed for school teachers.

Teacher education is now becoming a part of higher education system.

Internal and external assessment to monitor and promote quality in teacher education as per the guidelines of national agencies like NCTE & NAAC etc. are being performed periodically.

Reading material including reference books related to the field of education are being provided in Hindi or other regional languages.

Problems of Teacher Education Programme

- Isolation of teacher training causes hinderance in the successful implementation of teacher education program. It means isolation of teacher training from mainstream of university should be removed.
- Duration of course is not suitable to meet the desired goals.
- New professional courses are yet to be developed to orientate the teaching personnel.
- Post graduate course in education is still not flexible.
- Steps are to be taken to improve the teacher education institutions.
- Admission criteria for teacher training course is not determined by the suitable body.
- A standing committee by UGC for teacher education is not appropriately maintained.
- In-service training lacks coordination.
- Facilities for pre-primary training are meagre in India.
- Size of the training institutions is to be fairly large.
- Backlog of untrained teachers needs to be cleared.
- Location of the training institutions is to be proper.
- Education is still not a subject for under graduation.
- Revised pay scale is not realized everywhere.
- Security of service is not guaranteed.
- Social status of a teacher is to be raised.
- Selection of only those who have aptitude for teaching is missing.
- Special allowances are not provided to all and the same.
- Teachers’ council in each state is not yet established.
- Retirement and equitable system of PF is to be devised.
- Mechanical and routine methods of training fail to inspire the prospective teachers.
Teacher Education: Challenges and Opportunities

- Internship in teaching is not introduced in each training institution.
- Assessment criteria needs to be seriously designed.
- Curricula is not planned dynamically.
- Wastage in teacher education is much more in India due to lack of placement services.
- The post graduate in education carries no incentive as the post graduate in other streams get same weightage though he spends two years less than a teacher educator.
- Research in education is negligible in training colleges.
- Mushroom growth of teacher training lowers the standards of this profession.
- Period of teaching practice is not sufficient.
- Courses of study lay too much stress on theory.
- Outdated and irrelevant subjects are there.
- The experimental and a demonstration school is not still attached to the training institutions.
- Tuition fee and fee hike is a burden.
- Facilities of AV aids room, Labs, library etc are not provided everywhere.
- Dearth of comprehensive colleges is observed.
- Housing, medical and transport facilities are not provided as per the requirement.

Conclusion

No system of education can rise above the level of its teachers. All the efforts must be thus made to gear our teacher training to the present needs of the country. There is no more important matter than that of securing a sufficient supply of the right kind of people to the profession, providing them with the best possible training and ensuring them a status and esteem commensurate with the importance and responsibility of their work. Teacher education needs not mere patches of change here and there but a complete revolution in training program, curriculum and the objectives of professional preparation of teachers. To attain efficiency, a teacher must undergo a well designed course of teacher education. The government and the community should endeavour to create conditions which will motivate the teachers on creative and constructive lines. However excellent the training programme may be, it does not produce an excellent teacher in itself. Increased efficiency will come through experience critically analysed and through individual and group efforts and improvement.

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EXISTING SCENARIO OF PRE-SERVICE TEACHER EDUCATION AND A ROADMAP FOR TRANSFORMING ITS QUALITY

Dr. Sarbijit Kaur Ranu* & Ms. Satveer Kaur Gill**

Teacher Education is an age-old concept, but it has been undergoing transformations over the years and assuming new meanings and dimensions due to changes in socio-cultural and political conditions of the society. Teacher Education needs to be adequately strengthened and upgrade to accommodate the changing role of the teacher and so that teachers can effectively address contemporary issues regarding education. Teacher education has to be reformed in order to adequately prepare teachers for their new and more diversified functions in the school and the community. For this, various commissions and committees have been appointed to study the status of teacher education and to suggest recommendations. Justice Verma Commission has attempted a scrutiny of the existing quality of teacher education to facilitate identification of the deficiencies therein, and then to enable it to make recommendations which can rectify the defects and provide the level of teacher education necessary to produce quality teachers. The present article emphasizes the recommendations of report of Verma Commission especially on quality of pre-service teacher education. It discusses existing scenario of pre service teacher education and gives the roadmap for improving its quality.

21st century is considered as the century of knowledge. Teacher occupies a very important place in society because he brings about the intellectual tradition from one generation to the next. The Secondary Education Commission (1952) rightly points out “we are convinced that the most important factor in the contemplated educational reconstruction, is the teacher; his personal qualities, his educational qualifications, his professional training and the place that he occupies in the school as well in the community.” The Report of National Education Commission (1964-66) states: “The destiny of India is now being shaped in her classrooms.” This, we believe is not more rhetoric. National Policy on Education (1986/92) states: “The status of teacher reflects the socio-cultural ethos of the society; it is said that no people can rise above the level of its teacher”. Thus, a true teacher is a role model who triggers the thought process of his students to realize their true potential. He teaches by practice and not merely by percept. Therefore, the teacher has to make himself / herself familiar with the technicalities of the teaching-learning processes. The teacher is required to acquire adequate knowledge, skills, interests and attitudes towards the teaching profession. The teacher’s work has become more complicated and technical in view of the new theories of psychology, philosophy, sociology, modern media and materials. The teacher can be made proficient with well-planned and imaginative pre-service and in-service training programmes where teacher education plays a vital role.

Teacher Education is an age-old concept, but it has been undergoing transformations over
the years and assuming new meanings and dimensions due to changes in socio-cultural and political conditions of the society. Especially, after Independence the country has made new strides in the field of education and formulated new policies and programmes for realizing the emerging national goals. Several committees and commissions have reviewed and the achievements made recommendations in the field of education in general and Teacher education in particular. It has been felt that Teacher Education is a critical area in which adequate inputs and investments are to be made for developing not only human resources but also physical resources. The Education Commission (1964-66) discussed at length various issues related to teacher education. It recommended professionalization of teacher education, development of integrated programmes, comprehensive colleges of education and internship. The National Commission on Teachers (1983-85) recommended five years integrated courses and internship. The National Policy on Education (NPE) (1986) recommended the overhaul of teacher education to impart it a professional orientation and referred to the same concerns voiced by the earlier Committees. Its recommendations led to the launch of the Centrally Sponsored Scheme of Teacher Education incorporating the establishment of District Institutes of Education and Training (DIETs), Colleges of Teacher Education (CTEs), and Institute of Advanced Studies in Education (IASEs). The NPE Review Committee (1990) and the National Advisory Committee on Learning without Burden (1993) have also drawn attention to the need for qualitative reform of teacher education and suggested various measures. The Universal Declaration of Human Rights, 1948 (UDHR) states: “Everyone has the right to education. Education shall be free, at least in the elementary and fundamental stages. Elementary education shall be compulsory…. ” The Constitution of India, recognizing this aspect enacted initially the directive principle of State Policy in article 45 to achieve the goal of free and compulsory education up to the age of fourteen within ten years, but the task remaining unfulfilled for over half a century, the fundamental right in Article 21A has been inserted by amendment to reinforce its importance along with corresponding amendments in Article 45 and 51A. Teacher is the medium to achieve this goal. Hence, the quality of teacher education to provide quality teacher is an important component for the success of every programme.

The most important task of education for the future is to improve the intellectual and technical competence in the teachers because teacher’s influence is everlasting. Therefore, it is the need of the time that one should sincerely examine the issues related to the preparations of the teachers as well as the theory and practice of teacher education, as has been undertaken in the historical past, as it is operative in the present and as it is likely to be present in future. The National Council for Teacher Education (NCTE) was established by an act of Parliament (Act No.73 of 1993)” with a view to achieving planned and coordinated development of the teacher education system throughout the country, the regulation and proper maintenance of norms and standards in the teacher education system and for matters connected therewith”.

The Hon’ble Supreme Court appointed a High-Powered Commission to examine the entire gamut of issues which have bearing on improving the quality of teacher education as well as improving the regulatory functions of the National Council for Teacher Education (NCTE). In pursuance of the orders of the Hon’ble Supreme Court dated 13th May, 2011, the Ministry of Human Resource Development, Government of India, notified the constitution of a High Powered Commission and the ToRs vide Notification dated 27th June, 2011. The Chairman of this
Commission was Hon’ble Justice J. S. Verma, former Chief Justice of India. Justice Verma Commission has attempted a close scrutiny of the existing provisions and the quality of teacher education to facilitate identification of the deficiencies therein, and then to enable it to make recommendations which can rectify the defects and provide the level of teacher education necessary to produce quality teachers. Then only the Constitutional mandate in Article 45 read with that in Article 21A can be met. The Report of the Commission is in three volumes: Vol. I contains the main report divided into seven chapters along with the final conclusions and recommendations. Vol. II contains all the discussion and material related to the aforesaid 291 institutions. Vol. III contains all the Annexure.

**Terms of Reference (ToRs) of the Commission**

- “Whether in the context of the provisions of the Right of Children to Free and Compulsory Education Act, 2009 the Regulations on Recognition Norms and Procedure that lay down the norms and procedure for various teacher education courses which are adopted by NCTE are adequate or need review.”
- “Whether further reforms are necessary to improve quality of teacher training and in-service training”
- “To review the Recognitions on Recognition Norms and Procedure currently in force as laid down by the NCTE are being properly enforced. If not how to evolve a fair and transparent manner in which these norms and standards may be enforced.”
- “To review the existing practice of appointment of members to the NCTE are undertaken, so that the NCTE discharges its crucial role in providing vision and direction in the functioning of NCTE.
- “To evolve standard and norms for evaluating teacher performance and audit teachers.
- “To review whether the present provisions empowering withdrawal of recognition of institutions are adequate.”
- “To determine what the methodology should be to examine/ enforce quality in teacher education institutions.”
- “To review whether the 291 institutions in the Western Region qualify to be recognized as Teacher Training Institutions.”

**Existing Scenario of Teacher Education**

This article emphasizes on the Terms of Reference (ToRs) which have a direct bearing on the issues of the pre-service teacher education. The Commission is of the view that a set of recommendations to improve the quality of teacher education need to be based on clear articulation of the re-design of pre-service teacher education. The Commission has pointed out the following findings,

- Classroom practice is closely tied to the manner in which teachers learn to engage with teaching as a practical and social activity. The institutions of teacher education operate as a system of well-established conventions that structure social interaction, reproducing shared habits of thought through the conventions and rituals of teacher preparation.
- The bulk of secondary teacher education institutes offering programmes leading to the B.
Ed. degree are outside university campus. Elementary teacher education institutes including DIETs, offering programmes leading to the D. Ed. degree are not linked to the Universities. Teacher education institutes function as closed spaces with the sole mandate of training teachers.

- Most teacher education programmes (B. Ed. and D. Ed.) do not adequately engage with subject knowledge.
- Initial teacher preparation, both at the elementary and secondary levels, is facing a number of problems. Some of them are common while others are specific to a stage of education. For instance, current dominant teacher education programmes offer ritualistic exposure to fragmented knowledge which is neither linked to the larger aims of education nor the ground realities of classroom practice.
- The teacher education curriculum either in the D. Ed. or the B. Ed. programmes does not effectively engages student-teachers with subject knowledge. It focuses only on generic methods of school subjects. Any new developments in specific disciplines that make up school subjects do not receive the due attention.
- Current programmes fail to integrate the knowledge the knowledge about learners and the knowledge of the subject with knowledge about the socio-cultural context and philosophical basis of education and learning. Teaching is practiced as a mechanical delivery of a given a number of lessons, rather than reflective practice.
- There is poor quality of training through distance mode which lead to the dilution of quality of teacher education.
- Current teacher education institutes are isolated from universities and the system of higher education.
- Initial training of teacher education suffer from isolation, low profile and poor visibility in view of it being a non-degree programme.
- There is an urgent need to up-grade pre-service elementary teacher education by enhancing the duration of training; making it equivalent to an integrated degree programme and locating the management and control of elementary teacher education with universities.
- The teacher education system in India has traditionally been organized on the assumption that lower academic qualifications are acceptable for teaching at the elementary stages of school education.
- The Teacher Eligibility Test (TET) instituted in 2011 as an essential criterion for teacher recruitment over and above a professional degree in teacher education clearly demonstrated that bulk of candidates who take the TET do not qualify to be recruited, despite having a professional degree.

**Recommendations of the Commission**

An analysis of the teacher education practice today reveals that teaching is piece-meal in approach.

- The Commission recommends the Government should increases its investment for establishing teacher education institutions and increase the institutional capacity of teacher
Existing Scenario of Pre-Service Teacher Education and A Roadmap for Transforming its Quality

preparation, especially in deficit states.

- Government may explore the possibility of instituting a transparent procedure of pre-entry testing of candidates to the pre-service teacher education programmes, keeping in view the variation in local conditions.

- Teacher education should be a part of the higher education system. The duration of programme of teacher education needs to be enhanced, in keeping with the recommendations of the Education Commission (1966), the implementation of which is long overdue.

- It is desirable that new teacher education institutions are located in multi- and interdisciplinary academic environment. This will have significant implications for the redesigning of norms and standards of various teacher education courses specified by the NCTE. This will have also implications for employment and career progression of prospective teachers. Existing teacher education institutions may be encouraged to take necessary steps towards attaining academic parity with the new institutions.

- Current teacher education programme may be redesigned keeping in view the recommendations in the National Curriculum Framework for Teacher Education (NCTE, 2009) and other relevant material.

- In keeping with the recommendations of the Education Commission (1966), every pre-service teacher education institution may have dedicated school attached to it as a laboratory where student teachers get opportunities to experiment with new ideas and hone their capacities and skills to become reflective practitioners.

- There is a need to establish a national level academic body for continual reflections and analysis of teacher education programmes, their norms and standards, development of reading material and faculty development of teacher educators.

- As a matter of policy, the first professional degree/diploma in teacher education should be offered only in face-to-face mode. Distance learning programmes and the use of blended learning material may be developed and used for continuing professional development of school teachers and teacher educators.

- The institutional capacity should be increased for preparation of teacher educators. There is need to make Masters in Education programme of two years duration with the provision to branch out for specialization in curriculum and pedagogic studies, foundation studies, management, policy and finance, and other areas of emerging concerns in education.

- The NCTE would need to develop broad-based norms for qualification of teacher educators to enable induction of persons with post-graduation degrees in education science, social science, languages and mathematics, along with a professional degree in teacher education or a research degree in education, as teacher educators.

- The idea of creating opportunities for teaching practitioners to teach in teacher education institutions, as visiting faculty, may be explored. Similarly, teacher educators could be considered as visiting faculty in schools.

- Faculty development programmes for teacher educators should be institutionalized.

- There is need for enhanced investment in promotion of research in education in general, and in teacher education in particular in the universities; creation of an Inter University
Centre in Teacher Education could play a significant role, in this regard.

Conclusion

Teacher education, a subject of paramount importance, has symbiotic relationship with school education. The quality of teacher education is dependent on the quality of entrants to the teacher education programme. The quality of teachers is also linked with the quality of those who have the responsibility to prepare them; in this context the role of a teacher educator becomes very significant. Teachers have to meet the queries and satisfy the hunger of new generation with confidence. There must be adequate freedom, flexibility and frankness in them. Teaching instruction needs to be problem oriented and not discipline or theory oriented. Approaches such as case studies, simulations, role play and action research would be more appropriate for the professional development of teacher. The professional development of teachers need to be located in the larger socio-cultural, economic and political context of contemporary Indian society. A teacher’s task is to facilitate learning by enabling the child to construct or generate knowledge on the basis of his/her own observations, experiences, experimentation, analysis and reflections. Teachers need to be prepared to care for children and to view learners as active participants in their own learning. To conclude, professional upgradation is an important issue in teacher education. Teacher education has to be made an integral part of social as well as educational system. There should be dynamism in our approach to meet the challenges. Teacher educators has to assume responsibility to prepare teachers with proper attitude and ability to translate the philosophy of education into practical learning experience. Unless and until the present system of Teacher Education is revamped and re-organized, it would be difficult to provide suitable pre-service education and upgrade the quality of education in the country. In short the recommendations of various commissions and committees especially designed should be strictly implemented for enhancing and improving the quality teacher education.

Reference


We need to train teachers with new perspectives as the outer world is in the classroom and schools are opening to the world. He plays a vital role in all round development of the personality of children by exercising a personal influence. He should be qualified not only academically and professionally, but also has well defined abilities and values and his earnest responsibility and commitment to strive constantly to raise student’s learning capability achievement and make him a good person and an enlightened citizen, without such good teachers, it is not possible to improve education. The pre-service and in-service teacher education programs have shown paradigm shift with its emphasis on globalization and individualization. It has been recognized that teacher education program should be structured and modified in a way that enables them to respond dynamically to the new problems and challenges in the field of education, then only teacher can help in national development.

Education plays a tremendous role in the development of a nation and an individual. It is the backbone of a progressive nation. Education also gives real meaning to democracy in which a common man participates and contributes effectively to change and development. Education on which human progress depends on to such a large extent is being given a major consideration to all factors which determine the quality of national development. Thus lot of stress is laid upon education in democratic countries. To educate masses there is need of sincere and hardworking teachers. Teachers play a pivotal role in shaping and moulding the habits, attitude and manners among students. The teacher occupies an unchallengeable position in the educational process. He plays a vital role in all round development of the personality of children by exercising a personal influence. He should be qualified not only academically and professionally, but also has well defined abilities and values and his earnest responsibility and commitment to strive constantly to raise student’s learning capability achievement and make him a good person and an enlightened citizen, without such good teachers, it is not possible to improve education. Today there are new expectations for education where the focus is on having teachers be futurist leaders to ensure sustainable education. The paradigm shift is from teacher dominated classroom practices to that of partnership between the teacher and the learners and their peers. The key role of educational institutions is reflected in a variety of initiatives taken to transform the nature and function of education—both formal as well as non-formal. There are following recent trends in present teacher education in India.

**Stress on Special Education:** The SarvaSikshaAbhiyan, SSA (into which DPEP was incorporated) thus extends the dual approach historically adopted towards the education of children with disabilities, by propagating a “multi-optional delivery system”. It categorically brings the concerns of children with disabilities, or those it terms as “children with special needs (CWSN)” under the framework of “inclusive education” (IE): SSA will ensure that every child with special
needs, irrespective of the kind, category and degree of disability, is provided education in an appropriate environment. SSA will adopt ‘zero rejection’ policy so that no child is left out of the education system. (SSA, 2007:1). Now day’s special education courses start by the universities like B.Ed in special education, M.Ed in special education, and integrated special education courses. These courses creates a new job opportunities for the special education teachers.

**ICT based teaching**: In particular ICTs have impacted on educational practice in education to date in quite small ways but that the impact will grow considerably in years to come and that ICT will become a strong agent for change among many educational practices. Extrapolating current activities and practices, the continued use and development of ICTs within education will have a strong impact on: ICT and teaching learning process; quality and accessibility of education; learning motivation, learning environment and ICT usage and academic performance. The adoption and use of ICTs in education have a positive impact on teaching, learning, and research. ICT can affect the delivery of education and enable wider access to the same. In addition, it will increase flexibility so that learners can access the education regardless of time and geographical barriers. It can influence the way students are taught and how they learn. It would provide the rich environment and motivation for teaching learning process which seems to have a profound impact on the process of learning in education by offering new possibilities for learners and teachers. These possibilities can have an impact on student performance and achievement. Similarly wider availability of best practices and best course material in education, which can be shared by means of ICT, can foster better teaching and improved academic achievement of students.

**Teacher job is now becoming more stressful**: Teacher education is now becoming more challenging to the emerging demands from the school system. Because the changing educational needs of the student and advancement in technology has widen the area of responsibilities of the teacher. Now teacher has to perform various role like encouraging, Supporting and facilitating in teaching-learning situations which enables learners (students) to discover their talents, to realize their physical and intellectual potentialities to the fullest, to develop character and desirable social and human values to function as responsible citizens.

**Emerge new methods**: The method of teaching in the teacher education is reorganized according to the changing demand of education system. Special innovative programmes like seminars, Workshops, conferences, projects and discussions are organized regularly for the improvement of teaching learning process in various fields. Now day’s micro teaching, team teaching, prestiontations are the integral part of the teacher education.

**Private Education System**: Now a days the number of self- financing colleges are mushrooming like shops and they have made it as their money making factory which detrimental for education in future. Students can get easily seat in particular course on the basis of money. These increase the quantity of education but decrease the quality of education. Therefore for regular inspection should be done to ensure quality in teacher education. The affiliating bodies for teacher education should frame such parameters which can enhance the teacher education program in qualitative aspect rather than quantitative aspect.

**Increase the demands of teachers**: As it has been observed that there is big gap between demand and supply in various states. The whole scenario of education is changing after Right to
Education Act 2009, the demand for teachers at various level has tremendously increased. Moreover today is the time for inclusive education which leads to demand of special teachers/educators and we all are aware of the fact that there is scarcity of special educators. So a balance should to be maintained for better results. Moreover qualified teachers should be in the schools for the fulfillment the multiple demands of the students.

**Importance of language**: The question as to which language should be used as a medium of instruction in country like India is a debatable subject. The question is often posed in binary terms: Should the medium of instruction be a regional language or English? Language is a vehicle for learning as well as expression of ideas. An advanced language (English) helps in mentally provide people to communicate each other across the world. On the other hand, an underdeveloped language has its limitations. It keeps people underdeveloped. Due to this fact, the demand of English medium of instruction increase day by day. The reference books, other reading material are not available in Hindi and other regional languages so availability for such books should be made for students and teachers which can make the teaching learning process more effective.

**Evaluation system**: Considering the recommendations of various commissions and committees the internal assessment, semester system, continuous and comprehensiveness of the assessment process and grading emerged as the prime areas of concern in context of teacher education reforms. To overcome the drawbacks in the evaluation system and to test students understanding, application, skill, analytical and synthesis abilities, it is necessary to understand the prevalent reforms in the system so as to be able to suggest improvement measures. Few of the reforms adopted in Indian universities are, the internal assessments with semester system, continuous and comprehensive evaluation and grading instead of marking. This system helps, both teachers and students for improving themselves time to time; in systematizing and regularize the studies and students’ attendance; enhancing the achievement of the students. The functionally streamlined continuous internal assessment enables the teachers and students to analyse the course content into meaningful segments, prepares the blueprint of instructional strategy with build-in evaluation of a formative nature that included a few unit tests, oral tests, field works etc. This formative assessment staggered over the academic session culminated in summative evaluation at the end of the year.

**Number of schools are opened**: There are nearly 5.98 lakh Primary Schools, 76 lakh Elementary Schools and 98 thousand 4igh / Higher Secondary Schools in the country, bout 1300 teacher education institutions for elementary teachers and nearly 700 colleges of education / university departments preparing teachers for secondary and higher secondary schools. Out of about 4.52 million teachers in the country nearly 3 million are teaching at the primary/elementary level. A sizeable number of them are untrained or under-trained. As far as in-service education is concerned the situation is not very encouraging. In this scenario it has been observed that teacher educators are not professionally committed and overall competencies of teachers leave much to be desired. The quality of pre-service education has actually shown signs of deterioration. Many researchers in their study discussed about the various problems that are existing in Indian Teacher Education.
Conclusion

Teacher education is becoming increasingly upgraded in terms of its academic nature. Since the teacher is the pivot of the entire educational system and is the main catalytic agent for introducing desirable changes in the teaching learning process, all attempts need be made for motivating teachers to become innovative and creative. It goes without saying that a self-motivated and really industrious teacher can utilize his own resources to keep himself abreast of new knowledge and skills. It has been recognized that teacher education program should be structured and modified in a way that enables them to respond dynamically to the new problems and challenges in the field of education, then only teacher can help in national development. The government has been taking keen initiatives in the formulation of polices related to teacher Education in India.

References


TRANSFORMING TEACHER EDUCATION THROUGH TECHNOLOGY: ROLE OF MOBILE LEARNING

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Rapid expansion of knowledge, scientific developments, space exploration and above all the wave of globalization has created a complex web around us. Information is ultimately becoming the driving force in the world and intensely making its impact on the country’s economy, development and social growth. There is dire need of innovative ways of educating the young for long term quality involvement in learning to help them contribute to the growth of the nation and in turn helping them to maintain quality in life. Teacher education is under the gamut of technological revolutions and thus is being evolving. Every day classroom activities involve use of teaching strategies and innovations and mobile learning can be effectively incorporated in the teacher education. It will need certain preparations by the institutions and teachers. It will involve understanding, designing of technologies, media and interactions to support a seamless flow of learning across contexts, and integrating mobile technologies within education to enable innovative practices.

Rapid expansion of knowledge, scientific developments, space exploration and above all the wave of globalization has created a complex web around us. The education sector among other sectors is facing the challenges of global trends. In the present era, the country’s progress is not adjudged by its military power, political stability or economic prosperity but by its command and control over modern knowledge and information system. Information is ultimately becoming the driving force in the world and intensely making its impact on the country’s economy, development and social growth. At this juncture of time there is dire need of innovative ways of educating the young for long term quality involvement in learning to help them contribute to the growth of the nation and in turn helping them to maintain quality in life. It will also help them to face the challenges of a society for enriching and distinguishing themselves as well as enable to think better and develop independent learning. Integration of technology into education has the potential to bridge not only the knowledge gap in terms of improving the quality of education but also in making education accessible to people beyond boundaries and in remote areas. Technology plays a role in this approach of providing students with tools and information that support their problem solving, communication, collaboration, and knowledge creation. It also provides teachers with new tools that can transform instructional roles, curricula, and practices. The rapid rise to prominence of technologies is also having profound and far reaching implications for the way teaching and learning takes place across all stages of education. Teacher education system has to be revolutionized through the integration of technologies for developing teaching skills, providing tools for teachers and students, and even involving the components in the teaching learning process. The Education Commission (1964-66) has remarked, “Of all the different factors that contribute to national development, the quality, competence and the character of teachers are

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Teacher Education: Challenges and Opportunities

undoubtedly the most significant.” Teacher is the backbone of an education system and his/her competence and commitment determines the quality of an education system. The role of teachers and the students have been redefined due to tremendous changes that are occurring and thus, technologies has to be introduced in these teacher training and development programmes so as to make them literate in use of technology for imparting information and instructions in the class rooms. Traditional and innovative methods have to be blended together to make the whole teaching learning environment congenial for facing the rising global challenges. Use of innovative technologies in teacher education breaks the monotony of the teaching –learning process and the class room environments change from teaching to learning environments. Computers, laptops, internet, and wireless campuses are the recent trends of the educational institutes. The class rooms are now equipped with interactive white boards, projectors (mobile or desktop), LCD displays, 3D technology, etc. With improved connectivity, the interactive sessions have been enhanced along with online learning. In this evolution, mobile learning is also taking lead by decreasing the limitations of mobility of portable devices. The 3 G mobile telecommunications denoting the next generation of mobile systems supporting high speed data transmission and internet protocol (IP) are becoming more common in educational sector.

Mobile learning is one of the innovative technological advancement that can be effectively incorporated in the education system particularly teacher education system. Both teacher and the student need a proper and handy system to interact with each other and facilitate the teaching system. The M-learning systems are not to replace traditional classrooms but they can be used to complement the learning process. Our learners, instructors, students and teachers should be prepared for the next generation of learning and training. There must be proper training for teachers on how to use the mobile technology, how to design mobile learning materials and how to access existing learning materials. It is important to follow good learning design principles for mobile learning, especially when designing for different cultures. Learners must be trained on how to use the mobile technology and how to access the learning materials. The development of a mobile infrastructure for the provision of mobile learning will meet this need and will open new scenarios in the education sector.

M-learning is the technology of 21st century and has to be used as a tool for research as well as to access, manage, integrate, and evaluate information. Mobile learning in education sector has become a pertinent issue now days because the present as well as future generation learners are demanding for access to information or learning materials from anywhere and at anytime as they move from one location to the other in a wireless environment. The concept had generated an excitement in the learners and teachers as there would be a reallocation in the whole set up of traditional educational environment. Time is not far away when everywhere in the world the books and notes would be replaced with very small and slender devices known as smart phones, notebooks and tablets. As a result the teaching and learning environment will become convenient, virtual, effective and entertaining and above all mobile.

Mobile devices are offering large range of communication options, which includes

1. Voice-based services are available through voice communication with the operator of the call centre or IVR system. These services are convenient for visually impaired students. This service lack high security level, information is transferred openly while authentication
is carried out using the phone number and code words.

2. WEB-based services use the Internet services developed for desktop computers. Mostly, authentication is carried out using the password, sometimes with use of one-time passwords. Encryption is available with the use of SSL protocol, but these services are not so convenient to use on mobile devices due to their particularities (small screens, degraded keypad).

3. SMS or USSD-based services that have specific features typical for mobile devices, allowing to order remote services by sending specially stipulated SMS or USSD. They lack of high security level and are not so user-friendly. Authentication is carried out via MSISDN. Due to insufficient security level they have limited list of services and restricted payment limits.

4. Services based on special applications in mobile devices or secure elements are the most perspective and convenient method for users. Depending on implementation, they can have various security levels up to the maximum (when using multifactor authentication, data encryption and operating within Trusted Execution Environment).

Mobile learning in an education process is carried out through effective mobile devices which are highlighted below as:

— **Note Book computers** – They have the features of desktop personal computer, but are smaller in sizes and support wireless communications. Their prices are quite high.

— **Tablet PC** – These are one of newest mobile devices. They can easily recognize hand written text. And are expansive.

— **Personal Digital Assistance (PDA)** – They have small sizes and significant processor power. The main operating system used are palm and Microsoft pocket PC.

— **Cellular Phones** – The low class devices mainly can be used for voice communication as well as sending and receiving of text messages (sms). They have low memory capacity and lower data transfer rate. However, the higher class devices can be used for internet access via WAP or GPRS technologies.

— **Smart Phones** - They are hybrid devices which combine the abilities of cellular phones and PDA. They are of smaller size than PDA and bigger than cellular phones. They use Symbian, windows mobile or other operating system. As they have internet browsers so they can be successfully used in the mobile multimedia education.

Apart from above mentioned devices, several communication technologies are used in mobile devices. These include as follows:

— **Global System for Mobile Communication**: (GSM) is one of the leading digital cellular system. GSM has become the world’s most widely used mobile system in use in over 100 countries. It provides integrated voice mail, high speed data, fax, paging. It offers the best voice quality of any current digital wireless standard.

— **Wireless Application Protocol** (WAP) – This is a free unlicensed protocol for wireless communication. It makes possible creation of advanced communications services and access to internet pages from cellular phone.

— **General Packet Radio Service** (GPRS) – A packet-linked technology that enables
high speed wireless internet and other data communications GPRS Provides about four time greater speed than conventional GSM system.

- **Bluetooth** — Bluetooth makes it possible to transmit signals over short distance between telephones, computers, and other devices and thereby simplify communication and synchronization.

- **IEEE802.11** is a type of radio technology used for wireless local areas network (WLANs).

### Values of M-Learning in Education

Following are some special values of m-learning in education sector:

- Is cost effective as it replaces desktop with laptops and wired networks with wireless one.
- It can reach at those corners of the country or region which are remote and do not have any access to school, teachers and libraries.
- No need of infrastructural facilities, classrooms, libraries, etc.
- Provides freedom for anywhere and anytime learning.
- Easy to operate, and carry in pockets or handbags.
- Teaching and learning is self-paced, flexible and quick.
- Provides immediate feedback and reinforcement.
- As it is the most used technology by youngsters therefore creates motivation and interest.
- Effective teacher-taught relations as learning is spontaneous.
- Improved teamwork, sharing ideas, commenting, evaluation, etc.
- Increases students content retention power.
- Better communication and fewer hassles.
- Easy installation and no wiring problems.
- Quick uploading and downloading of teaching-learning content.
- Added features of graphics, animation, etc. improves learning.
- Provides access to both audio and video conferencing.
- It is an environment-friendly technology as no paper work is involved.

Thus, M-learning provides benefits of both mobility and reachability to both the teacher and learner.

### Challenges of using M-learning

Although the values of m-learning are greatly appreciated but like any other technology this one also has certain challenges that are as:

1. Problem of connectivity is sometimes irritating.
2. Battery life of few devices is very short.
3. Storage of data or content is of limited capacity.
4. Regular updating of technology is required otherwise it becomes obsolete.
5. Security constraints
6. Lack of appropriate technology literacy or digital literacy skills among teachers as
well as students.
7. Screen size and key size of the mobile phones or PDA’s or other mobile devices pose hindrances in reading.
8. Input of long study material poses problem.
9. Become distracting for some learners as they get involved in gaming, chatting, cyber crimes and often cheating.
10. Technical support, training, high cost and maintenance act as major constraints.

Over the last about ten years mobile learning has grown from a minor research interest to a set of significant projects in schools, colleges and work places around the world.

Today majority of the students have mobile phones with them. Most of the mobile users are having multimedia phone sets with large internal memory and varied applications. With such quality gadgets the teaching learning process can be made student and teacher friendly. Students can be assigned home assignments through mobile phones, can be provided class room lectures on mobile phones through download facility etc.

The mobile phones can be effectively used in the teacher education institutions with few suggestions:
1. The students must be given permission to bring the mobile phones with them in the classes in active mode.
2. The campuses must provide wi-fi facilities so that students can easily access and download the learning content.
3. Curriculum has to redesigned which includes those activities which involves e- learning.
4. Institutes must develop the knowledge pool and e learning consortium to share and download the required contents easily.
5. Video lessons as well as audio lessons should be appropriately developed for mobile learners in required format.

Along with this, following support facilities are required:
— Broad based robust telecommunication infrastructure has to be set up.
— Faster networks, better connectivity, higher level machines, more complex software’s.
— Mobile learning content development has to be taken up along with its proper distribution and orientation.
— Curriculum, evaluation procedures, etc have to be accordingly developed so that can be easily assessed on the handsets.
— Teachers have to be properly trained in the method and techniques of teaching through mobile devices at the pre service and in service training centres.

Conclusion

Teacher education has to empower itself to meet the challenges of technology brought about by globalization. It is evident that a nation cannot progress until we keep ourselves abreast with the latest technology and m-learning is one such technology that has to be integrated in the education sector with positive and amorous attitude. The need of the hour suggests that the importance of mobile learning has to be highlighted that means awareness among the learners
has to be enhanced about the advantages of m-learning. They have to be properly trained in the
digital literacy skills so that use of mobile technology is possible to the fullest extent with minimum
problems. In such conditions, the role and attitude of teacher is of foremost importance.

References
BARRIERS FOR THE IMPLEMENTATION OF NCF 2005 IN SCHOOL EDUCATION

Mr. Sudhir*

National Curriculum Framework, 2000 was initiated specifically to address the problems of curriculum load on children. A committee appointed by the Ministry of Human Resource Development in the early 1990s had analyzed this problem, tracing its roots to the system's tendency to treat information as knowledge. In its report, “Learning without Burden,” the committee pointed out that learning at school cannot become a joyful experience unless we change our perception of the child as a receiver of knowledge and more beyond the convention of using textbooks as the basis for examination. Though NCF 2005 is giving emphasis to the learning without burden but in ground reality there is still burden in the minds of the tiny stars. Schools have only one sole purpose i.e. to get more admissions. Thus they give preference to the scores which highlight their institute as the best school. Parents also don't have any concern with the natural learning of the child; they only want their child to be a topper.

The review of the National Curriculum Framework, 2000 was initiated specifically to address the problem of curriculum load on children. A committee appointed by the Ministry of Human Resource Development in the early 1990s had analyzed this problem, tracing its roots to the system's tendency to treat information as knowledge. In its report, “Learning without Burden,” the committee pointed out that learning at school cannot become a joyful experience unless we change our perception of the child as a receiver of knowledge and more beyond the convention of using textbooks as the basis for examination. Therefore the National Curriculum Framework 2005 gave emphasis to the learning from “known to unknown,” from “concrete to abstract” and from “local to global.” It favored child as a Natural learner who can learn from different activities and construct the knowledge from his past experiences. Initially, children are cognitively oriented to the here and now, able to reason and act logically on concrete experiences. Children may remember many facts but they may not understand them or be able to relate them to the world around them. So the main purpose of the teaching is to provide proper environment where the child can construct their previous experiences in the present scenario. But the ground reality is completely different. Though NCF 2005 has given emphasis to learning without burden and presents the child as the natural learner who can learn from his own experiences but still in many schools the old techniques and methods of instructional base of teaching has been adopted where the child is still the passive listener. The main emphasis is only given to memories the facts and information and reproduces it in the examination.

- The ground reality: The ground reality is that in most of the schools in India, students, teachers and administrators are apathetic towards the process of education, fraudulent ways are being adopted to complete the process and a large number of educated youth find themselves without jobs. It is quite anomalous that when the people, government and those involved in

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implementing it, consider the education to be desirable thing, they choose to ignore the real state of affair on ground. Policy makers, politicians, social activists and education experts are seen taking idealist positions when talking about education, most of the time. Do they really want to continue and expand the existing education system in its present form? Besides the degeneration of the process, education as an activity seems to be going without any direction.

- **Lack of supervisory staff**: Sources in the department admit that the educational standard has taken a hit due to severe crunch of supervisory staff. Of the 49 Mandal Education Officer (MEO) posts in the Krishnadistrict 27 are vacant while only 22 have regular appointees. If such is the conditions of our Government schools then how can we able to fulfill the aim of constructive learning because if there is a shortage of supervisory staff then who will judge the performance of teachers and the outcomes of the learners?

- **Extra burden on Teachers**: Because of lack of infrastructure and staff in schools the teachers have been given the extra responsibilities which further affect the performance of the teachers. Students are the natural learners and they learn from their surroundings but if their surroundings and environment lacks the infrastructure then neither the student nor the teacher in being able to do anything. No doubt teacher is the game changer and it is the teacher who helps the child to construct his knowledge but if teacher is loaded with extra burden then what would you accept from teacher?

- **No emphasis to the learning based on understanding**: Though NCF 2005 has given emphasis to the constructive learning which is purely based on understanding but still in school the old method of Jug mug theory has been given importance. Still no one believes in the natural learning of the child rather in many schools child or learner is still a passive listener. Today the biggest question which is rising in front of us is that why there is so much difference between policies and the actual ground reality? Is it because of poor implementation or because of the lack of will on the part of administrators?

- **Rote Learning**: Carl Jarvis, an educator from London, is helping ‘abillionideas’ in creating awareness about the rote learning mentality gripping our school system in India. It is ironic, that we still follow what the colonial system Britishers left for us whereas Carl (another Britisher) is now propagating how harmful that can be for true education. A group of parents are meeting Carl on Friday in Gurgaon to discuss the same. Over the last couple of years, studies reviewing the performance of students in professional courses show that they don’t meet the benchmark. Nearly 75% of second year engineering students in colleges in and around Chennai failed in at least one subject in the third semester. Months after acing their Class 12 exams, nearly 40% of first year medical students in 27 colleges across the state failed, a review in 2011 revealed. Among dental students too the pass rate of final year students in the state was around 40%. Now, a perception survey shows that more than 80% of school principals across the country blame rote learning for the poor standards of learning in students passing out of schools. Nearly 70% of the principals surveyed feel that today’s curriculum did not give sufficient scope for creative thinking. Experts believe that the educational system followed in most schools today is the ‘factory model’ designed between the 18th and 19th century to suit the needs of the Industrial Revolution. Since then, there have been dramatic changes in the learning environment and lifestyle. Researchers across the globe have reached the consensus that the key to addressing these
challenges is to bring a transformation in student thinking, classroom dynamics, learning ambience, technology integration and teacher empowerment. The above information reveals that still our education system needs a change in the ground level because though policies are made for constructive or co-operative learning which is completely based on understanding and develops the mental abilities of the child but still it is far from implementation.

- **Corporal Punishment**: The news published in Times of India in August 13 2012, emphasizes that corporal punishment is required for the desired behavior of the child which is against the norms of NCF 2005. As many as 30% principals and 40% teachers surveyed believed that strict enforcement of discipline is necessary for proper teaching and the teacher’s control over students is a must for discipline. They also said that there can be no discipline without fear of the teacher in students and those not paying attention to studies should be physically punished.

- **Less emphasis on co-scholastic activities**: The News also explored that over 70% of the principals said that co-scholastic areas are definitely relevant to curriculum and for building students’ self-confidence, self-control, sportsmanship, solidarity, teamwork, competitiveness, health, etc. However, less than half have accepted that their school places no major emphasis for these areas in curriculum. Schools on an average spend 9% and 10% each of time, respectively, on physical education/sports and co-scholastic activities like music/art/dance/ elocution/dramatics. About 60% of class time is spent on learning academic subjects. The above statement completely presenting the contradiction between the policy of NCF 2005 and the ground reality.

- **Dominance of Number system**: In school there is the dominance of number system. Schools don’t have any concern with learning rather their main concern is to produce scores which further helps these institutes to get more admissions. Parents also don’t bother about real learning of their children, they only have the interest that how much score their children got during examination? If such is recent trends of the present schools then where is the implementation of NCF 2005?

Thus the biggest question which is now rising in front of us is that: is there any co-ordination between the head and hands? And if there is no co-ordination then what is the cause of it? Education will become burden if these institutions practice such kind of wrong ideas. We need the Education in which the child’s natural instinct of learning cannot be suppressed and if it is suppressed by us then we all are the culprit of humanity. The futuristic society will not spare us if we don’t rethink about it and find the exact measure to curb it.

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ROLE OF TEACHER IN CHANGING SCENARIO

Mr. Arashdeep Singh*

In the fast changing world public education is also changing. As part of the changes the role of schools and education will also be different both in the educational system and in the society. Together with them the role of teachers will also change. Teachers play a central and very important role in molding students, who form a nation’s future human resource. They guide students to achieve the knowledge and skills they need to succeed in the world. Nations are the way they are and will be in part because of their teachers.

The word “teach” is derived from the Anglo Saxon word “teacon” which means “to impart”, “to instruct”, “to make aware of” and “to train”. A teacher can be defined as a person who has enough knowledge in any field and conveys this knowledge to the ignorant one. In narrow sense a teacher is who imparts knowledge but in a broader sense the teacher is a motivator who motivates, encourage and develop students in social, mental, academic areas of life. Life is a massive, unfilled and mysterious tunnel. Children have to cross this tunnel to achieve success. Obstacles will hinder them and this is where teachers come into view. Teachers play the role of the torch. They go together with the students and guide them out and away from their deadlock.

Role of Teacher in Ancient Period

GURU: “GU” means darkness and “RU” means remove. In ancient period teacher was defined as the dark remover who removes the untruth facts from the minds of the students.

Adviser: Teacher or guru played a significant role to advise or guide the kings of that time. All the kings gave them huge respect for their work.

Model: In the ancient period teacher was considered as a symbol of truth, beauty and purity and were given very high place.

The preceptors were of two classes, namely Acharya and Upadhyaya. According to ancient literary texts the Acharya performs the upanayana ceremony of the students, teaches him the Veda along with ritualistic literature and the Upanishads but does not work for livelihood whereas the Upadhyaya teaches his pupil the Veda and the Vedic literatures for livelihood. The Apastamba dharma sutra proclaims that though the teacher is the sole guardian of the learner during his study, yet he cannot exercise arbitrary power. It declares that the educator cannot utilise the pupil’s services for his own advantage. For the student’s offences, he can punish him in the prescribed manner but not in any way he likes.

According to the Apastamba-dharma sutra, a pupil should confidentially draw the attention of the teacher to any wrongdoing of the rules, meant for him, either purposely or unconsciously. The students are allowed to control the teacher by force from wrong-doing or to get him restrained.

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Role of Teacher in Changing Scenario

by his father etc. Mahabharata mentions that students are allowed to desert his teacher who is arrogant, ignorant of his duty and resorts to a wrong course of action.

**Role of Teacher in Modern Era**

There have been a huge number of changes in education systems universally. However, if we aim to have a closer look at the characteristic features of the changes, we have to examine what they are. Together with the changes, new expectations are demanded from schools. Nowadays schools need to teach their learners how to increase information and how to select and use them. This happens so quickly that students learn how to use the Internet together with their teachers. Parents are involved in decision-making so they take part in the life of the school. It is no longer enough to send the kids to school in the morning, pick them up in the afternoon. Parents have to have an insight in the writing of the educational institution. The concept of learning to learn has slowly become a very important element of teachers’ job.

Today, the seeds of such a dramatic transformation in education are being planted. Prompted by massive revolutions in knowledge, information technology, and public demand for better learning schools nationwide are slowly but surely restructuring themselves. Leading the way are thousands of teachers who are rethinking every part of their jobs, their relationship with students, colleagues, and the community; the tools and techniques they employ; their rights and responsibilities; the form and content of curriculum; what standards to set and how to assess whether they are being met; their preparation as teachers and their ongoing professional development; and the very structure of the schools in which they work. In short, teachers are reinventing themselves and their occupation to better serve schools and students. The changes that takeposition in schools have changed the roles of teachers, too. In the past teachers used to be the major source of knowledge, the leader and the educator. Teachers would systematize after-school activities. They used to be the influence in the class and often took over the role of parents. Nowadays, teachers provide information and show their students how to tackle them. Although they are still measured to be a kind of leader in the class, they can be thought of as facilitators in the learning process. They are supporters rather than educators and also advisors towards parents.

If we focus on the teaching process, we still understand that there are a great number of changes in this field as well, and all of them have an influence on the role of teachers. First of all, teachers in modern classrooms are no longer lecturers, they are facilitators, their main task is to set goals and arrange the learning process accordingly. In the past, teachers used to follow a syllabus which was compulsory for them. Nowadays, teachers have a National Curriculum, a Core Curriculum and a local (school) curriculum that they have to consider, but - on the other hand - they have independence to choose the teaching materials (textbook), make up a syllabus of their own and teach their pupils so that they can perform well both in examinations and in life. Curriculum design is a task teachers have to be readyfor.

Another difference between the past and present tasks of teachers is represented by the technical background they need to be able to use and handle efficiently (computer, photocopier, power point, projectors, etc). Instead of teaching chalk face, they need to be an information technology expert, a technician or/and a photocopy master. One of the major challenges for teachers is that their role in the school management has also changed. The school needs them as
individuals, who can make decisions and manage with the stress of the changing world of schools. At the same time teachers need to be able to work in teams, work collectively with colleagues and parents, they have to write projects to gain money for the school programmers, they have to be PR experts and need to do all these things for a modest monthly income.

The main question is how these changes manifest themselves for the society, for the participants (teachers, learners, parents) of education. This summarizes the characteristic features of future teachers who are to face a brand new situation in future education. According to the document, teachers realize the changes, but it is not sure whether they are able to face the new requirements or not. Today a great emphasis is placed on both initial and in-service teacher education programs which are to prepare teachers to meet new demands. As known, children are the future human resource of a country. They are the ones to buffet aside all antagonism and rise to the occasion. It’s up to the teachers to gather the vagabonds and mould them into full-fledged reservoirs of knowledge. This task is very crucial that even the teachers of a village can make a difference on an international level. Properly educated children will raise the importance of international harmony and will develop a prospect based on this, thus promoting international peace. Teachers play a crucial and vital role in moulding students. They are indirectly why nations are the way they are and the way they will be.

**Some Suggestions for Teachers**

Be aware of health and educational needs of the community and facilitate genuine desire to provide them. Teacher should act as a true leader and should make an earnest effort to find means to solve these problems.

- Actively design, implement and evaluate the departmental objectives he has set for himself and his team.
- Not only use existing clinical and scientific knowledge to teach but must aggressively indulge in research which is truly genuine and ethical.
- Educate the students and not lecture them.
- Set an example others can follow. Teacher should be a man of integrity and impeccable character undeterred by difficulties and hurdles. He should make a conscious effort to develop all the characteristics and attitudes required of his post including dependability and a sense of responsibility.
- Motivates both his juniors and peers.
- Indulge in postgraduate teaching and training. This is highly rewarding and provides a sense of satisfaction and achievement.
- Regularly evaluate himself and be open to improvement from whatever source it comes from, even from the students.
- Should be accessible to the students at all times, listen to their problems and should make a sincere attempt to solve them.
- Inculcate ability to relate to, communicate with and show concern and respect for his students. He should consider his students as junior colleagues and should treat them as such.
Teacher and Technology

Today we live in the era of technology. Teachers are facing some challenges because of modest use of technology in their teaching. Here are some things that a teacher should do for making himself ready for today’s challenging scenario.

They can use technology. Software to be used can be built up in many different ways, ranging from the simplest way to the complex. Links can be established to other bases, in order to add to the subject material and offer new ways of looking at it. Such programs can be used in lectures, in groups or for individual learning for the student. These methods can also be combined by using video-conferencing or two-way television. The videoconferencing technology can be used for lectures, conferences and tutoring along with other things. It is suitable for connecting several groups together and presenting knowledge to people who otherwise would not have had access to this. One can ask oneself whether there is any difference between the classroom and the videoconference.

Teachers vary enormously. Some are lectures and swear to one-way communication, whether they are standing in a classroom, an auditorium or sitting in front of the camera during a videoconference. Others again are more the dialogue-type of people, preferring to have conversations, tutor and discuss. Videoconferencing works well in both these cases. Everything will ultimately depend on the teacher’s pedagogical expertise, technical competence and ability. Broadly speaking we can say that a teacher who functions well in the classroom, will also function in the videoconferencing room.

Even if a videoconference is, technically speaking, different, the pedagogy’s ability to communicate will be the decisive factor. To create variation in videoconferencing studio classroom teaching, several cameras, Documental camera, Projected picture on picture, Screen picture downloaded from PC or Internet and Video playback can be possibly used. By doing this the videoconferencing teacher acquires large possibilities to provide varied education. When the person in question knows what he/she is doing and prepares him/herself accordingly, new technology is a door opener to good quality teaching and can be just as valuable - or even better than in the classroom. In decentralized set-ups video-conferencing will along with data-based learning often make up the very lifeline of the whole set-up. The technology will never render the teacher superfluous, but it can change the teacher’s role. By using ICT the teacher can arrange things so that the student, can, through active searching, find and go through relevant subject matter before coming to their classes or tutoring. It can also lead to having to travel less, by having video-conferencing meetings instead of ordinary meetings, and it can also be easier to adapt and tailor further education courses and studies which are in demand from the public and private sector.

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TEACHER EDUCATION IN THE INDIAN SCENARIO

Mrs. Geeta Kundi*

Teacher Education is a discipline which educates the progressive generations on what has gone by, where we are, where we want to go, and what we like to create, observing healthy, meaningful and long life. It is one of the significant areas where a lot of innovative ideas can be tried out and practiced. The present paper discusses about changing context of teacher education in Indian scenario.

An educational institution performs a significant function of providing learning experiences to lead their students from the darkness of ignorance to the light of knowledge. The key personnel in the institutions who play an important role to bring about this transformation are teachers. As stated by NCTE (1998) in Quality Concerns in Secondary Teacher Education, "The teacher is the most important element in any educational program. It is the teacher who is mainly responsible for implementation of the educational process at any stage. This shows that it is imperative to invest in the preparation of teachers, so that the future of a nation is secure. The importance of competent teachers to the nation’s school system can in no way be overemphasized. The National Curriculum Framework 2005 places demands and expectations on the teacher, which need to be addressed by both initial and continuing teacher education.

It is well known that the quality and extent of learner achievement are determined primarily by teacher competence, sensitivity and teacher motivation. The National Council for Teacher Education has defined teacher education as – A programme of education, research and training of persons to teach from pre-primary to higher education level. Teacher education is a programme that is related to the development of teacher proficiency and competence that would enable and empower the teacher to meet the requirements of the profession and face the challenges therein. In 1906-1956, the program of teacher preparation was called teacher training. It prepared teachers as mechanics or technicians. It had narrower goals with its focus being only on skill training. The perspective of teacher education was therefore very narrow and its scope was limited. Teacher education encompasses teaching skills, sound pedagogical theory and professional skills.

Teacher Education = Teaching Skills + Pedagogical theory + Professional skills.

- Teaching skills would include providing training and practice in the different techniques, approaches and strategies that would help the teachers to plan and impart instructions, provide appropriate reinforcement and conduct effective assessment. It includes effective classroom management skills, preparation and use of instructional materials and communication skills.
- Pedagogical theory includes the philosophical, sociological and psychological considerations that would enable the teachers to have a sound basis for practicing the teaching skills in the classroom. The theory is stage specific and is based on the needs and requirements that are characteristic of that stage.

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Professional skills include the techniques, strategies and approaches that would help teachers to grow in the profession and also work towards the growth of the profession. It includes soft skills, counseling skills, interpersonal skills, computer skills, information retrieving and management skills and above all life long learning skills.

An amalgamation of teaching skills, pedagogical theory and professional skills would serve to create the right knowledge, attitude and skills in teachers, thus promoting holistic development.

Changing Context of Teacher Education in the Indian Scenario

The well-established tradition of teaching and learning in India has retained its inherent strength even under adverse circumstances. The post-independence period was characterized by major efforts being made to nurture and transform teacher education. The system of teacher preparation has come under considerable pressure as a result of the expansion and growth of school education, through efforts to universalize elementary education. Having inherited a foreign model of teacher preparation at the time of independence from Britain in 1946, major efforts have been made to adapt and up-date the teacher education curriculum to local needs, to make it more context based, responsive and dynamic with regard to best meeting the particular needs of India. The current system of teacher education is supported by a network of national, provincial and district level resource institutions working together to enhance the quality and effectiveness of teacher preparation programs at the pre-service level and also through in-service programs for serving teachers throughout the country.

Impact of National Policies

India has made considerable progress in school education since independence with reference to overall literacy, infrastructure and universal access and enrolment in schools. Two major developments in the recent years form the background to the present reform in teacher education

- The political recognition of Universalization of Elementary Education that led to the Right to Education Bill, 2008 and

The Bill has been passed by the Parliament and the Right to Education Act has come into being making it mandatory for the state to provide free and compulsory education to almost 20 crore children in the 6-14 age group till class 8. The Act mandates a schedule for the functioning of schools which includes a teacher - student ratio of 1:30 till a student population of 200 students at the primary stage. This would increase the demand for qualified elementary school teachers many times. The country has to address the need of supplying well qualified and professionally trained teachers in large numbers in the coming years. The launch of the massive Sarva Shiksha Abhiyan in 2002 and the recent financial commitment and education cess to augment the Universal Elementary Education mission have underscored the need to adequately prepare teachers to address the growing demand for quality education.

Developments in School education: School education has seen significant development over the decades since independence. According to Government estimates (Selected Educational Statistics- 2004-2005 – Ministry of Human Resource Development, New Delhi) while 82% of the 20 crore children of the 5-14 age group were in school as per enrolment figures, it is equally
true that 50% of these children are dropping out before completing class 8 (MHRD Annual Report 2007-08). The situation on the ground is still ridden with difficulties. Regional, social, economic and gender disparities are posing new challenges. This reality increases the challenge that the prospective teacher will face in implementing the Right to Education Act. The continued fragmentation of the school system poses the severest challenge to the national declaration of catering to the basic needs of all children in the 6-14 age group through the elementary education in an inclusive setting. However increasing privatization and differentiation of the schooling system have vitiated drastically the right to quality education for all children.

Changing Role of the Teacher: The current system of schooling poses tremendous burden on children. Educationists are of the view that the burden arises from treating knowledge as a given— an external reality existing outside the learner and embedded in textbooks. Knowledge is essentially a human construct, a continuously evolving process of reflective learning. The NCF 2005, requires a teacher to be a facilitator of children’s learning in a manner that the child is helped to construct his/her knowledge. Education is not a mechanical activity of information transmission and teachers are not information dispensers. Teachers have to increasingly play the role of crucial mediating agents through whom curriculum is transacted.

Challenges in Teacher Education: Unprecedented expansion of teacher education institutions and programmes during the past few years characterizes the teacher education scenario of today. With increasing school enrolments and the launch of pan-Indian primary education development programmes like Operation Blackboard, District Primary Education Programme, Sarva Shiksha Abhiyan and Universalization of Elementary Education, there was a natural increase in the demand for teachers. Added to this, the backlog of untrained teachers in the system and the essential requirement of pre-service teacher certification for appointment as a teacher led to mounting pressure on existing institutional capacity. The demand far exceeding supply, market forces have taken over unprecedented rise in the number of teacher education institutions in most parts of the country. From 3489 courses in 3199 institutions and an intake of 2,74,072 in 2004, the numbers in December, 2008 swelled to 14,523 courses in 12,200 institutions with an intake of 10,73,661 at different levels. This expansion has taken a heavy toll on quality parameters like infrastructure, faculty learning resources and student profile.

Teacher education as a whole needs urgent and comprehensive reform. There is a need to bring greater convergence between professional preparation and continuing professional development of teachers at all stages of schooling in terms of level, duration and structure. Considering the complexity and significance of teaching as a professional practice, it is imperative that the entire enterprise of teacher education should be raised to a university level and that the duration and rigour of programmes should be appropriately enhanced.

Research and Innovation: There is a need to increase research that documents practices reflectively and analytically— whether it is of programs or of individual classrooms – so that it can be included in the body of knowledge available for study to student teachers. University departments and research institutions need to undertake such research. In addition there is a need to innovate with different models of teacher education. Institutional capacity and capability to innovate and create are a pre-requisite for the pursuit of excellence. Hence in the present scenario a lot of impetus has been given to research. Many teacher educators are encouraged to
take up either major or minor research projects.

**Inclusive Education**: There are two kinds of exclusion prevalent in schools; one is the exclusion of the child with disabilities and the second is the social exclusion of children who come from socially and economically deprived backgrounds. There is a dire need to equip teachers to overcome their biases in these regards and positively handle these challenges. The Persons with Disabilities (PWD) Act of 2005 provides for free and compulsory education up to the age of 18 years for all children with disabilities. The education of socially and economically disadvantaged groups, especially the SCs, STs and minorities has remained a primary national concern of education for several years. The enrolment and retention of girls and therefore their participation has also remained behind those of boys. Teachers will have to be specially equipped if the social deprivation has to be overcome through education.

**Perspectives for equitable and sustainable development**: In order to develop future citizens who promote equitable and sustainable development for all sections of society and respect for all, it is necessary that they be educated through perspectives of gender equity, perspectives that develop values for peace, respect the rights of all, and that respect and value work. In the present ecological crisis promoted by extremely commercialized and competitive lifestyles, children need to be educated to change their consumption patterns and the way they look at natural resources. There is also an increasing violence and polarization both within children and between them, that is being caused by increasing stress in society. Education has a crucial role to play in promoting values of peace based on equal respect of self and others. The NCF 2005 and subsequent development of syllabi and materials is attempting to do this as well.

**Role of Community knowledge in education**: It is important for the development of concepts in children as well as the application of school knowledge in real life that the formal knowledge is linked with community knowledge. The NCF 2005 promotes the inclusion of locally relevant content in the curriculum as well as pedagogy.

**ICT in Schools and e-learning**: With the onset and proliferation of Information and Communication Technology (ICT), there is a growing demand that it be included in school education. Teacher education has been structured to orient and sensitize the teacher to distinguish between developmentally appropriate and detrimental uses of ICT. It needs to also equip teachers with competence to use ICT for their own professional development.

In view of the above discussion, the newly visualized Teacher education program as put forth by NCERT is as follows; Newly visualized Teacher Education Program Emphasizes learning as a self-learning participatory process taking place in social context of learner's as well as wider social context of the community to nation as a whole. Puts full faith in self learning capacity of school children and student teacher and evolving proper educative programme for education. Views the learner as an active participative person in learning. His/her capabilities or potentials are seen not as fixed but capable of development through experiences. Views the teacher as a facilitator, supporting, encouraging learner’s learning. Does not treat knowledge as fixed, static or confined in books but as something being constructed through various types of experiences. It is created through discussion, evaluate, explain, compare and contrasts i.e., through interaction. Emphasizes that appraisal in such an educative process will be continuous, will be self-appraisal, will be peer appraisal, will be done by teacher educators, and formal type too.
No nation develops beyond the quality of its education system, which is highly dependent on the quality of its teachers. Teachers should be given the most appropriate tools during and after their training, including content knowledge and skills as well as teaching methodology to be able to do their work professionally. India is committed to compatible education for all, which is being realized through the various dedicated programs, essentially innovative in nature.

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INNOVATIVE PRACTICES IN TEACHER EDUCATION

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The quality of education is directly related to the quality of teaching staff. In-service training can greatly enhance the capacity of university and college teachers in operationalizing the innovative concept of teaching learning process. At every level, teachers’ competencies to improve their performance are of great importance. As stated by NCTE (1998) in Quality Concerns in Secondary Teacher Education, ‘The teacher is the most important element in any educational program. It is the teacher who is mainly responsible for implementation of the educational process at any stage. Realizing the call of time Higher Education Commission (HEC) took the professional development as number one priority. This paper concerns with an outline of continuous efforts that are going on for encouraging teachers to have knowledge and to use recent technologies during teaching-learning process for promoting teaching and learning novelty, facilitating and supporting the faculty members of the universities for excellence in learning, leadership in the use of technology and approach in education and training. It has brought new challenges and an opportunity for higher education.

Higher education in India is not only important for improving the country’s economy but also essential for its development as a moderate and democratic nation. The quality of education is directly related to the quality of teaching staff. It is well known that pupil learn more when they are involved actively in learning than when they are passive recipients of instruction. Active learning strategies can be designed to target visual learners through models and demonstrations, auditory learners through discussion, debates and games and kinesthetic and tactile learners through models and role playing. The innovative teaching practices would certainly have greater impact on the learning habits of pupil and consequently its influence on their performance in examinations, life skills and other related aspects. In other words, the innovative practices of teaching help the students to achieve either desired level or enhance the learning capacities so as to excel in their examinations as well as equipping with better potential to seek either jobs or other professional performance in their life.

Impact of Globalisation on Higher Education

Globalization and privatization are imposing new challenges but the nations are still entangled in solving the basic problems of accessibility to higher education for all. In the wake of the transition from elitist to mass education, universities worldwide are under pressure to enhance access and equity, on the one hand, and to maintain high standards of quality and excellence, on the other. Today the notion of equity not only implies greater access to higher education, but also opportunities for progress. In recent debates on higher education, the notions of equity and access go beyond minority to diversity.

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Developing Insight for 5 e’s: Need of Hour

Each of the 5 E’s describes a phase of learning, and each phase begins with the letter “E”: Engage, Explore, Explain, Elaborate, and Evaluate. The 5 E’s allows students and teachers to experience common activities, to use and build on prior knowledge and experience, to construct meaning, and to continually assess their understanding of a concept.

Engage

This phase of the 5 E’s starts the process. Students encounter the material, define their questions, lay the groundwork for their tasks, make connections from new to unknown and identify relevance. An “engage” activity should do the following:
- Make connections between past and present learning experiences
- Anticipate activities and focus students’ thinking on the learning outcomes of current activities. Students should become mentally engaged in the concept, process, or skill to be learned.

Explore

This phase of the 5 E’s provides students with a common base of experiences. Students directly involved with material, inquiry drives the process, teamwork is used to share and build knowledge base. They identify and develop concepts, processes, and skills. During this phase, students actively explore their environment or manipulate materials.

Explain

This phase of the 5 E’s helps students explain the discoveries, processes and concepts they have been exploring. They have opportunities to verbalize their conceptual understanding or to demonstrate new skills or behaviours. This phase also provides opportunities for teachers to introduce formal terms, definitions, and explanations for concepts, processes, skills, or behaviours.

Elaborate

This phase of the 5 E’s extends students’ conceptual understanding and allows them to practice skills and behaviours. Through new experiences, the learners develop deeper and broader understanding of major concepts, obtain more information about areas of interest, and refine their skills. They apply learning to other situations sometimes leading to a new inquiry.

Evaluate

This phase of the 5 E’s encourages learners to assess their understanding and abilities and lets teachers evaluate students’ understanding of key concepts and skill development. Rubrics, checklists, teacher interviews, portfolios, problem-based learning outputs, and embedded assessments are made use of. Results are used to evaluate and modify further instructional needs.

The Major Recommendations Made by Ananthamurthy Committee

The Ananthamurthy Committee (drafted a policy) on higher education has proposed a five-year action plan for revitalizing the higher education sector in Kerala. This can be treated as a model for the entire country. The major’ recommendations made by the committee are:
1. Student should get opportunities for acquisition of existing knowledge and generation of new knowledge. Written assignments, seminars, problem-solving sessions, projects, field studies and so on should become integral to any reform in pedagogy. Through a dialogic process, the teacher should induce the student to think, innovate and challenge existing ideas and generate new knowledge.

2. The method of evaluation should be progressively changed to continuous internal evaluation by evolving an open, transparent and fool-proof system with an appropriate mechanism for effective grievance redressed. The credit and semester mode should be preferable to the uniform, annual mode, as the former would give the students an opportunity to select subject combinations of their choice and to encourage more focused learning by dividing the content into manageable chunks.

3. While English may continue as the medium of instruction in the universities and colleges, there has to be some provision for the production of knowledge and its dissemination in the mother tongue-in the-University. This is because there is a greater possibility for the production of knowledge, especially in humanities and social sciences, in the mother tongue than in other languages.

4. Autonomy should be linked up with accountability. We need a decentralized democratic system of academic governance that would translate the ideal of socially accountable autonomy into a living reality:

5. All institutions for higher education, including universities and colleges, should set up Social Accountability Cells (SACs). A system of academic audit and compulsory disclosures should be put in place through these cells.

6. The Right to Information Act (RTI) should be implemented in all higher educational institutions. Each institution and each individual teacher should maintain a website in which basic data regarding the institution, individual and self-assessment reports should be compulsorily posted and updated at regular intervals.

**Innovative Practices in Higher Education**

**ICT Education**

With the onset and proliferation of Information and Communication Technology in higher education, there is a growing demand that it must be included in school education. Teacher education has been structured to orient and sensitize the teacher to distinguish between developmentally appropriate and detrimental uses of ICT. It needs to also equip teachers with competence to use ICT for their own professional development.

Many educators have the opinion that new methods (ICT) can assist pupil in engaging cognitively to a depth with knowledge domains. This is often discussed in terms of cognitive taxonomies such as provided by Bloom (1964) Bloom Theory on Education:

1. **Knowledge**: The learner must recall information (bring to mind the appropriate material).

2. **Comprehension**: The learner understands what is being communicated by making use of the communication.

3. **Application**: The learner uses abstractions (e.g. ideas) in particular and concrete
situations.

4. **Analysis**: The learner can break down a communication into its constituent elements or parts.

5. **Synthesis**: The learner puts together elements or parts to form a whole.

6. **Evaluation**: The learner makes judgments about the value of material or method for a given purpose.

**Seven Requirements in ICT Education are**

Suiting technology to educational goals and standards, Having a vision for the use of technology to support curriculum, Providing for both in-service and pre-service training, Ensuring access to appropriate technology, Providing for administrative support for technology use, Providing time for teachers to plan and learn how to integrate technology, Providing for ongoing technical support for technology use. In general, these above requirements fall into five areas of impact, Providing the infrastructure of hardware and software, Providing curriculum and technical support for teachers, School organization, design, policies and practices, Schooling, and Management support.

**Continuous comprehensive evaluation system**

Continuous and Comprehensive Evaluation is a process of determining the extent to which the objectives are achieved. It is not only concerned with the appraisal of achievement, but also with its improvement. As testing evaluation is also concerned with identification of learning experiences and educative environment to produce changes in the learner’s behavior, It involves information gathering, information processing, judgment forming, and decision-making.

The role of continuous and comprehensive evaluation becomes very important when our aim is to improve learners’ quality in the cognitive as well as in the non-cognitive domains. Some important points to be considered for implementing continuous and comprehensive evaluation are:

- Careful examination of the course, and specification of competencies to be attained by the learners in terms of knowledge, understanding, application (analysis, synthesis, evaluation for higher grades and skill performance).
- Knowledge and ability to construct assessment tools that are criterion based appropriate for assessing the competencies.
- Careful planning of the competency based teaching procedures. There should be congruence between teaching and assessment without which assessment would become distorted.
- Comprehensive evaluation of competencies as well as personality traits and attitudes.
- The maintenance of records.
- Requirement of knowledge and skills of evaluation, commitment, and assistance to provide remedial teaching on part of the teacher.

**E-learning**

The concept of e-learning is going to be a popular learning tool in higher education these days. The delivery of a learning, training or education program by electronic means is usually
known as e-learning. E-learning involves the use of a computer or electronic device (e.g. a mobile phone) in some way to provide training, educational or learning material (Stockley, 2003). It can involve a greater variety of equipment than online training or education, for as the name implies, “online” involves using the Internet or an Intranet. CD-ROM and DVD can be used to provide learning materials. Distance education provides the base for e-learning’s development.

E-learning has definite benefits over traditional classroom training. While the most obvious are the flexibility, cost savings and time saving. There are also others that might not be so obvious. For example: It’s less expensive to produce, It’s self-paced, It moves faster, It provides a consistent message, It can work from any location and any time, It can be updated easily and quickly, It can lead to increased retention and a stronger grasp on the subject and It can be easily managed for large groups of students.

Virtual Classrooms

Virtual classroom also known asynchronous e-learning, means “at the same time,” involves interaction of participants with an instructor via the Web in real time. For example – VCRs or Virtual class rooms that are nothing else but real classrooms online. Participants interact with each other and instructors through instant messaging, chat, audio and video conferencing etc and what’s more all the sessions can be recorded and played back. Its benefits are:

- Ability to log or track learning activities.
- Continuous monitoring and correction is possible
- Possibilities of global connectivity and collaboration opportunities among learners.
- Ability to personalize the training for each learner.

Instructor-based online mentoring is best suited for students, who need concept –based training and help with their regular studies. There needs to a constant interaction between the teacher and taught to clear doubts and make them understand complex concepts through examples and clarification of doubts. It is being successfully used in soft-skill training in interpersonal skills, diversity and teaching foreign languages.

Conclusion

Teacher education in India is at a new stake in view of the new policies laid down and the globalization processes. Indian Teacher education needs to orient itself to the new challenges and enable its pupil to compete at any level. The pupil who are pursuing teacher education are required to place community and future citizens at a higher place by possessing new skills and attitudes as well as competitive knowledge in the stream of education concerned. All these can be possible through practice of innovative teaching practices in Teacher Education. If the innovative teaching practices being in vogue as well as promoted by different institutions working in the arena of teacher education, there is every possibility that these practices would certainly attract the attention from the academic fraternity. They, in turn, may initiative steps either to follow the existing innovative teaching practices in teacher education or show new path of innovative teaching at their respective institutions.
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Teachers can greatly influence young minds and hence it is important that competent teachers are recruited for the gullible and vulnerable young minds. This is possible only if there is efficient teacher training curriculum with an efficient regulatory body. Teacher Education faces a major challenge of a divide between theory and practice. The quality of teacher development practices has become a major concern in recent educational discourse. There is a great emphasis on collaborative and reflective approaches for teacher empowerment. So for promotion of the knowledge and excellence in teaching there is need of much time to train the prospective teachers. It is discussed in this paper that NCTE took a good step to enhance the teacher education programme because Teacher education is a programme that is related to the development of teacher proficiency and competence that would enable and empower the teacher to meet the requirements of the profession and face the challenges there in.

Education for education sake is no more an acceptable proposition. It has to be purposeful and demonstrate useful not just to the individual and community but to the nation and the world at large. Education involves three processes: Teaching, Training and Instruction. The learning situations are generated by teaching tasks in which student gains new experiences and has to do something. This is the objective of teaching and learning. Former activity is based on teacher and latter is on learner. It is well known that the quality and extent of learner achievement are determined primarily by teacher competence, sensitivity and teacher motivation. Teacher education is important as efficient teachers can shape an efficient future society. NCTE is doing a good job but a lot has to be done to improve the status and quality of teachers in India. The current goal of the Indian Government is to provide education for all. They are trying out with schemes that would enhance enrolment and are ensuring that every child gets access to school. The Government is providing incentive of free meals at rural schools thereby ensuring better attendance at school. They are also focusing on the number of hours a child spends in school as well as certain number of years, so that the child can have a bright future. A lot of planning and resource has been spent on education in India and at the same time for improving the quality of education. One simple way of uplifting the standard of educations is by improving the quality of teachers. A great teacher can make a huge difference to the life of children. A lot of stress is given on teacher training course in India; unfortunately there are several loopholes in the system and a lot of times incompetent teachers get recruited.

Teacher training course in India is designed for aspiring teachers to learn interactive and better ways of teaching to make a subject interesting. Teaching methods have to be different for different age groups, for instance primary level teaching is a lot different from secondary or college level. The educational requirement for a primary and secondary teacher is also different. People who wish to teach primary school should minimum pass higher secondary examination.
with 50% marks whereas for teaching at secondary school, one needs to be postgraduate in the subject one wishes to teach.

The Indian sub-continent has one of the largest education system as well as teacher education system. There are several affiliated colleges and institutes that offer teacher education programs. All the programs are identical but its standards vary. Some unscrupulous institutes are simply money making centers and results in certified but incompetent teachers. The National Council for Teacher Education (NCTE) is a regulatory body but because the country is so diverse with innumerable institutions it sometimes get difficult to monitor all the institutions. NCTE has four regional offices in four different zones of the country for regulating the function of these institutes and to prevent them from becoming commercial institutions.

**Why B.Ed and M.Ed of Two Year**

Teacher education curriculum has faced severe criticism over the years, as it is general too technical and obsolete which is not applicable in contemporary Indian school and society. Because of this drastic changes are required to bring a big change to the curriculum. Teacher education is provided by several Universities, affiliated colleges, private and open Universities in India. Some of these institutions are more like an eye wash and provide certification just by paying the fee, and this leads to rise of unqualified teachers in India. The situation of primary teachers in India has seen a dramatic change but lot has to be done to improve the curriculum of secondary and vocational teachers.

Teachers play an important role in shaping the future of the country and hence it’s important that a lot of attention is paid on the quality of teachers churned out every year. The teacher educators prepare quality teachers who in turn improve the quality of school education and also enhance the learning level of children. The teacher educators are prepared through Master of Degree in Education (M.Ed) programme. It means quality of teacher educators depend on M.Ed programme. In this direction, many efforts were made by implementing the recommendations of policy documents.

B. Ed. Curriculum is meant for preparing teachers specifically for the secondary stage of school education. Hence, it can only include the knowledge domains appropriate for teaching at the secondary stage of education. There exist two main models of teacher education programmes in India. The long duration integrated model wherein the subject matter knowledge is learnt along side professional education courses and the short duration model in which the student would have already acquired a degree in the subject to be taught by him/her. This curriculum is meant for the later model.

While deciding on the courses and the structure, the domains of teachers’ knowledge as outlined under the “Teacher Education Programmes: Curriculum” in the *International Encyclopedia on Education* namely, ‘subject matter knowledge’, ‘pedagogical knowledge’ and ‘pedagogical content knowledge’ were considered. Of these knowledge domains, the subject matter knowledge required for teaching at the secondary level is presumed to be learnt at the secondary and the undergraduate levels of education. In fact, the undergraduate programmes would have provided the subject matter knowledge far beyond the requirements for teaching at the secondary level of schooling.
It is felt that a teacher to be a truly professional practitioner requires a conceptual understanding and appreciation of the above domains of knowledge and also the competence to implement the knowledge in specific contexts of teaching. In order that the teacher education programme to become a professional preparation programme, it should have a fair combination of theory and practice. Too much of theory would push the teacher education programme towards liberal arts orientation and hence prepare a disciplinarian rather than an efficient and effective practitioner. What the country needs today is sound practitioner teacher rather than mere those who is able to verbalise theoretical knowledge. One way of achieving this would be to have a proper blending of reflections on theoretical basis and sufficient opportunities for practice followed by feedback. It is not easy to make a person good teacher in one year. So there is necessity of much time to learn different teaching methodologies. The National Council of Teacher Education (NCTE) increased course duration of Bachelor of Education (B.Ed.) and Master of Education (M.Ed.) from upcoming session 2015. Now these courses will remain two years instead of the prevalent one year course. The NCTE gives the recognitions to the BEd colleges and regulates their activities in India. As per new rules students can complete their M.Ed. or B.Ed. course within three years.

In 1906-1956, the program of teacher preparation was called teacher training. It prepared teachers as mechanics or technicians. It had narrower goals with its focus being only on skill training. The perspective of teacher education was therefore very narrow and its scope was limited. As W.H. Kilpatrick put it, “Training is given to animals and circus performers, while education is to human beings”.

Teacher education encompasses teaching skills, sound pedagogical theory and professional skills. Teacher Education = Teaching Skills + Pedagogical theory + Professional skills.

Vision Towards Teacher Education

Teacher education has to become more sensitive to the emerging demands from the school system. For this, it has to prepare teachers for a dual role of;

- Encouraging, supportive and humane facilitator in teaching learning situations who enables learners (students) to discover their talents, to realize their physical and intellectual potentialities to the fullest, to develop character and desirable social and human values to function as responsible citizens
- Make conscious effort to contribute towards the process of renewal of school curriculum to maintain its relevance to the changing societal needs and personal needs of learners, keeping in view the experiences gained in the past and the concerns and imperatives that have emerged in the light of changing national development goals and educational priorities.

These expectations suggest that teacher operates in a larger context and its dynamics as well as concerns impinge upon his/her functioning. That is to say, teacher has to be responsive and sensitive to the social contexts of education, the various disparities in the background of learners as well as in the macro national and global contexts, national concerns for achieving the goals of equity, parity, social justice as also excellence. The importance of competent teachers to the nation’s school system can in no way be overemphasized. The National Curriculum Framework 2005 places demands and expectations on the teacher, which need to be addressed by both initial
and continuing teacher education.

**Conclusion**

Teachers at all stages have a role to play in actualizing aims of education and making the education process effective. In spite of this curriculum formulation and its implementation at any stage require teachers to share a collective view of the various aspects of teaching, learning and what is educationally desirable. It is this that helps in ensuring connectivity among the various aspects of education, namely, vision of education, forms of knowledge across stages of education, and their utilization towards individual and collective development. So there is necessity of producing efficient teachers for the nation. So it needs time and two year course of B.Ed and M.Ed will be a good effort.

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RECENT TRENDS IN TEACHER EDUCATION

Ms. Bimaljit Kaur*

The present paper is to enhance the teacher education quality in India by focusing on the emerging issues & related concerns. Various issues of teacher education namely, institutional inertia, brand inequity, quality crisis, overgrowing establishment, rare humane and professional teachers, poor integration of skills, alienated and incompatible modes of teacher education, little contribution to higher education, domain pedagogy mismatches, identity crisis, rare innovations, stake poor research scenario, vision and vision mismatches, non-scientific manpower planning, illusive laboratories, over activism of distance/open universities, invalid recognition and accreditation and no teacher education policy have been dwelt on in this paper. The paper concludes that teacher education system in India calls for revolutionary changes.

The process of globalization has not only changed the social, economic, and cultural landscapes across the world, it has significantly affected the nature of geographic boundaries, national and international organizations, social institutions, individuals, as well as corporations. Successful navigation of such changes requires creation of high-quality human resources and the necessary education to meet such goals. Education systems worldwide are bracing themselves to cope with the burgeoning knowledge-based economy by identifying the need to prepare teachers who are well-equipped to address context-specific challenges. This has resulted in a significant emphasis on research in the field of education in general. The universal association of teachers with qualitative improvements in education has added particular urgency to the field of research in teacher education. Areas like collaborative inquiry; action research; internationalization of teacher education curricula; education for sustainability, empathy, and peace; global citizenship; cultural diversity; social justice; and influence of technology, have received a lot of attention. In ancient India, teaching was integrated with religion. At that time, the teacher not only gave the academic instructions but also provided religious instructions. In the course of time, these two functions were separated. In recent times, teaching has become the largest profession of the world. Teachers work as the largest professional group who are engaged in activities of human Development. It is the teaching profession among all the other professions which helps an individual for his growth in body, mind and heart. Teaching as a profession fulfills the needs of special training intended to build up knowledge competencies, develop skills and favorable attitude towards learning. Like all other professions, teaching also demands specialized knowledge and professes to serve the society with a conscious understanding of efficiency, sound knowledge and expertise which are required for assuring highest quality service.

Meaning of Teacher Education

Teacher education refers to the policies and procedures designed to equip teachers with the

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Teacher Education: Challenges and Opportunities

knowledge, attitudes, behaviors, and skills they require to perform their tasks effectively in the school and classroom. In early times, teachers were often scholars or clergymen who had no formal training in how to teach the subjects of their expertise. In fact, many believed that “teachers were born, not made.” It was not until the emergence of pedagogy, the “art and science of teaching,” as an accepted discipline that the training of teachers was considered important. Although there has been continued debate about whether teaching is a “science” that can be taught or whether one is “born” to be a teacher, it has generally been agreed, at least since the nineteenth century, that certain characteristics are needed to qualify a person as a teacher: knowledge of the subject matter to be taught, knowledge of teaching methods, and practical experience in applying both. Most educational programs for teachers today focus upon these points. However, the internal character of the individual is also an important aspect of teaching; whether that is something one is born with or can be taught, and what are the qualities that are needed for the role of teacher, are also a matter of debate.

Teacher’s education is in the transition phase because of the rapid change in technology and student’s changing values. A substantial effort is needed to understand the underlying dynamics of teaching and learning principles of students of the recent time. Teacher’s education courses must incorporate the learning and teaching psychology of students and teachers respectively. Such courses should also incorporate the developmental stages of pre-service teachers to enhance their learning. Pre-service teachers are those scholars and teachers who aspire to build their career in the field of teaching. They should be educated in supportive and conducive environment in which they expect to educate and groom young students. Such courses should target to develop social consciousness and reform mindset among prospective teachers.

Recent Trends in Teacher’s Education

The change brought by technological, economic, and cultural forces in the early twenty-first century was very fast. These changes were mostly pronounced in the developed world. But their effect was also apparent in the developing world. Societies across the world were rapidly changing in fundamental ways, especially with regard to the availability and easy way to access to digital information and communication technologies. But, teachers and their predominant classroom practices rather remained traditional in this era of rapid change. It was content focused, teacher directed and didactic instruction focused on content delivery and reproducing the same remained the rule of the pedagogy.

Educational curriculums at all levels were very narrowly defined for students in many developing country in the era of the information technology. Formal education experiences such as, high test scores were viewed primarily as instrumental of achieving career goals. The quality of both educator and the teachers whose responsibility were to engage students in pedagogical experiences were singularly defined by higher grades and “policy driven perspective” to measure student’s achievement. Higher grades and good marks in exams were the only criteria to judge student’s competencies.

Preparing students for their complex and increasingly technological futures were probably never been thought in any teaching methodology or policy. That’s why education institutions were still continuing to prepare students for a future in which their teachers and administrators
were familiar and well conversant.

**Educational Workforce**

Teachers entering the educational workforce consistently reported minimal preparatory experiences without technological integrated lessons or formal digital literacy development in educational setting. Since teachers tend to teach as they were taught, the instructional workforces were reasonably not prepared to meet the increasingly digital demands of the twenty first century knowledge landscape. Such workforces were not able to meet the digital skill expectations of prospective employers and students as well.

**Digital Literacy**

The concept of digital literacy too has suffered a setback. A visible gap is created in desired level of teaching and real time pedagogy. A significant pedagogical gap seemed automatically created between the duration of a course curriculum of a student when he or she enrolls and then graduate. It is now time for future oriented teacher’s preparation programs rather than only catching up with the digital literacy of prospective students.

Digital literacy embodies the abilities to appropriately access, synthesize, and utilize both analog and digital information sources to achieve a defined teaching purpose. Digital literacy includes the abilities to communicate and collaborate effectively through modern technological aids and methodologies suitable for upcoming generation. Digital literacy should be understood as requisite set of skills extending beyond a traditional teacher’s pedagogical skills. Digital literacy cannot be fully acquired in isolation while preparing traditional written reports, but be obtained through a transformative process of authentic and contextual utilization through modern teaching aid (Sachs, J., 1997). Experience is the most powerful teacher, and has no substitute when it comes in developing and refining the skills of digital literacy or any other type of literacy among mentors and teachers.

Technology usage is where a teacher and learner is equipped with a portable, wireless electronic device capable of accessing internet content and enabling a wide range of digital collaboration methods across different place is the future of education. Younger generations raised in this ocean of digital information are familiar with the intricacies of digital world. At the same time they find life a bit unfamiliar and new without digital information and technological aid.

Today students are no longer the target audience what educational system was designed to teach. Internet instant messaging, video games, video conferencing and networking formed a substantial part of the native language of digital natives or net generation. Traditional education system barely engaged the minds and aptitude of digital natives in the twenty-first century classrooms. Therefore, a key questions need to be addressed by teacher’s education program such as how teachers learn and refine knowledge, skills and proficiency to teach such digital literate audience.

**Conclusion**

Technology has revolutionized every industry and each component of our culture and society. Now, it is revolutionizing the teacher’s education in all parts of the world. Revolution is going on with a swift pace. It is important that teachers can be prepared not only to use today’s technology
but should be able to handle systematically and analytically about what technology is going to come and evolve afterwards. Today’s technology need to be integrated from the tomorrow’s technology to achieve the best synergy in quality pedagogy. Educators must be well prepared to work on with such future development.

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INNOVATIONS IN TEACHER EDUCATION

Ms. Monika Rani*

The present paper discusses the need of teacher education program to be innovative, and also the scenario of innovative teacher education program in various universities and institutes of the country. The paper also discusses the basic features of some of these innovative teacher education programs and at the end suggests some innovative features of teacher education programs.

Teacher Education is a discipline which educates the progressive generations on what has gone by, where we are, where we want to go, and what we like to create, observing healthy, meaningful and long life. It is one of the significant areas where a lot of innovative ideas can be tried out and practiced. Where the ideas spring, feelings flow, motor creates, nature blooms, self with environ resonates, the spirit reins, there, we innovate, construct and create. The soul of a gardener resides in the seeds, the soul of a philosopher resides in the mind, the soul of a piper resides in the pipe, the soul of a singer resides in the voice, the soul of a dancer resides in each and every bodycell, the soul of a poet wanders in the nature, the soul of a sculptor resides in the stone, the soul of a teacher wanders with the learners. Dancing crops, flowing wisdom, enchanting music, touching songs, resonating dance, immersing verses, speaking sculptures, and enlightened learners are the wonderful springs of nature. Teacher Education is a discipline which educates the progressive generations on what has gone by, where we are, where we want to go, and what we like to create, observing healthy, meaningful and long life. Teacher education is important as efficient teachers can shape an efficient future society. Teachers can greatly influence young minds and hence it’s important that competent teachers are recruited for the gullible and vulnerable young minds. This is only possible only if there is efficient teacher training curriculum with an efficient regulatory body. NCTE is doing a good job but a lot has to be done to improve the status and quality of teachers in India.

Teacher Education in India

Teacher training course in India is designed for aspiring teachers to learn interactive and better ways of teaching to make a subject interesting. Teaching methods have to be different for different age groups, for instance primary level teaching is a lot different from secondary or college level. The educational requirement for a primary and secondary teacher is also different. People who wish to teach primary school should minimum pass higher secondary examination with 50% marks whereas for teaching at secondary school, one needs to be postgraduate in the subject one wishes to teach. There are several schools and colleges in India which cater to teacher training schools in India and these offer teaching courses for different levels. Teacher education in India is institution based, along with internship programs in real classroom.
Teacher Education curriculum has faced severe criticism over the years, as it is general too technical and obsolete which is not applicable in contemporary Indian school and society. Because of this drastic changes are required to bring a big change to the curriculum. These changes are slow but can be seen as International teaching agencies with a more advanced teaching curriculum is helping to shape better teachers in India.

Teacher education is provided by several Universities, affiliated colleges, private and open Universities in India. Some of these institutions are more like an eye wash and provide certification just by paying the fee, and this leads to rise of unqualified teachers in India. The situation of primary teachers in India has seen a dramatic change but lot has to be done to improve the curriculum of secondary and vocational teachers. Teachers play an important role in shaping the future of the country and hence it is important that a lot of attention is paid on the quality of teachers churned out every year.

**Teacher Education in India from 1947-1990**

With Indian independence in 1947, several educational reforms were made in system and also made changes for the education of teachers' in India. One of the first steps was establishing University Education Commission which happened in 1948, and regulated the educational requirement of teachers in India. The commission made some rules for people to qualify as teacher and these were as follows:

- All the undergraduates who wanted to pursue teaching as a career option were recommended a two year training program
- One year teacher training program for graduates. The commission stressed on exchange of teachers from teachers colleges, schools etc.
- The commission also stressed on training for organizing curricular activities.

Later in late 1960 the commission emphasized on the necessity of a professional training course in order to improve the education system. It gave stress on building a more comprehensive teacher training course for students, and also laid importance on practice teaching. Another way to attract people to join this Nobel profession was by increasing the salary of teachers in Government schools or by providing other incentives like house etc. in a rural setting. During the same time National council of Educational Research and Training (NCERT) was also formed, and this body reviewed and regulated the education of teachers. In 1974, National Council for Teacher Education was established; this non-statutory body was a part of NCERT. Gradually several changes were made and universities and colleges revised their curriculum for teacher training course. Various steps were taken by the Commission to enhance the education system. Its selection procedure was regulated and emphasis was given on theory as well as practical work. Gradually by 1990’s this profession had become popular with opening of several private schools and colleges and improved salary structure in both Government and Private schools.

**Identity of Teacher Education**

Every teacher Education institution ought to have valid identity. Valid identity means valid institutional land & plant, valid setting, valid inputs, valid processes and valid products. Each and every Teacher Educator ought to have a Unique Identification Number. The Self- Disclosure exercise being done by the Teacher Education Institutions is likely to present the reality. The
National Curriculum Framework for Teacher Education: Towards Preparing Professional and Humane Teacher (Dec. 2009) is with high hopes. Also, Teacher Education: Reflections Towards Policy Formulation (2009) is quite promising. Teacher Education will have to revive and build its identity to be innovative.

**Innovative Programs in Teacher Education**

Teacher Education Institutions at different levels, particularly in higher and technical education field countrywide, have innovated and institutionalized a number of programs, namely, M Tech Ed by NITTTR, Bhopal and Chennai, M Tech Engineering Education by NITTTR, Chandigarh, M Tech HRD by NITTTR, Chennai, B.C Ed. (1989) by DAVV, Indore, M.C.Ed. (1991) by DAVV, Indore, Master of Educational Technology (Computer Applications) by SNDT, University, Mumbai, M.Tech. (Educational Technology) by Kurukshetra University, Kurukshetra, B.Sc. in Teaching Technology by Sikkim Manipal University, HSTP, Training Teachers, Eklavya, MP(1982), Activity Based Teacher Education Program, DAVV, Indore (1991), Personalized Teacher Education Program, Lucknow University, Lucknow (1996), Comprehensive Teacher Education Program, Gandhi Shikshan Bhavan College of Education, Mumbai University, Mumbai (2000), Four Year Integrated Program of Teacher Education, Kurukshetra University, Kurukshetra (1955), Four Year Integrated Program of Teacher Education, RIE, NCERT (1963), B.Ed. (Educational Technology), AEC Teacher Training College, Pachmadi, MP, Early Faculty Induction Programme (EFIP) under QIP by AICTE, New Delhi, Induction Training Programme (ITP) under QIP by AICTE, New Delhi, University of Teacher Education, Chennai, Tamil Nadu (2008), IGNOU Institute of Professional Competency, Advancement of Teachers (IIPCAT, 2009), IGNOU, India and Indian Institute of Teach

Though a comprehensive list of Innovative Programs is available, innovations are very rare. It may be attributed to various factors. Novel ideas do not incubate because of the adverse external conditions. There are wide gaps between the visionaries and actors. So, very often the innovations have short life and die down in the institutions, where these originate. Sometimes, the most innovative programs fail in the formal system, because, these are beyond the view purview of the apex bodies. Four year Integrated Secondary Teacher Education Programs need excellent Teacher Educators who are Philosophers of basic Disciplines, as well as, Education. Such a combination is rarely found. In addition to this, these need to have scope for vertical mobility. Activity based, Personalized Teacher Education Programs though originated with zeal, yet need to struggle to sustain themselves in the forms envisaged.

**Features of Some of the Innovative Programs**

**Personalized Teacher Education (DAVV, 1991)**

Activity based Teacher Education Program (Zero Lecture Program) originated and institutionalized at the School of Education, DAVV, Indore (1991) was deployed at Lucknow (1996). Some of the features of this Program are: Choice of Volunteers, Learner Centered, Personalized Classroom Setting, Participatory Approach, No lectures by Teacher Educators (ZLP), Freedom for what to study, how to study, where to study, and when to study, Peer Teaching-Learning-Evaluation, Variety in the modes of presentation, Successive Discussions
Teacher Education: Challenges and Opportunities

Innovative and Wholistic Masters

The Centre for Advanced Studies in Education (CASE), Vadodara has been strengthening Wholistic Teacher Education through seminars, research and publications. A Research Study has been conducted on rehabilitation of Street Children through Wholistic Approach. Some Research Studies are being conducted on Wholistic Science Education Program and Wholistic Development through Leisure Time Activities. The holistic teacher education program is quite promising. Some of the features of the program are: Subject Knowledge, Inter-disciplinary, Environmental Attitude, Health development, Emotional development, Spiritual development and integrated development.

Integrated Teacher Education

Integrated Teacher Education Programs have been found to have a mixed scenario. Some are alive, some have died, whereas, some are taking birth. The Integrated Teacher Education Programs offered by the Regional Institutes of Education since many years have self-recognition and accreditation. There is a need to conduct research on the integrated Teacher Education Programs offered by the various institutions. There is also a need to mentor and monitor the Innovative Teacher Education Programs in all the regions.

Technology Integrated Teacher Education

There is technological revolution in Teacher Education. There is a shift from Bachelor of Teaching to Bachelor of learning, that too, Bachelor of e-Learning. There is a shift from e-Learning 1.0 (Online learning) to e-Learning 2.0 (Twitter, Face-book) to e-Learning 3.0 (Semantic Web), that is, from content to community to Artificial Intelligence. There is a quick shift from web-1 to web-2 to web-3. We have initiated into Open Education, Open Course Ware, Open Source Software, Open Content and Open Research. There are proposals for e-Teacher Education. Smart Classrooms are emerging, wherein; we have e-learning and e-testing. Terms like Wi-Fi, iPad, e-Book, e-Reader, e-Newsletter, Webinar is widely used. Digital Lesson Designs and e-Portfolio have become common features. There is wide scope for transformation of Teacher Education through Technology.

Innovative Teacher Education: Some Features

Constructivist, Activity based participatory, Inter-disciplinary, Emotional Maturity, Internship/Entrepreneurship skills, Self-peer-teacher- community certified, Choice Based, Research Based, Techno-Pedagogic, Humanistic, Life Skills, Meeting Development Challenges, Multi-Lingual, Integrated and Technology Integrated

Suggested Innovative Courses, Programs in Teacher Education

(a) Certificate/Diploma Courses: There can be innovations in Teacher Education through e-open sourcing in many areas such as: Personality Development, Human Rights Education, Life Skills Education, Techno-Pedagogic Skills, Management of Learning
Innovations in Teacher Education 67


(b) **Programs:** 1. e-Teacher Education, Modular Teacher Education, Integrated Teacher Education, Specialized Teacher Education and Personalized Teacher Education

**Conclusion**

Innovativeness by virtue of its nature is essential feature of Teacher Education. Teacher Education prepares the teacher to help learners meet the challenges of life, fully & confidently. There should be open investment in Teacher Education for capacity building and development of creative faculties. Innovations should be all pervasive right from conception to delivery of Teacher Education. Teacher Education Curriculum Framework by virtue of its nature has to be suggestive, not prescriptive. Deciding the body of the curriculum, modes of transaction, and evaluation should be left to the discretion of teacher educators and Teacher Education Institutions. But, it is a social reality that the society likes conformists and not heretics. Expected return on investment is in terms of reaping the benefits rather than nurturing the innovativeness. Teacher Education rather than considered a system, a discipline, a culture, is unfortunately being considered as an attachment. Sensing the complex challenges of the emerging society, Teacher Education has to realize its identity to innovate, construct and create. Research rather than stereotyped, should have problem based agenda. The researchers should be respected and paid differentially, simply because of the extremely added stress due to unquenched quest for exploration. Innovations breed in a peaceful environment, a unique, dedicated and humanistic culture. Growing complexities of the society and emerging challenges of life demand a self renewing innovative Teacher Education which is essential for survival.

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ISSUES IN TEACHER EDUCATION

Ms. Tejinder Kaur*

Change in school education is possible effectively only when there are corresponding changes in the management of teacher education. This needs a thorough analysis of teacher education system vis-à-vis changes in general school education, strength and weaknesses, need and scope for change, etc. Enough opportunities would need to be generated in teacher education programs for enabling student teachers to cope up with the professional demands in economic, social, cultural and ethical respects.

Teacher Education is an integral component of the educational system. It is intimately connected with society and is conditioned by the ethos, culture and character of a nation. Education including teacher education largely isolated from the needs of the people. The need for improved levels of educational participation for overall progress is well recognized. A variety of initiatives have been taken to transform the nature and function of education-both formal as well as non-formal.

Problems in Teacher Education

It is universally acknowledgment that education is an effective means for social reconstruction and to a great extent it offers solutions to the problems a society is faced with. These problems may be economic, social, cultural, political, moral, ecological and educational. Since the teachers play a major role of children, their own education becomes a matter of vital concern. Teacher education must, therefore, create necessary awareness among teachers about their new roles and responsibilities. Education of teachers need to strengthen and stress upon the main attribute of the profession, such as, systematic theory, rigorous training over a specified duration, authority, community sanction, ethical code and culture, generating knowledge through research and specialization. It is acknowledge that formal profession training on continuous basis is necessary for becoming a good teacher as it caters to the development of one’s personality and sharpening of the communication skills and commitment to a code of conduct.

Economic Problems

Poverty, unemployment, and low rate of growth and productivity are some of the major economic problems of the country which have led to the compulsions of the backward economy. These problems seek immediate solution and demand a realistic co-ordination between economic planning and manpower planning. Education can help find solutions if it is properly coordinated with manpower needs.

Social Problems

Indian society still suffers from evils like child labour, child marriage, untouchability,
discriminatory treatment to women, violation of human rights, etc. and most of the people are unaware of their legal rights. Modern model of development which puts man against nature by making it an object of exploitation has disturbed the harmony and equilibrium between the two. Its consequences are visible in serious environmental degradation, pollution and ecological imbalances.

**Cultural Reconstruction**

Education is the process of transmission of dynamic and responsive components of cultural heritage and its continuous enrichment. There is a need to reinterpret the Indian culture in its distinct identity and composite strength. Its capacity to absorb the sublime from other cultures needs to be highlighted. The teachers will have to play their role in cultural transmission and reconstruction.

**Erosion of Values and Morality**

There has been a persistent erosion of values in the society. In the present day context certain values need to be redefined and reinstalled. There are situations when the values imparted and inculcated in schools are not generally practiced in society. Value education demands a planned and purposive approach. It is through education and as of necessity through teacher education programmes that the task of inculcating values can be substantially accomplished. Whereas values are emotive, the other related significant dimension is that of moral education which is essentially conative in character.

**Isolation**

Teacher education institutions which were considered ‘islands of isolation’ have gradually developed linkages with schools, peer institutions, universities & institutions of higher learning as also the community. However, much remains to be done in these directions. The curriculum of the school, its actual transactional modalities, examination systems, management processes and its ethos need to be the main thrust areas of teacher education programmes.

To achieve these ends, teacher educators need to be made conversant with various aspects of school experiences. It is observed in day- to- day functioning that teacher educators often tend to lose contact with content areas relevant to their own disciplines resulting into gaps in communication and latest information. It is, therefore, a felt need in the present- day context that teacher education institutions keep in continuous touch with institutions of higher learning and peer institutions for effective transmission of knowledge and its up gradation. The breaking of isolation from the community is essential for enabling teacher and teacher educators to reconstruct pedagogical and educational principles and practices in the light of experiences gained from mutually beneficial community interactions.

**Expanding Scope of Teacher Education**

Education of teachers is not an end in itself. Its target is the school. Any change in the nature, purpose, quality and character of the school demands a concomitant change in teacher education, especially in its curriculum. The implementation of the 10+2 scheme at the school level has transformed the complexion of education to a considerable extent from the pre- primary to the +2 stage. There has been an increase not only in the quantum of knowledge, but also in its
nature and purpose. In addition, new transactional techniques and strategies have also been evolved. The teaching community has to face the challenges thrown by science and technology. There has been an explosion not only of scientific and technological knowledge but also in the means and techniques of acquiring knowledge. The scientific researches and developments related to theories of heredity, learning, mental health, neurology, attention, motivation etc. can no longer be treated alien to teacher education programmes.

**Evolving a Culture-Specific Pedagogy**

Every region and state has its typical cultural identity, and there is a need to utilize the same as abases for developing meaningful, relevant pedagogies. Since there is no one universal way in which the children learn, there is a strong need for looking into the cultural context in which a child is placed. A child in a tribal society may process information in an altogether different manner as compared to the one from urban area and socio-economic stratum.

Cultural practices such as story-telling, dramatics, puppetry, folk-play, community living, etc. should become strong bases of pedagogy instead of using one uniform, mechanistic way of student learning. Cultural specificity should get embedded in the pedagogical practices which should be evolved for tribal, rural, urban community and other ethnic groups.

**Conclusion**

The scheme of assessment and accreditation will help institutions to carry out their strength, weakness, opportunity and threat analysis and in making their programmes more attractive to the students and to their Potential employers. The norms and Standards evolve with strengthening of the capacity system and commitment for raising the quality of program which will be revealed by the system of assessment and accreditation.

Education including formal education, public awareness and training should be recognized as a process by which human beings and society can reach their fullest potential.

**References**


RELATIONSHIP BETWEEN PROFESSIONAL COMMITMENT AND MOTIVATION OF SECONDARY SCHOOL TEACHERS OF PUNJAB

*Dr. Khushwinder Kaur* and **Dr. Pushpinder Kaur**

Teachers are the repository of knowledge and moral and social norms. So they must be conscious of their role, responsibilities and performance. They are the agents who bring about social transformation, therefore, they are required to be motivated and committed. The research undertaken studies the relationship between professional commitment and motivation of school teachers. Descriptive survey method was used and a sample of 1000 secondary school teachers from six districts of Punjab was drawn for the study. The study reported significant positive correlation between professional commitment and teacher motivation. Teacher education programmes (both pre-service and in-service) must strive to motivate and inculcate commitment among teachers for improving the standard of education.

An effective system of education results in the development of learner’s potentialities, enlargement of their competencies and transformation of their interests, attitudes and values. Teachers are the dynamic force of the school and a vital component of the school system. They are the repository of knowledge and values. They are the agents who bring social transformation, therefore, they are required to be motivated and committed. Dave (1998) emphasizes, “If teachers acquire professional competencies and commitments and if they are enabled and empowered to perform their multiple tasks in the classrooms, schools and community in a genuinely professional manner, then a chain reaction can begin starting a sound teacher performance and culminating in high quality learning among students in cognitive, affective and psychomotor areas of human development.”

**Professional Commitment**

Conceptually ‘profession’ means engaging in a useful and specialised work with a noble cause, undergoing rigorous and specialized training, following a code of ethics, carrying out one’s duties and responsibilities and undergoing professional development. Teaching is deemed as a profession in the sense that it is a definite form of public service which requires expert, continuous and rigorous study and calls for a sense of personal and corporate responsibility for education and public welfare. The strength of any profession depends upon the degree of commitment of its members. Teaching is no exception. Commitment is a natural ingredient of teaching.

Commitment refers to the core set of values and beliefs which a teacher holds. It is a psychological frame of mind which motivates people to work towards certain goals. “Commitment is a term teachers frequently use in describing themselves and each other. It is a word they use to distinguish for those who are ‘caring’, ‘dedicated’ and ‘who take the job seriously’ from those

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who put their interests first (Nias, 1981). According to Cambridge International Dictionary of English (1995) “commitment means to promise or give your loyalty or money to a particular principle, person or plan of action.” O’Reilly (1991) opines, “Commitment is typically conceived of as an individual’s psychological bond to the organization, including a sense of job-involvement, loyalty and beliefs in the values of the organization.” Vandenberg and Scarpello (1994) define professional commitment as a “person’s belief in and acceptance of the values of his or her chosen occupation or line of work, and a willingness to maintain membership in that occupation”. Professional commitment refers to the strength of motivation to work in a chosen career role and to the attachment an individual has to his/her profession. Professional commitment is characterised by “client orientation, loyalty, professional autonomy, conformity to professional standards and ethics.” (Somech and Bogler, 2002) Professional commitment demands high degree of persistent and enduring motivation. Goals of professional commitment would remain half achieved if motivation remains at a low ebb. Surely, it is the motivation of teachers that moves the wheels in educational institutions.

Motivation

The term ‘motivation’ is derived from the Latin word ‘movere’ which means ‘to move’. McDonald (1972) defines “motivation as an energy change within the person characterized by affective arousal and anticipatory goal reactions. He has identified three aspects of motivation:

- It begins in some energy change in the person characterized by affective arousal i.e. some part of psychological tension.
- It is within the person.
- It is characterized by anticipatory goal reactions i.e. help the individual to sustain his efforts leading towards realization of his/her goal.”

“Motivation is a process that starts with a physiological deficiency or need that activates a behaviour or a drive that is aimed at goal incentive” (Luthan, 1998). Cole (2000) defines “motivation as a term used to describe those processes, both initiative and rational by which people seek to satisfy the basic drives, perceived needs and personal goals, which trigger off human behaviour”. The term represents “those psychological processes that cause the arousal, direction and persistence of voluntary actions that are goal directed” (Kreitener and Kinicki, 2001).

A motivated person makes use of his cognitive, affective and conative abilities for the achievement of organizational goals. It is the basic factor which is responsible for decision making process and length of enthusiasm for the activity. In teaching and learning, motivation plays a vital role. The commitment in teachers is directly influenced by motivation. If the teacher is adequately motivated he will make efforts to make a success of whatever he is doing. In short, motivation on the part of teachers can be defined as a strong desire for teaching which leads to fruitful outcomes.

Motivation is of two types- intrinsic and extrinsic. Intrinsic motivation comes from within-when people are internally motivated to do something. When a teacher undertakes a task without any personal end in mind, he is intrinsically motivated. In general, motivation arising from instincts, drives and thoughts is conceived as intrinsic motivation. “Performing a behaviour for its own sake in order to experience pleasure and satisfaction such as the joy of doing a particular activity
or satisfying one’s curiosity” construes intrinsic motivation (Dornyei, 2001). Extrinsic motivation is the result of external factors which energize a person to work harder and better. Examples of external factors are better salaries, improved working conditions, career promotion opportunities, opportunities for professional development, positive feedback from administrators and higher social status.

Professional Commitment and Motivation

Whatever be the realm of work, professional commitment demands high degree of persistent and enduring motivation. Goals of professional commitment would remain half achieved if motivation remains at a low ebb. Teachers conscious of their duties and responsibilities and the expectations of different stakeholders about them know in their heart of hearts that justice to their tasks demands hard work every day and hard work can be consistently put in only if cognitive, affective and conative aspects of motivation are kept going. If motivation is not there, there can hardly be any professional commitment for teaching. The lower the motivation to teach, the lower would be the degree of professional commitment for doing justice to any aspect of teaching. Following the same logic of reality it can be safely asserted that where there is higher motivation to teach, the higher would be the degree of professional commitment. A lot of research work has been undertaken to discover the reality of the relationship of professional commitment with motivation. Motivated teachers make effective contributions at work because of strongly developed feelings of behavioural commitment (Manning and Patterson, 2005). Ackerina (2013) concluded that education professionals who possessed public service motivation were professionally committed to their careers. Research has highlighted intrinsic and extrinsic motivating factors which make for better teacher performance (Lee, 1996; Balasubramanyam, 2005; Ramachandran et. al. 2005; Javaid, 2009). It has also been concluded that extrinsic motives are no doubt essential but it is self or intrinsic motivation which is most important. Firestone and Pennel (1993) noted that a committed teacher is one who is intrinsically motivated because of a sense of meaning in job responsibilities. Zhao et al. (2011) indicated that teachers with extrinsic motivation showed lower level of professional identity as compared to teachers with intrinsic motivation.

Objective of the study

To study the relationship of professional commitment (areas and total) of secondary school teachers with motivation (dimensions and total).

Hypothesis

There is a significant correlation between professional commitment and motivation of secondary school teachers.

Method and Procedure

Descriptive survey method was adopted for the study. A sample of 1000 teachers from secondary schools of six districts of Punjab was drawn for the study.

Research Tools

1. Professional Commitment Scale for Teachers by Baljeet Kaur (2007). The scale
Relationship between Professional Commitment and Motivation of Secondary School Teachers of Punjab consisted of 60 items spread over five commitment areas: 1) Commitment to learner 2) Commitment to society 3) Commitment to profession 4) Commitment to achieve excellence 5) Commitment to basic values.


Results and Discussion

Table 1 - Correlation Coefficients between Professional Commitment (Areas + Total) and Teacher Motivation (Dimensions + Total)

<table>
<thead>
<tr>
<th>Dimensions of Teacher Motivation</th>
<th>Areas of Professional Commitment</th>
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<tr>
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<td>Society</td>
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<td>.298**</td>
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<td>School Administration</td>
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<td>.196**</td>
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<td>Student Behaviour</td>
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<td>.226**</td>
</tr>
<tr>
<td>Working Conditions</td>
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<tr>
<td>Teacher Motivation</td>
<td>.137**</td>
<td>.328**</td>
</tr>
</tbody>
</table>

* Significant at .05 level of significance.
** Significant at .01 level of significance.

Figure 1: Correlation between Professional Commitment (Areas + Total) and Teacher Motivation (Dimensions + Total)

The results indicate that professional commitment and teacher motivation go hand in hand. If teachers are professionally committed they are bound to be motivated and if they are motivated at the outset it will show in the form of commitment. The data indicated that commitment to the learner is very strong and will remain despite adverse climatic factors, working conditions and school administration.

Highly significant positive correlation was found between professional commitment and
teacher motivation (as shown in Table 1 and figure 1). High significant positive correlation was found between the dimension of classroom teaching and all commitment areas; between the dimension of school administration and all commitment areas except school administration and commitment to learner; between professional pleasure and all commitment areas; between climatic factors and all commitment areas except with commitment to the learner; between inter-personal relations and all commitment areas except with commitment to the learner; between student behaviour and all commitment areas; between working conditions and commitment to society and commitment to achieve excellence; between professional development and all commitment areas; and between personal factors and all commitment areas. No significant correlation was found between the dimension of school administration and commitment to learner; climatic factors and commitment to learner; inter-personal relations and commitment to learner; working conditions and commitment to learner, profession and basic values.

Similar results were reported by O’Reilly and Caldwell (1980) who found that both intrinsic and extrinsic motivating factors were positively related to teacher commitment. Significant correlation has been found between professional commitment and school administration and working conditions. These results agree with the findings of Kang (1982) and Firestone & Rosenblum (1988) who concluded that attitude and support of administration were highly correlated with teachers’ professional commitment. The study shows positive relationship between professional commitment and climatic factors and working conditions. Earlier research by Rosenholtz (1989), Riehl & Sipple (1996) and Coutts (1997) also reported that positive feedback and workplace conditions enhanced teacher commitment. Overall, the present study shows significant correlation between professional commitment and teacher motivation. Similar findings were reported by Kaur (2009) who found positive relationship between professionalism and motivation. However, the findings do not comply with research by Tella et al. (2007) who found negative correlation between motivation and commitment among library personnel.

Educational Implications

From the results it can be implied that if we want to inculcate professional commitment among teachers we need to motivate them. The teachers must strongly believe in themselves; motivation should come first within and must later be supported by external motivation factors like organizational climate and working conditions. The research is of immense use to planners, policy makers and administrators. Teachers need to be provided with feedback, positive reinforcement, healthy organizational climate and good working conditions. The administrators can induce and encourage self-motivation of teachers and facilities must be provided to teachers to improve mental health. Adequate incentives and facilities must be provided to teachers to encourage professional growth and development. Teacher education programmes (both pre-service and in-service) can also help in motivating the teachers, providing value education and making them responsible and committed towards their profession.

References


INNOVATIONS IN TEACHER EDUCATION

Ms. Deepti Aggarwal*

During the past couple years, teacher education programs have been taking a lot of heat. Everyone from the Secretary of Education to the National Council for Accreditation of Teacher Education (NCATE) is concerned about the performance of colleges of education, calling for teacher education to be “turned upside down” in this country. A new generation of teacher education programs is challenging how teachers get trained for the classroom. Innovation is the only key to improvement, considering this grave need of hour. In current time the obsolete ideologies and methods of teaching do not work. One has to be innovative with teaching and this is now widely acclaimed by the educational fraternity world over. This is also a crucial time to highlight the importance of integrated teaching, teacher curriculum and teacher education for rural development as well. Time is constantly changing and the only way to keep up with it is to keep growing and evolving and this is also applicable to teacher education also. Teachers play pertinent role in shaping the future of the country and hence it’s important that a lot of attention should be paid on the quality of teachers churning out every year. Giving people an image of what learning could be like is a really important part of improving education. Students, teachers, administrators, parents, policy makers, and community members have remarkably similar views of what education looks like, and those views have not changed much since we were in school. Being innovative is about looking beyond what we currently do well, identifying the great ideas of tomorrow and putting them into practice. Innovations for teacher educators implies trying new ways of doing things in their learning environments - whether in an early childhood setting, a school, or in further education or training.

The Indian sub-continent has one of the largest education system as well as teacher education system. There are several affiliated colleges and institutes that offer teacher education programs. All the programs are identical but its standards vary. Some unscrupulous institutes are simply money making centers and results in certified but incompetent teachers. The National Council for Teacher Education (NCTE) is a regulatory body but because the country is so diverse with innumerable institutions it sometimes get difficult to monitor all the institutions. NCTE has four regional offices in four different zones of the country for regulating the function of these institutes and to prevent them from becoming commercial institutions. The situation of elementary teacher education is still better in the country and can also be compared to international standards but secondary and vocational teacher training situation needs drastic regulation and change. Over the last few decades the teacher education has been severely criticised for being very theoretical and obsolete. Teacher education system is strongly evolving so that quality of teachers in India improved. The curriculum of teacher education is being severely revised since 1998. In this internet age, the use of IT and computer should be used for training teachers and the curriculum now also advocates the use of internet to be used by teachers for teaching students. Teacher

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education is important as efficient teachers can shape an efficient future society. Teachers can greatly influence young minds and hence it’s important that competent teachers are recruited for the gullible and vulnerable young minds. This is only possible only if there is efficient teacher training curriculum with an efficient regulatory body. NCTE is doing a good job but a lot has to be done to improve the status and quality of teachers in India. The current goal of the Indian Government is to provide education for all. They are trying out with schemes that would enhance enrolment and are ensuring that every child gets access to school. A lot of planning and resource has been spent on education in India and at the same time for improving the quality of education.

One simple way of uplifting the standard of educations is by improving the quality of teachers. A great teacher can make a huge difference to the life of children. A lot of stress is given on teacher training course in India; unfortunately there are several loopholes in the system and a lot of times incompetent teachers get recruited. Teacher training course in India is designed for aspiring teachers to learn interactive and better ways of teaching to make a subject interesting. Teaching methods have to be different for different age groups, for instance primary level teaching is a lot different from secondary or college level. The educational requirement for a primary and secondary teacher is also different. There are several schools and colleges in India which cater to teacher training schools in India and these offer teaching courses for different levels. Teacher education in India is institution based, along with internship programs in real classroom settings.

Innovations in Teacher Education

The world is changing. According to Anand Kumar Sharma, multiple sources of influence impact the decisions about what and how teacher-educators are expected to operate including the innovations that are adopted. Knowledge societies demand flexibility and quick adaptability of the labor force to constant changes in an increasingly interconnected reality. The demands of work life skills are very different from what they used to be at the beginning of the educational institutions.

According to the Future Work Skills 2020 report on global workforce, the following are the ten skills that also need to be possessed by innovative teachers:

1. Sense Making: Ability to determine the deeper meaning or significance of what is being expressed.
2. Social Intelligence: Ability to connect with others in a deep and direct way, to sense and stimulate reactions and desired interactions.
3. Novel & Adaptive Thinking: Proficiency at thinking and coming up with solutions and responses beyond that which is rote or rule based.
4. Cross – Cultural Competency: Ability to operate in different cultural settings
5. Computational Thinking: Ability to translate vast amounts of data into abstract concepts and to understand data-based reasoning.
6. New Media Literacy: Ability to critically assess and develop content that uses new media forms, and to leverage these media for persuasive communication.
7. Trans-disciplinary: Literacy in, and ability to understand concepts across multiple disciplines.
8. **Design Mindset**: Ability to represent and develop tasks and work processes for desired outcome.

9. **Cognitive Load Management**: Ability to discriminate and filter information for importance, and to understand how to maximize cognitive functioning using a variety of tools and techniques.

10. **Virtual Collaboration**: Ability to work productively, drive engagement, and demonstrate presence as a member of virtual team.

One overriding challenge is now coming to the fore in public consciousness: We need to reinvent just about everything. Whether scientific advances, technology breakthroughs, new political and economic structures, environmental solutions, or an updated code of ethics for 21st century life, everything is in flux—and everything demands innovative, out of the box thinking.

The burden of reinvention, of course, falls on today’s generation of students. So it follows that education should focus on fostering innovation by putting curiosity, critical thinking, deep understanding, the rules and tools of inquiry, and creative brainstorming at the center of the curriculum. This is hardly the case, as we know. In fact, innovation and the current classroom model most often operate as antagonists. The system is evolving, but not quickly enough to get young people ready for the new world.

**Ways of bringing Innovations in Teacher Education**

There are a number of ways that teachers can bypass the system and offer students the tools and experiences that spur an innovative mindset.

**Move from projects to Project Based Learning**: Most teachers have done projects, but the majority do not use the defined set of methods associated with high-quality PBL. These methods include developing a focused question, using solid, well crafted performance assessments, allowing for multiple solutions, enlisting community resources, and choosing engaging, meaningful themes for projects. PBL offers the best method we have presently for combining inquiry with accountability, and should be part of every teacher’s repertoire.

**Teach concepts, not facts**: Concept-based instruction overcomes the fact-based, rote-oriented nature of standardized curriculum. If your curriculum is not organized conceptually, use your own knowledge and resources to teach ideas and deep understanding, not test items.

**Distinguish concepts from critical information**: Preparing students for tests is part of the job. But they need information for a more important reason: To innovate, they need to know something. The craft precedes the art. Find the right blend between open-ended inquiry and direct instruction.

**Make skills as important as knowledge**: Innovation and 21st century skills are closely related. Choose several 21st century skills, such as collaboration or critical thinking, to focus on throughout the year. Incorporate them into lessons. Use detailed rubrics to assess and grade the skills.

**Form teams, not groups**: Innovation now emerges from teams and networks—and we can teach students to work collectively and become better collective thinkers. Group work is common, but *team* work is rare. Use specific methods to form teams; assess teamwork and work ethic; facilitate high quality interaction through protocols and critique; teach the cycle of
revision; and expect students to reflect critically on both ongoing work and final products. For peer collaboration rubrics, see these free PBL Tools.

**Use thinking tools:** Hundreds of interesting, thought provoking tools exist for thinking through problems, sharing insights, finding solutions, and encouraging divergent solutions.

**Use creativity tools:** Educational industry uses a set of cutting edge tools to stimulate creativity and innovation. As described in books such as Gamestorming or Beyond Words, the tools include playful games and visual exercises that can easily be used in the classroom.

**Reward discovery:** Innovation is mightily discouraged by our system of assessment, which rewards the mastery of known information. Step up the reward system by using rubrics with a blank column to acknowledge and reward innovation and creativity, which informally is known as the Breakthrough column.

**Make reflection part of the lesson:** Because of the coverage imperative, the tendency is to move on quickly from the last chapter and begin the next chapter. But reflection is necessary to anchor learning and stimulate deeper thinking and understanding. There is no innovation without rumination.

**Be innovative yourself:** This is the kicker, because innovation requires the willingness to fail, a focus on fuzzy outcomes rather than standardized measures, and the bravery to resist the system’s emphasis on strict accountability. But the reward is a kind of liberating creativity that makes teaching exciting and fun, engages students, and—most critical—helps students find the passion and resources necessary to design a better life for themselves and others. Innovative methods of teaching are a goal of many educators. Teaching students in ways that keep them engaged and interested in the material can sometimes be a challenge. In the short-attention span world we live in, it can be harder than ever to keep high school students excited and engrossed in learning.

**The emphasis is on practice:** Much of the learning takes place in real schools. The programs look constantly and seriously at data in coaching teachers and in determining their progress. Theory still informs the program deeply—but it’s less direct. Jean Piaget’s ideas, for example, may inform program design, but students are unlikely to closely study, discuss, and write about those ideas. Yet these are not vocational programs—on the contrary, they aim to raise the status of teaching as a profession of intellectual skill, not a technical one.

**Visualization, technology tools and active learning**

1. **Visualization:** A list of disconnected facts will not lead to a deep understanding in students or an integration of knowledge from one situation to another. Knowledge that is organized and connected to concepts with a goal of mastery, including the ability to visualize the concepts, can lead to the ability to transfer knowledge and lead to a deeper, longer-term understanding of what is taught. Visualization is an especially good teaching strategy for reading and literacy teachers. Here’s a lesson in how to use visualization to help students illustrate mental images from a portion of text that is read aloud: Teaching students visualization skills help them understand, recall and think critically about subjects they study.

2. **Wisely managed classroom technology:** Computers, tablets, digital cameras, videoconferencing technology and GPS devices can enhance a student’s learning experience.
Possible uses of classroom technology include using video games to teach math and foreign languages, leveraging Skype to communicate with classrooms or guest speakers from around the world, or multimedia projects that allow students to explore subject matter using film, audio and even software they create. However, tech devices in the high school classroom require teachers to add a component to their classroom management. Giving students laptops or tablets means teaching them to use devices respectfully and preventing damage to the equipment. Tech-savvy teachers gave Education Week the following advice on using classroom technology:

- Explain that the use of tech tools in class is a privilege not everyone has — and if abused, it can be discontinued.
- During class, teachers should move around the classroom or use monitoring software to ensure students are using their devices appropriately. When they understand that their teacher will intervene if they go off-task, students know they must focus on their assignment.
- Put students in charge of the upkeep of devices. Classes can learn tech terms, basic maintenance tasks, and appoint a few students to serve as tech monitors responsible for distributing and storing equipment. Doing this creates a sense of value and ownership for the welfare of classroom technology.

3. **Active learning: Peer instruction, discussion groups and collaborative problem solving:** All high school educators dread a roomful of blank faces or silence after they open up a topic for class discussion. Devoting time to active learning projects is one way to get students thinking, talking and sharing information in the classroom. It also describes a class structure where the instructor leads a short overview of the day’s topic and gives students a challenge to meet by the end of the class, such as answering a question or solving a problem. Students break into small groups to do research online, chart out ideas and discuss ways to meet the challenge. Groups upload their work to a Blackboard site, where the teacher can review it. At the end of class, each group shares what they’ve learned with their peers.

The above mentioned ways highlight the various innovative methods of teaching that can help high school students to get the most out of their education. Thus finding new and innovative methods of teaching is a crucial skill for high school teachers. Brain research has shown that certain methods and approaches can truly enhance the learning process. Applying innovative learning and attention-management techniques to classes is a win-win for both students and teachers.

**Conclusion**

Yet if this new generation of teacher education institutions flourishes, the benefits are exciting to contemplate. Although the new programs and organizations are far from identical, they share enough characteristics to give them a family resemblance. They come in different packages—entrepreneurial startup organizations, school-based alternative certification programs, and paradigm-busting initiatives based in university schools of education. What they share, however, is a set of common beliefs about what it will take to reinvent teacher preparation.

For our school systems, it would mean, for the first time, the ability to hire teachers on the basis of their demonstrated skill—from programs based on their record. For training programs, a
feedback loop from the classroom would allow new understanding of what it means to teach well, and of how to help early-career teachers attain those skills. For teachers, it would mean shortening or eliminating the grueling early experiences that drive so many of them from the profession. And for schools and students, a faster path to skilled teaching could create a generation of teachers who don’t spend two, three, or five years offering mixed value to students as they learn on the job. Teachers, arguably, have the most important job in the United States, yet we do a lousy job of helping them learn to teach. We can do better.

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CREATIVE DRAMA METHOD OF TEACHING:
A QUALITATIVE INNOVATION IN TEACHING LEARNING PROCESS

Dr. Anita Sharma*

Science has affected all the spheres of human life thus it is essential to initiate the scientific temper into children as early as possible. Man’s future is stubbornly linked to scientific advances and the development of productive activity. Obviously therefore, science must find a respectable place in the school curriculum. In India, through the efforts of National Council of Educational Research and Training Science has been made a compulsory subject throughout the school stage. In the present era children are naturally curious and scientific inquiry is a part of their behavior from birth. Children begin to learn about themselves and the world around them through observation and experimentation. Therefore much emphasis should be laid upon effective teaching of science. A number of new teaching strategies are being used by teachers to enhance students’ achievement in science. Creative Drama Method of teaching involves elements such as demonstration, Imagination, Journeys, Theatre Games, Role Play etc. which attract students’ attention as well as interest for better understanding of scientific concepts. The paper highlights the empirical results of a study on effect of Creative Drama Method of teaching on achievement in science of VII class students. The objectives of the study were to compare the effectiveness of creative drama method of teaching and conventional strategies. The results revealed that experimental group students taught with Creative Drama Method of teaching achieved significantly higher scores in science as compared to the control group students.

Men throughout the world can no longer ignore Science. Since the dawn of atomic age, with its potential for destruction or tremendous good and the more recent explorations and discoveries in space, in transportation and in communications, people in every walk of life engage more frequently in conversations about Science. Achievements of Science are countless and are inspiring. As everyone knows, atoms have been smashed and the gene decoded, the space has been conquered and we have ushered in green revolution promising an era of abundance free from hunger and poverty. We can communicate instantaneously with persons anywhere on the globe and can travel faster than sound, and we have the microchips which promise to surpass the best of human brains. The test of miraculous achievement of modern age could go on almost endlessly. Realizing the importance of science in every sphere Achievement in science must be enhanced to develop scientifically literate citizens. In the present era children are naturally curious and scientific inquiry is a part of their behavior from birth. Children begin to learn about themselves and the world around them through observation and experimentation. Therefore much emphasis should be laid upon effective teaching of science.

Teaching of science has become an unavoidable part of general education. It is included in the school curriculum as it inculcate certain special values peculiar to it which no other subject

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can provide science learning provide training in science method and helps to develop scientific attitude, scientific creativity, scientific interest, scientific aptitude etc. Therefore science is compulsory subject right from elementary level.

Objectives

The study was conducted by keeping following objectives:

1. To compare the effectiveness of creative drama method of teaching with conventional teaching method.
2. To compare the achievement in science of boys and girls taught with Creative Drama Method of teaching.

Method and Procedure

Present study is Experimental in nature. Pre- test Post- test Control group Design has been employed. Experimental group is taught through Creative Drama Method and Control group was taught through Traditional method of teaching. Both the groups were taught similar topic for equal duration. After instructional treatment post test was employed to see effectiveness of Creative Drama Method.

Results

It has been observed that t-ratio for difference in academic achievement of Experimental and Control group comes out to be 7.467. The calculated t- value was found to be significant at 0.01 as well as 0.05 level of significance. Hence we can infer that Experimental and Control group differ significantly from each other on Achievement in Science.

Further, It has been observed that t- ratio for difference in Achievement of boys and girls taught through Creative Drama Method of teaching comes out to be non significant at both .05 and .01 level. Therefore boys and girls taught with Creative Drama Method did not differ significantly on Achievement in Science.

Implications of the study

The results obtained from present research can be interpreted as below:

1. The results in the present study reveal that Creative Drama Method is an effective method of teaching Science and thus can be used in Indian context for teaching science effectively.
2. Results also revealed that there is no difference in the achievement of boys and girls taught by Creative Drama Method and gender difference does not encounter to the present method of teaching.

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ATTITUDE TOWARDS ICT LITERACY AND IMPLEMENTATION BY SECONDARY SCHOOL TEACHERS

Dr. Anita Menon*

ICT is influencing many aspects of our personal, work lives, as well as many of our leisure activities. As more tasks involve human-computer interaction, computer skills and knowledge have become more positively correlated with both occupational and personal success. It is possible to acquire information through ICT. Therefore, as we move into a technology based society, it is important that student’s classroom experiences with technology be equitable and unbiased for males and females. In most cases, the teacher is key to effective implementation of the use of ICT in the educational system and given that teachers have tremendous potential to transmit beliefs and values to students, it is important to understand the biases and stereotypes that teachers may hold about the use of ICT and the factors that act as facilitators to teachers’ positive usage. Present study was conducted keeping in mind the objectives of comparing the attitude of government and private secondary school science and arts teachers belonging to urban and rural background towards use of ICT in classroom teaching. The study was carried out on 500 secondary school teachers of rural and urban areas of Amritsar. The result revealed that there exists no significant difference in attitude of secondary school teachers belonging to urban and rural area towards use of ICT. Further results showed that there exists no significant difference in attitude of secondary school teachers towards ICT in classroom teaching.

One of the common teaching methods that secondary school teachers prefer today is the lecture method. In this the teacher transmits knowledge to the students who sit passively in the classroom and listen. Another common method is the question-and-answer approach, which was developed in order to avoid the boredom caused by lecturers and to provide a more efficient learning environment. On the other hand, case studies allow the students to face the problems that occur in real life. They help to fill the gap between theory and practice through putting the previously learnt concepts and principles into use. In contrast to the previously described methods, the teacher can use ICT at different times and places according to the characteristics of the subject matter, the students and the available software and hardware. Computer programs can be used for practice, revision, one-to-one instruction, problem solving, or simulations during the applications.

The successful and effective uses of ICT in classrooms depend on several factors; of which teacher acceptance is considered a major factor. Researches indicate that teachers are reluctant to use ICT. Rogers defines “the adoption process as the mental process through which an individual passes from first hearing about an innovation to final adoption”. The theory emphasizes the importance to attitudes toward innovation.

Factors that can affect attitudes toward computer use in schools may include: Effects of gender, Age, Computer experience, Computer literacy and Psychological factors such as locus

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of control and personality characteristics.

In this study, we emphasized analyzing the attitude of Secondary School Teachers towards use of ICT in classroom teaching. The success of student learning with computer technology will depend largely on the attitudes of teachers, and their willingness to embrace the technology. Gaining an appreciation of the teachers’ attitudes towards computer use may provide useful insights into technology integration and acceptance and usage of technology in teaching and learning. Positive teacher attitudes towards computing are critical if ICT are to be effectively integrated into the school curriculum Myers & Halpin (2002).

**Objectives of the Study**

The main objective of this study was to examine the attitude towards use of ICT among secondary school teachers. Since achieving excellence in schools, it is important to ensure that teachers must be able to integrate technology into the curriculum. The present study was conducted with the following objectives:

1. To study and compare the attitude of government and private secondary school teachers towards use of ICT in class-room teaching.
2. To study and compare the attitude of male and female secondary school teachers towards use of ICT in class-room teaching.
3. To study and compare the attitude of science and arts secondary school teachers towards use of ICT in class-room teaching.
4. To study and compare the attitude of rural and urban secondary school teachers towards use of ICT in class-room teaching.

**Method and Procedure:** For collection of relevant data sample of 500 secondary school teachers (Male/Female) teaching in schools of Amritsar district were taken. In the present study Descriptive Survey Method of research was used and self prepared questionnaire was used for teachers. Suitable statistical techniques were employed to arrive at reliable results.

**Discussion of Results**

In the light of the analysis and interpretation of data following results were drawn:

1. There is no significant difference in the Attitude of Government and Private Secondary School Teachers Towards Use of ICT in Class-Room Teaching as ‘t’ value between means of the two groups – Private and Government Secondary School Teachers came out to be 0.15 which is insignificant at 0.05 and 0.01 levels of significance.
2. There is no significant difference in the Attitude of Male and Female Secondary School Teachers Towards Use of ICT in Class-Room Teaching as ‘t’ value between means of the two groups – Male and Female Secondary School Teachers came out to be 0.46 which is insignificant at 0.05 and 0.01 levels of significance.
3. There is no significant difference in the Attitude of Science and Arts Secondary School Teachers Towards Use of ICT in Class-Room Teaching as ‘t’ value between Means of the two groups – Rural and Urban Secondary School Teachers came out to be 2.70 which is insignificant at 0.05 and 0.01 levels of significance.
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QUALITY ISSUES IN TEACHER EDUCATION

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Teachers are the greatest assets of any education system. They stand in the interface of the transmission of knowledge, skills and values. Teacher education plays vital role in reforming and strengthening the education system of any country. Teachers to be highly qualified must be well prepared, especially in improving the quality of education facing global challenges. It is need of the hour to shift to more powerful learning paradigms, such as, linear to hypermedia learning, instruction to discovery and innovation, teacher centered to learner centered education, absorbing material to learning, learning as taxing to learning as fun, teacher as transmitter to teacher as facilitator. So, the government and education departments have to initiate suitable measures to make teacher education responsive to global developments as well as to quality concerns in future. This paper presents the different issues facing in present time that are affecting the quality of teacher education in India.

Teachers are the greatest assets of any education system. They stand in the interface of the transmission of knowledge, skills and values. They are accepted as the backbone of education system. The demand for qualified and quality teachers has been continuously on the increase the world over. Various contemporary issues and emerging trends such as liberalization, privatization, globalization, WTO, outsourcing, revolution of science and technology etc. are influencing the quality of modern education. There has been an unprecedented expansion of school education especially in the developing countries, which has increased such a demand. Therefore, the teacher education programmes have acquired renewed significance. It has become imperative that the effort and resources mobilized towards teacher education are effective and field relevant in particular country contexts. It is expected that the teacher education programmes reveal/exhibit vibrancy adequate for responding to the emerging paradigms of school education and the teacher roles thereof. Teacher quality is therefore crucial and has been globally accepted to be significantly associated with the quality of education in general and students’ learning outcomes in particular. Teacher professionalism comprises competence, performance and behaviour which reflect on teacher’s personality in school and society. Professional competence is fundamental in teaching profession which includes preparation of teacher for classroom processes, acquisition of knowledge of subject and facilitates personality development of children. The competent teacher is supposed to perform better in the interest of the development of both children and society. Therefore to be a good teacher and also to ensure the desired learning outcome to the target group, professional training is a must for every aspiring teacher. Unfortunately, the teacher education system is yet to be tuned to adjust with the changing educational need of time. The curriculum and syllabi review effort being undertaken in the context of child centric, joyful and competency based teaching especially at elementary level education, has not yet been fully supported by the teacher education programs. As a result, there is large gap between what is expected and what is achieved.

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at field level. There is no provision for undergoing compulsory in-service teacher training particularly at school education stage. As different universities of the state, control these teacher training institutions therefore, there is lack of uniformity and continuity in the curriculum and syllabi followed by them. Besides, no visible efforts can be seen for establishing linkage between various teacher education programs of pre-primary, primary, secondary and higher education level. It is thus necessary that quality concern is needed in every aspect of teacher education programmes. It refers to the concern reflected by those involved about ascertaining the true spirit and purpose of each task on the one hand, and on the other, try to enhance its meaningfulness. If such concern is an integral part of the processes and practices within an institution, students will gain meaningful and holistic experiences. Some of the educational issues that affect the quality of teaching are discussed as under:

1. **Public and Private Inequity**: There is public private division in teacher education. There is a pathetic indifference in public sector institutions and rampant commercialization in private sector. The teacher education degrees conferred by the various universities and institutions are non-comparable. Enrolment in teacher education programmes varies from region to region. There are some areas in India where the enrolment in Teacher Education is near full, but, the physical presence in the face to face mode is nearly nil. Some unscrupulous institutions have become simply money making commercial centres and produce certified but incompetent teachers which is a matter of great concern because incompetency of teachers can harm the system of education. There should be immediate ban on these institutions, whether, these institutions are under the purview of the NCTE or not.

2. **Quality Crisis**: There are problems of quality perception, quality scaling and quality differentiation in Teacher Education. There is a significant variance between expected and actual quality. It is evident from the results of successive entrance tests for higher level, such as Graduate, Post-Graduate or Doctoral Level. The degeneration of quality of Teacher Education can be attributed more to the private sector.

3. **Overgrowing Establishment**: Establishment has overgrown enrollment in most of the teacher education programmes in India. But, at the same time there is uneven distribution of the teacher education institutions. There is a need to have demand and supply estimates. The States need to justify case-wise their stand for objection or no objection with due respect to the establishment of teacher education institutions. There is a need to find out teacher education institutions required countrywide, program-wise and state-wise at present and in future. The projections should be in tune with the growth of school education.

4. **Lack of Humane & Professional Teachers**: Teacher Education for preparing humane & professional teachers needs to be wholistic. Along with content & methodology, there is a need to integrate emotional competencies, such as, self-awareness and self-management, social sensitivity and social management. There is a need to integrate life skills, such as, self-awareness, empathy, interpersonal relationship, effective communication, critical thinking, creative thinking, decision making, problem solving, and coping up with emotions and stress. There is a need to integrate spiritual intelligence dimensions, such as, spirituality, soul or inner being, self-awareness, equality of caste, creed, color and gender, inter-personal relations, acceptance and empathy, love and compassion. The different social sciences programmes run by the institutions
should develop ethics of the subject in teacher trainees. Merit is destroyed due to mismatches between Teacher Educators and Teacher Trainees. Quality teachers can be developed through skilled and competent Teacher Education professionals who have passion for profession.

5. **Poor Integration of Skills**: The various skills such as, life skills, techno-pedagogic skills, techno-savvy skills, emotional skills, human development skills, spiritual skills need to be integrated in teacher education. Teacher education is starving and striving for competent & proficient teacher educators. The study conducted by Helaiya (2009) presents how the life skills can be developed in the pre-service teachers and integrated in the teacher education programmes. It is insisted that there should be simultaneous focus on creative thinking and critical thinking, as well as, self-management and social management. The present century teachers ought to be highly skilled in management of stress and emotions. The study conducted by Madhavi (2009) revealed that living competencies and techno-pedagogic competencies have not been found to be the significant predictors of teacher education proficiency in India.

6. **Incompatible modes of Education**: There is little parity amongst various modes of education, such as, distance mode, e-mode, and face to face mode. Distance mode is diluted, e-mode is in infancy, whereas, the face to face mode is stagnant. There is no network amongst the various modes of teacher education. These are functioning more or less in isolation.

7. **Little Contribution to Higher Education**: Teacher Education has not been in a position to come out of school education. It has made very little contribution to higher education. Educationists have been over obsessed with school education intensively for complexity, enormity, and the large number of the schools and students, but this is at the cost of neglecting higher education.

8. **Domain Pedagogy Mismatches**: There are mismatches between the subject and pedagogy. There are mismatches amongst the profiles of the learners and their education. Every subject has its own structure and functions. Every education level has its own tenderness. Inspite of the presence of all the global and regional attempts we have not been in a position to even sustain the identity of elementary education. Teacher-centred strategies and pedagogy still dominate in the classroom. There is a relatively large variation among schools in the area of instruction, particularly concerning independent student practice, questioning skills, and teacher expectations for student achievement. During the practice in teaching, student teachers are non-serious to the task of teaching, deficient in sense of duty irresponsible, aimless, indifferent to children, lacking innovative measure in teaching which are great obstacles in the development of pedagogical skills.

9. **Lack of Innovations**: Teacher Education is a discipline which educates the progressive generations on what has gone by, where we are, where we want to go, and what we like to create, observing healthy, meaningful and long life. In India, teacher educators are averse to innovation and experimentation in the use of methods of teaching. It may be attributed to various factors. There are wide gaps between the visionaries and actors. Very often, the innovations have short life and die down in the institutions, where these originate. Sometimes, the most innovative programs fail in the formal system, because, these are beyond the view & purview of the apex bodies.

10. **Inadequate Technology Infusion**: Teacher education programmes are largely
traditional. Pace of modernization is very slow. Educational technology and ICT in education have demonstrated their values. But, Technology in Education is not yet fully integrated. Technology in Education is still underutilized. There is a need of technological revolution in teacher education. Computer as a medium has been found to have the potency of addressing the heterogeneity in terms of variables, namely, IQ, Interest, Motivation, Language level (Zyoud, 1999). Attempts have been made for designing, developing and implementing computer based Learning Resources Management System (LRMS). Many teacher education institutions in India have initiated ICT in education either as a core course or as optional course but to increase the number, government new initiatives needs to be employed as there is a wide scope for transformation of teacher education through technology.

11. Poor Research Scenario: Research in education is replicate and repetitive, devoid of freshness, either of problem or of approach or of methodology. A prospective plan for research and innovations should be framed with regional and national developmental priorities. The research methodology must be compatible with the local problems. There is a need to be innovative. There are mismatches between research trends and problems. Regulatory mechanism to tone up the research quality needs to be evolved. There is need for more quantitative research than qualitative.

Conclusion

Teacher education is a difficult assignment, especially at the present stage where teacher education programmes are being delivered by a large number of unaided private teacher education institutions. However, the quality concern goes beyond technical accuracy and consistent effort to carry out tasks. There is a need to evolve research quality indicators. The national agenda for research needs to be developed in alignment with the developmental objectives. There is a considerable lag between the demand and supply of teachers. This has created the problems of unemployment and underemployment. Most of the programmes are being conducted in a routine and unimaginative manner. So, the government and educators will need to understand better the links between schooling and its social and cultural environment, the kind of socialization and informal learning provided to children both before school entry and outside of the classroom and ways to develop more literate and encouraging environments in the family and the community, surrounding the school. Indian society as a whole should support the creation of a stable pipeline for recruiting more and better qualified, diverse teachers.

References


SHIFTING PARADIGMS OF INSTRUCTION: IMPLICATION FOR REFORMS IN TEACHER’S ROLE

Ms. Reetu Sharma* and Mrs. Malti**

Teacher is the custodian of heritage of mankind and exclusive appropriator of new knowledge. The advent of informative era as a result of scientific and technological advancements has opened Maiden avenues on the one hand and the traditional variables operating persistently on the education system. The traditional teacher standing at the crossroad seeks a Panacea to meet the emerging challenges so that his responsibility and accountability are reconciled to the needs of the hour. And at a time when unprecedented transformation of knowledge and action many fest in all diversions of worldly life, the scope of teacher education needs to take a positive direction commensuration with the change.

If all the different factors, which influence the quality of education and its contribution to the national development, the quality competence and character of teachers are undoubtedly the most significant. Teachers are the role models for students who contribute to shape the character, destinies of millions of our children. In that sense, they are the true nation builders since the children of today will be the leaders of tomorrow. True to our ancient teacher-disciple tradition, teacher have been entrusted with the vital task of providing education to children. And ultimately, it is the personality of the teacher that gives real meaning to the communication of knowledge. He has always been accorded the status of guide, guardian, mentor, path finder or a nation builder.

In the Modern scenario, the role of teacher has been changed due to the pressure of social, economic, scientific and technological advancements. The role of teacher has assumed new dimensions and society expects his/her leadership in the task of making education an effective instrument in the process of nation building. Today, the teacher has to concern himself with the total development of the child and not only with one or two aspects. He must be a philosopher illuminating the way of his intellectual and spiritual progress; he must be his guide in his moral and aesthetic advancement. In fact, he must be all things to all his pupils- a physician concerned about their physical health, a mental hygienist leading them carefully to sound mental health, a moralist assisting and encouraging them to acquire goodness and an artist helping them to find beauty. The success of students depends essentially upon the competence of the teacher, their sense of dedication and their identification with the interests of the students committed to their care.

The teacher is now expected not only to inculcate knowledge but also to encourage thinking and developing problem solving attitude among students. The traditional wittions analysis and
oral presentation skills are getting substituted with a series of innovated teaching skills, competency in task analysis, content analysis, design of learning materials and learning resources. More skills in providing educational consultancy, pedagogy counseling, devising and implementing learning situations are coming up as common skills of a common teacher.

A wide gap, too, has been experienced in the verbalized expertise and actual functional competency in teaching methods and models by most of the teachers due to unduly over emphasis on the science of education rather than on the art of teaching besides expanding frontiers of knowledge and pragmatic approach, progressing civilization and multiplying problems are giving rise to newer domain of knowledge creating much concerns for teacher practitioners who ever lags behind.

Teacher are being challenged to utilize new approaches and methods in an effort to improve learning outcomes. They have to seek improved ways of teaching by developing new programmes and instructional strategies such as enquiry approaches, simulation games, computer assisted instructions and programmed learning materials. And how do the teachers could prepare themselves for these conditions; probably through pre-service or in-service teacher education and that too need to be tuned to this new spirit and warmth. The true teacher, according to Swami Vivekananda, “is the one can immediately come down to the level of the students’ soul and see through his mind and understand him.” And these are the peculiar features in a teacher as per today’s demand.

Enrichment of teacher’s knowledge by providing in-service or pre-service education is the demand of the day and a teacher should be a lamp according to RabindraNath Tagore’s view which can never light another lamp unless he is still learning himself.

The Secondary Education Commission (1952-53) even goes on extent of stating that every teacher and educationist of experience knows that even the best curriculum and the most perfect syllabus remains dead unless quickened into life by the right method of teaching and right kind of teacher.

No doubt, teachers are prepared primarily through pre-service teacher education and further nurtured through in-service teacher education in present twice. Claiming at improving quality of education whereas pre-service teacher education is being provided by teacher education institutions, whether in the form of university departments, government colleges, self-financing colleges etc.

In-service education of teachers will provide them optimum conditions for growth, thinking of clear goals and bring about very much desired changes on the scale of a revolution with “Old order changeth, giving place to new.”

Distance mode of teacher education is also gaining momentum. Of course, critics and patrons are no dearth. The main motive is the professional competency of the product of the existing distance mode of teacher education. The emerging pedagogic trends and other socio-kinetics has created a new environment in the formal educational institutions in respect of over all organization, role-relation of the different components of the educational eco. Teacher education need be tuned to this new spirit and warmth.

The University Education Commission (1948-49), the Kothari Commission (1952) and the Education Commission (1964-66) too recognized the importance and significance of teacher
There is no doubt to the fact that if the teacher education is promoted in a progressive way, the long term results would be transformational in effect. In fact, these teacher education programmers provide some training not only in pedagogy but also in behavioral attributes including attitudes, motivation, perceptions, preferences, appreciations and value orientation.

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Education is the key to success in life and teachers make a lasting impact in the lives of their students. Teaching has been one of the oldest and respected professions in the world. The role, functions, competence and preparation of teachers have undergone a dramatic change from time to time but the need for teachers has been imperative for all times. The changing times as well as the requirements of the society have necessitated changes in the ways of teacher preparation. Teacher education is a programme that is related to the development of teacher proficiency and competence that would enable and empower the teacher to meet the requirements of the profession and face the challenges therein. The present paper will focus on teacher education’s meaning, nature, need, changing context of its Indian and global scenario.

An educational institution performs a significant function of providing learning experiences to lead their students from the darkness of ignorance to the light of knowledge. The key personnel in the institutions who play an important role to bring about this transformation are teachers. As stated by NCTE (1998) in Quality Concerns in Secondary Teacher Education, The teacher is the most important element in any educational program. It is the teacher who is mainly responsible for implementation of the educational process at any stage. This shows that it is imperative to invest in the preparation of teachers, so that the future of a nation is secure. The importance of competent teachers to the nation’s school system can in no way be overemphasized. The National Curriculum Framework 2005 places demands and expectations on the teacher, which need to be addressed by both initial and continuing teacher education.

Meaning of Teacher Education

The National Council for Teacher Education has defined teacher education as – A programme of education, research and training of persons to teach from pre-primary to higher education level. Teacher education encompasses teaching skills, sound pedagogical theory and professional skills.

Teacher Education = Teaching Skills + Pedagogical theory + Professional skills.

Teaching skills would include providing training and practice in the different techniques, approaches and strategies that would help the teachers to plan and impart instruction, provide appropriate reinforcement and conduct effective assessment.

Pedagogical theory includes the philosophical, sociological and psychological considerations that would enable the teachers to have a sound basis for practicing the teaching skills in the classroom.

Professional skills include the techniques, strategies and approaches that would help
teachers to grow in the profession and also work towards the growth of the profession. It includes soft skills, counseling skills, interpersonal skills, computer skills, information retrieving and management skills and above all lifelong learning skills.

**Nature of Teacher Education**

Teacher education is a continuous process and its pre-service and in-service components are complimentary to each other. According to the International Encyclopedia of Teaching and Teacher education (1987), "Teacher education can be considered in three phases: Pre-service, Induction and In-service. The three phases are considered as parts of a continuous process.

Teacher education is based on the theory that "Teachers are made, not born in contrary to the assumption, "Teachers are born, not made. Since teaching is considered an art and a science, the teacher has to acquire not only knowledge, but also skills that are called "tricks of the trade . Teacher education is broad and comprehensive. Besides preservice and in-service programmes for teachers, it is meant to be involved in various community programmes and extension activities, viz adult education and non-formal education programmes, literacy and development activities of the society. It is ever-evolving and dynamic. In order to prepare teachers who are competent to face the challenges of the dynamic society, Teacher education has to keep abreast of recent developments and trends.

**Need of Teacher Education**

The American Commission on Teacher Education rightly observes, “The quality of a nation depends upon the quality of its citizens. The quality of its citizens depends not exclusively, but in critical measure upon the quality of their education, the quality of their education depends more than upon any single factor, upon the quality of their teacher.”

The need for teacher education is felt due to the following reasons:- It is common knowledge that the academic and professional standards of teachers constitute a critical component of the essential learning conditions for achieving the educational goals of a nation. Educating all children well depends not only on ensuring that teachers have the necessary knowledge and skills to carry out their work, but also that they take responsibility for seeing that all children reach high levels of learning and that they act accordingly. The National Academy of Education Committee’s Report (Darling-Hammond and Bransford, 2005) wrote that: on a daily basis, teachers confront complex decisions that rely on many different kinds of knowledge and judgment and that can involve high stakes outcomes for students’ future. To make good decisions, teachers must be aware of the many ways in which student learning can unfold in the context of development, learning differences, language and cultural influences, and individual temperaments, interests and approaches to learning.

Teacher education like any other educational intervention, can only work on those professional commitments or dispositions that are susceptible to modification. While we can’t remake someone’s personality, we can reshape attitudes towards the other and develop a professional rather than a personal role orientation towards teaching as a practice. The Ministry of Education document “Challenge of Education: A Policy Perspective (1985) has mentioned, “Teacher performance is the most crucial input in the field of education."
Changing Context of Teacher Education in the Indian Scenario

The well-established tradition of teaching and learning in India has retained its inherent strength even under adverse circumstances. The post-independence period was characterized by major efforts being made to nurture and transform teacher education. The system of teacher preparation has come under considerable pressure as a result of the expansion and growth of school education, through efforts to universalize elementary education. Having inherited a foreign model of teacher preparation at the time of independence from Britain in 1946, major efforts have been made to adapt and up-date the teacher education curriculum to local needs, to make it more context based, responsive and dynamic with regard to best meeting the particular needs of India. The current system of teacher education is supported by a network of national, provincial and district level resource institutions working together to enhance the quality and effectiveness of teacher preparation programs at the pre-service level and also through in-service programs for serving teachers throughout the country.

Impact of National Policies: India has made considerable progress in school education since independence with reference to overall literacy, infrastructure and universal access and enrolment in schools. Two major developments in the recent years form the background to the present reform in teacher education- The political recognition of Universalization of Elementary Education that led to the Right to Education Bill, 2008 and The National Curriculum Framework for school education, 2005.

The Bill has been passed by the Parliament and the Right to Education Act has come into being making it mandatory for the state to provide free and compulsory education to almost 20 crore children in the 6-14 age group till class 8. The Act mandates a schedule for the functioning of schools which includes a teacher student ratio of 1:30 till a student population of 200 students at the primary stage. This would increase the demand for qualified elementary school teachers many times. The country has to address the need of supplying well qualified and professionally trained teachers in large numbers in the coming years. The lunch of the massive SarvaShikshaAbhiyan in 2002 and the recent financial commitment and education cess to augment the Universal Elementary Education mission have underscored the need to adequately prepare teachers to address the growing demand for quality education.

Challenges in Teacher Education

Unprecedented expansion of teacher education institutions and programmes during the past few years characterizes the teacher education scenario of today. With increasing school enrolments and the launch of pan-Indian primary education development programmes like Operation Blackboard, District Primary Education Programme, SarvaShikshaAbhiyan and Universalization of Elementary Education, there was a natural increase in the demand for teachers. Added to this, the backlog of untrained teachers in the system and the essential requirement of pre-service teacher certification for appointment as a teacher led to mounting pressure on existing institutional capacity. The demand far exceeding supply, market forces have taken over unprecedented rise in the number of teacher education institutions in most parts of the country.

From 3489 courses in 3199 institutions and an intake of 2,74,072 in 2004, the numbers in December, 2008 swelled to 14,523 courses in 12,200 institutions with an intake of 10,73,661 at
different levels. This expansion has taken a heavy toll on quality parameters like infrastructure, faculty learning resources and student profile. Teacher education as a whole needs urgent and comprehensive reform. There is a need to bring greater convergence between professional preparation and continuing professional development of teachers at all stages of schooling in terms of level, duration and structure. Considering the complexity and significance of teaching as a professional practice, it is imperative that the entire enterprise of teacher education should be raised to a university level and that the duration and rigour of programmes should be appropriately enhanced.

**Changing Context of Teacher Education in the Global Scenario**

Teacher education is a global profession that needs to be understood properly. It is essential to grasp a global perspective of the profession as it is today, to make assumptions about it in the near future and to utilize the best thinking and instructional models available in the present times. Professionally, powerful teaching is very important and increasing in our contemporary society as a result of the steam of dynamic initiatives of human development and evolution. Due to these developments and evolution, standards of learning would be higher in the 21st century than it has been in the 20th century. As a result teachers would need to acquire additional knowledge and skills, both general and specific, to be able to survive and be successful in the 21st century school environment. Education has increasingly become important to success of both individuals and nations. Growing evidence demonstrates that, among all educational resources, teachers’ abilities are especially critical contributors to students’ learning and consequently the success of a nation to advance in its economic, social and political spheres (Darling-Hammond, 2006).

For dynamic teacher education and training in the 21st century globalised world, teacher education and training institutions must design programmes that would help prospective teachers to know and understand deeply; a wide array of things about teaching and learning and in their social and cultural contexts. Further more, they must be able to enact these understandings in complex classroom situation serving increasingly diverse students. If the 21st century teacher is to succeed at this task, teacher education and training institutions must further design programmes that transform the kinds of settings in which both the novices and the experienced teachers teach and become competent teachers. This signifies that the enterprise of teacher education and training must venture out further and further and engage even more closely with schools in a mutual transformation agenda with all the struggles involved. Importantly, the teacher education and training institutions must take up the charge of educating policy makers and the general public about what it actually takes to teach effectively both in terms of knowledge and skills that are needed and in terms of the school contexts that must be created to allow teachers to develop and use what they know on behalf of their students.

**Conclusion**

No nation develops beyond the quality of its education system, which is highly dependent on the quality of its teachers. Teachers should be given the most appropriate tools during and after their training, including content knowledge and skills as well as teaching methodology to be able
to do their work professionally. The globalization concept, if taken into account, would require that teachers and teaching should be recognized like all other professions and should require stringent training and acquisition of knowledge and skills and professional registration under a global council of unified teacher registration body to allow for easy mobility of teachers across national boundaries.

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The present paper focuses upon the concept of Teacher education. In this paper details related to nature, scope, objective is given. It also discuss about the challenges of teacher education and various thought provoking suggestions for the qualitative improvement in teacher education. The crux of the entire process of teacher education lies in its curriculum, design, structure, organization and transaction modes, as well as the extent of its appropriateness. A teacher needs the appropriate knowledge and skills, personal characteristics, professional prospects and motivation if they are to meet the expectations placed upon them. The most significant quality perspective is the need to realize the importance of the teacher preparation program to ensure professionalism in the processes and practices.

Teacher Education has always been an important component of education since time immemorial. This is because all societies in the world have always needed teachers to propagate/transmit their cultures from one generation to another. Teachers need to be seen as creators of knowledge and thinking professionals. Education is a dynamic, continually evolving concept that keeps adapting to the changes around it. Likewise, the methodology used in teaching is equally transitory in nature and demands contemporary approaches too. Quality education means that the majority of the students, if not all, is able to meet the expectation of the “Minimum Level of Learning”. It means stimulating creative thinking, developing problem-solving skills and life skills and laying emphasis on application of knowledge. Quality is the basic or essential character, for the product of service of an organisation, or entity.

Meaning of Teacher Education

It is well known that the quality and extent of learner achievement are determined primarily by teacher competence, sensitivity and teacher motivation. Teacher education is a programme that is related to the development of teacher proficiency and competence that would enable and empower the teacher to meet the requirements of the profession and face the challenges therein.

Globalization

The term “globalization” means integration of economies and societies through cross country flows of information, ideas, technologies, goods, services, capital, finance and people. Cross border integration can have several dimensions — cultural, social, political and economic.

Globalization and teacher education: The Delors report, sets out an agenda for the future which implies that significant changes are needed in pre-service teacher education programs
if we are to select and prepare a new generation of teachers equipped with the knowledge, skills and values to help their culturally different and their socially disadvantaged students to learn, to resolve conflicts peacefully, to respect each other’s dignity and cultures, and to become socially responsible citizens. What emerges from the research is that teacher education which follows the ‘Do as I say, not do as I do model’.

**Nature of Teacher Education**

1. Teacher education is a continuous process and its pre-service and in-service components are complimentary to each other.
2. Teacher education is based on the theory that Teachers are made, not born in contrary to the assumption, Teachers are born, not made.
3. Teacher education is broad and comprehensive. Besides pre-service and in-service programmes for teachers, it is meant to be involved in various community programmes and extension activities
4. It is ever-evolving and dynamic.
5. The crux of the entire process of teacher education lies in its curriculum, design, structure, organization and transaction modes, as well as the extent of its appropriateness.
6. As in other professional education programmes the teacher education curriculum has a knowledge base which is sensitive to the needs of field applications and comprises meaningful, conceptual blending of theoretical understanding available in several cognate disciplines.
7. Teacher education has become differentiated into stage-specific programmes.
8. It is a system that involves an interdependence of its inputs, processes and outputs.

**Scope of Teacher Education**

The scope of teacher education can be understood in the following ways;
- Teacher education at different levels of education
- Triangular basis of teacher education
- Aspects of teacher education
- **Teacher Education at different levels of Education:** Teacher education reaches teachers at all levels of education, namely Pre-primary, Primary, Elementary, Secondary, Higher Secondary and the Tertiary.
- **Triangular Basis of Teacher education:** Construction of the relevant knowledge base for each stage of education requires a high degree of academic and intellectual understanding of matter related to teacher education at each stage. This involves selection of theoretical knowledge from disciplines cognate to education, namely, psychology, sociology and philosophy, and converting it into forms suitable for teacher education.
- **Aspects of Teacher Education:** Teacher education is concerned with the aspects such as, who (Teacher Educator), whom (Student teacher), what (Content) and how (Teaching Strategy). Teacher education is dependent upon the quality of teacher educators.
Vision of Teacher Education

- Encouraging, supportive and humane facilitator in teaching learning situations who enables learners (students) to discover their talents, to realize their physical and intellectual potentialities to the fullest, to develop character and desirable social and human values to function as responsible citizens; and,
- An active member of the group of persons who make conscious effort to contribute towards the process of renewal of school curriculum to maintain its relevance to the changing societal needs and personal needs of learners, keeping in view the experiences gained in the past and the concerns and imperatives that have emerged in the light of changing national development goals and educational priorities.
- These expectations suggest that teacher operates in a larger context and its dynamics as well as concerns impinge upon her functioning. That is to say, teacher has to be responsive and sensitive to the social contexts of education, the various disparities in the background of learners as well as in the macro national and global contexts, national concerns for achieving the goals of equity, parity, social justice as also excellence. To be able to realize such expectations, TE has to comprise such features as would enable the student teachers to
  - Care for children, and who love to be with them;
  - Understand children within social, cultural and political contexts;
  - View learning as a search for meaning out of personal experience;
  - Understand the way learning occurs, possible ways of creating conductive conditions for learning, differences among students in respect of the kind, pace and styles of learning.
  - View knowledge generation as a continuously evolving process of reflective learning.
  - Be receptive and constantly learning.
  - View learning as a search for meaning out of personal experience, and knowledge generation as a continuously evolving process of reflective learning.
  - View knowledge not as an external reality embedded in textbooks, but as constructed in the shared context of teaching-learning and personal experience.
  - Own responsibility towards society, and work to build a better world.
  - Appreciate the potential of productive work and hands-on experience as a pedagogic medium both inside and outside the classroom.
  - Analyze the curricular framework, policy implications and texts.
  - Have a sound knowledge base and basic proficiency in language.
  - The objectives of teacher education would therefore be to,
  - Provide opportunities to observe and engage with children, communicate with and relate to children
  - Provide opportunities for self-learning, reflection, assimilation and articulation of new ideas; developing capacities for self directed learning and the ability to think, be self-critical and to work in groups.
  - Provide opportunities for understanding self and others (including one’s beliefs, assumptions and emotions); developing the ability for self analysis, self-evaluation, adaptability, flexibility, creativity and innovation.
— Provide opportunities to enhance understanding, knowledge and examine disciplinary knowledge and social realities, relate subject matter with the social milieu and develop critical thinking.

Models of Teacher Education and Training for the 21st Century

The new models should emphasize learning to do and learning to think so that we do not produce learned monsters but learned thinkers.

1. There is absolute need for participatory teacher education. In this model, teachers in training should play active role in the training process. They should become participants in decisions regarding the needs to which their training must respond; what problems must be resolved in the day-to-day work environment and what specific knowledge and skills must be transmitted to them. In the participatory model teachers must be self-directed and self-taught.

2. The new teacher education and training should not lose site of the power of technology for both teachers and students learning. The real power of technology will come when teachers have been trained well in them and have captured the potential of technology themselves.

3. Need for in-depth content and practical knowledge of research for teachers: Research must be a major priority in teacher education and preparation in the 21st century. Professional teachers naturally seek answers to questions and solutions to problems that enable them to help their students to learn.

4. The concept research and its significance to teacher education and training: There is need to look at the concept research and how it applies to the teaching-learning environment, especially in the 21st century school environment. This will make the professional teacher to identify with the fact that research is a major part of the professional practice.

5. Need to provide 21st century teachers with solid foundation in research methods: If the 21st century teachers are to consider themselves as researchers and use research to improve their practice, then the following conditions would need to be fulfilled in their entirety by teacher education and training institutions.

6. Globalising the teaching profession through a globalised teacher’s council: Currently, every country has its own teaching council with specific objective to register professionally qualified teachers before they can practice. Every country has its own requirements that professional teachers should meet in order to be registered and certificated to teach.

Challenges of Teacher Education in Globalization

- **Research in Teacher Education**: Enhanced scope of Teacher education requires researches and studies to visualize scope of teacher education in the context of globalization. Research must respond to the area of policy issues, curriculum issues, evaluation systems, classroom practices, training strategies, value inculcation, school community relationship, technology mediated education, quality in education, interactive education, Inclusive education, practice teaching school etc.

- **Competency based Curriculum**: The competency based curriculum represents an approach to instructions, which emphasize the application of the knowledge in a manner, which may be observe or measured. Competency based curriculum guides focus on a comprehensive
view of each course of study, which is delineated into its essential components listing of most important objectives to be mastered and competencies which every student should be able to demonstrate often instruction is completed.

- **Adaptability and Professionalism**: The standard of education will improve if all the teachers have global perspective, well prepared and provided with ongoing professional development and appropriate support. Teachers need to be adapted to the socio-economic and cultural diversities of the students in order to complete in the international sphere.

- **Quality Education**: Today we are now more interested in the quality in teacher education. High quality teacher education is one more challenge which is successes caters to the following conditions without any bias such as staff pattern as prescribed by NCTE, Infrastructure catering to the needs of teaching learning situations, effective technique assessment and effective learning outcome assessment.

- **The need to favor the development of skills long side knowledge**: The phenomenon of globalization as helped to widen the gap between those who globalized and those who are globalized of the process at the local, national, regional and International levels.

- **Use of Integrated Technology**: A growing challenge in education is, establishing and implementing strategies to develop the skills and knowledge necessary for the teacher to essentially use technology as instruction tool. The extent to which teacher is prepared to infuse technology into curriculum and instruction is major contextual factor.

- **Changing context of teacher education in the global scenario**: Teacher education is a global profession that needs to be understood properly. It is essential to grasp a global perspective of the profession as it is today, to make assumptions about it in the near future and to utilize the best thinking and instructional models available in the present times.

- **Dynamic teacher education and training in the 21st century globalised world**: For dynamic teacher education and training in the 21st century globalised world, teacher education and training institutions must design programmes that would help prospective teachers to know and understand deeply; a wide array of things about teaching and learning and in their social and cultural contexts. Furthermore, they must be able to enact these understandings in complex classroom situation serving increasingly diverse students.

- **Structure of a Globalised Teacher Education and Training Curricula**: Building stronger models of teacher preparation in the 21st century would require adequate and progressive knowledge content for teaching as well as knowledge content for the subjects that the teacher would be required to teach. In this respect, the - what of teacher education and training should be the focus of the curriculum.

- **Impact of National Policies**: India has made considerable progress in school education since independence with reference to overall literacy, infrastructure and universal access and enrolment in schools. Two major developments in the recent years form the background to the present reform in teacher education-
Suggestions to Overcome the Challenges of Teacher Education

- Proper manpower planning of teacher education to estimate the number of teachers required during the next five years and accordingly adjusting the admissions in training colleges.
- Improvement of physical infrastructure and learning conditions in the training institutions.
- Developing individual building capacity and leadership skills in training institutions.
- Establishment of extension service departments in the training institutions for regular guidance of schools.
- A comprehensive program of in-service teachers training for existing teachers.
- Improvement in methods of teaching and evaluation with internal monitoring and performance measures.
- Since, teachers have to build up the character of students, it is necessary that teacher’s education should inculcate those values which the teachers are supposed to strengthen in society and to inculcate in their students.
- The faculty of training institutes should be adequately trained for their work of preparing teachers through in-service programmes or special orientation courses.
- Need for the reorientation of curriculum in training institutions for better academic and professional preparation of teachers.
- The leading teacher educators should come together to discuss about the curriculum, methods of work, activities, evaluation etc.
- For the teaching faculty, there should be educational research and teaching improvement units in every institute or university to advice teachers on improving their own teaching.
- Implementation of NCF 2005, the guiding light of Indian Education at every level of teacher education programme.

Conclusions

A teacher needs the appropriate knowledge and skills, personal characteristics, professional prospects and motivation if they are to meet the expectations placed upon them. The most significant quality perspective is the need to realize the importance of the teacher preparation program to ensure professionalism in the processes and practices. This professionalism can be achieved only by total commitment, devotion and continuous efforts on enhancing quality in transaction. No nation develops beyond the quality of its education system, which is highly dependent on the quality of its teachers. Teachers should be given the most appropriate tools during and after their training, including content knowledge and skills as well as teaching methodology to be able to do their work professionally. The globalisation concept, if taken into account, would require that teachers and teaching should be recognised like all other professions and should require stringent training and acquisition of knowledge and skills and professional registration under a global council of unified teacher registration body to allow for easy mobility of teachers across national boundaries.
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Innovations in Teacher Education

INNOVATIONS IN TEACHER EDUCATION

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Educational innovation refers to an idea or practice new to a specific educational context that meets unsatisfied needs. It is the introduction or promotion of new ideas and methods that are devised in education and/or school practices which have a substantial effect on changing the existing patterns of behavior of the group or groups involved. Innovative strategies imply the development of new ideas which are disseminated and utilized. This paper deals with the benefits and impact of new techniques on education and learning process. Is education has become effective and interesting with new techniques we will find out with the study.

Education in a very general sense can be summed up at a basic level as reframing to an experience or act that has a formative effect on the mind character or physical ability of an individual. In the sense that it is formative means that education is serving to form something and particularly something that will have a long lasting effect on the persons mind and faculties. The most obvious example of this is ability to understand and use language and mathematics a skill which is than utilized throughout an individual life. Education is commonly and formally divided into stages such as preschool, primary school, secondary school and then college. Any experience that has a formative effect on the way one thinks, feels, or acts may be considered educational. According to some learned people the word “education” has been derived from the Latin term “educatum” which means the act of teaching or training. A group of educationists say that is has come from another Latin word “educare” which means to bring up or to nourish. According to Rig Veda: “education is something which makes man self reliant and selfless.” Upanishad: “education is for liberation.” Bhagvadgita: “nothing is more purifying on earth than wisdom.”

Traditional Method of Education

Traditional homeschooling is similar to classroom learning. Using textbooks, workbooks and traditional teaching methods. this is often the best place for new homeschoolers to begin because of the availability of a complete curriculum some believe though that the term” Traditional homeschooling” is an oxymoron because they are antithetical. Many family do adopt traditional teaching methods in their home school because these methods are tired and true for the classroom type learner. This approach will not work for learning disabled children or ADHD children thoughts. The traditional textbooks developed by christens publishers present a distinctly Christian world view cover subjects toughly and usually include study questions, Enrichment activities and projects. These excellent books are rich in colorful illustration , photographs, diagrams, chart sand maps, supplemental teaching materials are available such as workbooks, tests answer keys, chart and

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Innovation

Innovation is a new idea, device or process. Innovation can be viewed as the application of better solutions that meet new requirement. In articulated needs or existing market needs. This is accomplished through more effective products, process, Services, technologies or ideas that are really available to markets, governments or society. The term innovation can be defined as something original and more effective and as a consequence new that "breaks into the market or society. Innovation differs from innovation refers to the use of a better and as a result, novel, idea or method. Innovation differs from improvement in that innovation refers to the nation of doing something different rather than doing the something better.

Some of the characteristics are: Innovation is regarded as a new idea, Innovation is a deliberate effort, Innovation is a planned effort, Innovation has an element of specificity, Innovation has functional utility, Innovation results in new resources of learning, Innovation is considered qualitatively superior to the present situation.

Innovation in Education

Teachers and schools are often perceived as lacking in innovation. However looking at the way teachers approach the classroom you find many similarities to disruptive innovators in his book. The innovator’s DNA, Clayton Christensen lays out the five characteristics of these innovation thinkers associating, questioning observing networking and experimenting. In reality educators and innovators embody most of these yet they are expressed in different ways. As a teacher and now founder of bright loop, I have been a part of both worlds. Viewing each through the media, it is easy to feel as if teachers and startups are incomplete that innovation is a term for the entrepreneurs and the teacher must catch up. Yet take a closer look and you will see that Christensen’s characteristics are very aligned to the way educators approach their classroom. It is time to dispel the myth that innovation only happens outside the classroom and use that knowledge to create me collaborative innovation between educators and detect entrepreneurs. Let’s take a look at what teachers and startups can learn from each other about innovation.

Innovation in Teacher Education

Innovation and teacher education innovation is the key to improvement. In current time the absolute ideologies and methods of teaching do not work. One has to be innovative with teaching and this was highlighted by Josh and Homes who wrote an article on innovations in teacher education. The authors had highlighted the importance of integrated teaching, teacher curriculum and teacher education for rural development. Time is constantly charging and the only way to keep with it so to keep growing and envying and this is also applicable to teachers.

In order to relate with children teachers need to keep themselves upgraded with new ways of teaching. For instance if a teacher is not net savvy in current times then he/she cannot make history classes interesting. Today is the age of videos and podcasts and children can easily learn through this interactive media and hence teachers of current media needed to keep with the current technology.

With internet being so windy used, knowledge is just not restricted to textbooks; children
have access to internet and information. In such times if teachers stick with a decade old way of teaching then it is difficult for children to relate to them. Teachers have to look beyond textbooks and take help from audio and visual aids of teaching to make a subject interesting. Various seminars and workshops are conducted by the educational books (CBSE/ICSE/ISC) on India to teach innovative teaching skills to teachers.

**Training for Teachers**

There are some excellent and rewarding teacher training programs available online right now. For a school teacher education you can get classes and programmers that meet your needs. Teacher training education is at its highest level in decades. Becoming a physical educational teacher or becoming a special education teacher is not as difficult as some would say. We can even show you how to become a physical education teacher.

The areas that have been discussed in this study are as under: Classroom Management, Teacher Preparations, Innovations in Instructional approach and Classroom handling techniques

**Classroom Management**

It is one of the important areas which play a vital role while conducting class. The factors which comes under classroom management are: Cleanliness of room, Seating Arrangements of students and Charts and tables for display. Basically it talks about the physical evidences of the service industries. A pilot study carried by author amongst the sample size of 500 students from different school revealed that these factors are very important from the moral point of view. These factors help to provide a good ambience in the classroom to boost the morale of the students even before the start of actual class work.

**Teacher Preparations**

This is the heart of the process. It was found during the survey that most of the teachers don’t have any teaching plan. Most of the senior teachers give more importance to their experience rather than preparing and updating their teaching notes. In this preparation following two factors are very important as the content requirement (Course-work), Beyond the course work etc. The course work is developed and designed by the experts in that specific area and one need to bind by that. But the other factor which talks about covering that course work by going beyond it. During ancient days students were supposed to away from their parents and there was a GURU and SHISYA culture for the formal education, here the author is discussing same philosophy with modern approach of case study methods and situation analysis.

**Innovations in Instructional approach**

The methodology or approach for the instruction is also very important from learning point of view. Here the emphasis should be given for the learning and not for merely forcing the students to mugging-up. The students should be forced to think and apply their mind. The output should not be because of test of memory but it should be because of test of knowledge. By combining some of the traditional approach with current modern techniques author can suggest some of the innovative techniques that can be used by the teacher as a tool for instructional approach. These tools can be applied separately or in a combination depending upon the course work. These
techniques are as under: Role Plays, Street plays, Out of Box thinking, Beyond Syllabus, Teaching Aids, OHP, LCD / DLP Projector and Video Conferencing. Finally it should be a balance integration of course work and case studies. The last point of discussion is about the classroom handling techniques which is discussed in next section.

**Classroom Handling Techniques**

This is the technique if used properly, can lead for motivation for both students as well as Teacher. Some techniques suggested under this by the author are Stress Management, Questionnaire techniques and Feedback approach.

**Conclusion**

The success of this task depends up on the training and knowledge of the teacher is highly skilled job. Every teacher should therefore be equipped with proper teaching technology for playing effective role. In India, year after the year teacher are still using the same chalk and talk” method to teach. Not much effort is being put into bringing innovation in teaching to make learning and teaching both enjoyable and effective. Innovation is regarded as a new idea in teacher education. Innovation to describe it in simple term, is the introduction of a new idea a process or a technique and its adoption for wide spread use to replace an existing practice or technique. Innovations in education are adopted for bringing qualitative improvement and the bases for educational change is the innovation and creative idea of an individual. Innovation may be regarded as a species of the genius change. On the basis of above discussion we can say that by innovation.

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Man is a social being. He is an integral part of society. The man is product of society where as society also depends upon its individuals for its development. Aims and objectives of any society can achieved through the proper education of its men. For such an educational system, we require efficient teachers. It is well known saying that teacher is the national builder. To be able to discharge such a high responsibility, it is very necessary that the teacher must become conscious of his role towards society. His behave should indicate his attempt to do his job properly. His personality must reflect characteristics of good citizenship, dignity of the individual, rights and duties etc., so that he may transmit the same to the younger generation. Although there has been continued debate about whether teaching is a “science” that can be taught or whether one is “born” to be a teacher, it has generally been agreed, at least since the nineteenth century, that certain characteristics are needed to qualify a person as a teacher: knowledge of the subject matter to be taught, knowledge of teaching methods, and practical experience in applying both. Most educational programs for teachers today focus upon these points. However, the internal character of the individual is also an important aspect of teaching; whether that is something one is born with or can be taught, and what are the qualities that are needed for the role of teacher are also a matter of debate.

Teacher Education refers to the policies and procedures designed to equip teachers with the knowledge, attitudes, behaviours, and skills they require to perform their tasks effectively in the school and classroom. In early times, teachers were often scholars or clergymen who had no formal training in how to teach the subjects of their expertise. In fact, many believed that “teachers were born, not made.” It was not until the emergence of pedagogy, the “art and science of teaching,” as an accepted discipline that the training of teachers was considered important.

Role of Teachers in Promoting Quality

Good education is the result of the interaction of multiple factors, the most important of which is increasingly recognized to be quality teachers and teaching. The way teachers teach is of critical concern in any reform designed to improve quality.

No Rigid Teaching Procedure: Teacher quality, teacher learning, and teacher improvement, therefore, are becoming the focus of researchers, policy makers, program designers, implementers, and evaluators. In both developing and industrialized countries, teachers in the past were treated as semiskilled workers unable to make responsible decisions about their practice. They were required to follow instructional prescriptions and highly scripted and rigid teaching procedures. For their professional development, teachers received information on how to improve from “experts” in centralized workshops with little follow-up support at the institutional level.
Reflective Practitioners: Many educational systems are starting to advocate active-learning approaches for teachers as well and significant changes are taking place. If teachers are to become reflective practitioners who use active-learning approaches in their classrooms, where students learn through problem solving, critical dialogue, inquiry, and the use of higher-order thinking skills, teachers must learn and improve in professional development programs that not only advocate but also use and model these methods.

Reflective Practice: The emphasis on teacher empowerment has grown from a variety of roots. The idea of reflective practice assumes that teachers are professionals capable of reflecting on the school and classroom situation and, thus, capable of making a large number of instructional and classroom management decisions. Even in circumstances where the level of teacher preparation is low, this perspective rejects the notion that teachers must work according to rigid prescriptions, incapable of independent decision making. Although some challenge the notion that teachers in developing countries, with minimal preparation and minimal resources, can reflect on practice and make informed choices, the more widely held view is that the idea of “the teacher as professional” has reliably led to better teacher performance.

Participatory Research: Action research is also closely related to teacher empowerment and has become an important component of what is considered good teacher development. Action or participatory research refers to teachers individually or in groups gathering and analyzing information in order to problem solve at the institutional level. In addition to mobilizing teachers to study and reflect on their practice, action research advances the professionalization of teachers by helping them develop and validate their knowledge. Action research often begins, in a teacher’s practice, as academic-based studies that are part of the preserves teacher education program and continue as part of academic-based teacher professional development programs.

Although discussion at national, district, educational institutions, and community levels should determine the qualities that a specific education system seeks in good teachers, a list of generally held perspectives on good teachers would include many of the following:

- Sufficient knowledge of subject matter to teach with confidence;
- Knowledge and skills in a range of appropriate and varied teaching methodologies;
- Fluency in the language of instruction;
- Knowledge of, sensitivity to, and interest in young learners;
- Ability to reflect on teaching practice and children’s responses;
- Ability to modify teaching/learning approaches as a result of reflection;
- Ability to create and sustain an effective learning environment;
- Understanding of the curriculum and its purposes, particularly when reform programs and new paradigms of teaching and learning are introduced;
- General professionalism, good morale, and dedication to the goals of teaching;
- Ability to communicate effectively;
- Ability to communicate enthusiasm for learning to students;
- Interest in students as individuals, sense of caring and responsibility for helping them learn and become good people, and a sense of compassion;
- Good character, sense of ethics, and personal discipline;
- Ability to work with others and to build good relationships within the educational institutions and community.

These teacher qualities thrive only in a positive and supportive environment. Although the qualities listed above are needed in each individual teacher, teaching (like learning) is not practiced most effectively as an individual activity. The teacher is always functioning as part of a social network, either with his or her students or within the school community. Excellence at the academics
level means more than an individual excellent teacher or even a collection of excellent teachers.

**Challenges in Teacher Education**

An immense writing has appeared on educational quality in recent years, examining factors that help improve education and proposing ways to promote better learning in schools. The issue of quality has become critical in many countries. In countries like India where with constrained resources, the successful effort to increase access to basic education has often led to declining quality of education. In a search for the factors that promote quality, countries programs as well as the literature increasingly emphasize teachers, schools, societies and communities as the engines of quality, with teacher quality identified a primary focus. The rapid changes in society led to teachers facing new and complex issues, resulting in changes in the area of teacher education. One of the most significant developments was the creation of Special education for children with special needs. For Special education teachers, learning how to effectively convey subject content is as important as learning this information. Special education teachers must be taught how information, especially more advanced and complex subject material, can be effectively taught to students in non-traditional ways. Special education teachers also often are required to study additional aspects of psychology and sociology.

Advances in technology have also posed an issue for future educators. Many educators have focused on ways to incorporate technology into the classroom. Television, computers, radio, and other forms of mass media are being utilized in an educational context, often in an attempt to involve the student actively in their own education. Hence, many teacher education programs now include courses both in technology operation and how to use technology for education purposes. With the coming on of distance learning utilizing mobile technologies and the internet understanding of technology or we can say e-learning has become crucial for new teachers in order to keep up with the knowledge and interests of their students in these delivery systems. The emergence of a networked knowledge economy presents both opportunities and challenges for teacher education. Used effectively, knowledge networks present opportunities for better informed and supported practice by education professionals and more authentic learning by students. The challenges include those identified above and, while much more research and development will be required to answer them. As India’s population or worldwide populations increasing which turn up to increasing demand for new teacher, while poverty, political instability, and other major issues have hindered governments around the world from meeting new educational demands. In some parts of the world, programs have been initiated to draw new talent into teacher educational programs. The UN’s Millennium Development Project has eight established goals, one of which is to develop universal primary education in every country by the year 2015. Central Asia, Africa and Latin America are all target areas for this initiative. In order to help achieve this end, the UN has devoted resources and funds to helping improve educational infrastructure and to training more new teachers in targeted areas.

**Suggestions for Improving the Condition of Teacher Education**

1. **Value Education:** Value education should be given to teachers, so that they could educate young minds in the right direction because these youngsters will become the future of the next generation.
2. **Revised Curriculum:** Curriculum of teacher education programme should be revised from time to time according to changing needs of society so that the incoming teachers may be able to adjust with the future perspectives.

3. **Consistently Improved:** The quality of teacher education programme should be upgraded. Teacher education programme should be raised to a university level and that the duration and rigor of programme should be appropriately enhanced.

4. **Periodic Inspections:** Teacher education institutions should be put under strict control of this regulatory body for the selection of teacher, students and provisions of good infrastructure etc. Institutions working should be examined from time to time and strict action should be taken of they fail to come up to expected level. Funds and aids should also be provided to the institutes who performed well.

5. **Stress Management:** Teachers should train about stress management mechanism so that they could help students in managing the stress and sustaining themselves in this time of social isolation, parental pressure and cut throat competition.

6. **Critical Thinking:** Teachers should be able to think critically make right decisions and maintain harmonious relations with others. Teacher education programmes should enables the teachers to develop there life skills among students.

7. **Reflective Thinking:** Techniques used in teaching should develop habit of self learning and reduce dependence on teachers. It will help them to reflect on their own and doing something new. Doing something new is creativeness so that their students may also become creative.

8. **Constitutional Goals:** Teachers should encourage student’s capacity to construct knowledge. Constitutional goals of justice, liberty, equality and fraternity can be realized through proper teacher education. Teachers are to make positive contribution to the realization of the constitutional goals. Teachers must understand the importance of the constitution in its true prospective in the light of Indian Culture ethos and integrate it with the philosophy of education.

9. **Social Reconstruction:** Teachers should prepare to own responsibility towards society and work to build a better world, commitment to justice and zeal for social reconstruction.

10. **Emphasis on Technology:** The impact of science and technology and ICT on society and education should be fully discussed in teacher educations institution.

11. **Scientific attitude:** Scientific temper should be developed and its application for the solution of problems of life should be encouraged.

12. **New Experiences:** New knowledge and new experiences should be incorporated in the curriculum and there should be a scope for teachers for reflection of knowledge.

**Conclusion**

Teacher education is a difficult assignment, especially at the present stage where teacher education programmes are being delivered by a large number of unaided private teacher education institutions. These institutions are also not sure of their tenure, as in near future; possibility of huge unemployment of trained persons may result in singeing fall. The surviving institutions can only be helped by appropriate authorities in improving quality of their academic management. This paper suggest an increase in responsibility for teachers but not an increase in authority: teachers are losing decision-making authority in the classroom. This paper also indicates that a
positive policy environment and ample support for growth are essential for creating and sustaining teacher quality. Government and educators will need to understand better the links between schooling and its social and cultural environment, the kind of socialization and informal learning provided to children both before school entry and outside of the classroom and ways to develop more literate and encouraging environments in the family and the community surrounding the school. Although the task of recruiting for both miscellany and quality seems discouraging, several well documented and proven long-term strategies exist and now we should support the creation of a stable pipeline for recruiting more and better qualified, diverse teachers. Expand the teacher candidate pool by targeting: potential teaching candidates in high school or before, teacher’s aides and other Para-educators, students at community colleges. Promote and support to teacher candidates who are otherwise qualified (based on defined eligibility criteria for teaching) but not passing the tests. Develop state, local, and national policies that provide meaningful financial support for teacher preparation programs and their students, including greater access to financial aid resources.

Teacher quality, teacher learning, and teacher improvement, therefore, are becoming the foci of researchers, policy makers, program designers, implementers, and evaluators. Quality & Excellencies in teaching in the Indian context is only possible if these points to be remembered: Students should listen intently, and participate actively (Concentrated listening). Teachers should try to interact with all of students in class (Thirst-quenching learning) More emphasis given to educational activities, careful planning, timed questioning session should be organized. Students learn stage-setting routines that allow teachers to change activities without interruption.

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ROLE OF COMMUNICATION SKILLS IN TEACHING LEARNING PROCESS

Ms. Neelam* & Ms. Harpreet Kaur**

Teaching is generally considered as only fifty percent knowledge and fifty percent interpersonal or communication skills. For a teacher, it is not just important to give a quality lecture but it is more important for the presentation of a lesson or lecture in class. Communication skills for teachers are thus as important as their in-depth knowledge of the particular subject which they teach. Teachers should be aware of the importance of communication skills in teaching. They must also realize that all students have different levels of strengths and weaknesses. It is only through communication skills that a teacher can introduce creative and effective solutions to the problems of the students. Thus, a teacher can enhance the learning process.

Before beginning the special education process, it may be useful for you to review the skills that can help build a collaborative relationship with your child’s school in order to develop an effective special education team. When an eligibility committee determines that a student needs special education services, parents often find themselves thrust into a new role as a special education advocate. In addition to learning about their child’s specific needs, parents also need to learn the skills necessary to communicate effectively with school staff members and to become integral members of their child’s education team. It is important for parents to develop a relationship of mutual respect and trust with school staff members. Parents and staff members need to express their thoughts in direct, honest, and appropriate ways while retaining and displaying respect for the rights and opinions of others.

The art of communication involves listening and speaking as well as reading and writing. Teachers need to be highly skilled in all these areas to excel in their profession. Proficient communicators receive information, understand and synthesize it and express themselves at a high level. They make excellent teachers because they are able to transmit knowledge, skills and values at the same time they communicate their caring for the students entrusted to their care. They motivate students to learn. Teaching is generally considered as only fifty percent knowledge and fifty percent interpersonal or communication skills. For a teacher, it is not just important to give a quality lecture but it is more important for the presentation of a lesson or lecture in class. Communication skills for teachers are thus as important as their in-depth knowledge of the particular subject which they teach. Teachers should be aware of the importance of communication skills in teaching. They must also realize that all students have different levels of strengths and weaknesses. It is only through communication skills that a teacher can introduce creative and effective solutions to the problems of the students. Thus, a teacher can enhance the learning process properly with the students:

Following are some of the communication skills that a teacher must possess so that they interact properly with the students:

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Positive Motivation This is one of the important things that a teacher must possess. In a class, students always have different kinds of taste and preferences over subjects. So it is the job of the teacher to create enthusiasm and interest in the minds of the students towards a subject. It is also a teacher’s role to remove any fear and inhibitions that a student may have towards a subject.

Effective Body Language This is the most powerful communication skill that a teacher must possess. Good presentation skills include a powerful body language supported by verbal skills. This can create a long lasting impression in the minds of the students. Thus, a teacher’s lectures will inevitably become more interactive and interesting for the students. Besides, a teacher should maintain the volume, tone and rhythm of their voice during a lecture.

Sense of Humor The importance of this factor has been regularly underestimated. A good sense of humor keeps the students active and interested in the teacher’s class. A teacher who is dour and lacks humor doesn’t contribute to the overall well being of the students.

Understanding the Students Teachers should encourage students to communicate openly. There should be emphasis on cultivating a dialogue rather than a monologue. So while solving any kind of problems in the classroom, it is always wise to hear the opinions of the students also.

Team Formation This is a good method where you can divide the classroom into small teams and ask them to solve different problems or complete assignments. This practice will increase not only the interaction among the students but also among the teacher and students.

Technical Skills It is also important that teachers should be up to date with all the latest teaching aids like computers, video conferencing and especially the use of internet. This will also help the students to keep up their interest in the learning process.

Students are the future of every nation. That is why the role of teachers is so important to the society. It is through a teacher that generations of youngsters are deeply influenced. Overall improvement in a student can be expected when communication skills for teachers is given due importance. Thus, it is important that communication skills become an important ingredient of a teacher’s professional competency.

The following are some strategies to demonstrate your interest and curiosity:

1. Don’t criticize, condemn, or complain to the teacher about his or her performance rather: focus on, and discuss, the material and your understanding of it.
2. Let the teacher know what you appreciate about the course
4. Know and use the teacher’s name
5. Listen to what the teacher has to say about himself or herself
6. Talk in terms of what the teacher is interested in
7. Let the teacher know that you think he or she is important
8. Avoid arguing
9. If you are wrong, admit it quickly and emphatically
10. Ask questions rather than give orders
11. Try honestly to see the teacher’s point of view
12. Let the teacher know that you sincerely want to do well in the course
13. Always have the course textbook in your hand whenever you see the instructor
14. Hand in all assignments on time throughout the semester

- **Listen:** No matter how many years of experience you have don’t always assume that you know what is going on through your student’s head. If you’re not having the results you expected with your pupil, it may be you overlooked something that you could easily resolve just by asking and listening.
- **Describe Clear Goals:** make sure you communicate a clear vision of the objective you wish your students to achieve. If you see any puzzled looks from the class, explain again, or ask one of your students to explain in their own words what they understood is the purpose of the lesson (project, homework, term, or whatever the issue at hand is) so you can double-check if everyone is on the same page.
- **Give praise:** everyone likes to hear they’re doing a good job and your students are no different. If you see someone having real difficulty with a specific subject it is especially helpful to praise even small improvements, as it will motivate your student to keep pushing forward towards the goal. Don’t be cheap with your kind words!
- **Be accessible:** you have an important job to do and your students depend on you for their learning process. Let them know you care by offering a designated time during the week where they can meet with you or talk over the phone or Skype for any questions they may have regarding class work. You can also give them a special email address you have set up for this purpose or create an online forum for open questions. You don’t have to offer “24-7 service” but make sure they can reach you if they need to.
- **Build teamwork:** if your whole classroom is working together to achieve similar goals it creates an environment that makes communication easier, it will help students help each other and build the camaraderie needed to make the classes run more smoothly.
- **Use humor:** Sometimes humor can lighten up the mood and be the lube that keeps the gears moving smoothly in your classroom. This does not mean you have to turn your lecture into standup comedy –unless, of course, you teach standup comedy!- but keep things light and have a little fun. A little humor can even get your students to do a task that may not be their favorite.
- **Embrace Variety:** it really is the spice of life and routines are a mood killer. So introduce new tools in your teaching repertoire: use role-play, bring an expert, do an interview, prepare a debate. Non-stop lectures will only make whatever you’re teaching less memorable for students.

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INNOVATIVE PRACTICES IN TEACHER EDUCATION

Mrs. Sonia Jindal*

Educating qualitatively requires good teachers means that it becomes essential that the most capable and appropriate people should be recruited into the teaching profession, provided with a high quality pre-service programme of teacher education, and then offered opportunities to upgrade their knowledge and skills over the full length of their professional career. It is, therefore, essential that there is a major reorientation of teacher education to ensure that teachers are furnished with the necessary knowledge and skills to cope with the new demand placed on them. Teacher education needs to be adequately strengthened and upgraded to accommodate the changing role of the teacher, so that teachers can effectively address contemporary issues regarding education. There are so many institutes which are providing Teacher Education, but there is still a need to learn and understand the real meaning of “Education”.

Teacher Educators although continually access their programs to make sure that they are up-to-date and consistent with current theory. Professional organizations, state departments of education and teacher preparation programs devote resources to identifying and nurturing high-quality programs that can serve as demonstration sites. There are bright spots across the nation and efforts are made to distill and disseminate key components of these programs. Yet many experience a gap between theory and practice and find theories irrelevant to the development of professional competencies. Newly educated professionals report a lack of competencies that are relevant to the challenge of professional practice.

Teacher Educators with high social and community content that are healthy, safe protective and gender-sensitive, and provide adequate resource and facilities. Teacher Educators continually access their program to make sure that they are up-to-date and consistent with current theory. Teacher educator with guiding philosophy and innovative methods to attain knowledge, skills and attitude that are linked to national goals for education and positive participation in society. It is important to keep in mind education’s systematic nature, however, these dimensions are interdependent, influencing each other in ways that are sometimes unforeseeable. Teacher education must be open to change and evolution based on information, changing contexts, and new understanding of the nature of education’s challenge. New research—ranging from multinational research to action research at the classroom level contributes to this redefinition. Hence we have to identify indicators of educational quality and measure it in a reliable and valid manner.

The Following are Innovative Practices in Teacher Education

Student-centered, non-discriminatory, standards-based curriculum structures:
Research on educational practices and projections about future needs in society contribute to
current understanding of the structure of school curriculum. In general, curriculum should emphasize deep rather board coverage of important areas of knowledge, authentic and contextualized problems of study and problem-solving that stresses skills development as well as knowledge acquisition. Curriculum should also provide for individual differences, closely and selectively integrate subject matter and focus on results or standards and targets for student learning that makes them to enable to apply all learnt theories into practical life.

**Uniqueness of local and National Value**: The specific content of school curriculum however depends on local and national values. In the main subject areas of primary education which include language, math, science and social studies, little variation is found among different regions in the developing world. Nation states, however, “tend to have a high degree of consistency in curriculum emphasis over time, but differ sharply from each other, reflecting unique historical patterns”.

**Linear Trends**: A recent UNICEF study on curriculum showed that in some cases, literacy skills are taught as a subject in a language course where the instruction tends to focus on teaching the language as an end in itself. Such an approach tends to be linear—first teaching aural skills, then speaking, reading and writing skills. Alternatively, literacy skills may be developed through other subjects such as social studies or science. Language Laboratories should be widely used for teaching pronunciation.

**Quantitative Literacy**: As quantitative data become increasingly prevalent in many societies, the concept of numeracy seems to be evolving. It encompasses a range of skills from basic arithmetic and logical reasoning to advanced mathematics and interpretative communication skills (Steen, 1999). Numeracy differs from mathematics; while mathematical skills support numeracy, the latter represents the ability to use a range in a variety of contexts.

**Life skills**: The term ‘life skills’ can be broadly interpreted and is often assumed to include such topics as health, hygiene, etiquette, and vocational skills. In UNICEF, however, life skills are defined as “psycho-social and interpersonal skills used in everyday interaction not specific to getting a job or earning an income”. The definition also explains that “a wide range of examples exits under the UNICEF working definition of life skills, such as assertion and refusal skills, goal setting decision making and coping skills”.

**Regular Attendance for learning**: When they reach school age, research demonstrates that to achieve academically, children must attend school consistently. A child’s exposure to curriculum—his or her ‘opportunity to learn’—significantly affects achievements and exposure to curriculum comes from being in school. A study of village schools in Malawi found that students with higher rates of attendance had greater learning gains and lower rates of repetition, a finding consistent with many other studies (Mike, Dowd et al., 1998).

**Interaction between school infrastructure and other quality dimensions**: The quality of school buildings may be related to other school quality issues, such as the presence of adequate instructional and textbooks, working conditions for teachers and the ability to undertake certain instructional approaches.

**Class Size**: A UNICEF/UNESCO survey conducted in 1995 in 14 least developed countries found that class sizes ranged from fewer than 30 students in rural and urban Bhutan, Madagascar, and the Maldives, to 73 in rural Nepal and 118 in Equatorial Guinea (Postlewaite, 1998). Do
larger class sizes hurt the quality of education? Educators and researchers from diverse philosophical perspective have debated the relationship between class sizes and student learning at length. Quantitative relationship between class sizes and academic achievement rarely take other key quality factors into account. Lower the size of class higher the personal care of learners, so as to give individual attention.

**Teacher competence and school efficiency**: Whether a teacher uses traditional or more current methods of instruction, efficient use of school time a significant impact on student learning. Teacher’s presence in the classroom represents the starting point. Many teachers face transportation and housing obstacles that hinder them from getting to school on time and staying until school hours are over. Next when teachers are present learning occurs when teachers engage students in instructional activities, rather than attending to administrative or other non-instructional processes. “The quality of a school and the quality of teaching of the individual teacher is higher in schools that are able and willing to make more efficient use of the available time of its teachers and its pupils”.

**Professional Learning for teachers**: Professional development can help overcome shortcoming that may have been part of teacher’s per-service education programme and keep teachers abreast of new knowledge and practice in the field. This ongoing training for teachers can have a direct impact on student achievement. The highest quality teachers those most capable of helping their students learn, have deep mastery of both their subject matter and pedagogy.

**Active, standards-based participation methods**: Education that supports and empowers both teachers and students through democratic processes increasingly defines quality in the 21st century. improving Educational Quality project, researchers collaborated with teachers in primary schools in foreign countries to develop action research opportunity for students that would exemplify empowering student-centered education. In one school, for example, students identified the problem area of student tardiness and selected it for study. They collected and analyzed data tracking attendance and mapping the homes and routes tardy children took to school.

**Teacher feedback mechanisms**: Good teachers should not be skilled only in instructional methods but also in evaluation and assessment practices that allow them to gauge individual student learning and adapt activities according to student needs. This process should include both performance assessment and assessment of factual knowledge. Teachers are very poorly trained in evaluation techniques and the reality is far from the continues evaluation procedures recommended by official programmers Indeed; many teachers and educational system continue to rely almost exclusively on traditional paper-and-pencil tests of factual knowledge that tend to promote rote memorization rather than higher order thinking skills.

**Teacher beliefs that all students can learn**: Quality education puts students at the centre of the process; student achievement must be the school’s first priority. Teacher committed to student learning communicate expectations clearly, give frequent and challenging assignments, monitor performance regularly and give students the chance to participate in practical work, give them exposure and take responsibility for diverse school activities.

**Teacher’s working conditions**: Teacher’s working conditions affect their ability to provide quality education. Teacher’s remuneration also matters. Effective teachers are highly committed and care about their students but they need supportive working conditions to maintain these
positive attitudes. They should also be provided with fear less environment so as to realize what, when, where and how kind of treatment they want to provide their students.

**Seminars and Workshops**: New Techniques of learning to teach in a way can really make teaching interesting and innovative So these kind of programmers not only improve professionalism but also give effective chance of interchanging of ideas, knowing their inner abilities and boost their confidence of presentation.

**Technology based Education**: As the technology can help in understanding, equipments should be used in regular and proper way to improve pedagogy and teacher student interaction.

**Conclusion**

Various efforts have been made to improve quality education in teaching but gaps can still be seen. Teachers need similar support for them to be taken in schools. Another essential ingredient for a successful education system is a quality learning environment. Although in theory we have promoted a board based curriculum that take a larger view of technology and its interactions with society, in practice we have often seen a relatively narrow curriculum that focuses almost exclusively on manipulation of tools and materials. The gap between that we say we are doing and what is actually happening in classroom across the country to widen. The curriculum developers must look for radically new approaches that might ultimately lead to widespread adoption of teaching for innovative literacy.

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CONTRIBUTION OF TEACHER TRAINING PROGRAMME

Ms. Ritika*

Training is necessary to get excellence in a particular job. Teaching is a complex process. If a teacher is trained before employing in a job, it is called pre service teacher training. Demand of a job and expectation certify the existence of teacher training. B.Ed. is a teacher training programme in which a student teacher gets an opportunity to acquire, to learn necessary skills, attitudes, habits etc., to be an efficient trained teacher. Now, it is essential qualification for the ones who want to enter in a teaching profession. School, teacher training institutes and college/university should remove the barriers of isolation so that students and teachers can get maximum number of benefits in teaching-learning process. As per NCTE recommendations, B.Ed. and M.Ed. will be now two year teacher training programme. This paper will focus on the contribution of teacher training programme on learners.

Education is an organisation facilitating the process of student learning and Facilitation of learning is possible through teaching. Although there is requirement of are several elements like curriculum, textbooks, school organisation and so on but the role of the teacher of actually engaging with learners in a live, real time context, is undoubtedly central to the facilitation process. Teaching is a complex and step by step process. Professional preparation and continuing professional development of student teachers is an important step to be an efficient teacher who has critical reflection on practice and research. Therefore, the training programme needs to provide for and facilitate the mentioned deepening of understanding and critical reflection though both critical comprehensions of theory as well as hands-on reflective practice. There is difference between training and education. According to Glaser (1962) Training has more specific objectives and attempts to minimise individual differences, educational objectives are more general and maximise the individual differences. When people are educated, the differences among them are increased and when they are trained, differences among them are minimised. Teacher education refers to the policies and procedures designed to equip the student teachers with knowledge, attitude, behaviour and skills that are required to perform their tasks effectively in the school and classroom. Education commission (1964-66) stated that “of all the different factors which influence the quality of education and its contribution to national development, the quality, competence and character of teachers are undoubtedly the most significant. Nothing is more important than securing a sufficient supply of high quality recruits to the teaching profession, providing them with the best possible professional preparation, and creating satisfactory condition of work in which they can be fully effective.”

A teacher must have an understanding of the close relationship between societies and the school, between life and school work. To enable student teacher to disseminate knowledge and to generate new knowledge is one of the aim of B.Ed. programme. Therefore it becomes essential

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and give necessary professional inputs to its student teachers. As per the recommendation of NCTE norms, the main aim of the Two-year B.Ed. Programme to make student teacher a reflective practitioner, to develop a conceptual understanding about issues of diversity, inequality and marginalization in Indian society and the implications for education, social and emotional development, and cognition and learning. The two year programme of B.Ed programme would enable students to specialize in one subject area. The programme is comprised of three broad curricular areas:

I. Perspectives in Education
II. Curriculum and Pedagogic Studies
III. Engagement with the Field.

Transaction of the courses is to be done using a variety of approaches, such as, case studies, group presentations, projects, discussions on reflective journals, observations of children, and interactions with the community in multiple socio-cultural environments.

Typical characteristics of teaching profession:
- Academic preparation supported by specialized knowledge and teaching competence
- Acquiring up-to-date knowledge by lifelong approach
- Social commitment
- Professional code of ethics

Aims and Objectives
- To enable student-teachers to engage with studies on Indian society and education, acquire conceptual tools of sociological analysis and hands-on experience of engaging with diverse communities, children and schools.
- To develop in student-teachers an understanding of the curriculum, linking school knowledge with community life.
- To develop critical understanding of the pedagogy as the integration of knowledge about the learner, the discipline and the societal context of learning, and research relating to different aspects of young children’s learning.
- To develop deep and critical awareness of professional ethics.
- To offer opportunities to self-reflect, study issues of identity, interpersonal relations.
- To develop in a student teacher, the professional and personal self of a teacher.
- To understand the role of education in desirable social change, sustainability, socioeconomic development.
- To involve in various activities and processes of a school and teacher education institution, in order to gain an insight into the multiple roles of a teacher.
- To understand the nature of classroom learning and develop strategies that promotes learning in the subject area.
- To critically examine the role and contribution of various agencies and regulating bodies in the development of quality education.
- To identify the variables involved in teaching-learning process.
- To develop professional attitudes, values and interests needed to function as a teacher.
- To make student-teacher capable of crossing subject-boundaries, empower them with new knowledge and train them to act as skilled teachers during transfer of the new
knowledge amongst their students.

The B.Ed. curriculum shall provide for sustained engagement with the Self, the Child, Community and School, at different levels, and through establishing close connections between different curricular areas. A teacher training institution should be able to establish proper relationships with the community, school and higher educational institutions in order to inculcate positive among student teachers attitude towards the profession which he has chosen to adopt for himself/herself. The student teacher needs to know real school environment before his/her experience actually begins. Previously, the one year duration of B.Ed. programme was assume as constraint but now as it is a two year programme, student teacher will acquire more time for their internship. In one year training programme, students get limited access to expose to the realities of school. Internship, practical and educational activities are not paid proper attention. One of the important components of teacher education programme is internship in teaching. It is the core of the programme.

For each student-teacher, internship should be conducted preferably in one school for the entire 15 weeks. It could be in one school or in two schools. But Under any circumstances, the student-teacher should not be sent to more than two schools during her/his internship period. This should include an initial phase of one week for observing a regular classroom with a regular teacher and would also include peer observations, teacher observations and observations of interns' lessons by faculty. It is important that the student-teachers consolidate and reflect on their teaching experience during and after the school internship. Therefore, along with writing reflective journals during the internship programme, there shall be space for extended discussions and presentations on different aspects of the teaching experience after the internship. Prerequisite of any successful programme of student teacher practice is that supervisor should observe the lesson through the entire period. Firstly, because it gives the supervisor ample opportunity to observe the student teacher at all stages of work. The assessment based on such a continuous process is more reliable than made by just a peep into the classroom for a short while. And secondly, this type of assessment can be a basis for giving instruction and guidance for improvement.

Training of teachers is not only responsible for the improvement of school education by preparing committed and professionally well qualified teachers, but is also the joining link between the school and higher education. Human being is a positive asset which needs to be cherished and nurtured. ‘The status of teacher reflects the socio-cultural ethos of a society; it is said that no people can rise above the level of teachers. National curriculum for Teacher Education- A Framework suggest that ‘Teacher education programmes for the different levels should share a common design with a built-in provision for horizontal and vertical mobility to break the isolation from stage to stage.’ This framework states that teacher education has to be responsive to the challenges faced by educational system in general and school education in particular. It suggests that teacher education curricula should integrate and blend the academic and professional skills into a composite whole.

Competence and professional skills are the very heart of teacher education programme. Teacher of today must be the teacher of a whole man. Learning is more effective when student and teacher activity is characterized by variety and stereotyped activity is avoided. Teacher
education programmes need to be strengthened so that learners can realize their potential, develop personal and social character and act as a responsible citizen of the nation.

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THE COUNCIL OF BOARDS OF SCHOOL EDUCATION AND ADOLESCENCE EDUCATION PROGRAMME

Ms. Saranjeet Kaur*

Council of Boards of School Education in India (COBSE) a provides common platform for mutual consultation for reinforcing the quality of School education. COBSE was created in 1979. It is an apex body of all boards/councils of secondary / senior secondary in the country. It was registered by CBSE under the Societies Registration Act XXI of 1860 in 1979 to provide academic support to its member-boards on setting and maintenance of educational standards, curriculum planning, and developing curriculum material, evaluation etc. In fact, the main objective of COBSE is to take steps of improve the quality of school education in collaboration with its member-boards. Presently, Mr. Vineet Joshi, IAS, Chairman, CBSE is the President of COBSE. Adolescence Education Program is to cover all secondary and senior secondary schools, rural, urban and transitional across the country. It covers all learners studying at the secondary and senior secondary level in i) government, local body and government–aided schools, ii) educational guarantee schemes (alternative innovative schemes, across the country) iii) all out-of-school children and adolescents being catered to by the adult literacy programs, and iv) learners of open schooling/open university systems.

The Council of Boards of School Education in India (COBSE) is a voluntary association of all the Boards of School Education in India registered since 1979 in Delhi. It has Associate Members from friendly countries also. COBSE works in close collaboration with Ministry of Human Resource Development, Government of India, other national level apex educational organizations and agencies like the National Council of Educational Research and Training (NCERT), National University of Educational Planning and Administration (NUEPA) and National Council of Teacher Education (NCTE) etc.

COBSE provides academic support to its member Boards on:

- Setting and maintenance of educational standards.
- Curriculum planning
- Preparation of Curriculum materials.
- Curriculum transaction and evaluation in schools.
- Reforms in examination etc.
- Professional development of its members.

COBSE also offers consultancy to other educational agencies, organizations and institutions in the above areas.

Role of COBSE

Setting and maintenance of educational standards.

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Teacher Education: Challenges and Opportunities

- Curriculum Planning.
- Preparation of Curriculum materials.
- Curriculum transaction.
- Evaluation in schools
- Public examinations.

Functions of COBSE
- It offers consultancy to other educational agencies, organizations and institutions.
- Developing framework for examination reform.
- Organizes service program for members of the board and other senior education functionaries.
- Conduct research on evaluation, curriculum and teaching methodology.
- Organizes workshop and seminar on issues of importance to school/education in general and secondary/higher secondary in particular.
- Research for development of framework for quality of school education.
- Develop the links with university system.
- Coordination among different boards

The Council Of Boards of School Education in India (COBSE) is a voluntary association of all the Boards of School Education in India. It works in close collaboration with Ministry of Human Resource Development, Government of India, other national level apex educational organizations and agencies like the National Council of Educational Research and Training (NCERT), National University of Educational Planning and Administration (NUEPA) and National Council of Teacher Education (NCTE).

1. Established in 1979 by CBSE to provide a forum for mutual exchange.
2. Since 1989, established an independent secretariat.
3. At Present it has 49 members
4. It has six Zonal Chapters- Central, Western, Northern, North-Eastern, Southern and Eastern.
5. Some foreign boards are it’s Associate Members – Nepal, Bhutan, Mauritius, UK and UCLES.

The Major Function are

(i) Provide a forum to its members to discuss issues of mutual interest and to learn from each other for improving quality of education
(ii) Curriculum reform and improvement in evaluation systems.
(iii) Respond to national concerns like Population Education and Disaster Management.
(iv) Professional Development of officers of the Members-boards.
(v) Interactions with NCERT / NUEPA on Professional issues.

Adolescence Education Programme

Adolescence Education Programme is focused on the needs and concerns that are faced
dramed adolescence. These elements are yet to be adequately reflected in the school curriculum. This Programme aims at facilitating the process of comprehensive integration of these needs and concerns in the school education curriculum and teacher education system.

**Adolescence Education Program (AEP)**

The Adolescence Education Program (AEP) was launched by Ministry of Human Resource Development, Government of India in 2005, as a follow up of the decisions of the Inter-Ministerial Group. This Program has two major facets:

(i) AEP being implemented in States and Union Territories through SCERTs/State Boards with support of SACS; and (ii) AEP supported by United Nations Population Fund (UNFPA), being implemented by national agencies Central Board of Secondary Education (CBSE), Kendriya Vidyalaya Sangathan (KVS), Navodaya Vidyalaya Samiti (NVS), National Institute of Open Schooling (NIOS) and Council of Boards of School Education in India (COBSE). National Council of Educational Research and Training (NCERT) is the coordinating agency on behalf of MHRD. The ultimate goal of the Programme is to empower adolescent learners to have knowledge of their needs and concerns related to the period of adolescence and develop in them life skills that will enable them to practice informed and responsible behavior. The objectives of AEP are being addressed in yet another way through a different program, known as the National Population Education Project under which various activities are conducted to facilitate the integration of adolescence education in the content and process of school education and teacher education.

**Aims and Objectives of AEP**

The Adolescence Education Programme (2005) aims to:

- Reinforce/support development of behaviours that will empower adolescents to make healthy choices
- Provide opportunities for enhancement of life skills and reinforcement of positive behaviors to enable young people to grow up healthy, cope with challenges and optimize opportunities in positive and responsible ways
- All schools provide accurate age appropriate life skills based adolescence education in a sustained manner to young people (10-18 yrs) in schools;
- School-going and out-of-school (through NIOS) adolescents are equipped with accurate information, knowledge and skills in the specific contexts of the process of growing up, prevention if HIV/AIDS and prevention of substance (drug) abuse;
- Effective integration of Adolescence Education components in school curriculum as well as the teacher education courses, adult literacy programmes and alternative innovative education schemes; and
- Facilitate linkages with youth friendly services and easy access to resources for additional and reliable information.

**COBSE’s Programme on Adolescence Education**

**Adolescence Education Programme (AEP)**

“Adolescence” is defined as the age between 10-19 years. It is a period of transition from
Adolescents constitute about 1/5th of the total population of India.

**Needs & Concerns of Adolescents**

Most adolescents, both girls and boys, are unaware of their own bodies especially their emotional as well as sexual health.

- In the absence of authentic and scientific information on AE related matters, they become vulnerable to prevailing myths and misconceptions.
- They also lack necessary life skills such as self-esteem, self-assertion, decision making and coping skills, making them vulnerable to different kinds of exploitation.
- There has been a growing trend among adolescents to involve themselves in irresponsible sexual behaviour, putting them at risk to HIV/AIDS/ST infection.
- There has been a growing trend among school going children to experiment with habit forming substances like tobacco, alcohol and drugs.

**Policies, programmes conferences highlighting the urgency to address Adolescents’ needs**

- The Indian Science Congress 1992: Recommending Introduction of Sex Education in Schools
- The National Health Policy 2002: Underlining the need for Adolescent Reproductive and Sexual Health (ARSH) to be integrated into school health programme.
- The National Youth Policy 2003: Emphasising the need for health information and services for improving quality of life among the youth
- The X Five Year Plan (2003-2007): Recognising AE as an important school education programme.

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www.wikipedia.com
Professional competence refers specially to the professional characteristics of a teacher. He is the one who not only imparts the entire educational curricula allotted to him in the best possible manner but improves academic performance and brings all round development of students. Attitude of teachers play a crucial role in teaching profession. A teacher is required to have a higher level of professionalism because of rapidly changing circumstances. The importance of teacher’s professional development is being too much emphasized today. Professional competence scale was developed by investigator and Attitude scale towards Teaching by Kulsum was used to collect the data. 400 (200 govt. and 200 private) school teachers were randomly selected from four district of Punjab. Anova was employed to find the interaction of government and private school teachers. The professional competence of secondary school teachers with low and high attitude towards teaching shows significant interaction at varying levels of attitude towards teaching. It shows that the teachers with higher attitude towards teaching show higher professional competence.

Teachers have a vital role to play in the progress and development of the country; for on them depends how the new generation is trained to face the increasing responsibilities of citizenship and administration. And yet if the teachers have to perform their duties well, the people and the government must ensure them reasonable conditions of the life and work. Kothari Education Commission (1966) says very authentically that “of all the different factors which influence quality of education and its contribution to national development, the character of teachers are undoubtedly the most significant.” Professional competence is genuine understanding of a realm of normative discourse pertaining to the practice of education in the light of which certain kind of conduct command themselves as prescriptive in response to an agents autonomous recognition of what is needed in a given set of educationally problematic circumstances. On this view, we recognize that the teachers require to be equipped with the conceptual resources which will enable them to identify clearly and respond rationally to the practical challenges and problems of education. It is a level of behavior and performance expected of teachers as professionals. This encompasses not only the standard of their teaching but also the application of an appropriate values and conformity to an accepted code of practice. One factor which sets teachers apart as a profession is their daily close contact with children and young people and consequent necessity to act as positive role models. another is, unlike other profession, such as medium and the law teachers have their standards of practice imposed externally by one of a range of government bodies, developing on the sectors as well as by the general teaching council which among its other function sets standards of professional conduct.
As pointed by Kumar and Mutha (1973) A professionally competent teacher is unique human being who is conscious of his role and responsibilities as a teacher. According to Joshi (1984) The five major characteristics of a professionally competent teacher is as (1) proficiency in content and general knowledge (2) good techniques of teaching (3) unbiased nature (4) qualities of counselor (5) regard for discipline.

Attitude is the broad term covering almost all the educational, sociological and psychological fields. The importance of the attitude in the life of a teacher is universally very well recognized. His success in the teaching profession and in any walk of life depends on two things his aptitude and attitude. Without an attitude he tends to remain inactive, dormant and sluggish, despite all his capacities he achieves little. Attitude of teachers play a crucial role in teaching profession. A teacher is required to have a higher level of professionalism because of rapidly changing circumstances. The importance of teacher’s professional development is being too much emphasized today.

Hayan (1989) exclaims that the teachers who possess professional and interpersonal skills are more effective in their classrooms in terms of students' behavior, attitude and achievement. Every individual has a variety of attitudes, which might be positive or negative and can vary according to their favorability and un-favorability for various attitudinal objects. Luthans (1993) professional attitude serves in many valuable ways and knowing these attitudes can also serve a lot. Attitude of teachers largely depends upon their personal characteristics and disposition, both seems to be highly interlinked. Goodling et. al., (1995) exclaims that the teaching profession requires certain dominant behaviors which show teacher’s intellect, desire to excel, extended professionalism and teaching as a life concern. This is a profession, which exalts service above the personal gains. The attitude of the teachers towards the students, teaching profession and the teaching situations are very important for their professional growth as well as teaching competence. The behaviour of a teacher has a great influence on his pupils. It is the teacher’s behaviour which sets the pattern and the atmosphere of the class. The teaching learning process in a classroom is generally not possible without this interaction, which is the main channel through which the teacher exercises his influence on the students.

Thamimani (2000) studied teacher competency, teacher personality and teacher attitude on achievement in science subject in higher secondary school and found that the teaching competence and personality were positively related to attitude towards teaching of science. Students of more competent teacher achieved significantly higher grades than the students who were taught by less competent teacher. Reddy and Sujathamalini (2005) studied the awareness, attitude and competencies of special school teachers on different aspects of children with disabilities and found that the teachers showed moderate and low attitude, and only moderate competency in all the aspects of disabilities under study, giving the vast scope for well-structured awareness, attitudinal building and competency based training programs to deal with children with disabilities. Kavita (2011) studied the effect of classroom questioning behaviour training on teaching competency of student teachers, attitude towards teaching and their self-concept and found that the classroom questioning behaviour training was found to be better strategy, than the conventional programme, of student teaching as teaching competence of student teachers was enhanced after classroom questioning behaviour training. Bajwa and Bajwa (2013) studied effectiveness of competency based training strategy in developing general teaching competency in relation to attitude towards teaching and found that...
the student teachers given training through competency based training strategy yielded significantly higher gain scores on the development of general teaching competency as compared to given training through traditional training strategy.

**Aim of the Study**

The present study was undertaken to see the interactional effect of professional competence on attitude towards teaching of government as well as private school teachers.

**Research Hypotheses**

1. There will be no significant interaction of professional competence on attitude towards teaching of government school teachers.
2. There will be no significant interaction of professional competence on attitude towards teaching of private school teachers.
3. There will be no significant interaction of professional competence on attitude towards teaching of school teachers.

**Sample**

The sample of present study consisted of 400 (200 government and 200 private) secondary school teachers of Punjab. Out of all districts five districts of Punjab (Sangrur, Barnala, Moga and Ferozepur) were taken randomly for present study.

**Tool Used**

Attitude Scale Towards Teaching by Kulsum (2008)

Professional Competence Scale was developed by investigator

**Findings and Discussion**

**Table - 1: Summary of Analysis of Variance of Government school Teachers (Professional Competence x Attitude Towards teaching)**

<table>
<thead>
<tr>
<th>Source of Variance</th>
<th>SS</th>
<th>Df</th>
<th>MS</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Among means</td>
<td>563.343</td>
<td>1</td>
<td>563.343</td>
<td>6.1351</td>
</tr>
<tr>
<td>With in Conditions</td>
<td>4961.65</td>
<td>54</td>
<td>91.882</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

For df = 1 and 54

F = 4.03 at 0.05 level

F = 7.17 at 0.01 level

**Table - 2: Summary of Analysis of Variance of Private school Teachers (Professional Competence x Attitude Towards teaching)**

<table>
<thead>
<tr>
<th>Source of Variance</th>
<th>SS</th>
<th>Df</th>
<th>MS</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Among means</td>
<td>5961</td>
<td>1</td>
<td>5961</td>
<td>70.15</td>
</tr>
<tr>
<td>With in Conditions</td>
<td>6203</td>
<td>73</td>
<td>84.97</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

For df = 1 and 73

F = 3.98 at 0.05 level

F = 7.01 at 0.01 level
Table - 3: 5.7.2. Complete Summary of Analysis of Variance
(Professional Competence x Attitude Towards teaching)

<table>
<thead>
<tr>
<th>Source of Variance</th>
<th>SS</th>
<th>Df</th>
<th>MS</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Among means</td>
<td>6939.94</td>
<td>1</td>
<td>6939.94</td>
<td>75.766</td>
</tr>
<tr>
<td>With in Conditions</td>
<td>11999.16</td>
<td>131</td>
<td>91.60</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>18939.10</td>
<td>132</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

For df = 1 and 131
F = 3.91 at 0.05 level
F = 6.83 at 0.01 level

1. Table 1 depicts the F value after comparing the groups of government secondary school teachers with high and low level of attitude towards teaching on the variables of professional competence the sum of squares among the means is 563.343 and sum of the squares with in the conditions is 4961.65. The F value obtained is 6.1351. which is significant at 0.05 level of confidence. So our first hypothesis is rejected.

2. Table 2 depicts the F value after comparing the groups of private secondary school teachers with high and low level of attitude towards teaching on the variables of professional competence the sum of squares among the means is 5961 and sum of the squares with in the conditions is 6203. The F value obtained is 70.15. which is significant at 0.01 level of confidence. So our second hypothesis is rejected.

3. Table 3 depicts the F value after comparing the groups of secondary school teachers with high and low level of attitude towards teaching on the variables of professional competence the sum of squares among the means is 6939.94 and sum of the squares with in the conditions is 11999.16. The F value obtained is 75.766. which is significant at 0.01 level of confidence. So our third hypothesis is rejected.

Conclusions
On the basis of results and above discussion it is concluded that

- The professional competence of government school teachers with low and high attitude towards teaching is significantly related with levels of attitude towards teaching only at 0.05 level of significance. The reason for this result may be that they don’t show as much interaction effect as private school teachers shows.

- As the interaction effect of professional competence on attitude towards teaching contributes significantly. Thus difference in professional competence with respect to attitude towards teaching is dependent. It shows that the teachers with higher attitude towards teaching shows higher professional competence.

- The professional competence of secondary school teachers with low and high attitude towards teaching shows significant interaction at varying levels of attitude towards teaching. Thus difference in professional competence with respect to attitude towards teaching is dependent. It shows that overall result of school teachers with higher attitude towards teaching shows higher professional competence.
References


E-Communication

Ms. Harpreet Kaur*, & Ms. Gagandeep*

E-Communication is the way of communicating information electronically. The first E-communication network, Instinet was created in 1969. E-Communication creates new option for extending & enhancing education. It increase competition among trading firms by lowering transaction costs. The internet and E-Communication doesn’t just mean new tools for communications, it means, new ways to communicate. Today our society interacts with its various constituents differently- Teachers, Employees, board-members & other depending upon the nature of the message, the goals you are trying to achieve. many people now finds that E-Communication are faster and more convenient to use than their hard copies. The government has set a target to making all government services available online by 2005. In research paper we include the uses, functions, advantages and disadvantages and role in education of E-Communication.

Electronic communications have revolutionized business communications, although the huge increase in use has taken some organizations by surprise. It is commonplace now for people at work to use e-mail as easily as using the telephone, and Internet access is often part of the setup of a workstation. Many people now routinely use e-mail and the Internet for personal communication and interest as well as in the workplace.

Electronic communication dates back to the telegraph that used Morse code to send messages long distances over wires. After that, the electronics industry added the wired telephone, the wireless radio and television. Bovee et al. said, “Electronic communication is the transmission of information using advanced techniques such as computer moderns, facsimile machines, voice mail, electronic mail, teleconferencing, video cassettes, and private television networks.”

Present Scenario

Communication is needed for decision making, co-ordination, control and planning. Communication is required for processing information in the accounting department, finance department, personnel department, establishment, of public relations, sales department, market research, production department, purchase department etc. Communication with the government, shareholders and prospective investors, customers etc. is also required for the day to day functioning of the business concern. Conventional process of communication is not sufficient to meet the multidimensional needs of the business enterprises. So, the need for modern communication technology emerges to meet the desired need of modern business enterprises. Worldwide communication has been facilitated by the electronic transmission of data which connects individuals, regardless of geographic location, almost instantly.

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Types

Web Pages
- World Wide Web users post content on websites for others to view. The content may be simple text, but it might also contain multimedia files including images, sounds, videos or streaming content. Unlike many other forms of electronic communication, most Web content is pulled from the Web by users who are seeking information, rather than pushed to subscribers. While not as permanent as traditional media like paper, Web pages can archive information for extended periods.

Email
- Email is a method originally intended to imitate physical mail. Messages are delivered from one specific address to one or more specific addresses. Users are alerted to the presence of new messages in their inboxes by email clients that display the content and offer an opportunity to reply. Messages are primarily text but may include file attachments of various types including images and short movies. Unlike instant messages, emails are generally not expected to be read immediately upon receipt. Most email readers keep track of conversations that include multiple people through the use of threads. Thus email is ideally suited for long, involved conversations between two people or among small groups of people.

Forums
- Conversations that go on indefinitely, involve large numbers of people or need to be archived are not well suited to email. Forums, often hosted on the Web, provide an alternative that combines many of the aspects of email and Web pages. They involve discussions around a single, limited topic but can take place over months or years and involve dozens or even hundreds of participants. Most use a treelike structure that allows participants to jump in at whatever level their comments are most appropriate.

Text and Instant Messaging
- Text messaging uses cellular airwaves and protocols to deliver textual messages from one cellular phone to another or from one phone to a group of other phones. Text messaging is usually intended as near-instant communication and can be quicker than a phone call because the sender doesn’t have to wait for the recipient to answer before delivering a message. Because text messaging is informal and easy, it’s sometimes called chatting. Text messaging can also facilitate private discussions when there is a chance that a phone call could be overheard. Instant messaging is similar to text messaging but is carried over the Internet rather than over cell phone airwaves.

Social Networking
- Social networking sites facilitate communication among people with common interests or affiliations. Sites such as Facebook and LinkedIn provide places for people to interact, sometimes in real time. Microblogging services like Twitter, allow short textual messages of no more than 140 characters to be broadcast to a large audience. Unlike text messages, which are delivered to only small groups, microblog posts are intended to be seen by all of a user’s followers.
Microblog users can repost messages that they want to share with their own followers, so a microblog post can spread quickly. A widely reposted message is called a viral post.

**Video Chat**

- Like instant messaging, most video chatting is conducted over Internet protocols that stream images from one device to another. At times, nothing beats a face-to-face conversation. Video chats provide an immediacy to a conversation. Because a person’s tone is often easier to read when you can see his face, businesses often use videoconferencing to aid in virtual meetings.

**Uses**

The Internet and electronic communications (also called computer mediated communications, or CMC) doesn’t just mean new tools for communication; it means new ways to communicate. Today your organization interacts with its various constituents differently - employees, board members, customers, partners and others - depending upon the nature of the message, the goals you are trying to achieve and the strengths (and weaknesses) of the available media - telephones, voice mail, fax machines, print, etc.

Electronic communications adds a powerful new channel that not only will change how you use this mix of options, but it will create entirely new ways to interact. For example:

- Electronic communications lets you combine numerous media - text, graphics sound, video, etc. - into a single message. That can result in far more meaningful communications tailored to the nature of your particular audience. In contrast to broadcasting, *narrow casting* reflects the ability to develop numerous communications for subsets of your market or constituencies.

- Electronic communications is interactive. It engages audiences in active, two-way communications. That requires a new way of thinking about advertising copy and the handling of public relations. The pay-off, however, is a self-selected audience, engaged and actively participating in the communications process.

- Two-way communication is nothing new. But electronic communications creates a new form of many-to-many communications that lets geographically distributed groups communicate interactively and simultaneously through text, sound and video. You can hold inexpensive video conferences or press conferences from your desk, or conference with people at several desks located across the world. One of the burgeoning phenomena of the Internet is businesses and organizations sponsoring, supporting and moderating discussion groups about issues, products, strategies - anything of interest to the organization and its constituents. Sponsorships are also solicited for popular resources, such as indexes and other Internet search tools, and these provide a further communications and marketing opportunity.

- Many organizations are using electronic communications facilities, such as the World Wide Web, as internal communications tools to enhance team work. Many individuals at different locations can work on the same documents, hold meetings and integrate research findings.

- Electronic communications removes the power of communications *gatekeepers* to both positive and negative effects. Most organizations are used to controlling the messages that go out to its constituents through managers, spokespeople and others. But with the Internet, constituents begin to talk among themselves, requiring new approaches and a new emphasis on
listening and reacting, not just talking.

- With the Internet you have the ability to transmit and receive large amounts of information quickly to and from individuals and workgroups around the world. This changes the way activists, for example, can galvanize communities, inform legislators and change public opinion. It changes the sources and depth of your constituents’ knowledge levels. It also lets those constituents reach you with new kinds of communications they may never have attempted before.

**Challenges**

However, in introducing electronic communications the organization should consider possible problems, which may include:

- E-mail is not the informal and transient form of communication that many people think it is, even ‘deleting’ or ‘trashing’ a message does not mean it is unrecoverable.
- Intensive use of e-mail, and unnecessarily wide broadcasting, can lead to ‘information overload’ and stress as workers try to keep up with the number of e-mails received.
- The ease and speed of e-mail can lead to inadequate thought going into a message, and the possibility of the words or tone being misinterpreted by the recipient.
- There are a number of laws that cover electronic communications and employer monitoring of e-mails and internet use by workers.
- It is essential that any organization using these technologies, or thinking of installing them, considers the impact they might have, the position of workers and the legal liabilities that may by incurred.
- Having a proper policy in place will help everyone understand the boundaries that may be imposed.

**Advantages of Electronic Communication**

The following points highlight on the advantages of electronic communication:

1. **Speedy transmission:** It requires only few seconds to communicate through electronic media because it supports quick transmission.
2. **Wide coverage:** World has become a global village and communication around the globe requires a second only.
3. **Low cost:** Electronic communication saves time and money. For example Text SMS is cheaper than traditional letter.
4. **Exchange of feedback:** Electronic communication allows instant exchange of feedback. So communication becomes perfect using electronic media.
5. **Managing global operation:** Due to advancement of electronic media, business managers can easily control operation across the globe. Video or teleconferencing e-mail and mobile communication are helping managers in this regard.

**Disadvantages of Electronic Communication**

Electronic communication is not free from the below limitations:

1. **Volume of data:** The volume of telecommunication information is increasing in such
a fast rate that business people are unable to absorb it within relevant time limit.  
2. **Cost of development:** Electronic communication requires huge investment for infrastructural development. Frequent change in technology also demands for further investment.  
3. **Legal status:** Data or information, if faxed, may be distorted and will cause zero value in the eye of law.  
4. **Undelivered data:** Data may not be retrieved due to system error or fault with the technology.  
5. **Dependency:** Technology is changing everyday and therefore poor countries face problem as they cannot afford new or advanced technology. Therefore poor countries need to be dependent towards developed countries for sharing global network.  

**Role of E-Communication in Education**  
Electronic communication courses familiarize students with the history of electronic communications and demonstrate how modern communications technologies have transformed society. Some common course offerings in electronic communication are presented in this article. Courses in electronic communication are typically offered through undergraduate diploma and degree programs in communications, broadcasting, audio production and journalism. These courses may also be offered as part of master’s degree programs in fields such as broadcast and electronic communication arts. Undergraduate courses generally introduce students to the field’s various components, while graduate courses often focus on advanced research projects and seminars. Some courses include hands-on practice with sophisticated electronic equipment and/or communications software.  

**List of Common Courses of E-Communication in Education**  
Below are the descriptions of the most common electronic communication courses.  

**Electronic Media Course**  
The history of and current technologies found in electronic media are examined in this foundational class. An exploration of the development and consumption of electronic media, the evolution of technology from radio to television and the Internet is explored. In addition to historical facts, technical aspects of broadcasting may also be explored.  

**Electronic Communications Course**  
Students in this introductory electronic communications class examine the history of electronic technologies used for communications, including the telephone, radio, television and Internet. They investigate the political, economic and social atmosphere that spurred the development of these electronic technologies.  

**Audio Production Course**  
Audio production courses are typically a combination of lab and lecture. Students discover how to use and control sound in different situations, including on stage, over the radio, on TV and in the recording of music and film productions. In the lab portion of the course, students record
and edit their own audio productions.

**Online Media and Publishing Course**

This course familiarizes students with the types of online publications available, which include videos, magazines and newspapers. Students gain experience with HTML and simple web publishing programs for print and Web-based production. The course includes an overview of the ways Internet access has influenced literature and literacy in the United States.

**Ethics in Electronic Media Course**

The Internet and other electronic mediums have changed the way people receive, interpret and spread information. Additionally, these technologies have influenced the ethical obligations of media professionals. Journalists, television hosts and radio broadcasters must remain neutral, fair and balanced. In this course, students discuss ethical issues facing journalists. They also discuss the responsibilities of communications professionals to report unbiased information without violating human rights.

**Conclusion**

Thus we can say that due to electronic technology, jobs, working locations and cultures are changing and therefore people can easily access to e-communication without any physical movement.
TEACHER EDUCATION THROUGH DISTANCE MODE

Mr. Sukhdeep Singh Loomba* & Ms. Navkiran Kaur*

We live in 21st century. For the development of our country each individual should be educated. In past years providing education in every state in all geographical conditions is very difficult. Now distance education proves very good mode of educating all individuals irrespective of their disabilities to reach at the door of child to get educated. Distance education is non-formal learning, learner-centered, flexible, indirect education, mass education, etc.

Distance education has been catching up very fast in our country. It seems to be more appropriate for providing greater access to education. Distance education emphasis on the separation of the teacher and the learner and planning of educational organization and use of technical media. Distance education is a modern system of non formal education. It is need of our country that every person of our country would be educated. But getting education for every person/child is not easy due to some personal and general problems. Here, distance education proves good for providing education to every child.

Distance education is eminently suited to cater to the professional growth of teachers whenever and wherever personal attendance and direct participation of teachers is not possible. Distance learning is a manifestation of educational technology.

Few of the characteristics of distance education are:

- **Non-formal learning**: Distance education is a system of non-formal education which has been described as correspondence education, open education, open learning, open school etc.
- **Learner-centered**: It concentrates on the needs and convenience of the learner. The learner learns at ones on open pace and convenience. He has the freedom of choice of courses.
- **Flexible**: It is flexible with regard to the qualification for entry. Secondly, it is flexible in the sense that a course can be completed in a number of years.
- **Indirect education**: Distance education is indirect as it is not centered on face to face communication. There is separation of the learner from the peer group and the teacher.
- **Mass education**: It is system of mass education. It is a method of taking education to the millions who find no time to have opportunity to study regularly in an institution.

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Distance education uses media like radio, television, computer, video etc.

- **Easy Access:** It is available even in areas where there is no school or colleges. It is available even to those with poor health or disadvantageous physical condition that inhibit them from undergoing any institutionalized education.
- **Degree is not essential:** It may or may not be for a degree or diploma.
- **Economical:** It is economical. It is within the reach of every category or person.

### Basic philosophy and need of Distance Education

- Learning or education is a life long process.
- No one is too old, too big or too small to learn at any moment.
- No one is too knowledgeable to learn new ideas, methods and concepts.
- An adult is conscious of the loss of not learning and if he is not. He would be made so.

The following points highlight the need or importance of distance education:

1. **Explosion of knowledge:** The scientific and technological change has produced and is producing so much of the knowledge in the world that the knowledge of the individual becomes absolute. The formal system of education finds it difficult to incorporate new changes speedily as desired. So it has to be updated by some means of distance education.
2. **Population explosion:** The formal education serves a selected and limited number of students on account of limited seats for enrolment, admission and examination, high per capita cost of education etc.
3. **Geographical isolation:** When a man is so located that it becomes difficult for him to attend the formal channels of education, may be because of residence, job compulsion and he wants to engage him in meaningful activities for career building up, he can get the requisite help from the distance education media and satisfy his needs.
4. **Lifelong education:** The days are gone when an individual was to get a degree through the formal education and then continue to work throughout his life. No one can learn at any age, time or place.
5. **Promotion channels:** When one is employed in some job and has some avenues of promotion with the improvement of qualifications then distance education provides him opportunities in an convenient way.
6. **Multidimensional needs:** Many people have many types of needs for which adequate formal facilities are either not available or they are not confidently placed to utilize those.
7. **Self improvement:** Distance education is needed from the point of view of self learning and self improvement of an individual who otherwise is deprived of receiving proper education.

Thus distance education system provides wider opportunities of getting knowledge to varied categories of people etc.

### Methodologies /Modes/ Media of imparting distance education

- **Correspondence courses:** correspondence is such method of teaching in which the
teacher bears the responsibility of imparting knowledge and skills to the students, who
do not receive instructions orally but who study in place determined by their individual
circumstances.

- **Television:** It is another important and powerful media of providing distance education.
  It took shape of educational instructional media in 1972 is second five year plan.

- **Satellite instructional television experiment:** it is an innovation in the
  communication television telecast has limited ranges but by using satellite its range has
  been extended.

- **Open University:** the Indira Gandhi national Open University was assigned the
  responsibility to co-ordinate the distance teaching learning system in the country.

- **Internet:** internet is widely used a mode of providing distance education.
  — Audio video cassettes, Study centers, Radio, Printed material, Personal contact
    programme.

### Merits of Distance Education

- Flexible system: it is not limited by time and place restrictions.
- Progress at own speed: it recognizes the individual differences which one takes his
  own time to grasp the idea.
- Coverage of remote and difficult areas: it helps in providing equal opportunities to
  those who live a far flung difficult area.
- Useful for all levels: distance education has become so mature that it is competent to
  deal with educational problems at all levels.
- New course of study: the institutional organizing distance education can introduce
  new courses according to the needs of the learners.
- Lectures of efficient teachers: learner can take advantages of the lecturer’s teachers
  of the most efficient teacher which is not always possible in all conventional educational
  institutions.
- Improvement of skills: distance learning can be utilized for improving technical and
  vocational skills so as to be able to go early promotions in the job.

### Conclusion

From the above discussion it is concluded that the distance education is ‘school on wheels’.
In distance education the learner can pursue their studies at home. It takes care of those workers
who are not free at school hour, physically handicapped, housewives and those who are too old
to attend secondary and primary schools.

### References

CAREER LONG LEARNING THROUGH CONTINUOUS PROFESSIONAL DEVELOPMENT

Ms. Monika Sharma*

Education is the essence of every civilization. The quality and effectiveness of an education system depends on, among other factors, the competencies, commitment and resourcefulness of its teachers. Teachers work in a complex and dynamic society; they need to grow professionally on a continuous basis to enhance their professional competence. This means that teachers need to be critically informed, have professional values and knowledge and take actions that ensure a positive impact on learners and learning. Teachers therefore need opportunities to develop in order to address these changing demands. Teacher learning is a lifelong activity that starts from his/her school days and continues throughout the life. The Education of a teacher is never complete. In view of this, the initial and Continuing Professional Development (CPD) of teachers is critical in the aspiration of enhancing the quality of education. In this paper an attempt has been made to highlight the rationale of career long learning for teachers through continuous professional development and various techniques which ensure Career Long Professional Learning.

Teaching is a profession in the sense that the roles of teachers are based on a body of knowledge, commitment to the tasks which one has accepted to perform. It is a learning profession and like any other professionals teachers are expected to be life-long learners. As every profession has to ensure regular renewal of learning for all its members. Absence of such inputs results in weakening of the level of expertise and professional skills. This is equally applicable to Teaching profession. Advancements in knowledge in different subjects areas and revolution of information and communication technology are placing new demands on the professional competence of Teachers. The role of teachers in contemporary societies is diversified and multidimensional and ever changing. Teachers can perform their changing role efficiently and effectively only if they continue to update and upgrade their professional competence. Professional development of Teachers is therefore necessary. Professional development is not a one time and adhoc activity; rather it represents a well planned lifelong learning process.

Rationale of Career Long Learning

Teacher learning is a lifelong activity that starts from his/her school days and continues throughout the life. The education of a teacher is never complete. The teacher is prepared for his profession before he enters it, but he must also be prepared again and again to keep abreast of the latest developments. Teachers need to grow professionally on a continuous basis to enhance their professional competence.

Teachers work in a complex and dynamic society. This means that teachers need to be critically informed, have professional values and knowledge and take actions that ensure a positive

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impact on learners and learning. Teachers therefore need opportunities to develop in order to address these changing demands. Career-long professional learning is a continuous process from the point that student teachers begin the early phase of teacher education to the end of their careers. Career-long professional learning aims to develop further and sustain a highly competent, committed workforce of enquiring professionals who focus on the best possible outcomes for children and young people. Professional learning is dependent on a range of interlinked factors and processes. These include:

- Teachers continuously analysing children and young people’s learning needs to identify their own professional learning needs
- Teachers engaging critically with new and emerging ideas about learning and teaching and about the context in which learning takes place
- Teachers enhancing their knowledge, understanding and skills in relation to individual, local and national priorities
- Teachers exploring and challenging their thinking and considering how this impacts on their teaching and the learning of children and young people
- Teachers engaging with and contributing to the development and implementation of national, local authority and school policy
- Teachers being motivated to sustain career-long effectiveness
- Teachers modeling lifelong learning for children and young people enhancing job satisfaction and the teaching profession as a whole.

The most successful education systems invest in developing their teachers as reflective, accomplished and enquiring professionals who are able, not simply to teach successfully in relation to current external expectations, but who have the capacity to engage fully with the complexities of education and to be key actors in shaping and leading educational change.

**Continuous Professional Development**

The acronym ‘CPD’ stands for ‘Continuous’ or ‘Continuing Professional Development’ and broadly signifies the process of continuing growth of a professional after joining the profession. CPD refers to any activities aimed at enhancing the knowledge and skills of teachers by means of orientation, training and support. The development is also likely to affect attitudes and approaches and may therefore contribute to the improvement of the quality of the learning and teaching process. “CPD is a planned, continuous and lifelong process whereby teachers try to develop their personal and professional qualities, and to improve their knowledge, skills and practice, leading to their empowerment, the improvement of their agency and the development of their organizations and their pupils.”

In education, generally speaking, it seems that there are two views of CPD – the narrow and the broad. The narrow view considers CPD as the imparting/acquiring of some specific sets of skills and/or knowledge in order to deal with some specific new requirements (for example, training teachers to handle a new textbook or using a new teaching aid.) The broad view considers CPD as a much deeper, wider and longer-term process, in which professionals continuously enhance not only their knowledge and skills, but also their thinking, understanding and maturity; they grow not only as professionals, but also as persons; their development is not restricted to
their work roles, but may also extend to new roles and responsibilities.

Continuing professional development means maintaining, improving and broadening relevant knowledge and skills in your subject specialism and your teaching and training, so that it has a positive impact on practice and the learner experience.

**The Key Features of the CPD Process**

To justify the name, a CPD needs to:

- Be a documented process
- Be self-directed: driven by you, not your employer
- Focus on learning from experience, reflective learning and review
- Help you set development goals and objectives
- Include both formal and informal learning.

The quality and effectiveness of an education system depends on, among other factors, the competencies, commitment and resourcefulness of its teachers. In view of this, the initial and Continuing Professional Development (CPD) of teachers is critical in the aspiration of enhancing the quality of education. CPD of teachers consist of periodic, structured and relevant activities according to needs and circumstances, designed to improve a teacher’s attributes, knowledge, understanding and skills in order to improve his/her professional practice. The different techniques to practice professional development are:

**Case Based Studies**

The term ‘case study’ covers a wide range of problems posed for analysis, but most types include several key elements. Case studies are usually real stories, examples for us to study and appreciate, if not emulate. They can be close ended or open-ended, they can require a single correct answer or various resolutions of a dilemma. Since, open-ended cases contain scientific aspects that involve emotions, ethics or politics, they can present unresolved dilemmas or yield multiple solutions. They tell a story, one involving issues or conflicts which need to be resolved—though most case studies do not have one obvious or clear solution.

**Problem-based Learning**

Problem-based learning (PBL) is both a teaching method and an approach to the curriculum. It consists of carefully designed problems that challenge students to use problem solving techniques, self-directed learning strategies, team participation skills, and disciplinary knowledge. Problem Based Learning addresses the need to promote lifelong learning through the process of inquiry and constructivist learning. PBL can be considered a constructivist approach to instruction, emphasizing collaborative and self-directed learning and being supported by flexible teacher scaffolding.

**Project Based Studies**

Project-based learning is an instructional method in which students learn a range of skills and subject matter in the process of creating their own projects. Sometimes, these projects are solutions to a real-world problem. But what is most important in project-based learning is that
students learn in the process of making something. They work in groups and bring their own experiences, abilities, learning styles and perspectives to the project.

**Professional Development Portfolios**

A professional portfolio is a record of goals, growth, achievement, and professional attributes developed over time and in collaboration with others. A portfolio illustrates goals and development over time, and not simply the highest level of achievement. For teachers, a professional portfolio is a thoughtfully organized collection of artifacts that illustrates professional status, pedagogical expertise, subject matter knowledge, knowledge of learning processes, and professional and personal attributes that contribute to teaching. The professional portfolio itself is the product of, and cannot be separated from, the reflection and assessment processes required to produce it. Finally, a portfolio has value as a source of self-satisfaction and pride. Like all symbols of growth and success, portfolios help stir feelings of accomplishment. Unlike awards given by others, portfolios are a celebration of both self and collaborative evaluation.

**Action Research**

Action Research or Teacher research can be a professional development experience of great importance and have a significant effect on teaching and learning. Action research is local and focuses directly on issues surrounding a teacher’s school, classroom, and students. Teaching is, in actuality, a research activity. This is because research is already a part of what teachers do on a daily basis as they plan, deliver, and monitor instruction and learning. Teachers are well positioned to conduct research in their own classrooms because they continually ask questions about their teaching and seek answers to instructional issues through various forms of evidence (for example, student work samples, formative assessments, observations, etc.). The benefit of action research is that it provides a framework for systematic inquiry into your own practice.

**Mentoring**

Mentoring commonly focus on one-on-one relationship with a series of interactions between a new teacher and a veteran. Mentoring is to support and encourage people to manage their own learning in order that they may maximise their potential, develop their skills, improve their performance and become the person they want to be. Mentoring is the process of serving as a mentor, someone who facilitates and assists another’s development. It is a powerful personal development and empowerment tool.

**Experts**

There is a lot to be learnt through taking advantage of all the experienced and expert practitioners in the field of Education, by attending sessions they may give at conferences or, if teachers are lucky, talks that are available in their vicinity. Reading readily-available articles and books written by ‘experts’ and participating in online events or blogs with invited professionals is an alternative if ‘experts’ are not available in the flesh somewhere near you.

**F2F Workshops**

Often teachers get a lot more out of smaller, more intimate workshops where there is the
opportunity to discuss and debate ideas and opinions and take away ideas for classroom activities and to reflect on.

**Online Communities**

These may include an interactive virtual conference, or the blogs on the Teaching website, or other forums and discussion boards set up to encourage participation around Education topics by teachers from all over the world.

**Talking Informally**

Joining other teachers in the staffroom discussing their next lesson or the materials they are using is one of the easiest and most effective ways of developing, especially if you borrow the ideas and try them out in your own classes.

**Individual Reading**

Another easy way to learn that can include internet materials and journals as well as actual books, which can be expensive and difficult to obtain in some parts of the world. We can read anywhere in any short piece of snatched free time.

**Reading Groups**

While reading is done individually, what is learnt can be formalized in discussion in a reading group. Set a text to read and come together with colleagues a few weeks later to discuss its content. So much can be learnt through sharing of impressions and discussing issues the reading material raises.

**Giving Sessions**

This can range from a small in-school meeting where teaching ideas are shared right through to a session at a large international conference. All conference speakers started small and all teachers have something to say. This is a particularly effective way to develop due to the planning and research which takes place before the session as well as the discussion and feedback which it provokes.

**Writing**

Writing ranges from short articles right through to books. Keeping a diary and reflecting on your teaching is a good way to start and there are plenty of models out there to learn from, while the preparation and research necessary teaches you as much as the writing and rewriting itself.

**Doing a Formal Course**

This is often the first thing people think of when they think about professional development. But it is often the most prohibitive due to time and expense, and often courses do not provide exactly what is needed. If you are lucky enough to be able to follow a course, however, make the most of the time you have laid aside for thinking and learning, because doing a course is a great way to develop.
Membership of Professional Bodies

Being an active member of a committee, board, or steering groups related to teaching and/or your subject area. This can provide opportunities and facilitation of many of the areas above, and although subscriptions can appear expensive, there is often so much offered by a professional body that it justifies the expense. Prepare to be active though, as so often you will get more out of it the more you put in yourself.

Reflective Practices

Reflective practice can be an important tool in practice-based professional learning settings where individuals learning from their own professional experiences, rather than from formal teaching or knowledge transfer. Further, it is also an important way to be able to bring together theory and practice; through reflection you are able to see and label schools of thought and theory within the context of your work. What is important about reflection throughout your practice is that you are not just looking back on past actions and events, but rather you are taking a conscious look at the emotions, experiences, actions, and responses, and using that to add to your existing knowledge base to draw out new knowledge, meaning and have a higher level of understanding.

Other Ways

The following things can help Teachers in their professional development:

- Peer coaching (coaching others and being coached in your subject or vocational area)
- Team-teaching & Self-directed studies.
- Observation of excellent practice.
- Trying out different methods/approaches in class.
- Becoming an e-CPD adviser or e-guide.
- Reading and reviewing books or journal articles.
- Curriculum design/development/validation.
- Updating knowledge through the internet/TV, other media and reviewing these with a group of professional colleagues.
- Gaining further qualifications in your subject or expertise through an accredited courses.
- Supervising research & reviewing books or articles for colleagues.
- Updating knowledge through the internet/TV/CD/other media.
- Reading and disseminating information on new policies/initiatives.
- Taking on examiner/verifier/assessor responsibilities.

As you see there are plenty of ways to keep up your continuous professional development. If a number of these activities are combined into a planned, interlinked programme, with monitoring and evaluation, even if only by the teacher him or herself, there can be real, satisfying results for teachers wishing to keep up and improve their professional development.

Conclusion

“Who dares to teach must never cease to learn”.

CPD is a broad term which applies to all teaching professionals irrespective of their age or
seniority. It ...is a process by which individuals take control of their own learning and development, by engaging in an on-going process of reflection and action.

CPD is an ongoing process, “It is a long-term commitment,”. “It means systematic maintenance, improvement and broadening of your skills year after year.” CPD comprises a diverse range of practices enabling individuals to develop their skills, share their experiences and bring up to date their knowledge of innovations in their field. This may happen through attending seminars or conferences, teacher exchange programmes, in-service training events, etc. CPD also entails providing or creating space and scope for individual evaluation of approaches, experiences and interactions. This may be in the form of reflective diary entries, teacher forums and blogs, mentoring programmes etc.

This process is empowering and exciting and can stimulate people to achieve their aspirations and move towards their dreams. CPD is essential in a knowledge-based industry. An effective CPD approach might even bring personal benefits. “There’s a huge amount of self-esteem one can get from knowing that he/she is continuously learning. CPD provides a sustainable and more rewarding career.

References


INNOVATIONS IN TEACHER-EDUCATION

Ms. Neha Singla*

Teacher-education is said to be a very significant investment for bringing qualitative improvement in education. If a revolution in education has to be initiated, it is teacher-education which can be taken as the starting point. The National Council for Teacher Education has defined teacher education as – A programme of education, research and training of persons to teach from pre-primary to higher education level. For instance if a teacher is not net savvy in current times then he/she can not make teaching interesting. Most of the schools and universities in India have training for teachers to upgrade their teaching skills. Learning never stops and for teachers to evolve as a good teacher needs to explore and try innovative educational measures to teach children. There are new practices, procedures, policies in the area of teacher-education. Some innovations in the field of teacher education have been discussed in the following paper.

Teacher-education is said to be a very significant investment for bringing qualitative improvement in education. If a revolution in education has to be initiated, it is the teacher-education which can be taken as the starting point. Any programme of qualitative change in education is pre-requisite for the improvement of teachers. The teacher has the crucial role in the development of country.

Teacher education is a programme that is related to the development of teacher proficiency and competence that would enable and empower the teacher to meet the requirements of the profession and face the challenges therein.

The National Council for Teacher Education has defined teacher education as – A programme of education, research and training of persons to teach from pre-primary to higher education level.

Teacher Education = Teaching Skills + Pedagogical theory + Professional skills.

Teaching skills would include providing training and practice in the different techniques, approaches and strategies that would help the teachers to plan and impart instruction, provide appropriate reinforcement and conduct effective assessment. It includes effective classroom management skills, preparation and use of instructional materials and communication skills.

Pedagogical theory includes the philosophical, sociological and psychological considerations that would enable the teachers to have a sound basis for practicing the teaching skills in the classroom.

Professional skills include the techniques, strategies and approaches that would help teachers to grow in the profession and also work towards the growth of the profession. It includes soft skills, counseling skills, interpersonal skills, computer skills, information retrieving and management skills and above all lifelong learning skills.

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Innovations in Teacher–Education

In response to facing problems, any educational new change is generally sought for removing the problems and for improving the field. In the field of teacher-education, many new trends and innovations have emerged in our country and abroad. These are new practices, procedures, policies in the area of teacher-education. The following are some current trends and innovation in Teacher-education:

1. **Inter-disciplinary Approach** (Problem of isolation with other-disciplines).
2. **Internship in Teaching** (Problem of isolation with secondary schools).
3. **Community Living**.
4. **Pre-Service teacher education**
5. **Orientation Course** (In-service Programme).
6. **Teacher induction**
7. **Training of Teacher Educators**
8. **Correspondence courses or distance education**.
9. **ICT in Teacher Education**
10. **Mechanism of feedback devices for modification of teacher behavior.**
   a. Simulated Social Skill Teaching (SSST).
   b. Micro-teaching.
   c. Programmed Instruction
   d. Training Flanders Interaction Analysis.
   e. T-Group Training.
11. **Educational Technology and Teacher education**
12. **Team teaching**
13. **Bloom’s evaluation approach and objective based lesson plans.**
14. **Continuous and Comprehensive evaluation and Teacher Education**
15. **Research on Teacher Education**

1. **Inter-disciplinary Approach**: The Regional Colleges of our country have taken the lead in making inter-disciplinary approach which is an integral part of the programme of teacher-education. It is universally accepted that there can be no better plan for improving the quality of teacher education than by integrating content and methods, e.g., through the inter-disciplinary approach. The four year courses of the teacher education is provided by the Regional College and the concurrent general and professional courses as being experimented by the Kurukshetra University offer ample scope to integrate all the essential ingredients of good teacher education, namely liberal education, professional education, specialization in one or two school subjects and direct experience including practice teaching in schools.

2. **Internship in Teaching**: Internship in teaching is a new phrase to denote the contemplated reform in practice teaching. This programme includes practice teaching and a wide variety of supervised field experiences. Outstanding schools are selected and the student teachers carefully supervise practice teaching and all other experiences during this period.

The student teacher is given an opportunity to participate in a wide range of school activities which are practicable so that he may develop a feeling of close identity with school community. He is made to share all the duties, responsibilities and privileges of a regular teacher except
monetary compensation. He plays a dual role; he is a learner as well as a teacher.

3. **Community Living:** Another current trend in teaching education which can be noticed from the practices in abroad is to give some weightage to the programmes which have a training potential for community living. In fact, teacher education programmes would be incomplete unless they provide some kind of guidance and supervised experiences of independent individual and corporate group life. The major aims of ‘Community Living’ programmes are personal and social effectiveness. Some essential features of the programme are:
   - Group living by making the residence in the hostel compulsory.
   - Taking group projects such as cleanliness of premises, rooms and lecture theatres, etc.
   - Management of playing indoor and out-door games.
   - Organizing some entertainment and variety programmes.

4. **Pre-Service Teacher Education:** Important innovations in pre-service teacher education have occurred. School experience (observation in schools) is becoming an important part of the teacher training programmes; CCTV being used in micro teaching programmes; and teaching aide work-shops being included in training courses.

   For pre-service training, the National Council of Teacher Education (NCTE), a statutory body of the Central Government, is responsible for planned and coordinated development of teacher education in the country. The NCTE lays down norms and standards for various teacher education courses, minimum qualifications for teacher educators, course and content and duration and minimum qualification for entry of student-teachers for the various courses.

5. **Orientation Course (In-Service Teacher Education Programme):** Orientation Course is also an emerging trend in teacher education. It is also recognized that teachers at all levels of provision (primary, secondary, vocational and non-formal) require regular opportunities for further study, for both personal and professional growth, so that they can maintain their commitment and motivation, update knowledge and skills, be exposed to new curricula and teaching materials, and have access to a reorientation programme if they wish to move into a different field of teaching.

   A multi-media package consisting of print, video/audio and practical work has been prepared in India for in-service education of primary-school science teachers. The package, specifically intended for teachers in rural areas, extends video and audio communications in different languages to nearly 24,000 teachers, some of whom are more than 1,000 kilometers distant from others.

6. **Teacher Induction:** An induction programme is that programme which provides inputs necessary for a person to start performing certain functions expected of him/her. It may have awareness inputs, attitudinal inputs and competency development inputs.

   The New Teacher Induction Program (NTIP) has been designed to support the growth and professional development of new teachers. It is the second step in a continuing of professional development for teachers to support effective teaching, learning, and assessment practices, building on and complementing the first step: pre-service teacher education programs.

7. **Training of Teacher Educators:** Because the teacher is the linchpin in the system of education, teacher preparation should be of paramount concern in any society. The relationship between education and the role of the teacher educator, as well as the facilities required to
Innovations in Teacher–Education

organize relevant activities for teacher education, need careful attention. Teacher educators, because they are adequately educated in most countries and quite small in size, have never received the attention that classroom teachers have received, so they have had to depend largely on themselves for their own improvement.

In India, a research and orientation programme has been developed in such areas of teacher education as micro teaching and teaching models. Teacher educators receive a basic orientation, plus help in planning the work in their institutions, and prepare evaluation reports which are disseminated to other institutions.

8. **Correspondence Courses:** This is a new technique for in-service teachers. In 1962, the Expert of India strongly recommended that selected University of Delhi was the first to start correspondence courses. The N.C.E.R.T. constituted a study group which reported in 1964 about correspondence courses in Training Colleges.

   The group pointed out the correspondence method it may be applied to the professional education of teachers should be adopted to meet two special requirements of teacher education; first, to adequate facilities for the development of teaching skills through practice teaching and secondly continuous contact between the student teacher and the institution. The four regional colleges of Education and the Central Institute of Education, Delhi have undertaken the bold experiment of correspondence courses of the Regional Colleges of Education, there is a provision of two summer courses of 2 months each.

9. **ICT in Teacher Education:** Information and Communication Technologies (ICT) that are becoming increasingly pervasive in societies around the world are also reaching schools. With numerous global advancements in ICT it is essential that educators have a thorough working knowledge of these media and their influence on the performance and engagement of their students. Now computers are assisting educators in imparting training to the student teachers. Here we assume that ICT includes, but is not limited to, personal computers, laptops, printers, LCD projectors, palm devices, iPods, fax machines, cell phones, Internet, and Intranet. It deals with information system, creation, data collection, data storage, access, processing, retrieval, analysis, use and dissemination of information accurately and effectively for the purpose of enriching the knowledge and developing intelligent decision-making as well as problem-solving ability of the user. In this way, ICT has brought revolution in the field of education and training.

10. **Mechanism of feedback devices for modification of teacher behaviour:** The following are the main feedback devices or new innovations which are commonly used in developing teaching competencies.

   (a) **Simulation Teaching:** Phillip w. Perdew defines simulation as activities which are similar to teaching and observing but which are not, in fact, carried in the regular classroom.

   This may involve the use of new media such as audio or video-tapes of teaching situations, intermittent photography, and micro-teaching with video play back. Simulation Teaching provides Better Rehearsal Ground. In fact, these techniques achieve their maximum potential in the pre-student teaching learning experience and may become a new kind of demonstration laboratory prior to student teaching.

   (b) **Micro Teaching:** Micro-teaching has been defined by Allen &Eve (1968) makes it
possible to concentrate on specific teaching behavior and to practice teaching under controlled conditions. Here competence is acquired in one skill instead of proceeding to another skill. Further, microteaching is a scaled-down teaching encounter, scaled down in terms of class size, less length, and teaching complexity.

(c) **Programmed Instruction:** Programmed instruction is a revolutionary device in the science of learning, now-a-days, its use in the field of teacher education has also attained importance.

The education commission (1964-66) has also realized the importance of teaching various subjects with the help of programmed instruction. Programmed instruction has been defined as a method of given individualized instructions in which the student is active and proceeds at his own pace and is provided with immediate knowledge of result. The physical presence of teacher is no essential in this strategy.

(d) **Interaction Analysis:** In the field of teacher education, teachers, classroom interaction has also been taken as target and attempts are made to analyze it and to quantify it. Here both verbal and non-verbal interaction are sought as: Thus, we see the most intensive long range programme of this dimension has been conducted under the leadership of Ned, A. Flanders. In his study Flanders found that the verbal patterns of teachers in high achieving classroom were significantly different from those in low achieving classrooms.

(e) **T-Group Training:** T-group training is also used feedback device for the modification of teacher behavior. It has been developed by Bethel and Mine in 1947. It is a leader less group which meets without any agenda or schedule -group consist of eight to twelve trainees and meeting continues for two or three hours. The trainees discuss their own problems and teaching and suggest some solutions on the basis of their experiences.

T-group provides the opportunities and situations to express their feeling regarding the difficulties of training programme freely. Pupil-teachers become honest, straight forward and insightful by attending the meeting of T-group regularly.

11. **Educational Technology and Teacher Education:** With recent development and advances, technology in teacher-education is virtually a new source of concern for educators, teachers and students. Educational Technology has been introduced in teacher education curriculum. Twenty first century skills that can be attained through the incorporation and engagement with technology. Educational technology is the effective use of technological tools in learning. As a concept, it concerns an array of tools, such as media, machines and networking hardware, as well as considering theoretical perspectives for their effective application.

12. **Team Teaching:** Team teaching is also called cooperative teaching. It occurs when two or more teacher share in planning and conducting instruction that is offered to the same group of students, whether they may be at elementary, secondary or college levels.

A great variety of organizational patterns are included under the label of “Team Teaching.” Terms vary in size from 2 elementary teachers who share the instruction offered to 40 or 50 students of team made up of many as 8 teachers and over 200 students. Teacher assignments for the team represent a considerable number of role and specializations. Team roles include
those of team leader, master teacher, part time teacher, intern teacher, teaching aid and team clerk.

14. Bloom's evaluation approach and objective based lesson plans: The evaluation approach is a new innovation in the field of teacher education. It has revolutionized the teaching, learning and testing process. It considers that education is the tripolar process. B.S. Bloom has given this approach to teaching-learning. The following steps are used:

1. Formulating educational objectives
2. Creating learning Experience
3. Evaluating the change of behaviour
   - **Formulation of educational objectives:** The well organized activity brings a desirable change which is termed as objective. The educational objectives concern with cognitive, affective and psychomotor change in the behaviours.
   - **Creating learning Experience:** After identifying the learning objective, the appropriate teaching strategies, teaching aids and tactics are selected for generating the environment are directly related to the objectives of teaching.
   - **Evaluation of change of behavior:** The learning experiences bring desirable change in behavior of the students. The change of behaviours are evaluated to take decision about the effectiveness of learning experiences. The change of behaviour is of three types: cognitive, affective and psychomotor.

15. Continuous and comprehensive evaluation and teacher education: Realizing the importance of evaluation in the teaching-learning process, it was made mandatory in the National Policy of Education, 1986 to introduce the concept of CCE in teaching-learning process to challenge the traditional system of evaluation. CCE encompasses the evaluation of both scholastic and co-scholastic aspects of pupil growth and is carried out on continuous basis spreading over the whole academic session. It becomes essential for the teachers to adopt a scheme of continuous & comprehensive evaluation that helps in confirming whether or not the learners have mastered the competencies or not. So it is at most important to make continuous and comprehensive evaluation as an integral part of teaching and learning process to promote standards of school education.

15. Research on Teacher Education: Research is also required to enable teacher education institutions to evaluate the effectiveness of their programmes to enable them to achieve what they are intended to achieve. This area is often overlooked; the result is that many teachers claim their teacher education courses are overly theoretical and incompatible with the realities of the school and classroom.

In India academic support is being provided through preparation of Manual for the teacher education institutions and publication and dissemination of Thematic Papers on Teacher Education. Various quality control mechanisms have been developed, including re-composition of the Visiting Teams, periodical monitoring of the teacher education institutions and de-recognition of institutions not conforming to the Norms and Standards prescribed by the NCTE.

Conclusion

In this way we can say that the teacher is the most important element in any educational
program. Teacher education has to keep abreast of recent developments and trends. The teacher is required to acquire adequate knowledge, skills, interests and attitudes towards the teaching profession. The teacher can be made proficient with well planned, imaginative pre-service and in-service training programmes. Technology has been introduced in present teacher education programme. Innovations has been introduced for pre-service and in-service teacher education programme. Training of Teacher Educators has been developed in India. Research has been conducted to enable teacher education institutions to evaluate the effectiveness of their programmes.

References

SCHOOL EDUCATION VS TEACHER EDUCATION: LEADER OR FOLLOWER

Ms. Cinimol Joseph* & Jins Thomas**

The ultimate aim of teacher education is to facilitate better school education. A trained teacher in the light of this study is neither a leader nor a follower; he is one who walks with the learner in his/her academic journey. Learning is a continuous process and the sojourns should not be earmarked as some portion of learning completed. This paper looks into the major problems that hinder to bridge the gap between teacher education and school education. Teacher education, in its essence, never ends. The graduation certificate one receives at the end of a teacher education programme should be considered as the dynamic beginning of a new era of lifelong learning and sharing of classroom experiences.

“Children must be taught how to think, not what to think.”
—Margaret Mead

We do not allege that the present system of education in our nation is at a dismal state; our research suggests that it is far from that. We live in a country that introduced schooling to the rest of the world and modernized its educational system according to the need of the hour. There was a time when Children in our country were taught how to think and not what to think.

This nation that has been the torch bearer of scientific temper in education now needs to revamp its teacher education system in order to cater to the needs of the hour. A teacher, in the history of this country, neither has been considered a leader nor a follower. He is one who walks with his pupil.

Problems

1. Teacher education system should instill in the mind of its stakeholders that teaching/learning cannot be one: to the students; at the students; for the students
2. Teacher education, as of now, does not recommend lifelong learning where school education keeps finding innovative, unexplored areas that leaves the teacher baffled.
3. Those academically weak students know best as to what works for them and what doesn’t. But the current system of teacher education strives to bring out the best from every child in the same way.
4. Our bachelor of education programmes still stresses on the student teacher spending his time preparing charts and models
5. When it comes to a student teacher, having considerable command over one’s curriculum area/field of expertise is of utmost importance; however, not understanding the social, psychological, intellectual and physical developments of the learner and meeting their needs as individuals poses a greater threat.

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6. The current teacher education system in India does not lay enough emphasis on the importance of a trained teacher being a reflective, resolute, mindful, innovative and creative practitioner.

7. Teacher education that does not enable student teachers to design a variety of learning experiences has the potential to mar even the professional career of an otherwise wonderful teacher.

8. Lack of esprit de corps among teachers is a real problem that, our research suggests, can hamper learning in unimaginable ways. Lack of collaborative efforts on the teachers’ part not only hinders student learning but also adds to the work pressure faced by teachers. This problem is to be understood together with another crucial threat: lack of understanding of vertical and horizontal curriculum mapping among our student teachers.

9. Course Duration: We believe that one year programme that offers bachelor of education degree is inadequate for a plethora of reasons.

10. Lack of/inadequate evaluation of teaching experiences is another important threat that the current system of school education faces.

Suggestions

1. Learning can happen only with the students cooperation; it can be done by the students. Hence teacher education needs to focus more on getting student educators as a part of the class, and not dictators, leaders or followers in the class. This might lead to the question: Is not a good teacher, a good leader. Of course, yes. But the teacher does not have to pose himself as the best leader. If they have qualities of a good leaders in them, students will identify and follow.

   For centuries teacher education has been focusing on bringing out good teaching machines who would go into a class and start hurling his vast knowledge at the students; he would try to teach to the students; the teacher education system has been instilling in the minds of the student learners that they are going to teach for the students. How absurd?

   We met a student in one of the classes we surveyed. He has been studying in prestigious English medium schools in and around Ludhiana since his Kinder Garten, but today he could not remember the 26 letters correctly. When we started digging deeper into the case for the cause, it became clearer that he was taught to, at and for by excellent teachers who never bothered to let him learn by himself. There are millions of such students in this country. How long can we neglect them?

   Teacher education plays the most pivotal part in the whole scenario. It needs to evolve more in time with the needs of the hour.

2. It is not a matter of debate that every good teacher is a lifelong learner. Unfortunately no department of education seeks accountability in this regard. We take it for granted that teachers keep themselves updated on their own which is way too far from the truth.

   The truth, as shown by a number of studies, is that many teachers even give up on reading newspapers once they are comfortably placed in a government job. Although there is no panacea available for this malady, teacher education should inculcate the necessity of teacher being a life
long learner in the formative years itself.

3. One of the most important areas of learning which has been known to us for far too long, but has been neglected is the area of individualized learning. Programmed learning to constructivism has thrown light on the need of individualized learning, still our teacher education system insists that all students should learn in the same way.

Thus a teacher takes a chart to class and assumes that every student would learn from the chart. This is not the case, and we know that there is much truth in Howard Gardner’s theory of multiple intelligences. What we have identified from our research so far is that every child who under performs in academics know exactly what works for them and what does not. This brings us to the logical question: Why is it that most trained teachers are simply reluctant to put their charts away and ask the child, ‘Dear how do you think you can learn it?’

The curriculum for teacher education should definitely include individualized learning that will promote an understanding among teacher educators that children, at all ages, may have their own ways of learning. That is to say, a trained teacher should let his students learn in the best way suitable and teacher education should train them to accept and encourage individual differences in methods of learning.

4. A Bachelor of Education programme that still stresses on the student teacher spending his time preparing charts and models can at best churn out teachers for the 19th or 20th century. Times have changed today’s learners are natives of the digital era, yet many teachers are unwilling to be even immigrants into this world of opportunities.

Modern school education requires tech savvy teachers who would explore new learning experiences with students. Millions of learning materials are available absolutely free of cost online. Unfortunately we require our student teachers to still spend their precious time preparing charts. The sooner we revise the syllabus for educational technology, the better.

5. One good thing about the existing teacher education system is that it lays a lot of stress on educational psychology. But when it comes to meeting students needs as individuals, most student educators are left in the labyrinth of confusion. We suggest that hands on experience should be given during the formative years as part of teacher education.

It does not take much intelligence to understand that case studies give better opportunities to student teachers.

7. School education requires teachers to design a variety of learning experiences. This must be made an integral part of teacher education programmes. Designing fruitful learning experiences is not everybody’s cup of tea, thus adequate importance must be given to this in the teacher education programmes.

8. School education is the result of a team effort; teacher education programmes should lay emphasise on student teachers learning to be more collaborative and supportive to their colleagues, department of school education or the school management, and the community at large.

In order for learning to take place horizontally and vertically throughout a child’s school life teacher education should focus more on preparing student teachers to deal positively with work pressure that might arise from the dire need of collaborative efforts in the teaching – learning process.
The importance of technology in learning cannot be overemphasized. The student who could not spell all the 26 letters correctly learned not only those 26 letters, but also 650 common words within the short span of 3 hours with the help of technology.

9. Teacher Education must be made a complete two-year programme. The first of these two years could ideally deal with the theoretical aspect of school education: educational psychology, philosophy, technology, subject-specific teaching methodologies, etc.

The second academic year should be spent in real working conditions under the guidance of an experienced teacher. In this one year of ‘internship’ the student teacher must be closely monitored and guided, also by faculty from his/her school of pedagogical sciences.

However, a teaching degree should be offered only on completion of both, the in-house learning and the internship programmes. We should also consider the possibility of awarding stipends to the teacher trainees during their internship programme.

10. Teacher Education centers to realize their social obligations and conduct more of in-service cluster meetings that would evaluate a number of teaching experiences and derive at possible causes of such instances. A vast number of beautiful teaching experiences go unrecorded, and something needs to be done in order to tap in this vast experiential knowledge in the immediate future.

Conclusion

Having looked into some of the prominent problems pertaining to school education versus Teacher education and suggested a few practical solutions, we still feel that this paper is only a drop in the ocean.

Much needs to be done in order to improve the school education system in our country. Innovation in the field of teacher education should be encouraged at all costs. There is an urgent need to encourage original researches in the field of education.

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Teacher education is a continuous process and its pre-service and in-service components are complimentary to each other. Teacher education is a program related with teacher proficiency and competence that would make them competent enough to face new challenges in the education. Now a days the field of education is not only limited with books but has broadened in various new horizons. Development and changes in education have affected teacher education necessitating review and reforms. It demands understanding with investigative minds, assimilating the required transformations, accommodating and responding to the universal needs. We also need to train teachers with new perspectives as the outer world is in the classroom and schools are opening to the world. The pre-service and in-service teacher education programs have shown paradigm shift with its emphasis on globalization and individualization. Thus, the main purpose of this paper is to indicate main changes that has incurred in teacher education in India and also provide an overview of trends, reforms and innovations in teacher education. It also discusses the need of teacher education program to be innovative and various practices that can be included. It has been recognized that teacher education program should be structured and modified in a way that enables them to respond dynamically to the new problems and challenges in the field of education.

As the population in India is growing very rapidly day by day the need of well qualified and professionally trained teachers will also increase in the coming years. So lots of efforts should be made to improve teacher education. Teacher education is a continuous process and its pre-service and in-service components are complimentary to each other. Education is instrumental in the preparation of teachers who can in their practice ensure transformative learning, where teacher and learner, learner and learner are co-constructors of knowledge. Today there are new expectations for education where the focus is on having teachers - be futurist leaders to ensure sustainable education. The paradigm shift is from teacher dominated classroom practices to that of partnership between the teacher and the learners and their peers. The key role of educational institutions is reflected in a variety of initiatives taken to transform the nature and function of education both formal as well as non-formal. Universal accessibility to quality education is considered essential for development.

This has necessitated improvement in the system of teacher education so as to prepare quality teachers. Although National Council for Teacher Education (NCTE) as a non-statutory body has taken several steps as regards quality improvement in teacher education. Its major contribution as to prepare Teacher Education Curriculum Framework consequently; teacher education curricula have witnessed many changes in teacher preparation programs in various universities and boards in the country. During the last decade, new thrusts have been posed due to rapid changes in the educational, political, social and economic contexts at the national and international levels.
Curriculum reconstruction has also become imperative in the light of some perceptible gaps in teacher education. Teacher education by and large, is conventional in its nature and purpose.

Teacher education must, therefore, create necessary awareness among teachers about their new roles and responsibilities. Education of teachers needs to strengthen and stress upon the main attributes of a profession, such as, the systematic theory, rigorous training over a specified duration, authority, community sanction, ethical code and culture, generating knowledge through research and specialization. It is acknowledged that formal professional training on continuous basis is necessary for becoming a good teacher as it caters to the development of one’s personality and sharpening of communication skills and commitment to a code of conduct.

Innovation is usually understood as the introduction of something new and useful, like introducing new methods, techniques, or practices or new or altered products and services. Schools or teacher education institutions can carry out innovations or experimentation on any aspect of their work related to teaching-learning, training or management of schools in order to improve efficiency of the institution to overcome problems and difficulties, they face in day to day functioning. The present structure of teacher education is supported by a network of national, provincial and district level resource institutions working together to enhance the quality and effectiveness of teacher preparation programs at the pre-service level and also through in-service programs for serving teachers throughout the country.

Teacher education is now becoming more to the emerging demands from the school system. Because the changing educational needs of the student and advancement in technology has widen the area of responsibilities of the teacher. Now teacher has to perform various roles like encouraging, supporting and facilitating in teaching-learning situations which enables learners (students) to discover their talents, to realize their physical and intellectual potentialities to the fullest, to develop character and desirable social and human values to function as responsible citizens.

Suggestions

1. The courses of studies in theory and practice should be restructured. For this research should be conducted comprehensively to realize the goals of teacher education. The results of these researches should be given due importance in designing the curriculum of teacher education.
2. The method of teaching in the teacher education should be reorganized according to the changing demand of education system. Special innovative programmes like seminars, workshops, conferences, projects and discussion should be organized regularly for the improvement of teaching learning process in various fields.
3. The admission procedures of B.Ed. should be completely restructured so that only those who have aptitude of teaching are able to take admission in this course as the increasing number of colleges of B.Ed. has made this course accessible for everybody.
4. Now a days the number of self-financing colleges are mushrooming like shops and they have made it as their money making factory which is detrimental for education in future. Therefore, regular inspection should be done to ensure quality in teacher education. The affiliating bodies for teacher education should frame such
parameters which can enhance the teacher education program in qualitative aspect rather than quantitative aspect.

5. In order to remove the myth or misconception that the training in teacher education department is superficial and is not incorporated in real situation. The professional attitude should be developed by organizing various types of facilities like school assembly, social work, fieldwork, surveys, laboratory and other co-curricular activities.

6. State Education department can have planning unit which can help in regulating the demand and supply of teachers at various levels of schools. As it has been observed that there is a big gap between demand and supply in various states. The whole scenario of education is changing after Right to Education Act 2009; the demand for teachers at various levels has tremendously increased. Moreover today is the time for inclusive education which leads to demand of special teachers/educators and we all are aware of the fact that there is scarcity of special educators. So a balance should be maintained for better results.

7. The training or the teaching practice of pupil teachers held in the school should be closely associated with teaching staff in education colleges in planning the content to be covered and method to be used by the pupil teachers to have useful implications for school rather than disturbing their routine schedule. Moreover the real teaching practice should be supervised by the teachers in a systematic way so that it fulfills the objectives of teacher training.

8. It should be made mandatory that a teacher education department should have a demonstration school which should have certain facilities such as laboratories, libraries and other important audiovisual equipments. This can be of great help to formulate the policies, program for refining the education system.

9. The whole system of education is changing at a greater speed. The teacher education department should conduct research on teaching curriculum and evaluation procedure in the regular university departments. Extension programs and Exchange programs with different universities within India and outside India enrich the teacher education programme enormously. So such programs should be sponsored by government and university so that different academicians from different disciplines can contribute in the qualitative aspect of teacher education.

10. Refresher courses, Orientation programs Seminars, Conferences, Workshop, symposium should be encouraged for the professional growth of teacher educators. All the educationists can be oriented with new developments, changes, innovations in the field of education.

11. The reference books, other reading material are not available in Hindi and other regional languages so availability for such books should be made for students and teachers which can make the teaching learning process more effective.

12. Haryana government has made provisions for providing incentives for pupil teachers who undergoes training at elementary level, so provisions should be made at higher level also. Government should provide financial grant to teacher education institute/department for opening experimental school.
13. Rigorous screening and strict admission procedures should be followed for correspondence courses for teacher education.

14. Inclusive education should be made an integral part of teacher education curriculum so that the pupil teachers are sensitized with Children with Special Needs.

15. Teacher Education Institute should be connected with real life situations of classrooms so that the teacher educators and pupil teachers both get acquainted with different problems of classroom situations.

16. The internships/teaching practice time period should be increased so that pupil teacher become more confident and get familiar with classroom situations.

**Conclusion**

Since the teacher is the pivot of the entire educational system and is the main catalytic agent for introducing desirable changes in the teaching learning process, all attempts need be made for motivating teachers to become innovative and creative. It goes without saying that a self motivated and really industrious teacher can utilize his own resources to keep himself abreast of new knowledge and skills. It has been recognized that teacher education program should be structured and modified in a way that enables them to respond dynamically to the new problems and challenges in the field of education, then only teacher can help in national development.

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CONSEQUENCES OF TWO YEARS PROGRAM IN M.ED. & B.ED.

Ms. Mandeep Kaur*

Since education forms the base of every structure in the society. Be it science, be it technology, be it engineering, and be it agriculture. Actually every field requires education and educators as base. So our Nation definitely requires good educators. The trends in education system have been changed. The paper covers the consequences of making the one year program of B.Ed. and M.Ed. two year each respectively. It will deal with the possibilities or the outcomes or the effects it will have on future teachers. The paper will deal with positive and negative outcomes of making B.Ed. and M.Ed. of two years respectively which starts from this session and will mainly highlight the positive outcomes.

Education is important for all us. Education plays very important role in our life. Education is not all about studying and getting good marks. Actually to understand the meaning of existing studies, to discover new things and to increase existing level of knowledge. It is only education which shows difference between a educated and uneducated person, real and unreal etc. As I mentioned in my abstract education is the base of all other streams.

But what about the educator who give us education. Educators are the people who are imparting knowledge and inculcate values them in their most impressionable years. Teachers certainly have a significant mark on the development of young children and even older children as they are teaching them and imparting effective knowledge which increase their knowledge and improve skills so that they can go on in life as a responsible and productive members. In nutshell both the education and the educators are very important.

All over the world there are special teacher training courses to produce qualitative teachers. Same in India NCTE (National Council of Educational Research and Training) is a leading council at the national level whose main objective is to bring qualitative improvement in school education. For this NCTE increase the duration from one year B.Ed. (Bachelor of Education) and M.Ed. (Masters of Education) to two years each respectively from this season 2015. Till now if one has to pursue his career as teacher the minimum eligibilities were 3 years graduation and one year teacher training course (B.Ed.) only four years education was sufficient to become teacher at school level and college level lecturer a person had to do 3 year graduation, post graduation in any subject, B.Ed. and M.Ed. it took only 7 years. But from next session it will take 9 years.

Accordingly, the two year B.Ed. and M.Ed. courses aims at a complete development of the student teacher particularly in knowledge and skills, in individual care of the learner and also in methods and education designed to facilitate learning. This course is divided into two parts. It aims at developing understanding of and competence to render disciplinary knowledge into forms

relevant to stage specific understanding of teaching learning situation apprehended through intensive study of conceptual explanations, observation and analysis of live classroom situations as well as hand-on experiences and longer duration of field experience. Interactive processes i.e. group reflection. Critical thinking and meaning making have been encouraged. The maturity of student teachers has been kept in mind while visualising modes of learning engagements, instead of continuous teacher monitoring, greater autonomy to learners has been given in accordance with androgenic principles of learning. The syllabus retains the essence of student-teachers being active participants in the learning process and prepares the student teacher for facing the emerging challenges resulting out of globalisation and its consequences.

**Main Causes for Change**

What was the reason behind this change. NCTE is a central body whose main objective is to produce qualitative teachers. To produce professionally skilled, up to date teachers several amendments have been done. What were the demerits of one year M.Ed. & B.Ed. programme.

1. Lengthy syllabus
2. Short duration
3. Short duration of teaching practice
4. More emphasis on completing syllabus
5. More stressful for teachers as well as students
6. No emphasis was given on skills development
7. Due to short period students used to stick with traditional methods of teaching i.e. charts, thermocol models, flash cards etc. when they can use power point presentation, videos, pics, documents etc.

**Merits of 2 years B.Ed. & M.Ed. Courses / Programme**

1. Sufficient time to complete syllabus.
2. Unemployed teachers get chance to be employed as for every 25 students one teacher is required.
3. More students will get chance to enrolled in M.Ed. courses as no. of seats increases from 35 to 50 in each college.
4. More emphasis is given on the professional development of would be teacher educators.
5. It provides greater scope for development of sound knowledge on different areas i.e. content knowledge, knowledge on teaching learning methodologies and knowledge of teaching learning among the trainee-teachers.
6. Skill development of trainee teachers to be competent enough regarding how to transfer the content material to the students of the schools meaningfully.
7. If a student opts for a integrated B.Ed.-M.Ed. programme without an option of intermediate exit. They can complete both degrees in 3 years.
8. Students will get more time, they can use E-learning methods of teaching
9. More emphasis its given to practical work like internal assessment, project, works, session works, internship in teachers, practice of micro teaching skills, community works, practical works relating to work experiences innovative ways for conducts
practical activities relates to health and physical education, work experience, field
work with community etc.

10. The materials of its programme are transacted to the trainee-teachers through many
innovative teaching-learning strategies like problem solving, group discussion, panel
discussion, seminar reading, brain storming, practical and project work, discovery
method, competency based teaching contractual, transaction of the contents,
demonstration-cum-discussion, participatory/activity based group work, case studies,
practical exercises, innovations, individual/group assignment, face to face contact,
tutorial/library work, research approach etc.

Demerits of 2 years B.Ed. & M.Ed. Courses / Programme

1. Tough time for colleges because they will have to increase infrastructure only those
colleges that have the required infrastructure and facilities will only be permitted to
increase intake of students.

2. According to the students view one year B.Ed. course is sufficient for developing
pedagogical skills in teaching/developing knowledge on teaching-learning strategies
among the trainee-teachers.

3. Burden on both the teacher and student will increase in same ratio as the duration
increase. As diversified course will be implemented.

4. Financial burden on parents will also increase.

Conclusion

Several reforms have been done in the light of research results. NCERTs, main objective is
to improve teaching learning process in schools. Hope this increase in duration generate better
professional and outstanding teachers.

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NEED OF EDUCATIONAL TECHNOLOGY FOR THE BETTERMENT OF TEACHER EDUCATION

Ms. Manpreet Kaur* & Ms. Jaspreet Kaur*

The need of educational technology in colleges has been realized and proved by various researches in developed as well as developing countries. If pupils are taught through the use of various educational technology like computer, internet, projector etc. integrating with the different forms of information can make them more motivated and knowledgeable. Educational technologies are used more by female teachers of professional courses than male teachers. Regarding the use of computer, internet, L.C.D, ETV facility, slide projector, audio and video conferencing facility and CD-ROM the number of male and female teachers of professional course are almost same. Active learning techniques are important pedagogic innovations which changes the traditional teacher-centered classroom into the modern student-centered approach to learning.

What is Educational Technology?

Technology refers to the techniques as also the technical contrivances. A systematic way of applying the techniques to achieve an objective is as important as the use of technical equipment for the same. As a matter of fact, techniques are reckoned as the software and the equipment as the hardware of technology. Technology results in new designs and devices as also new ideas and processes. For example, the development of telephone has led to phone books, answering machines, fax, telephone shopping, etc.

Education, the act or process of acquiring and imparting knowledge, is crucial to the development of a learner with a view to his/her participation in the transformation of the world for a better tomorrow. Learning and understanding are basic to the definition of education.

Educational Technology is the development, application and evaluation of systems, techniques and aids to improve the process of human learning. Educational technology is a systematic way of designing, implementing and evaluating the total learning and teaching in terms of specific objectives based on research in human learning and communication; and employing a combination of human and non-human resources to bring about more effective instruction.

Use of technology in education results in increased effectiveness of the educational process. Use of technology in training results in increased productivity through enhanced human capability. For example, telephone extends our capability to talk and listen over long distance and automobile extends our capability to travel large distance over short period of time.

When the term was first coined it referred to “Technology in education”, implying the use of a variety of audio-visual aids for teaching purposes. Implicitly relying on the then widely accepted sender–receiver construct, educational writers saw these aids primarily as transmitters of lessoncontent.

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As the concept of ET developed, the term “Technology of education” came into vogue. This looked at education in a wider sense, and included various aspects such as entry behavior of the learner, objectives, content analysis, evaluation, etc. By the mid 1970s, ET borrowed the terms “systems approach” from management studies and “corrective feedback” from cybernetics. This widened the scope of ET as the teaching-learning process was examined in a holistic manner.

**History of Educational Technology**

There is no written evidence which can tell us exactly who has coined the phrase educational technology. Different educationists, scientists and philosophers at different time intervals have put forward different definitions of Educational Technology. Educational technology is a multifaceted and integrated process involving people, procedure, ideas, devices, and organization, where technology from different fields of science is borrowed as per the need and requirement of education for implementing, evaluating, and managing solutions to those problems involved in all aspects of human learning.

**Educational technology, broadly speaking, has passed through five stages.**

The first stage of educational technology is coupled with the use of aids like charts, maps, symbols, models, specimens and concrete materials. The term educational technology was used as synonyms to audio-visual aids.

The second stage of educational technology is associated with the ‘electronic revolution’ with the introduction and establishment of sophisticated hardware and software. Use of various audio-visual aids like projector, magic lanterns, tape-recorder, radio and television brought a revolutionary change in the educational scenario. Accordingly, educational technology concept was taken in terms of these sophisticated instruments and equipments for effective presentation of instructional materials.

The third stage of educational technology is linked with the development of mass media which in turn led to ‘communication revolution’ for instructional purposes. Computer-assisted Instruction (CAI) used for education since 1950s also became popular during this era.

The fourth stage of educational technology is discernible by the individualized process of instruction. The invention of programmed learning and programmed instruction provided a new dimension to educational technology. A system of self-learning based on self-instructional materials and teaching machines emerged.

The latest concept of educational technology is influenced by the concept of system engineering or system approach which focuses on language laboratories, teaching machines, programmed instruction, multimedia technologies and the use of the computer in instruction. According to it, educational technology is a systematic way of designing, carrying out and evaluating the total process of teaching and learning in terms of specific objectives based on research.

One of the earliest systematic and large-scale efforts in India to run an educational television channel was SITE (Satellite Instructional Television Experiment) in 1975–76, which was beamed to six states, and is well documented. Many innovations were undertaken in SITE in both devising and deploying suitable hardware (for example, battery-operated television sets in Orissa,½”
video technology) and making original software. This software was made by many agencies other than Doordarshan, which until then had a monopoly on video production and broadcasting in the country. In this connection, the work done by AIR in its Vigyan Vidhi programmes to disseminate scientific information to students and teachers, or state and AIR efforts in the project mode in Maharashtra and Rajasthan, have been prominent. However, the supportive structure that these programmes needed could not be maintained for long. The first television inputs in education did not have any worthwhile support systems.

In 1970, the Ministry of Education took up a scheme of ET. Under this scheme, an ET unit in the Ministry, a Centre for Educational Technology (CET) under NCERT, and ET cells in six SITE states were set up in 1974. (There was a lot of time lag in thought and deed.) Both CET and DECU (Development and Educational Communications Unit) of the Space Application Centre (SAC), Ahmedabad conducted formative and summative research in respect of the programmes that they had carried out.

**Role of Educational Technology in Teacher Education**

National Policy on Education (1986), recommends that, “Educational Technology will be employed in the spread of useful, information, the training and retraining of teachers, to improve quality, sharpen awareness of art and culture, inculcate abiding values etc., both in the formal and non-formal sectors. Maximum use will be made of the available infrastructure.”

In this age teacher, student or society cannot run faster without using advanced information and educational technology. In fact majority of researches accepted the importance and need of technology in education from primary level to degree level. In our country, planners and administrators are in very much favor regarding use of educational technology in higher education. The teachers nowadays have realized the importance of introducing the new technologies in degree colleges and providing the facility to train the faculty member.

The advantages of technology use inside and outside the classroom will depend upon the creativity, ingenuity, and initiative of professors as learning facilitators who affect their students, and not without the input of software programmers who must be aware of the educational needs of today. Learning facilitators assume a host of responsibilities to provide a rich, exciting and enjoyable learning environment. They endeavor to organize and make easily available the widest possible range of resources for learning. However, students actively engage with contents when these are adequate to their needs and expectations, and presented in an interactive and dynamic fashion. Most importantly, the way software programmers display a visually stimulating method will lead students to gain a better understanding of the content and increase their involvement of the learning experience.

In higher education, the use of technology in the classroom requires time, money, and training. But, education is changing as technology is changing through the years. There may be some barriers found when dealing with technology for teaching and learning. The first one is the lack of technology mainly in the classrooms in universities. The second one is the need for professionals trained in technology use so that the integration of technology will work within the curricular system. The third one is that students are not aware of the purpose of software tools for learning.
purposes. All digital innovations have multiple uses, but unless the specific technology is not applied for learning, it is not going to influence positively in students’ academic performance.

Active learning techniques are important pedagogic innovations which changes the traditional teacher-centered classroom into the modern student-centered approach to learning. Improving the quality of education should start with the improvement of the quality of teachers. Teachers play a crucial role in shaping the minds of children and course of development of society. Teachers are the backbone of the education system and the professional preparation of teachers in crucial for the quality improvement of education.

Educational Technology provides different methods and techniques for writing instructional objectives in behavioral terms such as Bloom Taxonomy Mager’s Approach and RCEM Approach. The needs and requirements of the people and hence education need be revised from moment to moment. Educational technology helps in fixing-up the right objectives in the light of the changed circumstances and changed environment.

It helps in improving the teaching learning process and makes it more purposive. It tries to discuss the concept of teaching, analysis of teaching process, variables of teaching, phases and levels of teaching, principles of teaching, maxims of teaching and relationship between teaching and learning. Teaching learning materials are also as important as anything else in the teaching learning process. In this age of science and technology, the materials of teaching cannot be unscientific.

A strategy plays an important role in the hands of a teacher in every learning situation. The strategy has to be the right one which should be according to the materials and is able to bring about effective teaching-learning. The different strategies are being evolved by educational technology. The knowledge of those strategies is a must for every teacher. Then only the teacher will be able to do justice to their jobs. It tries to describe the ways and means of discovering selecting and developing suitable strategies and tactics of teaching in terms of optimum learning and available teaching-learning resources; the availability of the different types of teaching methods, devices and models of teaching-their appropriate selection and use for the optimum results.

Audio Visual aids have always played an important role in the teaching-learning process. They need be used according to the times. The software aids, the hardware aids, the computer and other such appliances, equipment etc., have to be used in the present type of teaching-learning environment. Computer assisted instructions will help the learner as well as the teacher to achieve the goals of education more conveniently.

Educational Technology is concerned with the designing of a suitable curriculum for the achievement of the desired objectives. It is helpful in describing the ways and means of the selection of suitable learning experiences, organization of the contents in a suitable framework in order to bring better results. It provides the scientific foundation to education as well as develops theories of teaching and learning.

It provides an appropriate feedback to the learners as well as teachers for bringing necessary improvement at the preparatory and implementation stages of their specific acts. For this purpose, educational technology discusses the ways and means of suitable evaluation techniques, their planning, development selection and appropriate use in relation to the objectives of teaching-
learning system. It teaches the teachers the art of teaching, the learners the science of teaching, the educational planners the structure of planning and administrators or managers the skill of managing or administering the task of teaching and learning.

**Conclusion**

New innovation of technology is shaping the future of higher education and influencing teaching methodologies. The globalization of technology continues to change the way we live and work. Teaching and learning are more effective when technology is added to the classroom and when used to improve students’ learning and to help them reach their goals. Effective use of technology will also benefit the learning process if it motivates the learner and provides an authentic learning experience.

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Transforming Teacher Education Institutions through the System of E-Governance:
Possibilities and Challenges

Shubneet Sidhu*

A remarkable growth in the higher education sector had made the administration of teacher education institutions intricate. Many researches reveal that the integration of ICT helps to reduce the intricacy and enhance the overall administration of teacher education institutions. E-governance has become the key to good-governance in a developing country like India. E-Governance is basically the application of ICT to provide government services to the citizens through internet. E-governance can facilitate in improving transparency, providing speedy information, dissemination, improving administration. The strategic objective of e-governance is to support and simplify governance for all, university itself, students, parents, teachers, and society at large. Teacher education institutions may have various requirements that include computerization and management of processes such as registration, admission, student information, classes, time table, transport, attendance, library, salary and expenses, examinations, performance, grades, hostels, security and reports. It is beyond doubt that for the quantity and quality of output of our education system to substantially improve, there is no option but to introduce e governance in this sphere. But, the application of ICT in governance is somewhat poor in this sector which assumes a leadership role in the transformation of education system in our country. The challenge is therefore to bring e governance into the teacher education sector.

Information and communication technologies are a diverse set of technological tools and resources used to communicate, to create, disseminate, store and manage information. By their very nature, ICT calls for innovation. It is about exploiting the full capabilities of technology to open new perspectives for teachers, students and organisations. Teacher education institutions may either assume a leadership role in the transformation of education or be left behind in the swirl of rapid technological change. They must also provide leadership in determining how the new technologies can best be used in the context of culture, needs and economic conditions of the country.

Education is at the confluence of powerful and rapidly shifting educational, technological and political forces that will shape the structure of educational systems across the globe for the remainder of this century (Vallikkad, 2009). E-Governance helps in improving transparency, providing speedy information, dissemination, improving administrative efficiency and public services in all the aspects of education. Educational institutions may have various requirements that include computerization and management of processes such as registration, admission, student information, classes, time table, transport, attendance, library, salary and expenses, examinations, performance, grades, hostels, security and reports.

The main governing body at the tertiary level is the University Grants Commission, which

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enforces its standards, advises the government, and helps coordinate between the centre and the state. Indian higher education is decentralized with separate councils responsible for the regulation of different institutions. But teacher education institutions come under NCTE (National Council for Teacher Education). The National Council for Teacher Education (NCTE) is a non-statutory body which has taken several steps as regards quality improvement in teacher education (Vallikkad, 2009).

This paper is based on Secondary Data collected from various sources like Books, Journals, Reports, News Papers and websites.

**Concept of E-Governance**

E-governance solution in the field of educational sector has changed the way administration, which is designed to make the system user-friendly, time saving and cost saving also. Many of them are flexible enough to adapt to the changing educational environment efficiently and quickly and effectively. It is an integrated solution in the education sector that facilitates the processing and maintenance of large volumes of information such as: registration, admission, student information, classes, time table, transport, attendance, library, salary, expenses, examinations, performance, grades, hostels, security, reports, management, transport, staff details and fees among various departments in an institution.

E-governance enables the Government and Citizens to access easily, to improve new class of quality of services and to provide multi-channel service delivery system. The vision of e-governance is to transform service delivery through the use of IT and Multimedia. E-governance can be defined as delivery of government services and information to the public using electronic means. Such means of delivering information is often referred to as ICT. Use of ICTs in government facilitates an efficient, speedy and transparent process for disseminating information to the public and other agencies, for providing services, and for performing administrative activities.

**Need of E-Governance in Teacher Education Institutions**

The state of Indian higher education and teacher education in particular has been examined by a number of education commissioners and committees and have identified the major problems and suggested the remedial actions for them e.g. the system of affiliation of colleges, followed by most universities, discourages accountability due to lack of proper monitoring facilities. When we talk of the Indian Higher Education System (IHS), there is lot of mushrooming of teacher education institutions in the country. There are number of aspects related to the quality education like progression of course, quality of faculty members, research facilities given to teachers and students, number of students, examination system and administration. For any Government, it is very important to keep an eye on the above factors prevailing in any university or colleges of education. Although there are number of regulating agencies like UGC, NCTE and NAAC etc. in the field of teacher education which monitors the performance of any university or college on an overall basis. The quality factors are also assessed before giving NOC to the universities or also before renewing the recognition/affiliation. On these metrics, the universities and colleges are asked to explain the reason for good or bad performance. Presently, the current procedure compels universities to submit the documents to UGC, MHRD, and NCTE etc. separately for various reasons like approvals/renewal of recognition, resulting in wastage of time and lot of
stationary. Ideally, a single window should exist for approval process of performance measurement. The need is to deliver services at the doorstep making it hassle free transparent and to facilitate decision makers to get all analysis and decide. As a result of such type of governance, there may be perceptible changes in both administrative and academic output of the department. Minimization of human intervention and discretion exhibits a fair, transparent accountable and responsive system. E-Governance is not doing all the activities on-line or other sort of computerization but it is actually the way to rethink and re-engineer the existing structure of the system of teacher education in India with its functions, processes, etc. The introduction of e-governance in teacher education institutions is one such concept that can empower the governing bodies to administer the progress of teacher education in the whole country and serves various stakeholders in a much better ways (Bhanti, Lehri and Kumar, 2012).

Benefits of E-Governance

The benefits of e-governance in a teacher education sector are improved efficiency, increase in transparency and accountability of educational administrative activities convenient and faster access to services, and lower costs for administrative services. The multi-faceted benefits of e-governance can be described as under these points:

- Increase the efficiency of the various departments and reduces duplication
- Preparation of reports becomes easy and quicker.
- Harassment of the students is reduced.
- Easy online information and submission of forms and payment also becomes almost immediate.
- The management, faculty members, students and administrative staff get connected to each other more easily leading to enhanced efficiency in delivering service by the way of faster dissemination of information that on a very low cost.
- Equal opportunity to access to information is provided regardless of one’s physical location and physical disability thus removing distance barriers.
- Leads to significant reduction of transaction costs, time, space, and manpower (Rajkumar and Ganash, 2014).

The computerization at the university level can be seen in the context of three levels i.e. student, staff, and administration. The management of information among these units is a challenging task which can be easily dealt with computerization.

Benefits for universities/college administration

In order to remove the duplication of procedures, there should be consolidated information about each university and college to track their performance. The tools of e-governance may enable the universities or colleges to submit the documents online for approval. This would greatly reduce the unnecessary duplication of work. Apart from this there may be a number of other services that can be provided with the introduction of such type of governance. Other benefits include:

- Information about the Regulatory bodies under Ministry
- Information about the norms / rules / regulations / deadlines pertaining to courses,
funds etc.

- Information about the courses / syllabi
- Information about the courses been offered in the various government aided and self finance colleges, admission criteria, fee structure, extra-curricular activities being offered in each of the colleges
- Day to day administrative functions
- Budget / accounts / finance / treasury and audit system
- Smart card based system for the students and staff.
- It can be used by the authorized person only (having biometric feature like finger print etc)
- Facilitate electronic information flow/transactions between all the professional institutions and alliedoffices / departments
- Use ICT for efficient administration, cost reduction and timely decision

Benefits for Teacher Educators

- Admission and student details
- Record maintenance
- Recruitment and promotions
- Faculty profile
- Knowledge resources including library for research and academic purposes.
- Activities including seminars / conferences / workshops for professional development of teachers.
- Information regarding the schemes of central Govt.(U.G.C.) like career advancement
- Information related to departmental procedures like G.P.F., pension benefits, V.R.S., retirement benefits etc.
- Information regarding revised pay scales from time to time
- Online grievance redressal etc.

Benefits for Students/Student Teachers

- Admission/enrolment/registration
- Subjects / courses offered along with examination results
- Knowledge regarding online library resources(Digital library)
- Student management system
- Maintenance of time table/attendance
- Online grievance redressal etc.
- On-line availability of teachers/experts through EduSAT

In view of limited resources and revenue, the computerization of teacher education institutions would be more challenging. The digital divide will multiply this challenge in reaching a larger segment of the stakeholders, especially the students. Lack of infrastructure, scarcity of local technical expertise, unnecessary bureaucratic and weak legal supports, makes it more difficult
for TEI’s in India to implement the system of e-governance. Here is a look at some of the major challenges for implementation of e-governance in education.

**Challenges for e-governance**

There are a large number of obstacles in implementation of e-Governance in India. These can be categorized under the following titles: Environmental and Social Challenges, Economical Challenges and Technical Challenges. These challenges are explained below:

*Environmental challenges and social challenges*

People are expected to be able to work, learn, and study whenever and wherever they want to; this in developing world this still not possible. A country’s educational technology infrastructure sits on top of national telecommunications and information technology infrastructures. There is a limited regional infrastructure for the full ICTs integration in education. It is very important for policymakers and planners before any ICT implementation in education to carefully consider the following:

- Appropriate rooms or buildings available to house the technology. In countries where they are many old buildings, ensure proper electrically wiring, heating/cooling and ventilation and also security and safety will be needed.
- Availability of electricity and telephony in most developing countries where there still large areas without a reliable supply of electricity and the nearest telephones are miles away.
- Policymakers should also look at the ubiquity of different types of ICT in the country in general and in the educational system in particular (Mbodila, Jones and Muhandji, 2013).
- Impediments for the Re-Engineering process: Implementation of E-Governance projects requires lots of restructuring in administrative processes, redefining of administrative procedures and formats which finds the resistance in almost all the departments at all the levels.

*Low IT literacy*

Majority of the students entering teacher education institutions and even teacher educators are not IT literate. Most of them are not aware about the usage of Information Technology. So, in India, having such low level of IT literacy, how can a system of e-Governance can be implemented successfully? We can say that IT illiteracy is a major obstacle in implementation of e-Governance in India. So, first of all teachers as well as students must be made aware about the usage of Information Technology.

*Lack of awareness in people*

Most of the students and teachers are not aware of the benefits of e-Governance services. Even the government do not pay much attention to make the people aware about e-Governance activities. Unawareness is a major challenge in the implementation of e-Governance in education.

*User friendliness of government websites*

Users of e-Governance applications are often non-expert users who may not be able to use
the applications in a right manner. Such users need guidance to find the right way to perform their transactions. Therefore, government websites must be user friendly so that more and more people can use them easily. Hence, these websites can be more effective.

**Resistance towards change**

The Resistance towards change phenomenon can explain much of the hesitation that occurs on the part of the constituents in moving from a paper-based to a web-based system to interact with government citizens, employees and businesses can all have their biases with respect to how transactions should be processed. Government entities and public policy administrators cannot ignore the changes that occur as a result of the implementation of the ICT. Education about the value of new system is one step towards reducing some of this struggle.

**Cultural challenges**

Diversities of culture in different part of the world are also challenges in introducing ICT in education. English is the dominant language of the internet.

Research has shown that an estimation of 80% of online content is in English. A large proportion of educational software produced in the world market is in English also. In most countries where English is not the first language this represents a serious barrier in integrating ICTs use in education system. The majority all the websites in the world are in English. This situation limits the information access for some people who has lack or no ability in English language.

**Educational challenges**

One of the greatest challenges in ICT integration in education is balancing educational goals with economic realities. ICTs in education require large capital investments. In term of human resources, the constraints are due to the lack of trained teaching manpower and lack of motivation among educators to adopt and integrate ICT as a tool into their teaching or educational curriculum. Extra effort and time involve in the use of ICTs in education. In some part of the world due to educational background generally there is lack preparedness for students entering higher education in the knowledge and skills required for the basic use of technologies. Still in educational, learning challenges arise in the delivery methods of using ICTs (online-based, blended etc.), content not adapted to the technology and context, limited interaction between students and educators. In general, integrating ICTs use in education requires establishment of infrastructural facilities, acquisition of technologies and their periodic updating, management and professional support services.

**Technical challenges**: There is general lack of technical literacy as well as literacy in countries like India.

**Multimodal Interaction**: Multimodal interaction provides the user with multiple modes of interfacing with a system. An e-Government application can be really effective if its users can access it using different devices

**Privacy and Security**: A critical obstacle in implementing e-Governance is the privacy and security of an individual’s personal data like medical history that he/she provides to obtain government services. With the implementation of e-governance, some effective measures must
betaken to protect the sensitive personal information of the people.

**Tried and tested technologies:** Technology tends to get out of date very fast. Our government or government aided colleges may not be in position to buy new servers every year. So, it is better and safer to use technologies and products which are tried and tested for longer periods of times than using the latest ones.

**Economical Challenges**

**Cost:** In developing countries like India, cost is one of the most important obstacles in the path of implementation of e-Governance. Even the politicians do not have interest in implementing e-Governance. A huge amount of money is involved in implementation, operational and evolutionary maintenance tasks. These costs must be low enough so that to guarantee a good cost/benefit ratio.

**Maintenance of electronic devices:** As the Information Technology changes very fast and it is very difficult for us to update our existing systems very fast. So, maintenance is a key factor for long living systems in a rapidly changing technical environment (Mittal and Kaur, 2013).

**Conclusion**

Thus, the potential of e-governance for management of teacher education institutions is tremendous for quality sustenance. It is essential on the part of central and state government to focus more on overcoming the barriers which becomes obstacles in exploring full potential of e-governance. In this twenty first century most of the operative part of human life and industries have become technology dependent therefore for a teacher education university many functions and management of things of e-governance model are like blessings for its stakeholder at large to receive qualitative, speedy and accurate services for sustenance of quality of teacher education.

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DRASTIC CHANGES MADE IN TEACHER’S EDUCATION COURSES TO MAKE IT MORE QUALITATIVE

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Teachers Education reforms invariably accord highest priority to improve teacher effectiveness. It requires consistent upgradation of teacher education programmes over the last two decades in India. The issue of curriculum renewal and extended duration of secondary stage teacher education has received serious attention. A perusal of the reports of various commissions and committees indicates the preference for longer duration of B.Ed programme.

NCERT is a leading council at the national level, whose main objective is to bring qualitative improvement in school education. Teacher education is a significant part of this school education programme. Along with many other functions, some of the important functions of NCERT in the area of teacher education are to prepare the curriculum for teacher education, to revise teacher education curriculum in accordance with existing needs, to judge the suitability and effectiveness of some new teacher training strategies. After a long term debate and discussion, realizing the insufficiency/ inadequacy of one year B.Ed programme, NCERT introduced two year B.Ed course.

Committee set up by NCERT said extension should be impended in the phases over five years beginning with the academic year 2015-16 and ending in 2019-20.

The Poonam Batra committee also directed teachers education institutes to offer multiple programmes in social science, science, humanities. At present training programmes for teachers for secondary and higher secondary levels are part of University system, those for elementary schools are under state board.

Two year B.Ed programme introduced by NCERT has certain special features/characteristics. It provides greater scope for development of social knowledge on different area i.e. content, knowledge, knowledge on teaching learning methodologies and knowledge of pedagogy of teaching learning among trainee teachers in the content area, develops skills of trainee teachers in content area, It develops among trainee teachers commitments, competence, accountability, dutifulness towards the profession.

NCERT said two year B.Ed programme should include pre-intership twenty days community week programme (10 days in part I and 10 days in part II), B.Ed stage I internships meet community week programme(10 days in part I and 10 days in part II stage (B.Ed Stage) etc are some of the special features of this course. Both the pre-internship and post internship programme are supplemented by many other innovative activities like practice of micro teaching skill in simulated classroom situation, orientation of teachers co-operative school, multicultural placement, Schlandted field experience observation of the lesson taught by the subject teachers, preparation...
use and exhibition of teaching aids conducting action research development of teaching learning materials, analysis of school experiences etc.

As a professional preparation programme, two year B.Ed course has to provide adequate conceptual understanding and perceptions to the actual operational dimension of education. An attempt has been made to provide for both conceptual understanding and practical experiences in inter linked manners. Thus two year B.Ed programme have various merits as

To imbibe, the knowledge and develop understanding of various method and approaches of organizing learning experiencing both cognitive and non cognitive aspects of their behavior.

To improve quality of teachers education the NCTE signed a MOU with national assessment and accreditation council (NAAC) for evaluation of training programme.

To provide knowledge and develop understanding about various aspects of school management

To develop skills required in selection and organizing learning experiences.

It develops sound knowledge bare for trainee-teachers in content areas, develops kills of trainee teachers to be competent enough regarding how to transact the content material to the students of school meaningfully.

It develops among trainee teacher values of commitment competence, accountability, dutifulness etc towards profession.

It intends to bring integrated development of the trainee teacher touching both cognitive and non cognitive aspects of their behavior.

It gives stress on practical activities like internal assessment project work, seasonal works, internship in teaching practice of micro-teaching skills, community works practical works relating to work experience innovative ways for conducting practical activities related to health and physical education, work experience, fieldwork with community etc.

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QUALITY AND EXCELLENCE IN TEACHER EDUCATION: ISSUES & CHALLENGES IN INDIA

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The first five decades after Independence have witnessed major changes in educational policies and in strategies for their implementation. On various occasions and in different contexts, several commissions and committees have reviewed the achievements and attempted to develop a vision for future. It is also widely acknowledge that while achievements in the field of education are appreciable and noticeable, much more needs to be done in terms of the quality and relevance of education. This implies continuous improvement of the quality and orientation of programmes being undertaken for teacher preparation, both at the pre-service and in-service stages. The development of the standard of education is closely connected with the question of teacher education. A teacher should prepare himself for this special task before accepting the responsibility of teaching. The teachers’ training institution helps a lot to do this task. In the education policy the importance of the teachers’ training is admitted for a long time. But in this changeable society how much development in the standard of education has taken place is the context of the present paper. The intent of the present paper is to enhance the teacher education quality in India by focusing on the emerging issues and related concerns. The paper concludes that teacher education system in India calls for revolutionary changes.

Introduction

Education is a dynamic process. It has continued to evolve diversify and extend its reach since the dawn of human history. Every country develops its own system of education to express and promote its unique socio-cultural identity as well as to meet the challenges of the times.

Today teaching is a profession requiring specialization in terms of knowledge and skills. There exists a wide gap between theory and the knowledge and skills of teaching required in the actual classroom curriculum transaction. For this reason, a routine-bound teacher cannot act in accordance with the emerging needs unless he or she is trained and frequently oriented. One of the most important requirements to promote and strengthen education is the training of teachers who are the key resources in the reform, redirection and renewal of education.

The Teacher Education Policy in India has evolved over time and is based on recommendations contained in various Reports of Committees/Commissions on education, the important ones being the Kothari Commission (1966), the Chattopadhyay Committee (1985), the National Policy on Education (NPE 1986/92), Acharya Ramamurthi Committee (1990), Yashpal Committee (1993), and the National Curriculum Framework (NCF, 2005). The Right of Children to Free and Compulsory Education (RTE) Act, 2009, which became operational from 1st April, 2010, has important implications for teacher education in the country.

In spite of adopting so many measures, still various problems of teachers’ training exist.

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The College Teachers, Education Department of University and the Government should give their attention to tackle the problem of teachers’ training. For the development of the standard of education, ideal teachers are necessary and for this there is the need of appropriate teachers’ training.

**Major Problems of the Present System of Teacher Education**

There are many problems and issues plaguing the system of teacher education. Teacher preparation has been a subject of discussion at all levels, from the government, ministries, regulatory bodies, schools, to teachers themselves. Major problems of teacher education are:

- Several types of teacher education institutions thereby lacking in uniformity.
- Poor standards with respect to resources for colleges of education.
- Unhealthy financial condition of the colleges of education.
- Incompetent teacher educators resulting in deficiency of scholars.
- Negative attitude of managements towards development of both human as well as material resources.
- Uniform education policy of the government treating excellent institutions alike.
- Improper selection of the candidates (student teachers) to be admitted.
- Traditional curriculum and teaching methods of teaching in the teacher education programme.
- Inadequate duration of the teacher programme.
- Haphazard and improper organization of teacher education.
- Unplanned and insufficient co-curricular activities.
- Subjective evaluation pattern.
- Practice teaching neither adequate nor properly conducted.
- Feedback mechanisms lacking.
- Objectives of teacher education not understood.
- Secondary level teacher education is not the concern of higher education.
- Lack of dedication towards the profession.
- Lack of occupational perception.

Major issues in teacher education concern the following: Proliferation of colleges of education, Isolation of colleges of education, Regional imbalances, Alternative modes of teacher education, Duration of teacher education programmes, Examination system. Further there are some issues related to the quality of the teacher education: Curriculum, Personal and social skills, Competencies, Subject knowledge, Information and Communications Technology (ICT) skills, Context sensitivity, and new pedagogy for the global world.

In the context of the above noted problems regarding the curriculum of teachers’ education some important planning’s of different undertakings have been adopting since 1971. And according to the changing plan, how different steps regarding pre-service and in-service teacher education were taken in the National Curriculum Framework, 2005 and National Curriculum Framework, 2009. The Chatterjee Commission (1983-84) first took various steps and planning regarding the teacher education and clarified them. This Commission (1984-85) suggested the following measures on pre-service teacher education: effective selection procedures, study of education.
as a discipline, study of four-year integrated course, use of technology in the training of teachers, systematic internship or practice of teaching, restructuring the curriculum, recruitment before teachers’ training where possible, and adequate physical facilities. And this commission gave the opinions regarding in-service teacher education. These are: systematic education should be imparted to the teachers according to their need, priorities for in-service teacher education, teacher education is given importance by the administrative support and teacher education includes the subject regarding school organization.

In reference to this committee many planning were taken in the NCF, 2005. In the NCF, 2009 different planning were taken place: professional development is given much importance in the curriculum of teachers’ education, acquisition of knowledge is given importance and reconstruction is done in the curriculum.

Role of NCERT for Revitalization and Modernization of Pre-service Teacher Education

The NCERT working group, preparing a scheme for revitalization and modernization of pre-service teacher education (NPE 1986) and made the following important recommendations:

1. Admission to the teacher training institutions in a State should be made on the basis of results of a common entrance test given by a State Agency.
2. The teacher-pupil ratio in a teacher training institution should be 1:10, subject to minimum of ten teacher educators. There should be at least one teacher educator in each school subject and at least three in pedagogical subjects. There should be at least two teacher educators in Science methodology; one in Physical Science and one in Biological Science.
3. Every teacher training institution should have a good library with at least 5000 books in all subject areas.
4. There should be a separate laboratory for educational technology where trainees can do practical work for resource material development for teaching different school subjects.
5. Every teacher training institution should have adequate hardware and software in educational technology and trainees should be provided practical work in the educational technology under micro and mini-teaching sessions.
6. Every teacher training institution should provide practical work in games and physical education in groups for at least two hours a week for each group.
7. Every teacher training institution should have facilities for practical work in art, music and other aspects of culture.
8. Every teacher training institution should have facility for organizing practical work in some locally relevant socially useful productive work.
9. The four-year integrated programme of teacher education is a better model of teacher education.
10. The minimum qualifications for a teacher educator in a teacher training college or university department of education in the methodology subject should be Master’s degree in the concerned subject together with Master’s degree in Philosophy, Psychology or Sociology together with Master’s degree in Education and should have
M.Phil. / Ph.D. in Education.

**Role of the District Institute of Education and Training (DIET) in Pre-service Teacher Education**

The district institute of education and training (DIET) is a central government-sponsored institute under the ministry of human resource development, department of elementary education and literacy. These institutes are established as centres of guidance for educational institutes and schools of a district and also work as a platform for research and experimental work in the educational domain. Under this scheme, 120 trainee teachers will be admitted for an annual diploma in education (D. Ed.) course at the institute. The candidates will be from different mediums of instruction - Marathi (50), English (50) and Urdu (20). This D. Ed. programme, which forms a major activity at the DIET, aims to educate teachers working in the field of elementary-level education in accordance with the national policy of education. Under the scheme, teachers who enrol for the programme are provided training under the following heads:

- To develop acquaintance with theories and methodologies of teaching students from Classes I to VII,
- To study subject content as per the curriculum of the State’s elementary education,
- To practice different methods of teaching in actual classroom situations,
- To prepare to be effective teachers to bring about qualitative changes in the overall elementary education,
- To plan educational excursions to historical and other places of interest, in order to make students develop an interest in cultural and historical studies

Role of DIETs in improving in-service education of teachers (The NPE 1986 has visualized that for improving teacher education, a network of DIETs would be formed in the country):

1. Providing pre-service education to prospective elementary teachers.
2. Organising in-service education programmes, for elementary teachers.
3. Training and orientation of heads of institutions in institutional planning and management.
4. Conducting action research and experimental work.

**Role of the National Council of Teacher Education (NCTE) in Teacher Education**

The National Council of Teacher Education (NCTE) suggested some reformations regarding teacher education:

1. Undertaking surveys and studies relating to various aspect of teacher-education and publishing the results.
2. Developing guidelines for general teacher-education programme.
3. Developing norms for various courses or training in teacher-education, including minimum eligibility criterion for admission.
5. Establishing international relations in the area of teacher-education.
6. Preparing programmes for in-service teacher-education for orienting teachers for latest
development.

7. Preventing B.Ed. correspondence courses which are lowering the standard and quality of teacher-education and commercializing the teacher-education.

8. Preparing code of professional ethics for teachers.


10. Developing methodology of teaching and techniques of evaluation procedures, continuing and non-formal education.

11. Improving role of the teacher in social and vocational areas.

Keeping with the view of all these above noted things, the NCF 2005 took the following steps regarding teachers’ education:

1. Meaningful academic planning has to be done in a participatory manner by headmasters and teachers.

2. Monitoring quality must be seen as a process of sustaining interaction with individual schools in terms of teaching-learning processes.

3. Teacher education programmes need to be reformulated and strengthened so that the teacher can be an encouraging, supportive and human facilitator in teaching-learning situations to enable learners (student) to discover their talents, to realize their physical and intellectual potentialities to the fullest, to develop character and desirable social and human values to function as responsible citizens.

4. Reformulated teacher education programmes that place thrust on the active involvement of learners in the process of knowledge construction, multidisciplinary nature of knowledge of teacher education, integration theory and practice dimensions, and engagement with issues and concerns of contemporary Indian society from a critical perspective.

5. Centrality of language proficiency in teacher education and an integrated model of teacher education for strengthening professionalization of teachers assume significance.

6. In-service education needs to become a catalyst for change in school practices.

Conclusion

Teacher education is a difficult assignment, especially at the present stage where teacher education programmes are being delivered by a large number of unaided private teacher education institutions. These institutions are also not sure of their tenure, as in near future; possibility of huge unemployment of trained persons may result in swingeing fall. The surviving institutions can only be helped by appropriate authorities in improving quality of their academic management. This paper suggest an increase in responsibility for teachers but not an increase in authority: teachers are losing decision-making authority in the classroom. This paper also indicates that a positive policy environment and ample support for growth are essential for creating and sustaining teacher quality.

Government and educators will need to understand better the links between schooling and its social and cultural environment, the kind of socialization and informal learning provided to children both before school entry and outside of the classroom and ways to develop more literate and encouraging environments in the family and the community surrounding the school. Although
the task of recruiting for both miscellany and quality seems discouraging, several well- documented and proven long-term strategies exist and but now we should support the creation of a stable pipeline for recruiting more and better qualified, diverse teachers.

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TRENDS AND INNOVATIONS IN TEACHER EDUCATION

Ms. Randeep Kaur* & Ms. Jagdeep Kaur**

Teacher education is a programme that is related to the development of teacher’s proficiency and competence that would enable and empower the teacher to meet the requirements of the profession and face the challenges therein. Development and changes in education have affected teacher education necessitating review and reforms. With the technological advancements and new innovations; new trends are being introduced in the teacher education. Teacher education is crucial to give new generation effective and qualified teachers and to improve pupil achievement.

According to NCTE (1998), teacher is the most important element in any education program. He plays a central role in implementation of educational process at any stage. The level of achievement of learner is determined by teacher competence. So the quality of education basically depends on the quality of teachers. Kothari Commission has very rightly said, “The destiny of India is being shaped in its classroom.” Pre-service teachers are those scholars and teachers who aspire to build their career in the field of teaching. They should be educated in sportive and conducive environment in which they expect to educate and groom young students. Such courses should target to develop social consciousness and reform mind-set among perspective teachers. Pre-service teachers should be able to teach confidently in their domain by using new pedagogical approaches that are appropriate to their specific students’ requirements and also commensurate with the capabilities of students.

Once teachers have a thorough understanding of the teaching content, they would lose that expertise. So knowledge about the subject matter and feeling comfortable in delivery are equally important for good teachers. Sometimes they try to link knowledge in different way while disseminating the information to students while engaging them in effective learning. Today we have competent teachers who have knowledge of resources and techniques that evolve around the use of technology. Technological aid should not be seen as separate tool in learning rather it should be taken as an integral part in effective pedagogical process.

Universities and other technical institutions should prepare teachers for future generation students. They need to be given opportunities to teach in modern classroom. Because that would give them a sense of practical experience related to the teaching theories to handle responsible quality teaching. The other concept is mentoring, where teachers are groomed and mentored by qualified and experienced teachers in their field of specialisation. That means the knowledge that grows over time can be shared between new comers and experts. The mentors could be colleagues, researcher, and retired teachers from reputed universities. They could also be people from industry who are developing new ideas and products. There are unlimited potential to

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support teacher education. This concept can take the teaching level beyond expectations. Innovation is usually understood as the introduction of something new and useful, like introducing new methods, techniques, or practices or new or altered products or services. Schools or teacher education institutions can carry out innovations or experimentation on any aspect of their work related to teaching-learning, training or management of schools in order to improve efficiency of the institution to overcome problems and difficulties, they face in day to day functioning. The present structure of teacher education supported by a network of national, provincial and district level resource institutions working together to enhance the quality and effectiveness of teacher preparation programs at the pre-service level and also through in-service programs for serving teachers throughout the country.

The change brought by technological, economic, and cultural forces in the early twenty first century was very fast. These changes were mostly pronounced in the developed world. But their effect was also apparent in the developing world. Societies across the world were rapidly changing in fundamental ways, especially with regard the availability and easy way to access to digital information and communication technologies. But teachers and their predominant classroom practices rather remained traditional in this era of rapid change. It was content focused, teacher directed and didactic institution focused on content delivery and reproducing the same remained the rule of the pedagogy. Educational curriculums at all levels were very narrowly defined for students in many developing countries in the era of information technology. Formal education experiences such as, high test scores were viewed primarily as instrumental of achieving career goals. The quality of both educators and the teachers whose responsibility was to engage students in pedagogical experiences were singularly defined by higher grades and “policy driven perspective” to measure student’s achievement. Higher grades and good marks in exams were the only criteria to judge student’s competencies.

Preparing students for their complex and increasingly technological futures were probably never been thought in any teaching methodology or policy. That’s why education institutions were still continued to prepare students for a future in which their teachers and administrators were familiar and well conversant. Teachers entering the educational workforce consistently reported minimal preparatory experiences without technological integrated lessons or formal digital literacy development in educational setting. Since teachers tend to teach as they were taught, the instructional workforces were reasonably not prepared to meet the increasingly digital demands of the twenty first century knowledge landscape. Such workforces were not able to meet the digital skill expectations of prospective employer and students as well.

**Use of technology:** Emerging trends in teachers are more content focused with the help of multimedia and other accoutrement. Such emerging teaching trends give an opportunity to perspective teachers to review case studies and examples of teachers who are really cannot control a classroom as well as teachers who turnout and demonstrated how to effectively control a classroom and prepare instruction lessons more valuable. It was found that teachers, who are working out videotapes themselves while imparting knowledge, became more effective in making class more interesting and valuable. Few teachers have gone one more step further to get critique or having a discussion on where one is more effective and ineffective while teaching.

**Collaboration of different universities:** To prepare more teachers to teach in
underdeveloped and developed region a professional collaboration between universities and schools should be created. The seasoned veterans should be groomed and hired and appropriately compensated for this great responsibility they bear. It will not only serve the quality school teaching for the present generation in those communities but also serve as an effective means to help and induct new generation qualified teachers. The best teaching hubs and schools are mostly located in urban areas. Serving youngsters and adults from that community only, such models can also be tried in all interior part of the country propagate quality education amongst the next generation by grooming and hiring seasoned educationists and teaching professionals.

To enable teachers to face challenges: Teachers are seen apprehensive and challenged by the students in the classroom, if they have been through the poor teaching programmes. Such embarrassment could be avoided if the state would be having a policy aligned with the present and future need of the students, where a teacher’s education would be supported by updated curriculum, noble technological aids and modern teaching methodologies. That curriculum will be helpful to develop some particular skills among the teachers which will help them to tackle every type of situations.

Continuing Education: The survey of Member Countries in Asia and the Pacific reveals that continuing education is widely accepted as playing an important role both in individual professional advancement (through lifelong development of vocational capabilities) and in the overall development of the individual. Continuing education can take many diverse forms, such as an up-grading in the knowledge and skills of such professionals as medical practitioners and teachers, functional literacy classes for children and adults, and livelihood skills development programs for out-of-school youth and underemployed or unemployed adults. It involves the development and use of self-learning materials as well as more formal delivery systems. Important trends in this area of activity include the following: establishment of village-reading and learning centers and libraries; development of ‘follow-through’ and bridging courses which consolidate the knowledge and skills acquired during schooling—this being achieved through the use of volunteers and interest groups to facilitate continuing education programs; use of distance learning, with help from print and non-print mass media; development of vocation-oriented programs which prepare students for entry to the work force; and an acceptance that continuing education has an important part to play in the education system, especially in the non-formal sector.

The Economic Factor: It is apparent that there is an increasing emphasis in many countries on relating education to the world of work, this being viewed in a much broader sense than merely preparing individuals for entry to a particular occupation. This reflects the belief that, although education systems need to prepare pupils in practical as well as moral and psychological terms to better enable them to choose socially useful and productive work in industry, science, culture and education, the systems should also cater to the needs of those who are unable to find employment and, at the same time, recognize that an individual’s self-image and sense of social identification are often closely associated with personal participation in the work force. There is also the realization that a country’s economic development will only occur (and be sustained) if a sufficient supply of trained manpower exists; consequently, schools need to be responsive to the changing requirements of economic systems.

Emphasis on practice: There is widespread international consensus that, if countries are
to flourish, if they are to strengthen their economic productivity, and if they are to ensure that all their citizens lead satisfying personal lives, modern societies need, through their educational systems, to cultivate the skills and capabilities of all, so that all can achieve their best potential. That same consensus affirms that the quality of teaching is the most crucial school factor in raising the level of pupil achievement and furthering their education progress. It is therefore clearly vital that communities need to have in place robust ways of selecting students to teacher education, of having teacher education programs that are academically relevant with a systematic focus on clinical practice, and of supporting teachers professionally throughout their careers.

**Practical activity:** Practical activities relating to the world of work which are considered an integral part of the learning process—this enables a suitable balance to be struck between theory and practice; it is aimed at the all-round development of the individual (trends in this area are manifested in such various educational practices as: participation in community development activities; productive work projects, both inside and outside the home, that are specially designed for females; ‘lifeskills’ projects; and programme involvement in such areas as health, nutrition, sanitation, population and environmental conservation; participation in work activities which help strengthen and develop desirable social attitudes, including the value of the work ethic—respect for manual labour, a sense of social identification and participation in national development are some of the benefits referred to by Member States; thus, educational programmes increasingly embody work experience projects, whether on farms, in industrial enterprises or as may involve social development activities.

**Science and technology education:** It is widely agreed throughout the region that there is a need to equip young people with a fundamental knowledge of science and technology which enables them to develop and use appropriate skills in a meaningful way. A multitude of forces have triggered new trends and developments in science and technology education in Member Countries. These include: the need to actively respond to scientific and technological changes which influence the future, and, in so doing, bridge the technological gap that is widening in some Member Countries; the harnessing of science and technology to enable self-reliant and indigenous modes of social and economic development, and make countries less technologically dependent; the acceleration of human resource development programmes to meet manpower needs for modernization and industry; the development of systems which enable a smooth transition to be achieved from primarily agricultural to industry-oriented societies and economies; and the encouragement of scientific modes of thinking which achieve increasing productivity in all fields and at all levels of human endeavour.

In the nutshell, the emerging trends and developments of education identified above all are firmly rooted in the past since they are partly the outcome of what has already occurred in many countries. Perhaps countries in the region should engage in a type of ‘futurology’ exercise in which are identified the developments in education. These changes are helping to broaden the foundation of general education, on the one hand, and integrate formal and non-formal education on the other. Recognition is made of the importance of both primary and secondary level education. Changing programme structures, for instance, may provide for two years of vocational training after general education, or for ‘streaming’ after a general education for career and work contingencies has been provided for. Trends are also evident with regard to the techniques
and criteria used for selection into work-oriented programmes by those involved with vocational aptitude training, and breaking the link between entries to work with other more academic entry requirements.

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Innovation play important role in education. It improves its quality and increase standard. When researches started in education, educationist relies the there should be more innovation. Traditional things will not work in new techno world. Then teacher trained for smart class and new teaching aids. The national policy on education also recognized that teacher should have freedom to innovate, to appreciate methods of communication and activities relevant to the needs, capabilities of community.

Educational and communication technology

Educational and communication technology covers print as well as non-print media, and so there is just as much concern with the production of low-cost printed learning materials for use in schools as there is with the use of television, video and computers. Member Countries, however, tend to stress the importance of non-print media in considerations regarding education and communication technology; similarly, this element will be emphasized here.

New communication technology, especially that which involves computers, television and video, is very much a part of the present technical and social milieu. All countries in the region recognize that it is essential that all children are equipped to cope with this new technology. In education, the use of television has long been one of the accepted means for achieving distance learning at the higher levels of the formal education system. The apparent emerging trend now is for television to also be used for other types of education (such as adult education for rural populations in remote areas). An important limitation of television education programmes transmitted by

Another major trend is the introduction of computer-assisted instruction (CAI) systems into the classroom. However, several important issues regarding the role and function of CAI are yet to be resolved—such as whether CAI should be directed mainly at contributing to educational improvement and quality training, or whether it should be merely an additional device to help familiarize youth with new computer technology. An important concern regarding CAI is how to best go about developing an indigenous capacity in software production; although many schools have the necessary computer hardware, few have adequate locally produced software for their systems.

In many countries the introduction of computers into schools has been uneven in coverage; while many of the private schools and elite public schools have ready access to this valuable new technology, the majority of schools do not. This situation tends to increase the inequalities between schools and their student populations usually along the lines of the socioeconomic status of the groups involved; it also increases the gap in learning outcome levels achieved among student populations.

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Science and Technology Education

It is widely agreed throughout the region that there is a need to equip young people with a fundamental knowledge of science and technology which enables them to develop and use appropriate skills in a meaningful way. A multitude of forces have triggered new trends and developments in science and technology education in Member Countries. These include: the need to actively respond to scientific and technological changes which influence the future and, in so doing, bridge the technological gap that is widening in some Member Countries; the harnessing of science and technology to enable self-reliant and indigenous modes of social and economic development, and make countries less technologically dependent; the acceleration of human resource development programmes to meet manpower needs for modernization and industry; the development of systems which enable a smooth transition to be achieved from primarily agricultural to industry-oriented societies and economies; and the encouragement of scientific modes of thinking which achieve increasing productivity in all fields and at all levels of human Many programmes seek to popularize science and technology at the local level in order to emphasize its relevance and importance. Science education is promoted through the mass media to generate basic science literacy and understanding, and new programmes are attempting to relate science and technology to the real-life needs and interests of people. This wider target group is, in turn, prompting the development of new modes of delivery and innovative programme content and support services to reach out more effectively to a diversifying client group. Education programmes in schools, non-formal education, universities, professional and technical training institutions and public extension services are all involved to varying degrees and at different levels in these new trends in the development of science and technology education in Member Countries. Apart from the governments in countries, agencies in the private sector, community groups, professional organizations and informal associations are increasingly participating in the formulation and implementation of science and technology education programmes and projects. These types of trends are largely responsible for diversifying the structure and curricula offerings of educational institutions. Earlier practices in which the curriculum was drawn up within science itself, with an emphasis on conceptual knowledge, have changed. Newer approaches highlight the social needs and uses of science, a reduced emphasis on book learning, a greater use of the immediate physical environment, and the practical application of science and technology in such areas as health, nutrition, sanitation, population, environment conservation, and resource development and use. Science and technology have become an integral part of the school curriculum up to the end of the secondary cycle, with some general schools even running factories, farms and community projects, which, in turn, yield additional resources. School science is being linked more strongly to everyday situations, to the new technology and to issues in society and the local community. Teaching modalities are moving away from teacher-centred learning to shared learning in classrooms to help create conditions in which teachers and students learn together. Teacher competence is being upgraded to enable the use of computers, the development of problem-solving skills and a creative outlook as regards science. Closer understanding is sought among science curriculum developers, teacher educators and science teachers, with regard to the interaction of science, technology and society in the context of the students’ environment and their abilities to cope with contemporary problems and issues. Outside resource personnel, such as scientists and
engineers, are also contributing to the teaching programmes in schools.

The increasing use of local, low-cost teaching materials, sometimes at the initiative of teachers themselves, has done much to help overcome the shortage of software and reduce the dependence on imported teaching materials. Member Countries are also strengthening delivery systems for adult and out-of-school target groups through such means as: training personnel; mobilizing new sources of expertise and resources; diversifying modalities of delivery through the use of books, posters, television, radio, magazines and correspondence; and increasing community involvement in such crucial areas as health, hygiene, sanitation and nutrition and environment.

One key issue which needs to be addressed is the tendency to associate science and technology with materialism and the concurrent erosion of traditional values. There is a need for education systems to encourage the development of an attitude in students which help ensure that modernization does not necessarily result in the erosion of traditional moral, social and cultural values of a society; students require a balanced perspective regarding both science and technology.

**The Future of Education**

There are many studies and reflections on the future of education in Asia and the Pacific. These raise crucial ideas that might be utilized as building blocks for developing alternative regional future scenarios for education. These depend on the economic, political and socio-cultural contexts of education in different countries, which vary a lot and are factors to reckon with in any consideration of the future of education. The interaction between societal forces and patterns of educational development at the national, community and individual levels are obviously very complex. Some of the main issues that need to be resolved, because of their substantial impact on the development of future scenarios for schooling and teacher education.

**Development and traditional values**

Development is one of the ultimate goals of education for the future. However, development has at least two main aspects: socio-economic development, which is materialistic in nature, and socio-cultural, which is, by and large, concerned with preservation of cherished values and traditions.

**Conclusion**

*Educational innovation* refers to an idea or practice new to a specific educational context that meets unsatisfied needs. It is the introduction or promotion of new ideas and methods that are devised in education and/or school practices which have a substantial effect on changing the existing patterns of behaviour of the group or groups involved. Innovative strategies imply the development of new ideas which are disseminated and utilized; they usually occur in response to particular problems that exist in the education systems of Member States.

*Educational reform* refers to a planned change brought into widespread use for the betterment of an educational system. It is an innovation that is in widespread use throughout a particular education system. *Educational development* refers to educational reforms, innovations or changes that result in the advancement or improvement of education systems. It is an overall, multidimensional and diversified process, essentially endogenous in nature, linked with the values
peculiar to each society and requiring the active participation of individuals and groups who are its agents and beneficiaries. Both educational reform and educational development are types of change. Other important definitions and classifications, adopted and used by Unesco and presented in the International Classification of Education (ICED), are as follows.

References


TEACHER EDUCATION IN CHANGING SCENARIO

Ms. Sandhya Rani*

Quality and excellence in the education sector is one of the major initiatives of the Government of India in its plans. To achieve the outcome of enhanced quality at all levels of education, Govt. of India has been focusing its attention on quality and excellence in higher education and teacher education. Teacher quality has produced voluminous studies that line many a research library. Discussion on what it is, how it is developed, and its connection to student achievement have become the feature of educational slang in the 21st century. These seek to look at teacher quality in a way in which it brings: as a means to review how the terms excellence and quality are shaped by policy, identify how educators perceive teaching quality and to review how quality is cultivated in teachers. Within this scope, this paper provides an overview of teacher education and evaluation in India and lastly we discuss about issues and challenges in teacher education. Several studies related to classroom environment and teacher behavior in selected subjects are referenced. The results from different papers and articles and some interview with teachers from different schools and colleges indicate that some items may be irrelevant in the Indian context while more items may be needed to reflect good teaching in India.

Government of India Organisation Bodies in Teacher Education

Department of Elementary Education & Literacy of the Ministry of Human Resource Development of the Government of India is the apex body that looks after policy for teacher education. Its agencies include:

- National Council for Teacher Education (NCTE)
- National Council of Educational Research and Training (NCERT)
- National University for Educational Planning & Administration (NUEPA).

University Grants Commission (UGC) is also involved with Departments of Teacher Education or Departments of Education in the Universities and Institutions Deemed to be Universities and Colleges of Teacher Education. Besides these, MHRD, there are also other ministries that have institutions which run teacher training programmes. Ministry of Women and Child Development has a large network of training of Anganwadi workers, who take care of pre-school component. At the State level, the apex body that looks after teacher education is the Government Department of Education. In certain States, it is looked after by the Department of School Education. A few States have independent Directorates for Teacher education. In a few others, the Directorate and SCERT function under one Director. The teacher training institutions offering programmes for elementary and pre-school teachers are in many states under the control of the Department of School Education, whereas the teacher training institutions offering degree courses are under the Department of Higher Education. In certain States all teacher education institutions are managed by the State government. In certain other States, majority of teacher

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training institutions are managed by private agencies under self-financed category. At the State levels, there are teacher training institutions being run by the Departments of Tribal Welfare, and other administrative departments. Creation of separate cadre for teacher educators has been an important issue to be solved in many states.

**Meaning of Teacher Education**

Teacher education refers to the policies and procedures designed to equip teachers with the knowledge, attitudes, behaviors, and skills they require to perform their tasks effectively in the school and classroom. In early times, teachers were often scholars or clergymen who had no formal training in how to teach the subjects of their expertise. In fact, many believed that “teachers were born, not made.” It was not until the emergence of pedagogy, the “art and science of teaching,” as an accepted discipline that the training of teachers was considered important. Although there has been continued debate about whether teaching is a “science” that can be taught or whether one is “born” to be a teacher, it has generally been agreed, at least since the nineteenth century, that certain characteristics are needed to qualify a person as a teacher:

**Quality & Excellency in Teaching**

Teacher quality and the strength of educator’s leadership are recognized as the greatest determinants of educational success. Quality teaching has a measurable impact on student outcomes. The teaching profession in India has much to celebrate. Our teachers and academic leaders are having a profound impact on our society. Teacher quality affects all stages of the teaching lifecycle, from attraction into the profession to ongoing development and retention in their own schools. To improve equity in educational outcomes, quality teachers must also work in schools where they are needed most including, remote and disadvantaged schools.

1. **Education quality as exceptionality:** Excellence is the vision that drives education, quality education is education that is exemplary; schools should maximize the pursuit of the highest potential in individual students.

2. **Education quality as consistency:** Equality is the vision that drives education, quality requires equitable experiences, schools and classrooms should provide students with consistent experiences across the system.

3. **Education quality as fitness-for-purpose:** Refinement and perfection in specific subject areas is the vision that shapes the system, quality is seen as preparing students for specific roles, instructional specialization is emphasized.

4. **Education quality as value for money:** Education reflects reasonable correspondence to individual and societal investments; quality is interpreted as the extent to which the system delivers value for money.

5. **Education quality as transformative potential:** Social or personal change is the vision that drives education, quality education is a catalyst for positive changes in individuals and society, education promotes social change.

One way of looking at quality, prevalent in both the research literature and reports of program implementation, concerns the relationship between different “inputs” and a measure of student performance, or “output.” The outputs are usually students results on achievement tests,
assessments, or end-of-cycle examinations. The inputs include a wide variety of factors: infrastructure and resources, quality of teaching environment, textbooks, teacher preparation, teacher salaries, supervision, attitudes and incentives, Educational Institutional climate, curriculum, students physical well-being, and family and socioeconomic context. Another way of looking at quality involves measuring the efficiency of the system. Educational efficiency is measured internally by the rates of completion, dropout, and repetition. Efficiency is also measured externally by looking at the outcomes of education or the productivity of school leavers. This is measured according to, for example, wages or agricultural yields associated with an individual s or a community s level of schooling. This topic/literature has a long history, primarily in educational economics, and has often used quantity of education as a proxy for quality. Studies of efficiency provide necessary information for planners, but this approach has relatively little explanatory power about what creates school quality without an accompanying analysis of the dynamics among the myriad school process factors that encourage students to stay in school and gain valuable knowledge and attitudes while there for studying. A more recently developed way of looking at quality focuses on the content, context, and relevance of education. This approach to quality focuses on process within the educational institutions and classroom and relationships between the educators and the surrounding community. Greater attention is given to the ways in which inputs interact at the Institutional level to shape quality of learning, defined as the elements of knowledge and character that a society values in young peoples.

**Issues and Challenges in Teacher Education**

An immense writing has appeared on educational quality in recent years, examining factors that help improve education and proposing ways to promote better learning in schools. The issue of quality has become critical in many countries. In countries like India where with constrained resources, the successful effort to increase access to basic education has often led to declining quality of education. In a search for the factors that promote quality, countries programs as well as the literature increasingly emphasize teachers, schools, societies and communities as the engines of quality, with teacher quality identified a primary focus. The rapid changes in society led to teachers facing new and complex issues, resulting in changes in the area of teacher education. One of the most significant developments was the creation of Special education for children with special needs. For Special education teachers, learning how to effectively convey subject content is as important as learning this information. Special education teachers must be taught how information, especially more advanced and complex subject material, can be effectively taught to students in non-traditional ways. Special education teachers also often are required to study additional aspects of psychology and sociology. Advances in technology have also posed an issue for future educators. Many educators have focused on ways to incorporate technology into the classroom. Television, computers, radio, and other forms of mass media are being utilized in an educational context, often in an attempt to involve the student actively in their own education. Hence, many teacher education programs now include courses both in technology operation and how to use technology for education purposes. With the coming on of distance learning utilizing mobile technologies and the internet understanding of technology or we can say e-learning has become crucial for new teachers in order to keep up with the knowledge and interests of their
students in these delivery systems. The emergence of a networked knowledge economy presents both opportunities and challenges for teacher education. Used effectively, knowledge networks present opportunities for better informed and supported practice by education professionals and more authentic learning by students. The challenges include those identified above and, while much more research and development will be required to answer them. As India’s population or worldwide populations increasing which turn up to increasing demand for new teacher, while poverty, political instability, and other major issues have hindered governments around the world from meeting new educational demands. In some parts of the world, programs have been initiated to draw new talent into teacher educational programs.

**Conclusion**

Teacher education is a difficult assignment, especially at the present stage where teacher education programmes are being delivered by a large number of unaided private teacher education institutions. These institutions are also not sure of their tenure, as in near future; possibility of huge unemployment of trained persons may result in swingeing fall. The surviving institutions can only be helped by appropriate authorities in improving quality of their academic management. This paper suggest an increase in responsibility for teachers but not an increase in authority: teachers are losing decision-making authority in the classroom. This paper also indicates that a positive policy environment and ample support for growth are essential for creating and sustaining teacher quality. Government and educators will need to understand better the links between schooling and its social and cultural environment, the kind of socialization and informal learning provided to children both before school entry and outside of the classroom and ways to develop more literate and encouraging environments in the family and the community surrounding the school. Although the task of recruiting for both miscellany and quality seems discouraging, several well-documented and proven long-term strategies exist and but now we should support the creation of a stable pipeline for recruiting more and better qualified, diverse teachers.

**Reference**

TEACHER EDUCATION IN CHANGING SCENARIO

Ms. Neha Sachdeva*

The landmark passing of the Right of Children to Free and Compulsory Education Act 2009 marks a historic moment for the children of India. Quality is an integral aspect of the RTE Act. It clearly specifies those terms, under which the quality of elementary education is to be ensured, which include a comfortable teacher-student ratio, curriculum reform and improvement in evaluation methods. But the success of these measures largely depends on teachers, and that is where the system is facing problem. While the Act lays down minimum criteria for teacher qualifications, it may be hard to expect quality improvement unless the principles, content and methodologies of pre- and in-service training of teachers are relooked at and changed. In addition to this, there needs to be a tight mechanism to prevent mushrooming of innumerable sub-standard private teacher training colleges and institutes in the country. If the quality of teachers in all our schools needs to improve then there must be profound improvement in a range of related domains in Teacher Education and Professional Development and not just result in more “training programs”. The scope of the effort in this direction needs to be much wider and should include teacher selection, teacher preparation, continuous professional development, continuous academic support and teacher motivation.

The education is the key which allows people to move up in the world, seek better jobs, and ultimately succeed in their lives. It forms the basis for lifelong learning and inspires confidence to face challenges. So education is very important, and none should be deprived of it. Our Government introduced Right to Education Act which describes the modalities of the importance of free and compulsory education for children between 6 and 14 in India an educational institution performs a significant function of providing learning experiences to lead their students from the darkness of ignorance to the light of knowledge. As stated by NCTE (1998) in Quality Concerns in Secondary Teacher Education, The teacher is the most important element in any educational program. It is the teacher who is mainly responsible for implementation of the educational process at any stage. This shows that it is imperative to invest in the preparation of teachers, so that the future of a nation is secure. The importance of competent teachers to the nation’s school system can in no way be overemphasized. The National Curriculum Framework 2005 places demands and expectations on the teacher, which need to be addressed by both initial and continuing teacher education.

Meaning of Teacher Education

It is well known that the quality and extent of learner achievement are determined primarily by teacher competence, sensitivity and teacher motivation. The National Council for Teacher Education has defined teacher education as – A programme of education, research and training of persons to teach from pre-primary to higher education level. Teacher education is a programme

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that is related to the development of teacher proficiency and competence that would enable and empower the teacher to meet the requirements of the profession and face the challenges therein. In 1906-1956, the program of teacher preparation was called teacher training. It prepared teachers as mechanics or technicians. It had narrower goals with its focus being only on skill training. The perspective of teacher education was therefore very narrow and its scope was limited.

Scope of Teacher Education

The scope of teacher education can be understood in the following ways;

- Teacher education at different levels of education.
- Triangular basis of teacher education
- Aspects of teacher education

Teacher Education at different levels of Education

Teacher education reaches teachers at all levels of education, namely Preprimary, Primary, Elementary, Secondary, Higher Secondary and the Tertiary. The needs and requirements of students and education vary at each level. Hence level and stage-specific teacher preparation is essential. Teacher education also helps in the development of teaching skills in teachers of professional institutions. The teachers in professional institutions have only the theoretical and practical knowledge of their respective subjects. They require specialized teacher training inputs to deal with students entering their professions. The knowledge base is adequately specialized and diversified across stages, in order to develop effective processes of preparing entrant teachers for the functions which a teacher is expected to perform at each stage.

Triangular Basis of Teacher Education

Construction of the relevant knowledge base for each stage of education requires a high degree of academic and intellectual understanding of matter related to teacher education at each stage. This involves selection of theoretical knowledge from disciplines cognate to education, namely, psychology, sociology and philosophy, and converting it into forms suitable for teacher education. Teacher education derives its content from the disciplines of Philosophy, Sociology and Psychology. The Philosophical basis provides insights to the student teachers about the implications of the various schools of philosophy, ancient and modern philosophical thoughts, educational thoughts of philosophical thinkers on education and its various aspects such as curriculum construction and discipline. The Sociological basis helps the student teachers to understand the role of society and its dynamics in the educational system of a nation and the world at large. It encompasses the ideals that influence national and international scenes. The Psychological basis helps the student teachers develop insights into students’ psychological make-up. This enables the student teachers to understand their self, their students and the learning situations such that they are able to provide meaningful and relevant learning experiences to their students.

Aspects of Teacher Education

Teacher education is concerned with the aspects such as, who (Teacher Educator), whom (Student teacher), what (Content) and how (Teaching Strategy). Teacher education is dependent
upon the quality of teacher educators. The quality of pedagogical inputs in teacher education programme and their effective utilization for the purpose of preparing prospective teachers depend largely on the professional competence of teacher educators and the ways in which it is utilized for strengthening the teacher education programme.

**Present Scenario of Teacher Education**

The teachers are still following the traditional pattern of making students read chapters and then write some questions from the textbook or the guidebook. Students in all schools use guidebooks suggested by their teachers. Guidebooks have turned out to be reference books for students. Though teachers did not admit of suggesting students to use these guidebooks but in informal talks they submitted that the guidebooks are quite detailed so students are able to understand the topic from these guidebooks better than the textbook. Major issues in teacher education concern the following: Proliferation of colleges of education, Isolation of colleges of education, Regional imbalances, Alternative modes of teacher education, Duration of teacher education programmes, Examination system. Further there are some issues related to the quality of the teacher education: Curriculum, Personal and social skills, Competencies, Subject knowledge, Information and Communications Technology (ICT) skills, Context sensitivity, and new pedagogy for the global world.

**Major Problems of the Present System of Teacher Education**

There are many problems and issues plaguing the system of teacher education. Teacher preparation has been a subject of discussion at all levels, from the government, ministries, regulatory bodies, schools, to teachers themselves. Major problems of teacher education are:

- Several types of teacher education institutions thereby lacking in uniformity.
- Poor standards with respect to resources for colleges of education.
- Unhealthy financial condition of the colleges of education.
- Incompetent teacher educators resulting in deficiency of scholars.
- Negative attitude of managements towards development of both human as well as material resources.
- Uniform education policy of the government treating excellent institutions alike.
- Improper selection of the candidates (student teachers) to be admitted.
- Traditional curriculum and teaching methods of teaching in the teacher education programme.
- Inadequate duration of the teacher programme.
- Haphazard and improper organization of teacher education.
- Unplanned and insufficient co-curricular activities.
- Subjective evaluation pattern.
- Practice teaching neither adequate nor properly conducted.
- Feedback mechanisms lacking.
- Objectives of teacher education not understood.
Secondary level teacher education is not the concern of higher education.
Lack of dedication towards the profession.
Lack of occupational perception.

Conclusions

An educational institution performs a significant function of providing learning experiences to lead their students from the darkness of ignorance to the light of knowledge. As stated by NCTE (1998) in Quality Concerns in Secondary Teacher Education, "The teacher is the most important element in any educational program. It is the teacher who is mainly responsible for implementation of the educational process at any stage. This shows that it is imperative to invest in the preparation of teachers, so that the future of a nation is secure. To conclude, any effective teacher education curriculum calls for systematic task analysis of teachers at various levels and inclusion of relevant contents, which alone can infuse confidence among the prospective teachers to negotiate the school curriculum in classroom. The present teacher education programme is inadequate to meet the challenges of diverse Indian socio-cultural contexts and the paradigm shift envisaged in the NCF 2005.

References


PROFESSIONAL ETHICS IN TEACHER EDUCATION

Ms. Vanika Nagpal*

Education that helps in discrimination between what is right or wrong, proper or improper in thought and action of an individual about an object event or situation may be termed as value education. It develops positive attitude and constructive approach in day to day activities. The purpose of education is to promote a balanced development of physical, mental, emotional, moral, spiritual and social aspects of the individual to produce enlightened citizens of the nation. Various commission and committees since 1948 have recommended value orientation of education. The role of education to promote humanistic outlook, sense of brotherhood and a commitment to ethical and cultural values needs to be emphasized.

Teacher Education

Effective teacher education trainees to develop appropriate skills to work jointly with school principal and to carry out day-to-day effective functioning of the school and to participate in a continuous process of school empowerment. Teacher preparation has become a controversial issue all over the world. Teacher education scenario is like the Bermuda triangle. However necessity of teacher education for improving quality of teaching has universal acceptance. Teaching is an art as well as a science so also teacher training cultural roles and identities of teachers, details of definition of teacher quality and details of teacher training programmers including the nature of practical training vary from one state to another. There are high quality institutions which do not but on sincerity and dedication of an individual to work as a teacher. Sri Aurbindo International centre of education at Pondicherry is one of such institution. Teachers need appropriate knowledge and skill personal characteristics professional prospects and motivation if they are to meet the expectation placed on them.

Professional Ethics in Teacher Education

Teaching is a professional ethics in the sense that the role of teachers are based on a body of knowledge usable skills and a commitment to the tasks professional ethics to ensure irregular renewal of learning for all its members. Absence of such inputs results professional skills. This is equally applicable to teaching profession.

Teaching is the one of the professional ethics in India. A professional ethics have been characteristics of a professional ethics as spelt out by Huggesh are:

Involves Intellectual activities, commands a body of specialized knowledge, requires extended professional preparation, demands continuous in service growth, sets its own standards, exalts service above personal gains and has a strong knit professional organization.

Those who are engaged in a profession also then to come together with some academic and professional interest common problems and common goals etc. Professional ethics also

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follow some regulatory mechanism to ensure that their members do not deviate from the path that they have chosen.

**Why professional Ethics Development is Needed ?**

The initial professional ethics education provided to prospective school teachers aims at developing the basic minimum essential teaching competencies among them. Changing educational concepts innovations in science and technology including educational and communication technology and knowledge revolution bounel to effect teachings learning process as a result of curriculum shulman’s list of seven types of teaching is widely cited

1. Content knowledge latest knowledge of various school subject like science mathematics history ect.
2. General pedagogical knowledge knowledge of principles and strategies for teaching curriculum and class management in general.
3. Curriculum knowledge knowledge of course content teaching learning material and activities etc.
4. Pedagogical content knowledge a special amalgam of content and pedagogy.
5. Knowledge of learners and their characteristics 
6. Knowledge of educational contexts knowledge of the characteristics and effects of groups classroom school district administration communities and culture.
7. Knowledge of educational nds, purposes, values and their philosophical and historical grounds. Professional ethics development is not only of interest to the teachers but also important for school since it helps in improving the functioning of school and realisation of goals and objective for which they have been established thus continuous professional ethics development enables teachers to: Update and upgrade their theoretical and practical knowledge, esquire new competencies and skills, Increase their professional ethics competence and improve their existing competencies related to the various roles and responsibilities that they are expected to perform at school.

**Phases of Professional Ethics Development**

The professional career of teachers comprises mainly two phases pre service (initial training) and in service education.

**Pre-Service Education**

Pre- Service education is an intial stage in the wider process of continuing teacher education. During this phase students who have just completed their gerneral education from colleges and universities are trained for taking up fresh assignment of teaching young ones. In fact it is a stage of laying foundations for teaching assignment which is of a complex nature having different problems at different stages. The aim of pre service teacher education is to prepare teachers with required competencies. The training for prospective teachers would generally include.

1. Up to date knowledge of the subject they are expected to teach.
2. Psychological principles of growth and development and individual differences.
3. General as well as specific teaching methods.
The training also helps prospective teachers develop understanding, skill, interests and attitudes which would enables all round development of children.

**In-Service Education:** The need for more effective pre service education has always been stressed. These have been attempts to improve the content of pre-service teacher education and the modalities for its transaction however the efforts to provide in service education to teachers on a continuous phase has neither been systematic nor extensive. Rapid advancement in various fields of knowledge and continuing evolution of pedagogical theory and practice as well as innovations. The education commission recognized the need for further training of teacher after initial preparation. The NPE 1986 also stresses the need for life long in service education of teachers along with pre service education.

**Conclusion**

Like other professional ethics teachers also need to grow professionally professional ethics development of teachers means broadening the professional competence of teacher i.e. acquiring new knowledge or updating the existing knowledge as well as refining their teaching shapes and reshaping their attitudes in the light of advancements in knowledge and information and communication technologies.
E-Learning is the use of network technologies to facilitate learning, to fastly deliver the subject matter and to create knowledge by anyone, anytime and anywhere. Electronic learning in its literal meaning stands for the type of learning carried out, facilitated or supported by some or the other electronic gadgets, media or resources. It is quite a broader meaning of the term e-learning. Integrating technology into education can help to bring quality education to everyone everywhere - a key goal of the education for all initiative of the 21st century. The sole aim of the technology is advancing and enhancing the classroom training. Learning situation especially to enhance group collaboration among students and instructors. The teacher uses this environment to put problems for students and then guides them through experiences. Learning with the evolution of internal and proliferation of computing device all over and with the progression of time, the tools are going to change.

Introduction

The term e-learning came into regular use around 2000 (Daniel, West and Mackintosh, 2006). e-learning term is ambiguous. It is commonly used but does not have common definition. It has different meanings to different people. Since the term is now in widespread use, it is worth pausing on the variety of meanings given to it. For Wikipedia, “e-learning is a general term that relates to all training that is delivered with the assistance of a computer”. Others deny that the “e” stands for electronic and argue that it stands for concepts like evolving, everywhere, enhanced or extended.

In this sense, e-learning may call for the services of the advanced electronic information and communication media and means like CD-ROMs and DVDs, teleconferencing, video-conferencing and computer based conferencing, e-mail, live chat, surfing on the internet and web browsing, on line reference libraries, video game style simulation customized e-learning courses and web blogs.

However, a question may emerge at this stage - Whether or not we should include the learning possibilities through the recorded audio and video-tapes, CDs and DVDs in the category of e-learning? The question seems to be somewhat puzzling and challenging. The term e-learning has entered the realm of teaching and learning in the similar way as other related terms like email, e-banking, e-booking and e-commerce tend to exist with us in our other walks of life. What seems to be common in the nature, functioning and use of these terms may be summarized as below:

- They all call for the services of the computers, laptops and their technologies in their functioning.
- The use of the Internet services and Web technology is must for their functioning.
Characteristics of E-learning

1. **Empowered by Digital Technology**: e-learning is pedagogy empowered by digital technology.
2. **Computer Enhanced Learning**: E-learning is a term which is used to refer computer enhanced learning.
3. **Technology Enhanced Learning**: e-learning includes all type of technology enhanced learning (TEL), where technology is used to support the learning process.
4. **One Line Learning**: Used of e-learning is generally confined to “One-line learning” carried out through the internet or web-based technology, with no face to face interaction.
5. **More than CBL and CAI**: e-learning conveys broader meaning than the term CBL (Computer Based Learning) and CAI (Computer Assisted Instruction).
6. **More than one-line Learning**: E-learning is broader in its meaning that they conveyed through the simple terms like “one-line earning”
7. **Not Synonymous to Audio-Visual and Multi Media Learning**: e-Learning should not be considered as synonymous to audio-visual learning multi-media learning, distance education or distance learning. Although the audio-visual and multi media technology and distance education programmes are based on the internet and web services provided through the computer, yet these are not identical but complementary.

**Modes of e-learning**
- Online learning of internet
- Offline learning e.g. independent computer, CDs etc.

**Infrastructure of e-education**
In the most basic system, Brihaspati is used. Brishawpati is a web application built using turbine framework. For each course, there are three types of users.

(a) Administrator
(b) Instructor
(c) Students

It provides facilities for uploading, publishing of lessons, management of students, notification system, discussion board and chat system for interaction. All the three types of users need to use only web browser with java script and java support. In this mechanism instructor creates the course notes in Ms-word, Powerpoint, Latex or html.

**Strategies for Online Learning**
e-lecturing, online assignment, online examinations, discussion form, e-mentoring, e-tutoring, e-informal peer interaction, e-structural group activities, e-books, e-lessons and e-journals

**Qualities of e-learning**
Competent and co-operative e-professionals, Interactive and responsible professionals, Assess and improve their quality and Multi-access to e-learning. Sharable across boundaries and libraries, Hyper linking, Downloading / printing
Today the smart class room technology is also a form of e-learning. Students learn through picture show and videos of different concepts. It is especially useful for subject of science and social studies. To adopt e-learning we need skilled teachers in computers as well as creative in teaching.

**Promotion and Arrangement for e-learning in our Educational Institutions**

e-learning and m-learning is the demand of the time. We have to prepare our students and bring suitable modifications and improvements in the prevailing system of our educations.

1. The first and foremost thing that needs to be done is to develop a positive attitude towards the processes and products of e-learning. The students should be made to appreciate the fruits of e-learning.
2. Provide the needed facilities for training and equipping the students and teachers (along with the supporting staff) with the essential technical knowledge and skills related to the operation.
3. Provide proper orientation to the staff and students not only in terms of making them technologically capable for engaging in e-learning but also to have full awareness about all the possible advantages and gains drawn from such ventures.
4. Make provision of the Internet facilities and classroom websites for giving opportunities to the teachers and students to carry out the teaching-learning tasks using the mechanisms of e-learning.

**Advantages of e-Learning**

1. Most of the learners who may not have time and resources for getting access to the traditional class-bound learning experiences may get it now easily at their convenience in the form of e-learning.
2. e-Learning has enough potential to make the education, instruction and learning opportunities provided to the learners adaptable to their needs - mental and skill level - local needs and resources at their hands.
3. It has a unique feature of arranging an access to the same quality of the content that a full time student has. The best of the world’s educational content, treasury of knowledge and the opportunities are available through e-learning to an increasing number of learners especially in the developing and underdeveloped countries.

**ICT and e-Learning with the Conventional Approach of Teaching and Learning**

The e-Learning can provide an opportunity to access literature/information/knowledge related to the curricular areas with fair degree of mobility. A systematic, sustainable system for development related to the adoption of e-learning among the teachers, educators, instructors, content creators needed. The system need to support conventional, innovative and progressive approach.

**Issues related to e-Education, e-Learning Development and e-Content Creation**

1. Lack of awareness, acceptance and motivation towards use of e-Learning in higher education system.
2. India has not developed National Policy on e-Learning therefore country has not made much progress in systematic development of e-Learning.
3. There is lack of financial provision in present budgetary system for development and implementation of e-Learning and e-Content in universities and colleges.
4. Many Universities constituted an IQAC (Internal Quality Assurance Cell), but due to lack of mandatory provisions, it does not fulfill its objectives (Sarkhel, 2006). At institutions level provision for internal quality assurance cell and accreditation by an external agency needed. Setting up NAAC in 1994 was a pioneering effort (Kurup 2013), but all the organizations have not adopted it.

Conclusion

The ICT in education and e-Learning can help us to solve many issues of traditional Educational System, it is a present need and future demand, this is a new trend toward a new culture in the area of teaching and learning. Lack of technology and ICT use in education delivery may make Indian Education system less productive. Integrated learning system with web based notes, video lectures, contents, animations, interactive simulations, wiki, glossaries, quizzes, assignments, solutions, online feedback and online discussions can enhance the quality of content dissemination. In India an integrated policy needed to deal with development and changes related to existing teaching learning practice in higher education system. Effort, coordination and collaboration are very much essential between various related agencies. Some degrees of central planning, integration in various policies programmes are also desirable for ICT implementation and e-Learning development. Based on the above it can be stated that e-Learning is important it can supplement traditional teaching system in India, can fulfill the gap of availability of printed resources. All the stakeholder needs to be involved for development of the national system. At national level duplication of efforts need to be avoided.

References

INNOVATIONS IN TEACHER EDUCATION

Mr. Navjot Singh* & Ms. Kamaljit Kaur*

Now a day’s smart board is being launched in schools to make the student smarter and innovative. According to new thinking of teachers, these are being launched because making the student smarter was not attainable from the old traditional methods of teaching. There are many new methods in teaching are introduced. Such as EDUSAT AND VIRTUAL CLASSROOM. They can help us to making the teaching learning method effective. In India this type of innovation are very helpful to teach us. Now every teacher should know the latest technology that used in daily life. My study will see the impact and utility of new techniques of teaching in teaching learning process.

Education is a powerful weapon to change the world. Technology plays a vital role because the revolution in Information Technology has opened up new horizons for education. Teacher education system is an important vehicle to improve the quality of education as well as quality of teachers and working condition of teachers. In any field without technology there is no scope in present in time. Technology can be used in every field of human life. Everybody should know how to operate upon new technology in present time, globally educational systems are under great pressure to adopt innovative methodology and to integrate new information and communication technologies in the teaching and learning process to impart students with the knowledge and skills they need in the 21st century. A technological technique for professional development of teachers is to provide courses in basic knowledge and skills about technology. Technology is now the bedrock for natural survival and development in a rapidly changing global environment.

Modern Technology of 21st Century: ICT

The term information and communication technology involved in 1970. It is some time known as information technology and information and computing technology or Infocom is some part of Asia.

ICT is defined as anything that allows us to get information, to communicate with each other, or to have an effect on the environment using electronic or digital equipment “Information and communication” using technology. Information processing involves four phases input, process, output and storage in particular IT deals with the use of electronic computers and computers. Software to convert, store, protect, process, transmit and retrieve information.

Information and Communication Technologies

The term information and communication technology that is ICT means to share, to process, to store, create display information by the electronic means the actsives can be carried out through different forms of technology. Like television, videos, DVD, telephone, satellite.

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system, hardware, software and services associated with these technologies, such as video conferencing, interactive whiteboard, email and virtual classroom.

**ICT in Education**

In teaching learning process ICT develops the teaching skills and providing tools for teachers and students. The use of ICT in teaching learning process is very effective. The ICT in education involves the adoption of general components of ICT in teaching learning process.

**Quality in Education or Teacher**

The term quality refers to degree of excellence of a thing quality teacher education is essential for the prospective teachers. It is needed to update their knowledge and skills in the school curriculum and technological change. The quality of teacher depends upon their own education that is popularly known as quality teacher education. Quality teacher education includes quality teacher preparation and quality teacher development two aims of quality teacher training are: quality teacher education in ICT and quality teacher education through ICT.

**Teacher Educator**

Teacher educators are the main pillars of teacher’s education. They train the teacher’s trainees for the future. They can develop the mental ability, personality, critical thinking, character of the pupil teacher with the help of ICT they can create suitable environment for learning. The major objectives of this course are to enable the teacher trainees to effectively use ICT in teaching learning and uses of multimedia for preparing lesson plans.

**Student**

A college student pursing a degree in education who teaches in a classroom under supervision of an experienced, certified teacher is also called as practice teacher. They give us feedback side by side. They enhance teaching skills in us. They increase our teaching abilities.

**Teacher Education in ICT**

ICT is an technique for professional development. ICT provides courses in basic ICT knowledge and skills delivered by experts. It means courses for student educators, in particular software and hardware applications, if we not focuses on ICT then there is no improvement in education. NCTE in its general body meeting held on 17th August 2000, decided “information and communication technology literacy” should be made a compulsory part of B.Ed. courses.

**ICT in Teacher Education**

The ICT provides us preparation program and creating environment for students & activities they gives us sustainable learning experience.

**Social Issues**

The use of ICT in the promotion of a healthy society, understanding moral codes, legal.

**Technical Issues**

Include technical proficiency and the provision of both technical infrastructure and technical support for ICT integration throughout the curriculum. These competencies are developed and
utilized in technology-pedagogy integration in the following four supportive terms – context and culture, leadership and vision, lifelong learning and management of change.

UNESCO planning guide for ICT in teacher education cities three key principles for effectiveness of ICT development in teacher education technology should be infused into the entire teacher education program technology should be introduced in context student teachers should gain experience through innovative technology in teacher education program. These three principles will be a milestone in effectively integrating ICT in teacher education.

Primary Approaches of ICT in Teacher Education

All around the world ICT can be used in various methods, use of ICT within teacher training programs around the world is being approached in a number of ways with varying degrees of success. These approaches were subsequently merged and refined into two primary approaches are required to develop awareness in student educators.

ICT Subject Specified Approaches

From this approach student educators learn how ICT is embedded into own subject area.

Developing 21st Century Skill

In education computer is now used as a super-teaching machine its use in education has been tried as an innovation and it has proved its teaching efficiency in many developed countries.

Nowday’s computers are used as a learning tools for teachers. in present time technology rising workforce and capabilities of men all around the world make 21st century skills. Essentials, here are the some following skills which allow student educators to prepare for career, requiring them to acquire a new knowledge learn new technologies and facilitate rapid process information.

Creativity and critical thinking

- Identification of problems
- Social responsibility and self-direction
- Engage in problems solving and ensure security and safety

In Present Time Role of Educators

ICT provides assistance in improving learning and developing efficiency and competency in teachers. ICT helps to change the role of educators from traditional method to using innovative techniques method of teaching create online learners through videoconferencing, discussion forum, chat etc. With the help of ICT teacher’ & swifter communication presentation of ideas is more effective and relevant ICT can helps the teachers to make his content matter more effective in present time teacher should know all the knowledge of technologies such as ICT teachers are the nation builders of the country. It is the teachers who are required to use the technology to enhance student learning. ICT helps the student to study online. We can get knowledge anywhere from the world in present time there is explosion of knowledge. That affects the everyman so the teacher are to know how to operate the modern technologies. Teacher education programs try to in build the qualities of teachers as well as create innovative teachers.

Advantages of ICT

- Through ICT we can easily gain the knowledge
With the help of ICT we can easily searching the content
We can get guidance with the help of ICT
We can connect all over the universe through ICT
ICT helps the teacher to maintain a high quality of teaching
Teacher can make classroom teaching effective using ICT
The teachers can communicate with their students in any easy, attractive, effective way using ICT
Quick and effective interaction

Limitations
The use of technology in any systems makes the process mechanical
The use of ICT has raised a new type of problem, i.e., problem of secrecy
Sometime ICT leading students to wrong direction
Sometime misleading and incorrect information is passed through ICT
The installation and maintenance of certain hardware and software makes the use of ICT much expensive

Conclusion
Teaching with the help of ICT is more effective than the traditional method of teaching. Because there is less wastage of time, they can help us to know the modern technologies in the world. We can create many new concepts about our teaching skills

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ADOLESCENCE EDUCATION PROGRAMME

Ms. Ramandeep Kaur*

The Council of Boards of School education is the association of all the Boards of school education in India. All states of India have at least one Board of school education dealing with secondary and senior secondary education, examination and prescription of curriculum and teaching - learning materials. Since education in India is on the concurrent list, the state as well as central government is responsible for the management of school education in India. This is why Council of boards has been set up as the central and nodal agency to ensure the collaboration of boards for improvement in the quality of school education. The Ministry of Human Resource Development (MHRD) recognizes the potential of young people and invests in initiatives and partnerships to create and strengthen opportunities for young people to realize better life options. The Adolescence Education Programme (AEP) is an important initiative that aims to empower young people with accurate, age appropriate and culturally relevant information, promote healthy attitudes and develop skills to enable them to respond to real life situations in positive and responsible ways.

Council of Boards of School Education

The Council of Boards of School education is the association of all the Boards of school education in India. All states of India have at least one Board of school education dealing with secondary and senior secondary education, examination and prescription of curriculum and teaching - learning materials. Since education in India is on the concurrent list, the state as well as central government is responsible for the management of school education in India. This is why Council of boards has been set up as the central and nodal agency to ensure the collaboration of boards for improvement in the quality of school education. Council of boards ensures this collaboration through a number of means. For one, it provides a platform for mutual consultation. It organizes periodic meetings of the board officials from all over the country. It also provides academic support to member boards for maintenance and improvement of educational standards through curriculum - planning, developing curriculum, teaching-learning material, evaluation etc. Council of boards is headed by a president with a general secretary as its chief executive. It has six zone chapters, viz. central, western, southern, northern and north eastern. For carrying out its functions council of boards works in close cooperation with the Ministry of Human Resource Development, the government of India. There are more than 127,000 secondary / senior secondary schools in India. If any initiative has to be taken to bring about the changes in the area of curriculum development, teaching/learning process, examination reform, etc, the Board of school education have to provide leadership. Council of Boards of School Education in India provides a common platform for mutual consultation for reinforcing the quality of school education. Council of boards was created in 1979. It is an apex body of all the boards/councils of secondary / senior education in the country. It was registered by CBSE under the Societies Registration Act XXI of 1860 in

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1979 to provide academic support to its member-boards on setting and maintenance of educational standards, curriculum planning, developing curriculum material, evaluation etc. In fact, the main objective of COBSE is to take steps to improve the quality of school education in collaboration with its member-boards. Council of boards provides academic support to its member Boards on:

1. Setting and maintenance of educational standards.
2. Curriculum planning
3. Preparation of Curriculum materials and transaction
4. Evaluation in Schools
5. Public examinations

Adolescence

India is home to 253 million adolescents; young people in the age group of 10-19 years who comprise 21% of the country’s population. Not only does this cohort represent India’s future in the economic realm, but its experience, attitudes and behaviours will largely determine whether India is able to realize the vision of an equitable civil society envisaged in its constitution. Sixty one percent boys and 53% girls in the age group of 15-19 are enrolled in schools and these numbers are likely to increase making schools important spaces for reaching out to adolescents. In school settings, students not only acquire knowledge but also imbibe values, develop an understanding of social norms that finally influence their behaviours. School education also plays an important role in reinforcing or challenging stereotypes among young people. School-based interventions are feasible and cost effective as school going adolescents are easily accessible. Importantly, schools also have a social standing and recognition as institutions of learning. Hence, any intervention implemented through schools has enhanced credibility and acceptability.

Need for Adolescence Education

Adolescence Education (AE) has been conceptualised as an educational response to the need for support, encouragement, clarifications and information that adolescents often express in order to make sense of their rapidly changing world. Adolescence Education (AE) is guided by the National Curriculum Framework (NCF), 2005 which recommends that education should instil ‘independence of thought and action, sensitivity to others’ well-being and feelings, learning respond to new situations in a flexible and creative manner, predisposition towards participation in democratic processes, and the ability to work towards and contribute to economic processes and social change.’ Based on these principles, AE aims to provide young people with accurate, age appropriate and culturally relevant information; develop skills to enable them to respond to real-life situations effectively.

Objectives of Adolescence Education Programmes

The objective of the AEP is to provide young people with accurate, age appropriate and culturally relevant information; promote healthy attitudes and develop skills to enable them to respond to real-life situations effectively. The following activities will provide opportunities for interactive learning to acquire comprehensive understanding of AEP, its components and strategies for effective implementation. It requires certain special transaction strategies for life skills development in the existing education system. The strategies and methods of curriculum transaction
need to be focused. The traditional methodologies are otherwise also being questioned, notably by National Curriculum Framework (NCF) 2005. Through this program, the learners will be enabled to appreciate new methodologies and develop competencies to use such methods. Learning Objectives: To enable participants to:

- Understand the rationale for Adolescence Education Program as an educational response to the needs and concerns of adolescents;
- Critically analyze the Adolescence Education Program and approaches and strategies of its implementation.
- Appreciate roles and responsibilities of concerned organizations and individuals for attaining the objectives of AEP.
- Understand the need to use innovative methods, which emphasize experiential learning, for appreciate effective co-curricular activities and process of conducting the activities, focused on life skills develop
- To ensure the integration of AE elements into the school curriculum and in teacher education courses. To organize activities for life skills development.
- To help students acquire authentic knowledge about and responsible behaviour towards ARSH issues, including HIV/AIDS and substance abuse.

**Guiding Principles of Adolescence Education**

The guiding principles of Adolescence Education clearly articulate that adolescents should be recognised as a positive and valuable resource that needs to be respected and appreciated rather than being treated as a problem, AEP should contribute towards realising the transformational potential of education and that the programme should enable adolescents to articulate their issues, know their rights, counter, shame and fear, build self-esteem and confidence, and develop ability to take on responsibility for self, relationships and (to an extent) the society around them. The guiding principles also recommend that AEP should influence the entire school curriculum and ethos rather than being a stand-alone program.

- Adolescence is conceptualized as a positive stage of life, full of possibilities and potential. It should not be labeled as problematic and traumatic, and adolescents should not be stereotyped in negative ways.
- AE should recognize and respond to the reality that adolescents are heterogeneous: with diversity in terms of urban/rural, caste, class, religion, cultural beliefs, and so on.
- The educational programme should be participatory, process-oriented and nonjudgmental, not prescriptive, stigmatizing or fear inducing. AE should enable adolescents to understand and negotiate existing and constantly changing lived realities.
- Teachers need to unlearn and learn in order to facilitate the effective transaction of this curricular area. This is relevant in respect of content, attitudes and pedagogical modalities.
- The program should enable adolescents to articulate their issues and know their rights, counter shame and fear, build up self-esteem and self-confidence, and develop ability to take on responsibility for self, relationships and (to an extent) society around them.
Adolescence education should influence the entire school curriculum and ethos, rather than being an isolated, stand-alone component.

The AEP should have inbuilt flexibility - in terms of content and process to be able to respond to dynamic needs of young people

The program should empower young people through participatory, process oriented, non-judgmental approaches that build on the experiences of learners, and provide them with opportunities to think critically, analyze, and infer learning rather than being prescriptive.

Adolescence education should be strongly oriented towards the transformational potential of education, based on principles of equity and social justice, rather than having a status-quo orientation.

**Strategies Adopted by AEP**

In view of the above, the following strategies may be adopted to facilitate the institutionalisation of this curricular area in the content and process of school education and teacher education: Awareness Building:

The first and foremost step is to create a favourable environment for accepting the need to impart adolescence education in schools. Past experience has indicated that in most cases the resistance to adolescence education has been because of the lack of proper appreciation of the needs of adolescents in the changing context and also of this educational area. This requires organization of awareness building activities with a wide variety of stakeholders, including, policy framers, opinion leaders, media persons, curriculum developers, teacher educators, teachers and parents. Judicious and thoughtful utilization of strategies such as increasing use of mass media, particularly electronic media and interactions with media persons will also prove to be useful.

**Integration in the School Curriculum**

Adolescence education can be effectively transacted only when its elements are integrated in the school curriculum. With a view to facilitating effective integration of adolescence education in the content and process of school education, it is necessary that the framework of adolescence education reflects adolescent reproductive and sexual health concerns relevant to various cultural settings comprehensively. The nature of the existing school curriculum will also be a key determinant.

**Use of Co-Curricular Modalities to Promote the Objectives of AE**

The integration of elements of adolescence education in syllabi and textbooks may have to wait till they are revised in due course of time. Furthermore, the schools system throughout the country is not ready to absorb all the components of adolescent concerns in their true spirit. Participatory and experiential learning approaches to actualize life skills development are yet to assume their rightful place in the school curriculum. There is also an overall paucity of teachers and specifically trained teachers in the education departments. In order to address youth concerns expeditiously, the implementation of adolescence education cannot not be postponed until all its elements are integrated in syllabi and textbooks. Therefore, the teaching learning process may be initiated forthwith by utilizing co-curricular modalities. Co-curricular activities, especially
designed for life skills focused adolescence education, may be organized in schools as early as possible. Activities like Question-Box, Group Discussion, Value Clarification, Role Play, Case Study, Painting/Poster Competition, Essay Competition and Quiz Contest may prove very effective in not only providing accurate and adequate information to learners but also inculcating in them positive attitude and more importantly developing the ability to apply the needed life skills.

Major Categories of Program Activities

In order to facilitate the implementation of AEP, the following major categories of activities are conducted:

- **Material Development:** It is essential to develop various types of materials to facilitate integration of adolescence education in the content and process of school education and teacher education. Therefore, curricular, textual and other materials for advocacy, training, co-curricular activities, research and evaluation and monitoring are developed under the Programme.

- **Training:** Since this is an innovative curricular area and contains contents related to sexual development during adolescence that have been a taboo, teacher preparation is a critical element in its transaction in schools. Teachers therefore are being trained through in-service training programmes. To conduct teacher training programs Masters Trainers are trained at the national, state and district levels who in turn train the teachers.

- **Advocacy:** As part of awareness building, advocacy programmes for different target groups are organized by the trained personnel at different levels. Advocacy of parents and local community is mandatory.

- **Organisation of Activities:** As stated above, classroom transaction and organization of co-curricular activities for students is core to the attainment of program objectives. These are to be made an integral part of the school time table.

- **Monitoring and Evaluation:** In order to ensure effective implementation of AEP, it is important to monitor the program at all levels. The program should be monitored at the school, district, state and national levels. Monitoring indicators at input, process and outcome levels will help in tracking the project progress. Monitoring and evaluation are an integral part of the process of institutionalization of adolescence education. All the aspects of evaluation – context evaluation, process evaluation and product evaluation – are equally crucial. The context evaluation may be conducted for identifying needs and requirements of adolescents in different cultural settings and content analyzing syllabi and textbooks in order to identify gaps and suitable entry points for integration of adolescence education elements. Evaluation may be made an integral part of material development, advocacy, training and organization of activities. Suitable designs have to be evolved to evaluate the outcomes of this educational intervention.

Summing Up

Adolescence Education Program is an educational intervention designed to provide information and skills to address concerns of adolescents. AEP enables young person to be equipped with accurate information, knowledge and skills in the content areas of the process of growing up, prevention of HIV/AIDS and prevention of substance abuse. The AEP ensures that schools will provide accurate and age appropriate life skills based adolescence education in a sustained manner to young people. To transact the content of adolescence education effectively,
the following transaction methodologies are being used: role play, situation analysis and case studies, group discussion, brainstorming, value clarification, debate, quiz contest, visualization, presentations and question box and anything else that engages the learners to think, analyze and infer in a participatory, non-judgmental manner.

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With passing time change does come in every field of life. After all, change is law of nature. Today is the era of science. With help of these scientific innovations, where change comes in every field of life, it also affects the education sector deeply. There was a time when the classes were taken in the open, children sitting on mats, studying on chalk boards but now scenario is completely different. Now there are proper classrooms with blackboards, smartboards where live examples regarding the topic can be given on the spot. The change brought by technological, economic, and cultural forces in the early twenty first century was very fast. These changes were mostly pronounced in developed world. But their effect was also apparent in the developing world.

Information technology has a very important role to play twenty first century education. Technology is by far the most popular topic concerning twenty first century learning and education. It is not a solution to a twenty first century education but is simply a tool to aid education and learning and make it a fun and interesting process for the students to learn. It is a great tool for the teachers who can use the power point presentations, videos, images to explain the topic and make their point clear to the students. Animated figures and pictures always catch the fancy of students and videos showing the things practically make the students totally involved in the subject. There can be infinite uses of the computer and of new age technology, but if the teacher themselves are not able to bring it into the classroom and make it work, then it fails. So it is very important for the teachers to learn the new technology, try to implement it properly and venture into this new world of gadgets so that they can guide students who are ‘the future of nation’ more properly and effectively and make them ready for the situations they are going to face in the practical world. Teachers need to integrate technology. Seamlessly into the curriculum instead of viewing it as an add-on, an afterthought, or an event. What is great about this information technology is that the students are required to demonstrate their knowledge of the real world and their ability to understand the nuances in text in their quest to acquire deeper meaning.

Also PowerPoint presentations on different topics available on the net help the teachers to explain their point effectively and also help the students to grab that point and also gain effective knowledge of the subject by the images and visuals shown.

The number one benefit of information technology is that it empowers people to do what they want to do. It lets people be creative. It lets people be productive. It helps people learn things they didn’t think they could learn before, and so in a sense. It is all about potential.

Teachers are seen apprehensive and challenged by the students in the classroom if, they have been through the poor teaching programs. Such embarrassment could be avoided if the state would be having a policy aligned with the present and future need of students, where a teacher’s education would be supported by updated curriculum, novel technological aids and
modern teaching methodologies.

These days almost students know how to use a computer and the internet and most of them are using social media network to share their thoughts and views by which they get a platform to present themselves and give their opinion. Teachers also these days know how to harness the power of the internet and social media to get in touch with the students and hear their thoughts and what they think at personal level.

Recent trends in teachers are more content focused with the help of multimedia and other accouterment. Such emerging teaching trends give an opportunity to a prospective teachers to review case studies and examples of teachers who really can’t control a classroom as well as teachers who then turnaround and demonstrated how to effectively control a classroom and prepare instruction lesson more valuable. It was found that teachers who are working on videotapes of themselves while imparting knowledge, became more effective in making class more interesting and valuable. Some teachers have gone one more step further to get critique or having a discussion on where one is more effective and ineffective while teaching.

The UNESCO World Education Report notes that the new technologies challenge traditional conceptions of both teaching and learning and, by reconfiguring how teachers and learners gain access to knowledge, have the potential to transform teaching and learning processes. ICTs provide an array of powerful tools that may help in transforming the present isolated, teacher-centered and text-bound classrooms into rich, student-focused, interactive knowledge environments. To meet these challenges, schools must embrace the new technologies and appropriate the new ICT tools for learning. They must also move toward the goal of transforming the traditional paradigm of learning. To accomplish this goal requires both a change in the traditional view of the learning process and an understanding of how the new digital technologies can create new learning environments in which students are engaged learners, able to take greater responsibility for their own learning and constructing their own knowledge. Thomas Kuhn suggests that revolutions in science come about when the old theories and methods will not solve new problems. He calls these changes in theory and methods a “paradigm shift.” There is widespread concern that the educational experiences provided in many schools will not prepare students well for the future. Many educators and business and government leaders believe that creating a paradigm shift in views of the learning process, coupled with applications of the new information technologies, and may play an important role in bringing educational systems into alignment with the knowledge-based, information-rich society.

Technology and teaching trends has evolved and changed very rapidly in last few decades. So, future research needs to review various conceptualization, models and reforms agenda in teacher’s education with respect to its geographical and cultural adaptability.

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TRANSFORMING TEACHER EDUCATION

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There are many social, political and economic changes that have transformed the structure of our societies. When our societies have been changed we should also think about to remodel our teaching systems and make them flexible. Education is mainly characterised by compulsory schooling of our primary school children and population of secondary education. The change from a system designed to educate the whole of the youth of our countries, not only increased the numbers of teachers and pupils. It has also brought perplexing problems related to quality. How to achieve high standards of education in these circumstances is an enormous organisational and personal challenge that needs much creative thoughts.

Teaching today is a very different activity as compared to earlier. It is more difficult to deal with mixed ability classes that comprise 100% of the children of the area with all the social and psychological conflicts of our present societies, than it was to teach more or less homogeneous classes of children selected for their academic ability. This, then, was the root cause of the initial disenchantment of many of our teachers. Teaching has changed. Today, more complex teaching activities are evolving to cope with changed classroom circumstances. Some teachers cannot or will not, adopt them as their own.

We find many indicators that influence the situation of teachers in the classroom and refer to the social context in which teaching is carried out.

1. The mass media offer interesting possibilities for learning to young people. Powerful mass information media offer other possibilities of access to knowledge to children and young people. All these media, but especially television and the internet, have revealed enormous power to influence for good or bad. The communication skills of the professional newsreader have raised the standards of young viewers. Pupils now expect their teachers to communicate their subject with the same effectiveness and charm as their favourite programme presenter. Tired teachers who speak with backs towards their pupil while writing on the blackboard compare badly with them. In this way, teachers are being forced to modify their role as communicators of information. Each day it is becoming more common to introduced audiovisual material into classes, either as special educational TV programmes or as pre recorded videos, and the new compact disc interactive computer technology can be of enormous help in improving teaching effectiveness and obtaining pupil participation. Teachers who hope to remain the only classroom source of oral information have already lost the battle. A good TV presentation can motivate children much better than ‘chalk and talk’.

2. There is change in social worth of education. Education system changed from one that aimed to select and educate an elite of highly able children, to one which aims to teach the
entire population of children and adolescents within the age of compulsory schooling. This more diversified system must be very flexible because it aims to offer all children equal opportunities to qualify and progress through the different educational levels according to their individual abilities. However at the same time, the social worth of education has declined, especially in the eyes of pupil parents, because earlier an academic qualification assured social status and economic reward according to the level attained, now the extension of academic qualifications cannot assure social status. In this way, pupil, teachers and parents need to change their expectations of the new system of education. It is absurd in a comprehensive education system to keep the objectives of a system designed to educate an elite. For this reason teachers were obliged to change and become more flexible. It would be unrealistic these days to expect collective achievement similar to that produced by educational systems oriented primarily to create an elite.

3. There is change in the social status of the teacher in a materialistic society. Social attitudes toward teachers is changed. Not many years ago, teachers had high cultural and social status, their knowledge and work was widely recognised and respected. However, society today tends to rank social status in terms of earnings. Knowledge, selfless dedication and vocation count for very little now. Many parents consider that those who choose to be teachers are displaying their inability to make better of themselves’ or to do something else that pays more. Teachers feeling about their salaries are a key component of their collective identity crisis. Today most people dedicate themselves to the pursuit of power and riches. To such minds, teachers are people who lack ability to earn more. When teachers take on board and internalise this materialistic mentality, they soon leave teaching to seek more remunerative occupations.

4. There is also a mismatch between the needs of schools and available resources. Inspite of the fact that the overcrowding of schools has led to an enormous increase in teachers responsibilities, they have not received new resources to meet these associated new obligations, they work under increasingly difficult conditions. Today, quality teaching, where it is found, owes more to the extraordinary dedication of excellent teachers rather than to having optimum working conditions to help them with their heavy taskload. Many of teachers complain openly about the absurd situation in which educational authorities call for methodological renewal, yet at the same time deprive the teachers of the means to carry out the reforms. This frustrating situation inhibits the enthusiasm of the teachers and they become sceptical of educational authorities. They are aware of the additional effort required by the projected reforms and they ask if they are to receive adequate funds to meet their objective of improved teaching quality.

5. The profound changes has been seen in the authority and discipline in the classroom and school. Earlier the teacher had all the privileges and authority, the pupil had duties and could only suffer all kind of humiliation. This was manifestly unjust, but equally unjust is the situation in which pupils verbally, physically or psychologically attack the teachers or their fellow pupils when the arbitration mechanism designed to correct injustice do not function. Human relations in educational centres have changed, today there is more conflict. Many teachers and staff collectives have not yet found satisfactory ways to organise a peaceful social environment that offers respect to everyone: staff and pupil.

6. In the last two decades the work of the teachers has fragmented. Some teachers find
in themselves teaching badly because they cannot attend to all the extra tasks in the time available. In addition to their classroom work, they must attend to different administrative tasks. They must allocate time for planning, pupil evaluation and their in-service teacher training. They must counsel and orientate the students, attend to visiting parents, organise extracurricular activities for the pupils, attend staff meetings and other different types of meetings to discuss coordination, to discuss cycles and levels and then perhaps they have to attend to the security of buildings and materials, supervise dining rooms and pupil recreation periods. Different published research works indicate that teachers lack sufficient time to attend to their responsibilities and this frustrating overload causes exhaustion.

Conclusion

All above described the nature of principal changes in our educational system. They also indicate the principal problems that remain to be resolved by the new projects of educational reform, and particularly by the pre-service and in-service teacher training. Societies change and we need to remodel our programmes of teachers training, preparing new teachers to confront the challenges of future. The arguments presented raises relevant issues to discuss with different answers. We can learn from the problems and solutions presented in order to understand better the transformation of teachers role and subsequent need to transform the teachers training.

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For the progress & development of the nation, society depends on education. Education is the vehicle of social change. Education is the basic investment necessary to improve the overall quality of life of contentment. The social economic, scientific and cultural development and advancement of a country depends on the quality of the people. The quality of the people depends largely on the quality of the education system prevailing in the country. As there saying if you educate a boy you educate individual if you educate a girl you educate the whole family and if you educate a teacher you educate the whole community. Johnson (1965) emphasized the dynamic role of the teachers “we must demand that our schools increase not only the quantity of education.3rs of our school system must be supports by the 3Ts-teachers who are superiors, techniques of instruction and thinking about education, which place it first in all our plans and hopes.” All nations attempt to impart quality education and today when there is virtual explosion of information it is highly essential that teacher education is of the highest quality and standards. For the overall quality education depends to a large extent upon the quality of the teacher education.

Teacher education is that knowledge skill and ability which is relevant to the life of “teacher as a teacher” Teacher education is not teaching the teacher how to teach. It is not to kindle his initiative to keep it alive to minimize the evils of the hit and miss process and to save time energy money and trouble of the teacher and the target. Teacher education is an important area of concern in our educational system. Numerous committees and commissions were established to improve and change the status of teacher education. Development in a country depends greatly on the quality of its teachers. Teachers' education has special value in the emerging society as it contributes directly as well as indirectly to the wealth of a nation. Teacher education programme is an integral part of educational system which is directly link with society. The major factors of quality concern in teacher education are input process and product factors. Input factors involve the entire physical infrastructure such as building equipment, library books, laboratory, playgrounds etc. Besides it includes student’s entry behaviour such as family background, socio-economic status, academic achievement, their interest, need, attitude towards teaching profession. A process is a particular course of action intended to achieve the desired results. Quality lies in its process. Output is the result of process. The outcomes are largely depending upon how effectively the process of training is organized. It involves the procedure of teaching, teaching facilities etc. Good quality inputs coupled with weak processes may not lead to desired outcomes. It includes the instructional strategies and processes. Product factors are the desired outcomes of a given course of instruct. It determines whether objectives of a particular course of instruction are being achieved or not.
Innovations in Teacher Education

Education innovation refers to an idea or practice new to a specific educational context that meets unsatisfied needs. It is the introduction or promotion of new ideas and method that are devised in education and school practices which have substantial effects on changing the existing patterns of behaviour of the group or group involved. The interpretation given to innovation at 1986 Ministerial conference in Singapore was innovation for development in which the process of development was seen as a means of bringing about certain fundamental and pervasive transformations in motivations attitude habits and modes of thought and work in other words if education is not to be relegated to the role of by standard in the development process it should become an active participant in the necessary social changes. Some of the innovations are discussed in the present topic.

Integrated Teacher Education Programme: The four year integrated programme was introduced during the 1960s in NCERT’s four regional colleges of education in Ajmer, Bhubaneswar, Mysore and Bhopal. This programme was designed to prepare secondary school teachers in Sciences and Humanities. The institutions are offering 4-year integrated programme for Elementary Teachers (B.El.Ed). Modular Integrated Teacher Education Programmes on e-learning have also been formulated by some of the institutions.

A number of studies were conducted to examine the effectiveness of these for years integrated programs the key finding is that teachers that emerge from this program our much better than the products of the traditional one year B.Edprogramme the difference in effectiveness is attributed to ‘selection of meritorious students, greater length integrated curriculum along with simultaneous teaching of content and methods of teaching.’

Personalized Teacher Education: Activity based teacher education program originated and institutionalized at the school of education, Devi AhilyaVishwavidyalaya, Indore (1991) was developed at lucknow (1996) some of the features of this program are:

- Choice of volunteers
- Learner centred
- Peer teaching learning evaluation
- Freedom for what to study
- Where to study
- When to study
- How to study
- Successive discussions
- Innovative and holistic masters

Activity-Based Secondary Teacher Education DAVV, Indore: This model has a long history. In this model, teaching is done by the student teachers instead of the teacher educators. Students collectively or individually prepare the topic and make theoretical or activity-based presentations. Teachers educators associated with this programme help the student teachers in identifying learning resources, learning the topic, preparing for presentations and post presentation discussions. Students enjoy the initiative, activism and group. This programme has been running for the last two decades. Its impact has been studied by Passi, Tyagi and Gupta (1992).
Activity-Based Elementary Teacher Education: An Elementary Teacher Education was launched in the District institute of education and Training (DIET), Daryaganj; Delhi. The decision to launch Elementary Teacher Education Programme was taken by the DIET faculty. They introduced it as a self-managed and a self - resourced activity-based elementary teacher training programme. Three guidelines of true teaching as envisioned by Sri Aurobindo were followed:

- The first principle is that can be taught
- The second principle is that mind is consulted in its own growth.
- The third principle is that education works from the near to the far, from what ‘is’ to that which ‘should’ be.

Comprehensive Teacher Education Programme: Gandhi ShikshanBhawan: Gandhi ShikshanBhawan, an affiliated College of Education of Bombay University offers an integrated B.Ed degree programme for Secondary School Teacher since 2000. It provides firsthand experience to a slum community. The main aim is to make student teachers aware of the socio economic, cultural traditions of the poor and backward and its impact on the education and development of children. Teachers are educated to develop the conviction and the professional skills to help the children come out of such adverse conditions.

Such an approach has now become a part of B.Ed degree programmes of all the college of education of Bombay University. On the same line the department of education of JamaiMillia has proposed to incorporate the social context elements into teachers training programme. All these innovations compels one to be convinced that drastic and revolutionary changes are possible and the Gandhi ShikshanBhavan of Bombay and proposed programme of department of education of JamiaMillia Shows the readiness to change the teacher education programme. But only the fully participative processor oriented programme should be adapted and that is the need of the day. That can only change education scenario of Indian education.

A Teacher Education Model Based on Brain Research: Many philosophers and thinkers have suggested a large number of innovative programmes for teacher education. The list of such programme is a big one. A few sample examples of teacher education programmes could be task-based teacher education, problem based teacher education and so on. Likewise, brain-based education is proposed here for consideration to accept it as an innovative programme of education as well as that for teacher education the innovation of brain based learning is proposed on the basis of new researches in the light of learning society, this programme is proposed for capitalizing the natural abilities of the brain.

Holistic Teacher Education (CASE, 2008): The Centre for Advanced Studied in Education (CASE), Vadodara has been strengthening holistic Teacher Education through seminars, research and publications. A research study has been conducted on rehabilitation of street children through holistic Approach.

Some research studies are being conducted on holistic Science Education Program and holistic development through Leisure Time activities. The holistic teacher education programme is quite promising. Some of the features of the programme are: subject knowledge, Inter-disciplinary, Environmental Attitude, Health development, educational development, spiritual development, integrated development
Problem solving in higher education through participatory approach (DAVV, 1992)

The M.C.Ed class (1992), DAVV, Indore was very often given a problem to be solved through a computer program. Number of different programmes would emerge from the entire class. Each program was presented by one of the programmers to the rest of the class and rated by all the students on different criteria, namely, compactness of source code, fetch and execute cycle size, response time, memory used, programming discipline level and programme intelligibility. Also, the students developed programme to calculate kendell’s Coefficient of Concordance through ‘C’ language. They then computed Kendell’s Coefficient of concordance individual criterion wise with respect to the comprehensive criteria. There is a significant cognitive development through cognitively mapping the algorithms and solution to a problem. This approach cuts across students of varied profile, simultaneously. Participatory approach may be introduced in various disciplines to enhance learning in all domains. It facilitates creative production and independent thinking.

Conclusion

To conclude it can be said that the need of hour is open up road of education from its dead end & clear the parts that will lead to the learning the society. It is therefore essential that there is a major i.e. orientation of teacher education to ensure that teaching one furnished with the necessary knowledge & skill to cope with the new demands placed on them. Teacher education needs to be adequately strengthened & upgraded to accommodate the changing role of the teacher so that teachers can effectively address contemporary issues regarding education.

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REFOCUSSING TEACHER EDUCATION: ROLE OF STATUTORY BODIES

Dr. Ashima Bhandari*

The progress of a nation always depends on knowledge acquired through education and its sensible application. For global, national and regional progress quality education is indispensable. To improve the quality of education, teacher education is a significant vehicle. We require quality teachers who are dedicated to teaching and outfitted with essential knowledge, skills and competencies for effective teaching, to deliver excellent education and to fulfill the needs of society. In this age of liberalization, privatization and globalization to enhance the quality of teacher education is very important and challenging task. The assurance of quality has been challenged with the expansion of teacher education institutes. Today, in the knowledge-based society quality management is the basic requirement. In India statutory bodies like NCTE, UGC, NCERT, NUEPA, etc. have given direction to the development of a quality assurance framework and resource material for enhancing and assessing the quality of teacher training institutions. In the present paper, the role of statutory bodies in enhancing the quality of teacher education is discussed.

Teacher education system is an important vehicle to improve the quality of education. Therefore, teacher preparation needs to give more thinking into the different roles a teacher needs to meet. In the current setting, teacher has to become more of a mentor, a partner, or a facilitator to talk to. Teachers have to seek improved ways of teaching by developing new programme and instructional strategies. To put it again, teacher education programmes play a grand role by providing important components of teaching process to the teacher trainees who are directly responsible for producing future citizens to the nation. Hence it is important to develop the teacher education programme, which can provide the changing needs of the society, as the change has been universally accepted as important features of modern life in a society. Hence, a systematic analysis of the recent steps of statutory bodies in professional preparation of teachers and its effectiveness towards a pattern change in Teacher Education in our country need to be understood, keeping in view the several perspectives of the present scenario of the society.

Statutory Bodies in Teacher Education

1. National Council for Teacher Education (NCTE)
2. National Council of Educational Research and Training (NCERT)
3. University Grant Commission (UGC)
4. National University for Educational Planning & Administration (NUEPA).

National Council of Teacher Education (NCTE) : Kothari commission Report (1964-66) criticized Teacher Education Programme being conventional, rigid and away from reality.

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Therefore it expressed the need of establishing National council of Teacher Education in order to improve the standard of Teacher Education. In September 1972, Central Advisory Board in Education accepted the said proposal which was supported by fifth National plan. Thereafter by law, Indian Education Ministry established NCTE on 21st May 1973. NCTE has got independent constitutional status since 1993.

**Objectives:** To work especially towards planned and coordinated development of teacher-education. To improve the standard and functioning of teacher-education.

**Quality Enhancement Initiatives by NCTE**

A series of steps have been initiated by NCTE for raising the quality of pre-service teacher education programme. India, being a country with different states having different perspectives on education, there are several kind of teacher education institutes working; adding to diversity in the field of teacher education. Therefore the major challenge was to bring all institutions to work under a disciplined framework. In order to achieve this the Council formulated the norms and standards for nine teacher education courses that included pre-primary, elementary or primary, secondary, physical and distance education programmes. It is made compulsory for the existing and new institutions to seek NCTE recognition after fulfilling the NCTE norms. Besides this basic effort, there are other efforts which have been introduced by NCTE to bring in and restore the quality in our Teacher Education Programme. Some of these are highlighted below:

1. The recognised Institutions have to submit the performance appraisal report annually. These PAR’s are reviewed by the Regional Committees and take action for withdrawal of recognition in case of violation of norms by the institution. This is always done through the issue of a notice. A notice to the institution sends the right signal for satisfactory performance of the institution in keeping the quality of teacher education.

2. For purpose of bringing the quality of teacher education programme on par with similar programmes in other countries and to meet the essential stage specific requirements the Council develops and periodically revises the curriculum framework for teacher education. Based on this framework, the universities are expected to evolve their own detailed curriculum. It gives a broad frame of reference for local/regional initiatives to design curricula.

3. The NCTE also provides professional support to Teacher Education institutions and Teacher Educators in several other ways. For instance, NCTE has brought out reference reading material on several educationists. Similarly a number of books on related aspects have also been brought out by NCTE. The Council also publishes two biannual professional journals titled ‘Indian Journal of Teacher Education’, and ‘Teacher Support’.

4. In order to empower teacher educators with technology and the associated pedagogic skills, NCTE has renewed its MoU with Intel Teach for undertaking the joint project XPDITTE (X-elerated Professional Development in the Integration of Technology in Teacher Education) for integrating technology in education.

5. The Council is also assisting MHRD in the implementation of RTE Act- 2009 in several ways. As the designated Academic Authority for prescribing qualifications for
elementary teachers, the Council in consultation with MHRD has set the qualifications for the teachers.

Further, expert groups have developed guidelines for State Teacher Eligibility Test and Code of Professional Ethics for Teachers.

**National Council of Educational Research and Training (NCERT):**

**Establishment:** Ministry of Education of Indian Government established NCERT in 1961. NCERT is an autonomous - organization, working as an academic wing of the Ministry of Education. It assists the said ministry in the formulation and implementation of its policies and programmes in the field of Education. It is expected to encourage student teachers and teacher educators to conduct educational research. In order to fulfill these main objectives, it has established National Institute of Education (NIE) at Delhi and 4 regional colleges of education at Ajmer, Bhopal, Bhubaneswar and Mysore. It also works in collaboration with the departments in the states, the universities and institutes, following objectives of school education. It also maintains close-contact with similar national and international 103 institutions throughout the world. It communicates results of its researches to a common man by publishing books and journals.

**Objectives**

- To launch, organize and strengthen research works in various aspects of education.
- To arrange for pre-service and in-service training at the higher level.
- To publish necessary textbooks, journals and other literature for achieving the objectives.
- To organize extension centers in training institutes with the cooperation of state governments and extend facilities pertaining to new methods and technologies among them.
- To establish a National Institute of Education and manage for the development of research and higher training for educational administrators and teachers.
- To provide guidance and counselling services on a large scale.

**Major Function**

- To monitor the administration of NIE/Regional colleges of Education.
- To undertake aid, promote and co-ordinate research in all branches of education for improving school-education.
- To organize pre-service and in-service education programmes for teachers
- To prepare and publish study material for students and related teacher's handbooks.
- To search talented students for the award of scholarship in science, Technology and social sciences.
- To undertake functions assigned by the Ministry of education (Now HRD) for improving school –education.

**University Grant Commission**

Established by an Act of Parliament in 1956, the main purpose of the UGC is to coordinate, determine and maintain the standards of university education. It provides grants to centrally funded universities and colleges, guidance on curriculum development as well as on the governance
of tertiary institutions. As part of the central government’s efforts to improve higher education in India, the UGC has begun a programme promoting quality and excellence which aims to identify and support the improvement of universities and colleges with the potential for excellence.

**Quality Enhancement Initiatives by UGC**

The main objective of UGC is to work for the coordination, determination, and maintenance of standards of university education in the country. There are three broad goals of the higher education system in the country. These are: to ensure access or expansion (that aims to increase student enrolment), to impart quality or excellence in education and to provide equity to underprivileged sections of the society. UGC is contributing to bring quality in education by strengthening academic and physical infrastructure to achieve excellence in teaching and research, Promoting flexible and effective governance, Enhancing the quality of learning at the undergraduate and postgraduate levels by using a more flexible credit based system and by Promoting networking between like research centres, departments and laboratories around India.

**National Institute of Educational Planning and Administration: (NUEPA/ NIEPA):**

**Functions:** As the highest organization of educational planning and Administration- has the following functions to perform:

- Providing training of educational planning and administration to develop the abilities and competencies in the educational administration as the in-service program.
- Providing training facilities in educational planning and administration at state level and regional level to develop efficiency at their level.
- Integrating educational studies and researches under the area of educational planning and administration and make co ordinations in these activities.
- Encouraging the teachers to solve the problems of educational planning and administration by organizing seminars and workshops.
- Arranging extension programs for new developments and innovations in the area of planning and administration.
- Establishing contact with other countries to understand the developments and innovations of the developed countries.
- Providing guidance at National and State levels in the area of planning and administration.
- Multi –dimensional activities- under extension programs—journal on educational planning and administration and other books are published.
- Review of educational planning and administration of other countries- used to develop our educational system and solve educational problems.
- Orientation programs for educational administrators- provide awareness of new developments in this area.
- Educational research reports are published. The publication unit established the coordination between theory and practice.
- Seminars and workshops are organized and their discussions and results are published.
- Training Institutions for special fields for school and colleges these provide elementary
in special fields like computers, educational technology and fine arts.

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We are living in challenging times as we transition to a new knowledge-based society. Some educational resources are now fully accessible through different media formats via information and communication technologies (ICT) — through Web tools and search engines, including personal websites and those of formal educational institutions, libraries, information centres and civil society organizations (communities, associations, affiliations). There are advances in technology worldwide and hundreds of thousands of new resources published each day on the Internet, i.e., a need of an hour for transforming teacher education in changing scenario. Accordingly, the way we see the world has changed dramatically. This also has a significant impact on education, both in the methods of learning and in the methods of teaching. Teachers feel a need to introduce experiential approaches to teacher education as a means to counter an overly cognitive national curriculum and to address issues of behavior, discipline, and social attitudes. Professional development sessions allowing teacher educators to interact with each other let individuals examine and view his or her own beliefs differently by using thoughts and testimonies from others; such experiences permit individuals to make sense of the world around them which is transformative learning (Cranton & King, 2003). If knowledge creation and transfer is one of the strategies of wealth and prosperity most promising and challenging in the emergence of a knowledge-based society, then the main objective for an organization has to be the discovery, instrumentation, and operationalization of a sustainable cycle of “virtuous value creation” as a side effect of capitalizing on the flow of information and knowledge in the activities produced by the most valuable asset of the organization: its human capital. The capacity for innovation is a recognized indicator of competitive strength and vitality in an organization, and has become extremely valued in a knowledge-based economy (Carrillo, 1998, 2004). In an educational environment, this means valuing and using knowledge produced through the academic community, from courses and teaching materials, art. Conceptually, e-learning is broadly synonymous with instructional technology internet-based training (IBT), flexible learning, web-based training (WBT). In usage, all of these terms appear in articles and reviews; the term “e-learning” is used frequently, but is variously and imprecisely defined and applied. Corresponding with increased access to the Internet, post-secondary institutions: teacher educational colleges need to consider the impact of social media technologies. Social media encompasses a range of contemporary Web-based technologies that facilitate scalable and interactive communication around the creation and exchange of user-generated content. Open access technologies, combined with contemporary shifts in the ownership of ideas in a digital age, may change the way universities view their place in the teacher education courses by refocusing strategic approaches to course development and collaboration.

We are living in challenging times as we transition to a new knowledge-based society. In an teacher educational environment in changing scenario this means valuing and using knowledge
produced through the academic community, from courses and teaching materials, art. Conceptually, e-learning is broadly synonymous with instructional technology, information and communication technology (ICT) in education, Educational Technology, learning technology, multimedia learning, technology-enhanced learning (TEL), computer-based instruction (CBI), m-learning, and digital education. In usage, all of these terms appear in articles and reviews; the term “e-learning” is used frequently, but is variously and imprecisely defined and applied. In changing scenario the Internet has proven to be of great potential to facilitate knowledge dissemination from universities, educational institutions, to promote cultural change towards openness in education, innovative educational strategies to improve and transform learning environments. UNESCO coined the term “Open Educational Resources” (OER) in 2002 to describe open academic content made available through ICT for reference, use and adaptation for educational purposes. According to UNESCO (2011), the potential use of information technologies in education: teacher education is crucial in providing educators in a growing information society with the tools needed to creatively impact the teaching learning process, enabling them to overcome the challenges of a disruptive environment and global progress towards a more demanding knowledge-based society. To move beyond the OER movement of creating and sharing resources, it is important to recognise and properly document the type of knowledge being generated in teacher educational institutions. Teacher Educational institutions aim to provide appropriate mechanisms to encourage knowledge transfer but make a conscious recognition of administrative, technological and legal barriers. It is crucial that policy makers and administrative staff take actions to facilitate knowledge-based strategies, aligned with the mission and vision of organisations, to make possible a real change in the three levels of planning: strategic, tactical and operational. To succeed in building a knowledge-based economy, organisations — including teacher educational institutions — need to recognise their knowledge assets and facilitate a dissemination process through an active local community. One of the thorough mechanisms of intellectual property and copyrights at the moment that the knowledge is generated by the creator. Without the proper legal management of digital objects (like OER), the efforts will be diminished, impacting the further uses of OER. It is estimated that most of the existing teacher educational material available over the Internet is protected by traditional copyright terms and conditions of use, which makes it difficult to share and subsequently make it “open” (Atkins et al. 2007). OER are characterised as open access materials that are available to the public, with no restriction on accessibility and no payment of royalties for educational use. One challenge of OER use in academia is to recognise the value of existing knowledge as it is shared, assimilated and applied to specific needs by other communities in academia. The emergence of “infomediaries” is needed, whose basic goal is to provide a service as aggregators of information, operating as catalogues (Hartman et al. 2000; Skyrme 2001). An infomediary (from the combination of the words “information” and “intermediary”) is a website that gathers and organises large amounts of data (metadata) and acts as a go-between among those who need the information and those who supply the information. Next, there is a dissemination process to different markets. In the case of universities, the faculty is the idoneous community to catalyze change by mobilising knowledge into specific educational practices — for example, by creating new subjects, workshops, learning activities, conferences and other teaching activities. The full idea with Educational Practices is to represent the activities of how institutions, educators
and learners are using it in practice for teaching, learning or research. A good example is the re-use, revision, remixing, redistribution and production of new ways to promote innovative pedagogical techniques and strategies to empower learners on their lifelong learning path. The capacity for innovation in production processes is an indicator of strength and vitality. In academia, innovative production can be exhibited through the creation of courses, instructional materials and learning resources, publication of articles and books, and the development of other educational materials as OER. These materials are becoming popularized in changing scenario, along with other ways of mobilizing faculty to support the use and re-use of technology. In a traditional classroom or online course, learning designers and teacher educators structure the readings, learning resources, lectures and activities of learners. As a result, learning is directed towards clearly articulated goals and outcomes. The teacher educator provides shape and direction to the learning experience by forming groups and providing assessments, assignment focuses or guidelines.

**Mobilisation:** Transference of Academic Content. There is a necessity to deal with uncertainty and provide an effective way to provoke knowledge transfer and to satisfy particular needs of development. It is not enough to share and publish a magnitude of information and it is also not enough to simply facilitate the digital dissemination of knowledge. There is a more demanding need to ease and facilitate the learning and sharing of knowledge through a conscious development of connections, relationships and the flow of information through communities of people (Bennet & Bennet 2007). Knowledge mobilisation is about bringing people and actions together to create value and meaning to satisfy particular needs based on assimilation and application of focused knowledge.

**Conclusion**

In changing scenario a learning environment enriched with technology allows instructors to offer new ways of teaching and reflecting on their teaching practice, empowering students in the development of essential skills in the use of such technology to stimulate the learning process. Learning ways as they can be found in a natural state in digital format and available through electronic media like the Internet facilitates their incorporation into the classroom using ICT to encourage an active role in the teaching-learning process. The following recommendations might assist decision makers in fostering new learning environments to prepare educators in a knowledge-based society: Context-Open access technologies, combined with contemporary shifts in the ownership of ideas in a digital age, may change the way universities view their place in the teacher education market by refocusing strategic approaches to course development and collaboration. There are advances in technology worldwide and hundreds of thousands of new resources published each day on the Internet. Accordingly, the way we see the world has changed dramatically. This also has a significant impact on teacher education, both in the methods of learning and in the methods of teaching i.e it's an need of hour for transforming teacher education in changing scenario as we are in a techno world. If knowledge creation and transfer is one of the strategies of wealth and prosperity most promising and challenging in the emergence of a knowledge-based society, then the main objective for an organisation has to be the discovery, instrumentation and operationalisation of a sustainable cycle of “virtuous value creation” as a side effect of capitalising on the flow of information and knowledge in the activities produced by
the most valuable asset of the organisation: its human capital. The capacity for innovation is a recognised indicator of competitive strength and vitality in an organisation, and has become extremely valued in a knowledge based economy. Open access technologies, combined with contemporary shifts in the ownership of ideas in a digital age, may change the way universities view their place in the teacher education market by refocusing strategic approaches to course development and collaboration in the changing scenario.

References


The Role of Teacher Educators in Changing Scenario

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The author in this paper made an attempt to explain that changing scenario for teachers is important to achieve teaching that is independent of any political, economic, ideological or religious influence in order to preserve students new and multiple ways of deep learning – Our children need interdisciplinary and collaborative educational environments that support them as they explore and inquire, draw critical interpretations from multiple information sources, and interact with local, national, and global experts as they build and apply knowledge and skills.

The role of teacher is often formal and ongoing, carried out at a school or other place of formal education. In many countries, a person who wishes to become a teacher must first obtain specified professional qualifications or credentials from a university or college. These professional qualifications may include the study of pedagogy, the science of teaching. Teachers, like other professionals, may have to continue their education after they qualify, a process known as continuing professional development. Teachers may use a lesson plan to facilitate student learning, providing a course of study which is called the curriculum. A teacher’s role may vary among cultures. Teachers may provide instruction in literacy and numeracy, craftsmanship or vocational training, the arts, religion, civics, community roles, or life skills. A teacher who facilitates education for an individual may also be described as a personal tutor, or, largely historically, a governess. In some countries, formal education can take place through home schooling. Informal learning may be assisted by a teacher occupying a transient or ongoing role, such as a family member, or by anyone with knowledge or skills in the wider community setting. Religious and spiritual teachers, such as gurus, mullas, rabbis, pastors/youth pastors and lamas, may teach religious texts such as the Quran, Torah or Bible.

To be a better teacher: Before one becomes a teacher he should learn skills and gather knowledge for many years and work hard. But there is always a room for learning new things and get more and more knowledge. A teacher should never stop learning while continuing the process of teaching. A teacher educator should tell the future teacher the best way to teach is to learn while teaching. Make improvement in your self by learning more and more new things while teaching. As we know that the learning is never ending process for both teacher and pupil. He should always try to become better than he was yesterday. Hence, by this kind of approach a teacher educator can make a better teacher to the education scenario.

To make learning fun again: We are lifelong learners and we provide learning opportunities for people at every stage of the age spectrum—children, youth, adults and seniors. In order to be effective at this, we must have a variety of tools in our toolbox. One such tool is the effective use...
of learning activities that engage the learner and reinforce key ideas. Sometimes these learning activities may be games. Although many of us like to play games outside the work, some of may think that games are child’s play and not appropriate for working and actual learning. But this is not true games and fun are vital part for learning and teaching. With this, we can create interest in pupils about learning make learning a fun for them.

To inspire students to find a love for reading : You will not hear many students yelling with excitement when you mention that you have some great ideas to get them to read. So we discuss some points to make the pupil to love reading.

Let students see you read: If you are going to encourage your students to read, then you should make sure that you’re leading by example. Instead of grading papers when students are reading silently, read a book. Talk about the book that you are reading with them, and ask them to read before they go to bed.

Allow students to read the whole book before discussing it. Give students the opportunity to read the book before you pull it apart and talk about literary devices. Sometimes when all you do is talk about the plot, setting, or genre, you are taking all the fun and pleasure out of the story. Give students the chance to read it once thoroughly, then you can go chapter by chapter and dissect.

Invite a local author to class. A great way to promote a love of reading is to invite an author to your classroom to discuss their book. This may be just the thing to inspire your students to read or even be an author themselves do someday.

Teach students reading strategies. Many students don’t like to read because it’s hard for them. Teach children reading strategies (i.e. repeated reading) to help them feel confident and read fluently.

Set up a book club. Book clubs and reading groups are a great way for students to socialize and share their thoughts. This interaction makes reading so much more enjoyable, and it enhances their comprehension skills.

Let students choose their own books. Studies have shown that when students choose their own books it will boost their reading ability. Make sure you have an abundance of different genres and themes in your classroom library from which students may choose.

To Create the Ultimate Organized Classroom

A well organized classroom means less stress for you and more time to educate students. Most teachers are already known for being organized, but when was the last you thought about what worked and what didn’t in your classroom. The beginning of the school year is the perfect opportunity to become the ultimate organized teacher. Think of a classroom, where the students take responsibility for their own belongings and where everything has its place. By these tips we can run a classroom properly and process of learning and teaching takes places efficiently. So a teacher educator should stress on the ways to make classroom organized.

To Grade Students Fair and Effectively

The sole purpose of assessment is to help plan instruction around students needs, So each
student achieves their academic goals.

**Steps to Grade Fairly and Accurately**

- Consider grading based only on mastery of material and not on personalities or perceived-effort.
- Avoid competition between students - this may generate animosities and a poor learning environment.
- Do not overemphasize grades. Emphasize learning over grades.
- Keep students informed of their progress throughout the term.
- Clearly state grading policies and procedures on the syllabus and review them with the class on the first or second day.
- Avoid modifying policies during the term.
- Provide plenty of opportunities for assessment. This will avoid unnecessary pressure and allow for some mistakes.
- If many do poorly on an exam, schedule an exam for the following week to retest the class.

**To Sneak Reading into Classroom Activities**

For some children hearing “it's time to read” is like fingers on a chalkboard. This may be because they are reluctant readers and have a hard time, they have no interest in the material they are required to read, or they fear they don’t read as fast as their peers. Whatever the case may be it is our job as teachers to find a way to get our students to read and have a love for reading. So by these methods teacher educator can help pupil teacher face the challenges related to classroom activity.

**To Incorporate Effective Reading Strategies**

Strategies that can be used are...

- Strategies to strengthen your students’ reading comprehension of fiction and nonfiction reading materials
- Ways to use a variety of genres to teach reading comprehension
- How to incorporate before, during and after reading strategies that improve reading comprehension
- Identify and explicitly teach essential reading comprehension skills as part of guided reading
- Incorporate reading comprehension instruction as part of your balanced reading program
- To find creative ways to get students to learn
- Connect what you’re teaching to real life

Choose culturally relevant materials. According to the National Council of Teachers of English, students who do not find representations of their own cultures in texts are likely to lose interest in school-based literacy.

- **Use specific everyday examples**: An easy way to help students feel personally connected to what they’re being taught is to talk about how they can apply the material in real life.
Link routines to learning: Conversely, teachers can promote learning through classroom routines. For instance, a child learning to wash hands during bathroom breaks can also be taught science concepts (body parts, hygiene and disease prevention, water conservation), reading (bathroom signage), antonyms (hot/cold, left/right).

Give Students Choices

Group Students: Breaking the class up in groups increases the likelihood that everyone will contribute to class discussion and problem solving. Poll your students about their working preference, or experiment with breaking them up in different ways. Divide the students in half, place them in small teams of three or four, or divide them up in pairs.

Allow Students to Set the Pace: Let your students choose their own starting point on an assignment, and they’ll stay comfortable and challenged. For example, try giving your students tired math problems, with increasing levels of difficulty. From least to most sophisticated, the tiers could be: determine the surface area of a cube; determine the surface area of a rectangular prism; determine the amount of wrapping paper needed to cover a rectangular box; determine how many cans of paint you’ll need to buy to paint a house with given dimensions. Once students choose a starting point, the teacher can guide them through increasing levels of mastery.

Try Homework Menus. Instead of having all of your students complete the same homework assignment, why not offer a menu of options that tie in with your lesson plan? A little variety and choice go a long way toward relieving the sense of drudgery some students experience when completing their homework.

To create a class website to keep parents and students informed

Classroom websites aren’t anything new, they have been around for years. The difference between creating or maintaining a classroom website ten years ago to now is that today you can do it in a matter of minutes. Years ago creating a website involved a lot of hard work and took someone who had specialized knowledge in computers today, technology has made it so easy that even a child can create a web page. If you are still up and in air and contemplating if you should create a classroom website.

To integrate technology

At this day and age its hard to keep up with technival tools for education. It seems like a new device to help us learn quicker and better comes out every week. With the ever changing technology it can seem like an uphill battle to know what is the best way to integrate the latest technology into your classroom.

Use technology as a topic for a writing assignment

For younger students, have them write a “how-to” piece about using technology in the classroom. It’s a natural process, as young people usually have a higher comfort level with technology than many adults. Tell kids to write a piece instructing someone—maybe a grandparent?— on how to send an email, set up an Ipod, or play a video game. For older kids, have them research the impact that technology has had on a particular time in history or science or include a unit on science fiction and technology in your language arts curriculum.
The Role of Teacher Educators in Changing Scenario

**Give multimedia presentations – or have your students give them**

Live up a traditional lecture by using a PowerPoint presentation that incorporates photographs, diagrams, sound effects, music, or video clips. For high school teachers, consider having your students develop presentations as a review tool before semester exams. Their work may be so good that you will want to use it in future classes!

**References**


Teacher education in India is a basic need of the 21st century. Future of our children depends upon the teachers and their teaching. So there is a need to improve teacher education through an educational process. Teachers should be skillful persons who have full knowledge of content matter. To improve the teacher education, various recent trends are made like aptitude tests, new methods of teaching, teachers training for different levels of schools, training for specialists, research, rejection of absolute parts of syllabus, etc.

The progress of a country depends upon the quality of its teachers, and for this reason teaching is the noblest among all professions. Looking to the developmental history of mankind, we find that each generation has witnessed significant social transformation. Due to these transformations, there have been new shifts in educational processes. This has necessitated corresponding changes in teacher education to maintain its relevance in the next country. Teacher education is a professional preparation in pedagogy of those who want to enter the profession of teaching. Teaching is not everybody’s cup of tea. It is an art and a skill. This skill has to be learned by teachers. This art is developed in teacher education institutions so that would-be teachers can be produced.

In past there was no complication in the society so no need of teacher education was felt. Education was given by the parents and society. But there have been radical changes due to which society becomes complex. So there is a need of teacher training programmes. The quality of education directly relates with the teacher. To improve education, there is a need of efficient teachers and efficient teachers can be produced only with the help of teacher education programs. According to old view “Teachers are born”. Today it is said “Teachers are to be made”.

There are mainly two types of teacher education:

1. Pre-service teacher education: It is for the new entrance to teaching profession. It includes theoretical as well as practical knowledge.
2. In-service teacher education: It is provided to those who are already in service. This aims at improving their professional efficiency through their professional growth.

New Concept of Teacher Education

In recent years, many terms related to school education and the professional preparation of teachers have been replaced by new ones in order to appropriately convey the changes of view points on objectives function and practice of teacher education. Now teacher is an “educator” who keeps his personality in the background in order to help the pupils to be self-directing individuals. Different terms are used in present time which are:

- Competency based teacher education (CBTE): It is a very potential and powerful strategy which is intended to bring radical reform in the field of teacher education.

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Performance based teacher education (PBTE): It has a potentiality to revolutionize the entire field of educational personnel development after knowing the teacher.

Field based teacher education (FBTE): This concept has gained momentum and now it is, more or less a big momentum. It is not only aiming at reforming teacher education in particular but is also revolutionizing the whole education in general.

The CBTE, PBTE and FBTE are considered as mere slogans of modern age.

Teacher Education in 21st Century: Recent Trends

21st century is going on. A lot of technological, social, psychological changes are taking place. It is an age of development. Due to all these changes education system is also changing. The whole system of education is overhauling. The new features of education and present status of teacher education forms a partial but significant basis for working out some new guidelines for the next centuries. These guidelines are general and may not apply to all levels of education but these can help to work in detail on different levels.

- **Teacher’s training for pre-primary schools:** In this type, high school or junior high school passed persons are trained for teaching in pre-primary school such as nursery, kindergarten and Montessori. For the training of pre-primary school teachers, the central government has established Indian Education Committee.

- **Various methods of teaching:** In recent years, various methods of teaching are included like play way method, problem solving method, simple to complex, general to particular, inductive-deductive method, lecture demonstration method, whole to part, heuristic method, discussion method, etc.

- **Teacher’s training for primary school:** After achievement of independence, basic education pattern was accepted as national policy for primary education.

- **Teacher’s training for junior high schools:** In Jabalpur, Sagar and Nagpur universities, there is one year diploma training course and in Baroda, Gujarat, Bombay, Karnataka and Poona. This course is known as training diploma.

- **Graduate Teacher training for secondary school:** In various states of the country many training colleges are run for preparing teachers of secondary school and inspectors of schools.

- **Training for Specialist:** Under this programme, the teachers are trained for particular subjects, such as music, fine arts, home science etc. Research facilities are also available in these training centers.

- **Post Graduate teacher’s training and research:** This programme is of one year after B.Ed course. This is called M.Ed. This is like pre Ph.D course.

- **Training for lady teachers:** Both men and women receive training in the same college.

- **Two years instead of one year:** B.Ed and M.Ed courses are of two years for the improvement of teacher’s training to produce better teachers.

- **Aptitude test:** For admission to teacher education institution the candidate is required to clear an aptitude test. Through this aptitude of teaching is known.

- **Communication and language:** Teacher education in 21st century should develop good communication skills. Through Hindi, English, regional language.
Computers and information: 21\textsuperscript{st} century is characterized by advancement in science and technology. This development of competence of use of computer, information technology will be more important.

- Rejection of absolute part of syllabus
- **Choice:** The teacher education programme should not be rigidly structured but it must have enough scope for trainee to undertake studies in the area of their own particular interest. This will help to develop the most important aspect of teacher education.

**Conclusion**

On the basis of above review, it is evident that formal, teacher-training programme was introduced in 19\textsuperscript{th} century is most of developed countries, bit in India informal system of teacher training is very old in the Gurukul system of education in the form of monitorial system. While recent trend is to organize teacher-training for pre-primary teachers, in service programmes correspondence education, distance education, orientation courses for college teachers as recommended by national policy of education. Recently vocational teachers training programmes are being encouraged.

**Reference**


ROLE OF ICT IN HIGHER EDUCATION

Ms. Mini Sharma*

This article discusses the Roles of ICT in education. Information communication technologies (ICT) at present are influencing every aspect of human life. They are playing salient roles in work places, business, education, and entertainment. Moreover, many people recognize ICTs as catalysts for change; change in working conditions, handling and exchanging information, teaching methods, learning approaches, scientific research, and in accessing information. Therefore, this review article discusses the roles of ICTs, the promises, limitations and key challenges of integration to education systems.

Higher education systems have grown exponentially in the last five decades to meet the demands of quality education for all. This aspect has further gained momentum due to swift advancements in Information and Communication Technology (ICT). Demand for skilled and competent labour is ever increasing in the contemporary globalised society. In this backdrop, access to quality in higher education for all has emerged as determining factor of economic growth and development. In order to increase the access to higher education and improving its reach to the remotest parts of the country contribution of open and distance learning facilities is on the increase. In addition, it is catering to life-long learning aspirations and that too at affordable cost. The last two decades have witnessed the inclusion of developments in ICTs in higher education systems around the world. Even then the challenge to develop a higher education system that is flexible and dynamic so as to holistically integrate the technology in the management and delivery of learning programmes is daunting. The first section presents briefly the present profile of higher education in India. Role of ICTs in higher education and the areas in which they can be integrated to play prominent role are discussed in the second section. The final section explores the challenges in expanding the role of ICTs for future development in higher education.

Trends in Growth of Higher Education in India

Though higher education is very old in India, modern higher education in India began with the establishment of Hindu College in Calcutta in 1817. By 1855, there were 281 High Schools and 28 Colleges. To regulate them, three universities; Bombay, Calcutta and Madras were established in 1857 by then British Indian Government. The growth continued un-impeded and by 1947, there were 19 universities, 496 colleges with 2,40,000 students. University Education Commission, 1948-49 (popularly known as Radhakrishnan Commission) emphasized the need for setting up an apex body to coordinate the growth and development of education at the tertiary level and maintenance of standards in education. Thus, the University Grants Commission (UGC) came into existence by an Act of Parliament in 1956. In the last five half decades, the growth of

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higher education presents a very impressive picture. There has been commendable quantitative expansion in terms of students’ enrolment, number of teachers, colleges, universities and research degrees.

**Institutions**

At the end of X Plan (31.03.2007), there were 363 Universities (20 Central, 229 State, 109 Deemed and 5 Institutions under Special State Legislature Acts) and 21,170 colleges in the country. At the end of the third year of XI Plan (2009-10), the number of Universities has gone up to 493 (42 Central, 130 Deemed and 316 State Universities and 5 Institution established under Special State Legislature Acts) and the number of Colleges to 31,324, thus registering an increase of 36% in the number Universities and 48% in the case of Colleges in comparison to the figures at the end of X Plan. The type-wise number of universities and colleges as on 03.03.2010 is indicated in the Table 1.

**Table 1: Type-wise number of University/University-Level Institutions and Colleges as on 31.03.2010**

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Type of Institutions</th>
<th>Number of Institutions (As on 31.03.2009)</th>
<th>Number of Institutions (As on 31.03.2010)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Central Universities</td>
<td>40</td>
<td>42</td>
</tr>
<tr>
<td>2</td>
<td>State Universities</td>
<td>231</td>
<td>256</td>
</tr>
<tr>
<td>3</td>
<td>State Private Universities</td>
<td>21</td>
<td>60</td>
</tr>
<tr>
<td>4</td>
<td>Institutions established through State Legislation</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>5</td>
<td>Institutions Deemed to be Universities</td>
<td>128</td>
<td>130</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>425</td>
<td>493</td>
</tr>
<tr>
<td>6</td>
<td>Colleges</td>
<td>25,951</td>
<td>31,234</td>
</tr>
</tbody>
</table>

*Source: Annual Report 2009-10, UGC*

**Students Enrolment**

Enrolment in higher education has registered a steep hike in the last sixty years. During the academic year 2009-10, there had been 146.25 lakhs (provisional) students enrolled in various courses at all levels in universities/colleges and other institutions of higher education as compared to 136.42 lakhs in the previous year, registering an increase of 7.2 percent. Out of 146.25 lakhs, 60.80 lakh had been women students, constituting 41.6 percent. This rapid expansion of higher education, however, hides the story of the severe disparities that prevails in access to higher education across the states. Different states are at different stages of development. There are states wherein the access ratio to higher education is much lower than the national average of about 20%. As against this, there are 14 states wherein the access ratio is higher than the national average. It is evident from the available statistics that of the total enrolment in higher education, 86% students are enrolled in undergraduate programs, 12% in postgraduate programs, 1% in diploma / certificate programs and 1% are enrolled in research programs. It shows a highly skewed picture of higher education. The size of the post graduate education as also that of research is a matter of great concern. The situations of diploma and certificate level programs,
which constitute only 1% of the higher education, leave much to be desired.

**Faculty-wise Enrolment**

The distribution of students, across various faculties, during the academic year 2009-10 had been as under:

Out of the total enrolment of students (146.25 lakhs), 42.01% students had been in the faculty of Arts, followed by 19.30% in Science and 17.83% in Commerce / Management. Thus, 79.14% of the total enrolment had been in the three faculties of Arts, Sciences and Commerce / Management while the remaining 20.86% had been in the professional faculties indicating the highest % in engineering/Technology (10.33%), followed by Medical courses (3.48%), etc. In a country like India, where Agriculture and allied occupations are the main occupations, the enrolment in Agricultural Courses had been just 0.55 percent and in Veterinary Science, it is miniscule 0.14 percent. Thus, it is evident from the faculty-wise distribution of enrolment that the ratio of professional to non-professional enrolment has been 1:4 and hence there is a need for an appropriate policy change which may rationalize and reduce the disparity.

**Research Degrees**

The number of research degrees (Ph.Ds) awarded by various universities decreased from 13,237 in 2007-2008 to 10,781 in 2008-2009, thus registering a decrease of 18.5%. Out of the total number awarded in 2008-2009, the Faculty of Arts had the highest number with 3496 degrees, followed by the faculty of Science with 3317 research degrees. These two faculties together accounted for 63 percent of the total number of research degrees awarded. In the professional faculties, the faculty of Engineering and Technology had topped with as many as 1141 Ph. D degrees, followed by Agriculture faculty with 423 degrees and Education faculty with 403 degrees. It is noted here that there is a decreasing trend in academic research in terms of number of research degrees awarded by the Universities during 2008-2009 as compared to the figures for 2007-2008.

**Growth in Enrolment of Women in Higher Education:** There had been a phenomenal growth in the number of women students enrolled in higher education, since independence. The women enrolment which was less than 10 percent of the total enrolment on the eve of Independence had risen to 41.6 percent in the academic year 2009-2010. The pace of growth has been particularly faster in the last two decades. The number of women enrolled per hundred men registered almost five times in 2009-2010 as compared to 1950-1951. The statistics reveal that out higher education system is so large. However, higher education is featured by many weaknesses today. They include continuation of the legacy of British system, over politicization of the higher education sector, mushrooming of institution, lack of leadership, mismatch between enrolment and infrastructure, overcrowding of classrooms, lack of motivation on the part of teachers and the students, rigidity in subject combinations, inappropriate recruitment policy relating to teachers, implementation of policies without sufficient preparation, poor efficacy of co-curricular and extra-curricular activities, the contradictions between the ruled and the reality, government shirking its responsibility for providing necessary financial support, etc. It is felt that higher education is not yet higher in India.
ICT Enabled Education: An Overview

The Information and Communication Technology (ICT) is an umbrella term that includes any communication device or application, encompassing: radio, television, cellular phones, computer, and network hardware and software, satellite systems and so on, as well as the various services and applications associated with them, such as videoconferencing and distance learning. When such technologies are used for educational purposes, namely to support and improve the learning of students and to develop learning environments, ICT can be considered as a subfield of Educational Technology. ICTs in higher education are being used for developing course material; delivering content and sharing content; communication between learners, teachers and the outside world; creation and delivery of presentation and lectures; academic research; administrative support, student enrolment etc. In the current information society, people have to access knowledge via ICT to keep pace with the latest developments. In such a scenario, education, which always plays a critical role in any economic and social growth of a country, becomes even more important. Education not only increases the productive skills of the individual but also his/her earning power. It gives them a sense of well being as well as capacity to absorb new ideas, increases their social interaction, gives access to improved health and provides several more intangible benefits. The various kinds of ICT products available and having relevance to education, such as teleconferencing, email, audio conferencing, television lessons, radio broadcasts, interactive radio counselling, interactive voice response system, audiocassettes and CD ROMs have been used in education for different purposes (Bhattacharya and Sharma, 2007).

Table 2: The Four Rationales for Introducing ICT in Education

<table>
<thead>
<tr>
<th>Rationale</th>
<th>Basis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Social</td>
<td>Perceived role that technology now plays in society and the need for familiarizing students with technology.</td>
</tr>
<tr>
<td>Vocational</td>
<td>Preparing students for jobs that require skills in technology.</td>
</tr>
<tr>
<td>Catalytic</td>
<td>Utility of technology to improve performance and effectiveness in teaching, management and many other social activities.</td>
</tr>
<tr>
<td>Pedagogical</td>
<td>To utilize technology in enhancing learning, flexibility and efficiency in curriculum delivery.</td>
</tr>
</tbody>
</table>

Today ICTs – including laptops wirelessly connected to the Internet, personal digital assistants, low cost video cameras, and cell phones have become affordable, accessible and integrated in large sections of the society throughout the world. It can restructure organizations, promote collaboration, increase democratic participation of citizens, improve the transparency and responsiveness of governmental agencies, make education and health care more widely available, foster cultural creativity, and enhance the development in social integration. It is only through education and the integration of ICT in education that one teaches students to be participants in the growth process in this era of rapid change. ICT also allows for the creation of digital resources like digital libraries where students, teachers and professionals can access research material and course material from any place at any time (Bhattacharya and Sharma, 2007). Such facilities allow the networking of academics and researchers and hence sharing of scholarly material. This avoids duplication of work. In view of ICT, education can be classified in three main categories:
E-learning, Blended Learning and Distance Learning

**E-Learning** or Electronic learning is a general term used to refer to computer-enhanced learning. It is commonly associated with the field of advanced learning technology (ALT), which deals with both the technologies and associated methodologies in learning using networked and/or multimedia technologies. It is also known as online learning. Distance education provided the base for e-learning’s development. E-learning can be ‘on demand’. It overcomes timing, attendance and travel difficulties. E-learning allows delivery, dialogue and feedback over the internet. It allows mass customization in terms of content and exams. E-education can provide access to the best gurus and the best practices or knowledge available (UNESCO, 2002). It is possible to leverage the online environment to facilitate teaching techniques like role-play across time and distance. It can also facilitate the development of scenarios, which can be rarely witnessed in practice. ICT can play a valuable role to monitor and log the progress of the students across time, place and varied activities. E-learning allows higher participation and greater interaction. It challenges the concept that face-to-face traditional education is superior to it (Bhattacharya and Sharma, 2007). The web and the internet is the core ICTs to spread education through e-learning. The components include e-portfolios, cyber infrastructures, digital libraries and online learning object repositories. All the above components create a digital identity of the student and connect all the stakeholders in the education.

**Blended Learning** is the combination of multiple approaches to learning. It is usually used to define a situation where different delivery methods are combined together to deliver a particular course. These methods may include a mixture of face-to-face learning, self-paced learning and online classrooms.

**Face to face Learning** refers to learning that occurs in a traditional classroom setting where a faculty member delivers instruction to a group of learners. This could include lectures, workshops, presentation, tutoring, conference and much more.

**Self paced Learning** provides the flexibility to learn according to the availability of learners’ own time and pace, it occurs in a variety of ways such as : reading specific chapters from text book, studying course material presented through web-based or CD based course, attending pre-recorded classes or sessions, reading articles referred by faculty member, working on assignments & projects, and searching & browsing the internet

**Online Collaborative Learning** involves interaction between learners and faculty members through the web; this interaction can occur in one of the following modes: Synchronous interaction and Asynchronous interaction. Synchronous, means ‘at the same time’, it involves interacting with a faculty member and other learners via the web in real time using technologies such as virtual classrooms and / or chat rooms. On the other hand, Asynchronous means ‘not at the same time’; it enables learners to interact with their colleagues and faculty member at their own convenience, such as interacting through email.

**Distance Learning**

It is a type of education, where students work on their own at home or at the office and communicate with faculty and other students via e-mail, electronic forums, videoconferencing, chat rooms, instant messaging and other forms of computer-based communication. It is also
known as open learning. Most distance learning programs include a computer based training (CBT) system and communications tools to produce a vital classroom. Because the Internet and World Wide Web are accessible from virtually all computer platforms, they serve as the foundation for many distance learning systems. ICTs also allow for the creation of digital resources like digital libraries where the students, teachers and professionals can access research material and course material from any place at any time. Such facilities allow the networking of academics and researchers and hence sharing of scholarly material and leads to quality enhancement in teaching and learning.

**Role of ICT in Higher Education**

Swift growth of ICTs is taking place all over the world. They have emerged as powerful tools for diffusion of knowledge and information. Their introduction and unprecedented use in the higher education has generated varied response. The opportunities can be categorized as the aspects relating to role of ICT for access and equity in education, their role in pedagogy for quality learning and teaching at higher education level and in inducing innovations in approaches and programmes.

**Role of ICTs in Pedagogy for Quality Teaching Learning**

Another most important dimension of higher education sector influenced by ICT integration is improving quality of teaching-learning. Also, the changes taking place due to globalization and internationalization attach premium to knowledge and information. Therefore, the integration of ICTs would not only help in promoting personal growth but also in developing “knowledge societies”. The call of the hour is the need to provide education for everyone, anywhere, and anytime. Life-long learning has become the driving force to sustain in the contemporary competitive environment. Therefore to strengthen and / or advance this Knowledge-driven growth, new technologies, skills and capabilities are needed. Conventional teaching-learning processes are undergoing a paradigm shift. Focus of instruction is now on education programs/practices that promote competency and performance. Such curricula tends to require access to variety of information sources, information forms and types; student centred learning settings based on information access and inquiry; learning environments centred or problem-centred and inquiry-based activities, authentic settings and examples; and teachers as coaches and mentors rather than content experts (Neeru, 2009). The shift towards development of educational programs is well supported by and encouraged by the emerging instructional technologies. Apart from enhancing student’s learning experience, role of ICTs in capacity building/training of educational personnel has very large potential. National level institutes can provide leadership role in enhancing technical and managerial manpower in different disciplines through ICT networks and collaborations. Technology facilitated learning would result in preparation of staff regarding innovative pedagogic methods, new ways of learning and interacting, easy sharing of new practices among teaching community and result in widening the opportunities for their participation. The capabilities of competent and trained teachers/academic experts can be made available to larger audiences/students through flexible and virtual settings.
Innovative Approaches for Teaching

ICTs have the potential to drive innovative and effective ways of teaching-learning and research. The inclusion of learning tools, easier use of multimedia or simulation tools, easy and almost instant access to data and information in a digital form which allows for computations and data processing generates possibilities which were otherwise not feasible. The possibility to diffuse these innovations and complement the learning content to improve quality in higher education through innovative pedagogic methods is high. The focus on ICTs to back quality research through utilization of rigorous research methodology and in-depth analysis is the call of the hour.

Potential Drawbacks-cum-Challenges to Using ICT in Education

While using ICTs in education has some obvious benefits, ICTs also bring challenges. First is the high cost of acquiring, installing, operating, maintaining and replacing ICTs. While potentially of great importance, the integration of ICTs into teaching is still in its infancy. Introducing ICT systems for teaching in developing countries has a particularly high opportunity cost because installing them is usually more expensive in absolute terms than in industrialized countries whereas, in contrast, alternative investments (e.g. buildings) are relatively less costly (UNESCO, 2009).

The four most common mistakes in introducing ICTs into teaching are i) installing learning technology without reviewing student needs and content availability; ii) imposing technological systems from the top down without involving faculty and students; iii) using inappropriate content from other regions of the world without customizing it appropriately; and iv) producing low quality content that has poor instructional design and is not adapted to the technology in use (UNESCO, 2009). Although ICT offers a whole lot of benefits there are some risks of using ICT in education which have to be mitigated proper mechanisms. They are:

- It may create a digital divide within class as students who are more familiar with ICT will reap more benefits and learn faster than those who are not as technology savvy.

- It may shift the attention from the primary goal of the learning process to developing ICT skill which is the secondary goal.

- It can affect the bonding process between the teacher and the student as ICT becomes a communication tool rather than face to face conversation and thus the transactional distance is increased.

- Also since not all teachers are experts with ICT they may be lax in updating the course content online which can slow down the learning among students.

- The potential of plagiarism is high as student can copy information rather than learning and developing their own skills.

- There is a need for training all stakeholders in ICT.

- The cost of hardware and software can be very high.

Conclusion

The increasing use of information and communication technologies (ICTs) has brought changes to teaching and learning at all levels of higher education systems (HES) leading to quality enhancements. Traditional forms of teaching and learning are increasingly being converted to online and virtual environments. There are endless possibilities with the integration of ICT in
the education system. The use of ICT in education not only improves classroom teaching learning process, but also provides the facility of e-learning. ICT has enhanced distance learning. The teaching community is able to reach remote areas and learners are able to access qualitative learning environment from anywhere and at anytime. It is important that teachers or trainers should be made to adopt technology in their teaching styles to provide pedagogical and educational gains to the learners. Successful implementation of ICT to lead change is more about influencing and empowering teachers and supporting them in their engagement with students in learning rather than acquiring computer skills and obtaining software and equipment. ICT enabled education will ultimately lead to the democratization of education.

References


UNESCO (2002). Open and Distance Learning Trends, Policy and Strategy Considerations, UNESCO.

SEMESTER SYSTEM GOOD OR BAD

Ms. Navjot Kaur* & Ms. Gundeep Kaur*

In the present scenario educational reform is necessary for improving the quality of education. In this regard University Grants Commission gave directions to all the universities and colleges to implement the semester system. Till date our education system follows the yearly formula but now started following semester system. This paper mainly focuses on whether semester system is good or bad. From this paper it is concluded that although semester system has many drawbacks such as biasness, increased workload, anxiety, part learning etc. yet it is successful because it provides opportunity for the students to work continuously throughout whole semester which inculcates regular study habits and motivate students to learn more effectively if implemented properly.

In 2005, University Grants Commission through a directive to all the centralized universities had directed to implement semester system by the end of 2012. The university grants commission order was in consonance with the recommendations of the knowledge commission’s report that wants to revamp education system through the key principles—”expansion, excellence and inclusion.” The academic community is contesting the claims of the government and university authorities to bring about uniformity and enhancing quality of education through semester system in India at various forums, this raised many issues in the academic community whether it is good or bad. Before discussing about the good or bad aspects of semester system we should talk about the concept of semester system. The word semester is derived from the Latin word 'semestris' which mean half yearly or two halves of the year. Semester system divides the syllabus, activities and other course work into two parts of one year. According to Good’s Dictionary of education semester means “Half of an academic year, usually 16 to 18 weeks.” The course which is taught in one year is divided into two halves and examinations are held at the end of the semester. Many universities and colleges implement semester system in place of annual system to bring reform in their educational system.

Semester: Good or Bad

Any system change needs time to show results. Till date educational institutions have been following the format of academic session 10-12 months. This format has many plus points and few drawbacks as well. To overcome these drawbacks and to reform the education system, semester system is introduced. The success of any system can be checked when it is properly implemented and its outcomes are positive. Many studies show that students of higher education have positive attitude towards the semester system because they have to study only the half part of the syllabus. Dr. S. Haseena and Dr. L. K. Reddy, in their study concluded that Post graduate students irrespective of their gender have favorable attitude towards semester system and when
attitude scores of arts and science students were compared, results shows that there is significant
difference between the arts and science students, where science students favor the Semester
system compared to the Arts students. The main benefits of the semester system are as:

- In semester system it becomes easy for the students to understand the whole syllabus
  because it is divided into two parts: one half is completed in first semester and other
  half in second semester.
- In the semester system the mental stress of the students reduced than the annual
  system because students have to learn only half of the content in one semester.
- In the semester system the preparation for the examination becomes easier because
  of half content of theory and practical work.
- Work load on the students and teachers become less because they work continuously
  throughout the whole semester instead at the end of the year. Students and teachers
  are continuously working, so that they need not to worry at the end of session to
  complete their work.
- Semester system inculcates regular study habits because students have to study
  throughout the whole semester but in case of annual system generally students study
  only at the end of session.
- Number of dropouts becomes less as they get time to recover in semester as compared
  to annual system. Because in the semester system they are continuously busy in studies
  and other activities. As a result their academic achievement improves and they get
  less time to engage in anti-social activities which causes their dropout. If the students
  are unable to continue their studies because of some reasons, semester system provides
  flexibility for them and they can complete there semester in the next session.
- Motivation level of students becomes high because they get feedback after 6 months
  instead at the end of the year. This helps in quick and effective learning.
- In less time more learning is achieved in semester system than annual system because
  in semester system students have to study only for six months for any new course but
  in case of annual system they wait for the whole year to learn something new.
- Semester system causes upward mobility of the students because they can clear backlog
  in one or many subjects after moving to the next semester.
- Students get mastery over the subjects because they had to study the whole syllabus
  rather than some selected questions as in case of annual system.
- Evaluation procedure in semester system includes all aspects of student personality
  rather than academic achievement this makes evaluation process more effective.
- Semester system encourages diversification of courses, interest oriented functional
  and utilitarian courses can be provided. There is scope for students to have specialization.
- Because of diversification of courses in the semester system there is comparatively
  lesser number of students in each course hence the semester system provide healthy
  teacher-taught ratio.
- Healthy teacher taught ratio, opportunity for seminars, group discussions, extension
  lectures and conferences clearly reveal that the semester system have been introduced
  by way of qualitative improvement and for better outcomes.
Semester System Good or Bad

- As the semester system provides diversified courses. It provides job opportunities to the unemployed persons who want to become teachers. This brings possibility of more intensive courses in the semester.
- In the semester system preparation for the examination requires less labour hence the students gain confidence.
- In the semester system students work regularly and continuously. Semester system provides opportunities for the development of creativity and various other potentialities. These all are commonly discussed reason for the replacement of the annual system with the semester system.

Sridevi, K. V. (May 2012) made a study to examine the attitude of teacher trainees towards B.Ed. Semester System and study the problems faced by teacher educators in dealing with new semester system along with the analysis of the curriculum of B.Ed Programme (Semester Scheme). The investigator randomly selected a total number of 6 B.Ed colleges for the study that included Government, Private aided and Private unaided schools. Sample comprised 204 teacher trainees for the study. It is found that majority of the teacher trainees have mildly positive and mildly negative attitude. The investigator concluded that new curriculum created a lot of changes without considering the time duration of the course from the data collected through unstructured interviews conducted. These all are commonly discussed reason for the replacement of the annual system with the semester system. In the words of Prof. N. Prabhakara Rao, Vice Chancellor, SV University “The semester system is a very proactive system as it engages both the faculty and the students throughout the year in academic activity. While, in the annual system once the student enters the college he feels free and thinks about studying only during the exam time. Semester system not only involves students more throughout the year but also reduces examination burden. The semester system is the need of hour and a very effective one.” Khan, S.A. (2015) conducted study to investigate the attitude of university students towards semester system and teachers with a specific objective of finding problems faced by students in semester system. 10 focus group discussions were conducted among students in five Universities of Hazara Division of KPK regarding their knowledge and attitudes about semester system and problems they faced due to this system and teacher’s attitude. The key findings were the problems like favoritism, gender biasness, racial biasness, biasedness in marking, relative marking, harassment, using students for personal tasks and authoritarian attitude from teachers’ side and the heavy tasks in less time which are causing stress among students. It was recommended that proper training and monitoring system should be maintained for evaluation of teachers to minimize the corruption in this sacred profession and maximize the optimal functioning. The information gathered in this research can be used to develop training modules for University teachers. These are the some common drawbacks of the semester system. Any system is successful only when it is implemented properly. Other drawbacks that exist in the semester system which doubts the success of the system are as follows:

- In semester system time for learning actually becomes less because all the activities are to be completed in six months which are generally done during whole year.
- Semester system is more costly in fee structure than annual system in universities and colleges.
In semester system guess work is more because students learn selected topic from the syllabus which is already half.

In semester system students get less time to bond with classmates as a result their social interaction to quiet an extent.

In the semester system during evaluation humiliation of students is also seen by means of biasness and nepotism.

It increases anxiety level among students because they are continuously working that increases work load on them.

Work load on students actually increase because they are busy through the whole semester as compared to annual system.

In semester system time for the practical work is less than annual system.

No time is available for students to read extra study material in the semester system because they already have heavy work load on them. As a result they don’t get time to read extra books.

In semester system more emphasis is placed on part learning rather than whole due to this reasons sometimes content become illogical.

Semester system may create unhealthy competition among different institutions. Each institution may like to give more and more marks in internal assessment.

Many teachers and students donot have proper understanding of this system. Although semester system has many drawbacks but still it can proves good if properly implemented as per university grants commission’s guidelines.

Conclusion

As every system as some good aspects and some bad aspects, semester system also has the same. There are many studies which favors the semester system and some opposes it. In the views of Lt-Gen DDS Sandhu, “the semester system is a very good and positive system. It enhances learning and assesses students throughout the year without burdening them. Initially, the system may face some problems like increased frequency of examinations and lack of clarity among students as to how things are going to happen but ultimately this is the methodology of the future.” From this paper we can conclude that semester system although have many drawbacks still it is not bad if it is implemented properly and students and teachers have positive attitude towards it. It can revolutionize the education system.

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[www.lokniti.org/semester-disaster.php](http://www.lokniti.org/semester-disaster.php)
ROLE OF COMPUTER ASSISTED INSTRUCTION IN SCHOOL EDUCATION

Ms. Jagjeet Kaur* & Ms. Khushwinder Kaur*

The most exciting innovation in the field of education is the introduction of computers in teaching learning. The effective use of CAI is one of the most important factors to improve the quality of instructions. In spite of its importance and other technologies in learning, our educational system fails to incorporate them in classroom for quality enhancement. Our present paper is focused on the importance of CAI in classroom and the difficulties encountered by the teachers while adopting CAI in classrooms.

Today we are living in a modern era of innovations. Changes are taking place in every part of life. Today’s scenario is the scenario of science and technology. New inventions are taking place every day. The most exciting innovation in modern era is the introduction of computers. At present time the computers are used in almost all the fields. It is widely used in trade, commerce, industries, business, offices, banks, transportation, communication, traffic control, space travel, crime detection, national defence, food and material production, printing technology, administration, scientific research, sports and games, guidance and counselling and education. Computers can play the most significant role in the transaction of the curriculum and there has been gradual growth in the use of computers in schools all over the world. Computers have brought a revolution in information technology by composing, communicating, processing, retrieving, preserving and transacting information. All other instructional technologies are restricted to particular kinds of symbol systems and hence to a limited range of contents. Computer on the other hand, allow a large variety of contents and symbolic modes ranging from printed word to dynamic schemes, from graph to musical notations, and from realistic pictures to dance formations.

Role of Computers in Education

In education, computers play an important and effective role. An Information Technology Action Plan adopted by the government of India in 1998 recommended large scale introduction of computers in schools. Schools are expected to provide the opportunity to students not just to complete school successfully, but also to empower them to be successful in the 21st century. Usage of computers brings the entire world into the classroom. The computer can be used as a support and resource for the communicative processes of teaching and learning. In current time, the obsolete ideologies and methods of teaching do not work. One has to be innovative for effective teaching learning process. In order to relate with children teachers need to keep themselves upgraded with the new ways of teaching. Teachers have to look beyond text books and take help from audio and visual aids of teaching to make a subject interesting.

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**Computer Assisted Instructions (CAI)**

CAI is an interactive instructional technique in the field of education. CAI refers to the use of computers as a tool to facilitate and improve the instructions. CAI is a self-learning technique, usually offline/online, involving interaction of the students with the programmed instructional materials. CAI uses a combination of text, graphics, sound and video in enhancing the learning process. The computer has many purposes in the classroom, and it can be utilized to help a student in all areas of the curriculum. The effective use of CAI is one of the most important factors to improve the quality of instructions. Computer based instruction is individualized, interactive and diagnostic. Computer based learning provides learning enhancement at all levels of education. In CAI there is a trend towards greater student autonomy and control in learning process. CAI uses programmed instruction, electronic data processing, audio visual and media theory, communication theory, system theory and learning theory. CAI can be used either in isolation, bearing the whole responsibility for conveying instructions to students or in combination with conventional i.e. that is face to face, teaching methods.

**Modes of CAI**

CAI programmes use tutorials, drill and practice, simulation mode:

**Tutorial mode:** In the tutorial mode, students are presented with instruction interspread with appropriate questions. Often the student is allowed to ask related questions which the computer answers. Question formats are commonly multiple choice, matching, fill in the blanks and short answers. Sophisticated CAI systems can catch or allow for miss spellings, judge as a correct a variety of possible answers and allow students to touch portions of the display to elicit a computer response.

**Drill and practice mode:** Drill and practice mode has proved to be the most wide spread, probably because it is easiest to prepare and can be used to free teachers drudgery of making up and checking practice exercises. Typically, students are given a series of related questions to answer and are provided immediate feedback to the answers they give.

**Simulation mode:** The simulation mode is perhaps the most exciting mode. It can allow students to use the computers as a tool to discover and generate new information. Educational games, another type of simulation, are captivating if not motivating for the intended learning activities. It is anticipated that the simulation mode will be prepared and used much more often as instructional developers and teachers become more familiar with it.

**Advantages of CAI in the field of education**

The main advantage of CAI is that it involves the individual activity in the learning process. Another accepted value is the ability of the learner to proceed at his own pace. Reinforcement is immediate and systematized which should result in more effective learning. Computer does not express annoyance with wrong response. Large volumes of data can be handled with accuracy. A final comment regarding the benefits of CAI relates to remedial teaching and distance learning. Self-pacing, self-evaluation and self-correction are possible through CAI. CAI is more effective for students with poorer rates of attendance. Another benefit of CAI is that a student can pick up the subject matter where he or she had left in the previous days. CAI also avoids some of the
disruption effects of having peers with poor attendance rate. The World Wide Web makes it possible for students to tackle a huge amount of human experience. In such a way, they can learn by doing things themselves. They become the creators not just the receivers of knowledge. As the way information is presented is not linear, users develop thinking skills and choose what to explore. Computers are most popular among students either because they are associated with fun and games or because they are considered to be fashionable. Student motivation is therefore increased, especially whenever a variety of activities are offered, which make them feel more independent. Network-based instruction can help pupils strengthen their linguistic skills by positively affecting their learning attitude and by helping them build self-instruction strategies and promote their self-confidence. All students can use various resources of authentic reading materials either at school or from their home. Those materials can be accessed 24 hours a day at a relatively low cost. Random access to Web pages breaks the linear flow of instruction. By sending E-mail and joining newsgroups, EFL students can communicate with people they have never met. They can also interact with their own classmates. Furthermore, some Internet activities give students positive and negative feedback by automatically correcting their on-line exercises. Shy or inhibited students can be greatly benefited by individualized, student-centered collaborative learning. High fliers can also realize their full potential without preventing their peers from working at their own pace. Although students can still use their books, they are given the chance to escape from canned knowledge and discover thousands of information sources. As a result, their education fulfils the need for interdisciplinary learning in a multicultural world. A foreign language is studied in a cultural context. In a world where the use of the Internet becomes more and more widespread, an English Language teacher’s duty is to facilitate students’ access to the web and make them feel citizens of a global classroom, practicing communication on a global level.

**Barriers in the use of CAI**

Although CAI is introduced in all the schools and it has number of benefits over the traditional or conventional methods of teaching. But even then CAI is not properly used in the teaching learning process due to some barriers. The main barrier in the use of CAI is lack of competent teachers who can not operate the computers adequately. Financial barriers are mentioned most frequently by the education practitioners. They include the cost of hardware, software, maintenance (particularly of the most advanced equipment), and extend to some staff development. Froke (1994b) said, “concerning the money, the challenge was unique because of the nature of the technology. The costs of media were accounted for in the university as a part of the cost of instruction. Though the initial investment in hardware is high, inhibiting institutions’ introduction of advance technologies; but Hooper (1995) recommends that the cost of computers will be so low that they will be available in most schools and homes in the future. The most significant aspects of computer are hardware and software. Availability of high quality software is the most pressing challenge in applying the new technologies in education. There are few educators skilled in designing it because software development is costly and time-consuming. A lack of technical and theoretical knowledge is another barrier to the use of Computer-assisted Learning technology. Not only is there a shortage of knowledge about developing software to promote learning, as shown above, but many instructors do not understand how to use the new technologies.
Furthermore, little is known about integrating these new means of learning into an overall plan. Improper use of technologies can affect both the teacher and learner negatively. Wrong conceptions about the use of technology limit innovation and threaten teachers’ job and security. Instructors are tend not to use technologies that require substantially more preparation time, and it is tough to provide instructors and learners access to technologies that are easy to use.

**Conclusion**

Computer plays a crucial role in every aspect of education. CAI is one of the important factors in the school education. It makes the teaching learning process very effective. Computer assisted instruction is an interactive instructional technique. It has many benefits over the traditional method. Through CAI students can learn at their own pace. CAI also reduces the burden of teachers. But the main difficulty in adopting CAI is the lack of competent teachers and financial problems. So education system should provide training to the pre-service and in-service teachers in computer education.

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IMPACT OF MOBILE LEARNING ON STUDENT EDUCATION

Ms. Seema Gulati* & Ms. Gurvinder Kaur**

Despite improvements in educational indicators, such as enrolment, significant challenges remain with regard to the delivery of quality education in developing countries, particularly in rural and remote regions. In the attempt to find viable solutions to these challenges, much hope has been placed in new information and communication technologies (ICTs), mobile phones being one example. This article reviews the impact of mobile Learning in contributing to improved student educational outcomes. It also reviews that mobile devices allow students to gather, access and process information outside the classroom. They can encourage learning in a real-world context, and help bridge school, after school and home environments.

Over the past decade, developments in computer technology have significantly shaped our everyday life. These developments have been known as a potential to foster financial and social development. It is also has the potential to reform our education system in the twenty-first century into a new level. Wireless technology like Smart phone, Computers, laptops and other personalized tools, have been utilized by students at all levels of education with the aim of enhancing learning. Schieber (1999) explained that the difficulties of “part-time” utilize of computer technology have been put an end to it; pupils with personalized wireless technology tools are able to use them the whole time, in class or at home. In recent years, mobile devices, wireless communications, and network technologies have emerged and have been integrated into various learning contexts. Mobile learning environments offer much educational potential that is not easily achieved in other learning environments. Mobile devices not only enable both the teacher and students to employ computing power but also do so without seriously constraining either the teacher or students regarding time or location. These constraints continue to diminish as the wireless technologies seamlessly connect mobile devices to other computing devices. This promising computing power has appealed to educators and researchers in many disciplines, particularly in the natural sciences.

What is Mlearning?

“The capacity for learning any time and any where through the use of multimedia (text, voice, images or video) and communication (phone call, voice/text messaging, e mail, web access). This mode of teaching and learning provides real-time online interaction in a series of short burst learning activities, with features such as voice/video recording for story telling or even a mobblogging journal.”

The “anywhere”, “anytime”, “any device” phenomenon: Education delivery has come a long way and is advancing from a specific location context to ubiquitous space, which is teaching and learning anywhere, anytime with any device. This is a new paradigm in education which has

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received the attention of researchers over the past few years with several pilot projects being conducted across the globe. “Anywhere” is a situation which is not limited to a specific location or venue. “Anytime” can be explained as an undecided time or wherever seems convenient or appropriate. “Any Device” in this context refers to all types of computing devices which have the capabilities for teaching and learning. These devices include smartphones, mobile phones, PDAs, tablets, palmtop, notebooks, laptops and desktop computers.

Benefits of Mobile Learning in Education

The benefits of m-learning (mobile learning) can be felt at the distinct levels as given below. They have some commonalities with benefits of e-learning approaches, as m-learning is a subset of e-learning.

**Easy Access:** Knowledge is delivered on-demand, with updated information within the precincts of the m-learning campus.

**Options for Self-study:** The flexibility of m-learning enables participants to learn at their own time and pace even more compared to the fixed PC access. Hence the amount of information retained from the training is often greater, which results in increased information retention.

**Evaluation and Feedback:** Assessment tools can be included into the m-learning or e-learning packages to monitor student’s progress, and produce detailed usage reports. This can be given as feedbacks to students or learners.

**Access of Online Repository:** The online materials accessed through m-learning system offers a place for the learners and students to interact frequently. Learners have access to a stored repository of knowledge and information like the digital course materials and a host of other online digital libraries for assignments and exams.

**Communities of Practice:** The three elements of a COP are a domain, a community and a practice and the theory behind is that learning involves participation in a COP. Most COPs meet online and m-learning makes this click well.

**Any place learning:** Students who were unable to attend campuses like in remote areas, today, are able to make this choice through technology-facilitated learning settings.

**Improve twenty first century social interactions:** Mobile technologies have the power to promote and foster collaboration and communication, which are deemed essential for twenty first century success.

Issues with Mobiles in Classroom

One issue is that there are some participants who choose to use the mobile for activities that is not related classes, such as playing games or instant messaging. Generally students engage in activities that are not related to class often toward the end of the session time rather than the beginning of the session; it is often seen that students seated toward the back rows of the classroom use their mobile more often for activities that is not related class also, sometime the teacher have to ask students to turn off their mobile in order to direct student attention back to her.

Another issue is that the physical classroom was a traditional lecture room; it did not accommodate group activities very well. Students remarked that they had difficulty when the teacher asked them to work in a group. Students had difficulties in rearrange their seats for
teamwork. The teacher also had difficulties walking among students due to the not enough spaces. In addition, students also complained that only a few power outlets were available in the classroom. Some students had problems of the mobile power outage and consequently they were unable to use their mobile in the classroom.

Another issue is that though many experts believe that mobile devices have significant potential to transform children learning, parents and teacher apparently are not yet convinced, most teachers see cell phone as distraction and feel that they have no place in school.

Another issue is that currently, no widely accepted learning theory for mobile technology has been established hampering the effective assessment, pedagogy and design of new applications for learning.

**Conclusion**

Each coin has two sides in the same way m-learning has both pros and cons it has some advantages and some disadvantages. Technology is never wrong it’s the human being who use technology for wrong purpose, so we should use m-learning for the betterment of education. Mobile learning is a hot new item that will continue to gain popularity based on convenience. The fact is that convenience is everything in today’s busy society and will continue to be in generations to come. Mobile learning opens so many doors to new technology and will continue to get more complex as the years go on. So many more opportunities are being giving to get an education and to expand your knowledge. This is a great way to help people learn better.

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EMERGING TREND AND INNOVATIONS IN TEACHER EDUCATION

Ms. Deepa Singh* & Ms. Manisha*

Teacher education is a program related with teacher proficiency and competence that would make them competent enough to face new challenges in the education. Now a days the field education is not only limited with books but has broadened in various new horizons. Development and changes in education have affected teacher education necessitating review and reforms. It demands understanding with investigative minds, assimilating the required transformations, accommodating and responding to the universal needs. We also need to train teachers with new perspectives as the outer world is in the classroom and schools are opening to the world. The pre-service and in-service teacher education programs have shown paradigm shift with its emphasis on globalization and individualization. Main purpose of this paper is to indicate main changes that has incurred in teacher education in India and also provide an over-view of trends, reforms and innovations in teacher education (integrated teaching, teacher curriculum and teacher innovations). It also discusses the need of teacher education programme to be innovative and various practices that can be included. It has been recognized that teacher education program should be structured and modified in a way that enables them to respond dynamically to the new problems and challenges in the field of education, then only teacher can help in national development.

According to NCTE (1998) teacher is the most important element in any educational program. He plays a role in implementation of educational process at any stage. The level of achievement of learner is determined by teacher’s competence. So the quality of education basically depends on the quality of teachers. Kothari commission has very rightly said, “The destiny of India is being shaped in its classrooms.” As the population in India is growing very rapidly day by day the need of well qualified and professionally trained teachers will also increase in the coming years. So lots of efforts should be made to improve teacher education. Teacher education is a continuous process and its pre-service and in-service components are complimentary to each other. Education is instrumental in the preparation of teachers who can in their practice ensure transformative learning, where teacher and learner, learner and learner are co-constructors of knowledge.

Present Scenario

India has a large system of education. There are nearly 5.98 lakh Primary Schools, 76 lakh Elementary Schools and 98 thousand high / Higher Secondary Schools in the country, about 1300 teacher education institutions for elementary teachers and nearly 700 colleges of education / university departments preparing teachers for secondary and higher secondary schools. Out of about 4.52 million teachers in the country nearly 3 million are teaching at the primary/elementary
level. A sizeable number of them are untrained or under-trained. As far as inservice education is concerned the situation is not very encouraging. In this scenario it has been observed that teacher educators are not professionally committed and overall competencies of teachers leave much to be desired. The quality of pre-service education has actually shown signs of deterioration. Unless teacher educators model effective use of technology in their own classes, it will not be possible to prepare a new generation of teachers who effectively use the new tools for teaching and learning.

Problems of Teacher Education

It is universally acknowledged that education is an effective means for social reconstruction and to a great extent it offers solutions to the problems a society is faced with. These problems may be economic, social, cultural, political, moral, ecological and educational. Since the teachers play a major role in education of children, their own education becomes a matter of vital concern. Various problems in the way of teacher education are following: Selection problem, Short Duration of Teacher Training Programs, Incompetency of Pupil Teachers, Teacher Education Program have narrow and rigid curriculum, Superficial Practice teaching, Problem of supervision of teaching, Deficient in content of the Teaching Subjects, Knowledge, Methods of Teaching are lacking in innovation, Segregation of Teacher Education Department, Poor Academic background of Student Teachers, Deficient in facilities for pupil-teacher, Lack of Regulations in Demand and Supply, Lack of facilities for Professional Development, Insufficient financial grants, Narrow Scope of Teacher Education and Lack of Culture-Specific Pedagogy.

Teacher education must, therefore, create necessary awareness among teachers about their new roles and responsibilities. Education of teachers needs to strengthen and stress upon the main attributes of a profession, such as, the systematic theory, rigorous training over a specified duration authority, community sanction, ethical code and culture, generating knowledge through research and specialization. It is acknowledged that formal professional training on continuous basis is necessary for becoming a good teacher as it caters to the development of one's personality and sharpening of communication skills and commitment to a code of conduct.

Emerging Trends and Innovations

Innovation is usually understood as the introduction of something new and useful, like introducing new methods, techniques, or practices or new or altered products and services. Schools or teacher education institutions can carry out innovations or experimentation on any aspect of their work related to teaching-learning, training or management of schools in order to improve efficiency of the institution to overcome problems and difficulties, they face in day to day functioning. The present structure of teacher education is supported by a network of national, provincial and district level resource in situations working together to enhance the quality and effectiveness of teacher preparation programs at the pre-service level and also through in-service programs for serving teachers throughout the country.

Teacher education is now becoming more adapted to the emerging demands from the school system. Because the changing educational needs of the student and advancement in technology has widened the area of responsibilities of the teacher. Now teacher has to perform
various roles like encouraging, Supporting and facilitating in teaching-learning situations

Suggestions

1. The courses of studies in theory and practice should be restructured. For this research should be conducted comprehensively to realize the goals of teacher education. The results of these researches should be given due importance in designing the curriculum of teacher education.

2. The method of teaching in the teacher education should be reorganized according to the changing demand of education system. Special innovative programmes like seminars, Workshops, conferences, projects and discussions should be organized regularly for the improvement of teaching learning process in various fields.

3. The admission procedures of B.Ed. should be completely restructured so that only those who have aptitude of teaching are able to take admission in this course as the increasing number of colleges of B.Ed. has made this course accessible for everybody.

4. Now a days the number of self- financing colleges are mushrooming like shops and they have made it as their money making factory which detrimental for education in future. Therefore for regular inspection should be done to ensure quality in teacher education. The affiliating bodies for teacher education should frame such parameters which can enhance the teacher education program in qualitative aspect rather than quantitative aspect.

5. In order to remove the myth or misconception that the training in teacher education department is superficial and is not incorporated in real situation the professional attitude should be developed by organizing various types of facilities like school assembly, social work, field work, surveys, laboratory and other co-curricular activity.

6. The training or the teaching practice of pupil teachers held in the school should be closely associated with teaching staff in education colleges in planning the content to be covered and method to be used by the pupil teachers to have useful implications for school rather than disturbing their routine schedule. Moreover the real teaching practice should be supervised by the teachers in a systematic way So that it fulfills the objectives of teacher training.

7. It should be made mandatory that a teacher education department should have a demonstration school which should have certain facilities such as laboratories, libraries and other important audiovisual equipments. This can be of great help to formulate the policies, program for refining the education system.

8. The whole system of education is changing at a greater speed. The teacher education department should conduct research on teaching curriculum and evaluation procedure in the regular university departments. Extension programs and Exchange programs with different universities within India and outside India enrich the teacher education programme enormously. So such programs should be sponsored by government and university so that different academicians from different disciplines can contribute in the qualitative aspect of teacher education.

9. Refresher courses, Orientation programs Seminars, Conferences, Workshop,
Symposium should be encouraged for the professional growth of teacher educators. All the educationists can be oriented with new developments, changes, innovations in the field of education.

10. The reference books, other reading material are not available in Hindi and other regional languages so availability for such books should be made for students and teachers which can make the teaching learning process more effective.

11. Rigorous screening and strict admission procedure should be followed for correspondence courses for teacher education.

12. Inclusive education should be made an integral part of teacher education curriculum so that the pupil teachers are sensitized with Children with Special Needs.

13. Teacher Education department Institute should be connected with real life situations of classrooms so that the teacher educators and pupil teachers both get acquainted with different problems of classroom situations.

14. The internships/teaching practice time period should be increased so that pupil teacher become more confident and get familiar with classroom situations.

**Conclusion**

Since the teacher is the pivot of the entire educational system and is the main catalytic agent for introducing desirable changes in the teaching learning process, all attempts need be made for motivating teachers to become innovative and creative. It goes without saying that a self motivated and really industrious teacher can utilize his own resources to keep himself abreast of new knowledge and skills. It has been recognized that teacher education program should be structured and modified in a way that enables them to respond dynamically to the new problems and challenges in the field of education, then only teacher can help in national development.

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THE E-5 INSTRUCTIONAL MODEL: AN INNOVATION IN TEACHER EDUCATION

Ms. Harleen Kaur*

Today there are new expectations for education where the focus is on having teachers - be futurist leaders to ensure sustainable education. The paradigm shift is from teacher dominated classroom practices to that of partnership between the teacher and the learners and their peers. The key role of educational institutions is reflected in a variety of initiatives taken to transform the nature and function of education-both formal as well as non-formal. Universal accessibility to quality education is considered essential for development. The E-5 Instructional Model is a reference point for school leaders and teachers to develop a deeper understanding of what constitutes high quality teacher practice in the classroom. This includes engage, explore, explain, elaborate and evaluate. The 5 E’s is an instructional model based on the constructivist approach to learning, which says that learners build or construct new ideas on top of their old ideas. An effective instructional model such as the 5E Instructional Model, along with effective instructional materials, is tools and resources for educators that can play a substantial role in providing quality instruction and education.

Innovation is the key to improvement. In current time the obsolete ideologies and methods of teaching do not work. One has to be innovative with teaching and this was highlighted by Joshi and Thomas who wrote an article on Innovations in teacher education. In order to relate with children teachers need to keep themselves upgraded with new ways of teaching. For instance if a teacher is not net savvy in current times then he/she cannot make History classes interesting. Today is the age of videos and podcasts and children can easily learn through this interactive media and hence teachers of current India need to keep up with the current technology. The “5 E’s” instructional model was developed by the Biological Sciences Curriculum Study (BSCS) (Bybee, R. W. (Ed.). National Standards and the Science Curriculum: Challenges, Opportunities, and Recommendations. Dubuque, Iowa: Kendall-Hunt Publishers, 1966]. This guided inquiry approach involves students in actively developing their understanding of concepts or skills with the teacher acting as the instructional director. The E5 Instructional Model is not a recipe for teacher practice but rather a framework to inform conversations and guide the observation, critique and reflection of classroom practice. There are many different ways that teachers can vary in their approach and their behaviour and still be highly effective in the classroom. All teachers use their professional judgement to adapt their practice to the specific context they work in and to the particular cohort of students they teach. However, within this zone of discretion there are common practices that draw on a professional knowledge base in the classroom we can develop a great understanding of the nature of the professional learning teachers require to improve their practice.

The “5 E’s” instructional model involves specified sequence of phases: Engage, Explore,
**280 Teacher Education: Challenges and Opportunities**

**Explain, Elaborate, and Evaluate.** Each phase has a particular purpose. The nature of the instructional task during each phase can and does vary from activity to activity, but the purpose of each phase remains the same.

![Diagram of Engage, Explore, Elaborate, Explain]

**Engage**

The teacher fosters positive relations with and between students and develops shared expectations for learning and interacting. They stimulate interest and curiosity, promote questioning and connect learning to real world experiences. It has four levels:

**Level 1:** The teacher supports students to identify what they know and what they need to know, enabling students to monitor their own learning.

**Level 2:** The teacher uses this information to differentiate learning goals for groups of students based on need. The teacher demonstrates a purpose for learning by linking the specific activity to the learning goals. They explain assessment criteria when communicating assessment requirements to students. The teacher models different types of thinking using labels and definitions.

**Level 3:** The teacher negotiates learning routines and protocols for interactions with students. The teacher responds to each individual student’s social and emotional needs. They use a range of strategies to assess and document students’ prior knowledge.

**Level 4:** The teacher refers to shared norms in their interactions with students and shares responsibility with them for reinforcing protocols. The teacher uses all available evidence to determine each individual student’s current level of understanding. The teacher facilitates processes for students to monitor the effectiveness of their learning.

**Explore**

The teacher presents challenging tasks to support students to generate and investigate questions, gather relevant information and develop ideas. He is mindful of the learning requirements of the task, attentive to student responses and intervenes accordingly. It has four levels

**Level 1:** The teacher uses a range of question types and encourages students to share their prior experiences to involve students in the inquiry. They ask students to explain their understanding of key concepts and ideas to identify misconceptions.
**Level 2**: The teacher uses questions to stimulate further investigation into the inquiry. They broaden students’ experiences by making links between the learning focus and real world applications. The teacher observes and listens to student interactions and responds to any misconceptions.

**Level 3**: The teacher provides experiences to draw out students’ misconceptions and frames questions to challenge students’ ideas. They teach strategies for students to choose resources applicable to the inquiry, as well as processes to collect and select relevant information. The teacher explains reasons for the use of particular strategies to help students organise information.

**Level 4**: The teacher introduces new perspectives, extending the inquiry and supporting students to reflect on their understanding. The teacher challenges misconceptions through the use of specific tasks and questions to extend student thinking and provide strategies to enable students to manage their time effectively.

**Explain**

The teacher provides opportunities for students to demonstrate their current level of understanding through verbal and non-verbal means. They explicitly teach relevant knowledge, concepts and skills. It also has four levels

**Level 1**: The teacher supports students to develop explanations to make sense of the inquiry. They present new content based on year level standards and represent the content in different ways to enhance students’ understanding. The teacher verbalises the connections between new content and past learning, and continuously prompts students to clarify their understanding.

**Level 2**: The teacher uses student explanation of the inquiry to determine current levels of understanding and introduces new content accordingly. They select multiple ways to represent the same content in response to student need. The teacher structures collaborative opportunities for students to share their explanations and supports students to make links between past and new learning.

**Level 3**: The teacher differentiates content based on the students’ level of understanding of the inquiry. They adapt representations based on student need. The teacher uses analogy and metaphor to illustrate the relationship between ideas, assisting students to make connections between new and existing knowledge to clarify understanding.

**Level 4**: The teacher assesses the student’s level of understanding, selecting and introducing content at individual point of need, in response to student explanation. They assist students to select strategies to demonstrate relationships between ideas and to connect new content with prior learning and support students to identify and use strategies to meet the literacy demands of the task.

**Elaborate**

The teacher engages students in dialogue, continuously extending and refining students’ understanding. They support students to identify and define relationships between concepts and to generate principles or rules. Its four levels are as follows:

**Level 1**: The teacher provides intellectually challenging tasks and articulates the cognitive demands of the task to students. They provide examples of the concept in similar contexts to assist students to apply their learning. The teacher uses strategies to involve all students in
focused conversation, facilitating the sharing of ideas.

**Level 2:** The teacher provides tasks that support the transfer of learning and assists students to apply concepts from familiar to unfamiliar contexts. The teacher structures conversation, acknowledging the value of students’ ideas and using these to build individual and collective understanding. The teacher gives feedback referenced to assessment criteria, when monitoring student progress. They adapt instruction based on group needs.

**Level 3:** The teacher structures tasks that require students to manipulate information and ideas to generate rules and principles. They support students to test these rules and principles in unfamiliar contexts. The teacher negotiates conversational protocols which support all students to make meaningful contributions, build on and challenge one another’s ideas. The teacher asks questions, probes student thinking and prompts them to justify their responses.

**Level 4:** The teacher explains the taxonomy used to structure the task and inform the assessment criteria. They support students to use evidence to challenge assumptions underpinning principles when extending the learning to new contexts. The teacher structures opportunities for students to sustain a conversation, deepening individual and collective understanding.

**Evaluate**

The teacher supports students to continuously refine and improve their work using assessment criteria in preparation for a performance of understanding. They integrate evidence from each phase, formally recording students’ progress against learning goals. The teacher provides feedback and assists students to evaluate their progress and achievements. Its four levels are

**Level 1:** The teacher assists students to prepare for a performance of understanding. They assess student achievement and communicate progress. The teacher presents guiding questions to enable students to reflect on their learning. They support students to frame future learning goals based on identified strengths and areas for improvement.

**Level 2:** The teacher provides strategies for students to reflect on and refine their work in preparation for a performance of understanding. The teacher integrates evidence gathered from both formal and informal assessment to make judgements about student progress. They use examples of student learning and work samples to illustrate student progress against learning goals.

**Level 3:** The teacher structures opportunities for students to individually and collaboratively assess and improve their work in preparation for a performance of understanding. They make judgements about student achievement using rubrics referenced to curriculum standards. The teacher communicates progress against learning goals based on curriculum standards.

**Level 4:** The teacher moderates both within and across classes to ensure consistent judgements. They support students to reflect on their learning outcomes and evaluate strategies used.

**Conclusion**

Therefore this instructional model is a scaffold that is planned and developed prior to instruction to provide an effective and efficient learning experience. Some instructional models are designed for a particular learning theory, such as behaviorism, cognitivism, or constructivism. Some combine aspects of different learning theories.
The E-5 Instructional Model: An Innovation in Teacher Education

References


ICT BASED LEARNING IN HIGHER EDUCATION

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Education is the driving force of economic and social development in any country. So, it is necessary to find the ways to make education of good quality, accessible and affordable to all using all the latest technology available. From the last two decades, Information and Communication Technology (ICT) has changed the dynamics of various industries as well as influenced the way, people interact and work with the society. Use of ICT within teacher training programmes around the world is being approached in a number of different ways with varying degrees of success. We had discussed various approaches in our research paper. ICT in teacher training has taken many forms now. Teachers can be trained to learn how to use ICT tools. We had also discussed the various ways in which ICT teacher training efforts could be classified. Whatever approach or ways in which ICT teacher training is followed in educational institutions is to develop knowledge about ICT. It also has inherent limitations. The present paper discussed about the need of teacher education program to be innovative, and also the scenario of ICT programme in various institutes of the country. So, we are not making student teachers fully confident in always using ICT in their daily classroom activities.

Education is the driving force of economic and social development in any country. Considering this, it is necessary to find the ways to make education of good quality, accessible and affordable to all, using the latest technology available. The last two decades have witnessed a revolution caused by the rapid development of information and Communication Technology (ICT). ICT has changed the dynamics of various industries as well as influenced the way people interact and work in the society. Internet usage in home and work place has grown exponentially. ICT has the potential to remove the barriers that are causing the problems of low rate of education in any country, it can be used as tool to overcome the issues of cost, less number of teachers and poor quality of education as well as to overcome the time and distance barriers (McGorry 2003). The world is home to seven billion people, one third of which are using the internet. Forty five per cent of the world internet users are below the age of 25 years. There are 5.9 billion mobile cellular subscriptions with global penetration is of 87%. In India telecom has become the second largest wireless network in the world after China. India has billion-plus population and a higher proportion of youth and hence it has a large formal education system. The demand for education in developing countries like India has skyrocketed as education is still regarded as an important bridge of social economic and political mobility. The various kinds of ICT products available and having relevance to education such as teleconferencing, email, audio conferencing, television lessons, radio broadcasts, Interactive radio counselling interactive voice response system, audio cassettes and CD ROMs etc have been used in education for different purposes.

Today ICTs- including laptops wirelessly connected to the internet, personal digital assistants,
ICT Based Learning in Higher Education

low cost video camera and 3G cell phones, and tablets PCs have become affordable, accessible and integrated in large section of society throughout the world. It can restructure organizations, promote collaboration, increase democratic participation of citizens, improve the transparency and responsiveness of governmental agencies, make education and health care more widely available, foster cultural creativity, and enhance the development in social integration of ICT in education that one can teach students to be participants in the growth process in this era of rapid change.

Advantages of ICT in Education

There are many advantages of ICT based Teaching and learning in Higher education. Some of them are given below:

- Increased access.
- Flexibility of content and delivery,
- Combination of work and education,
- Higher quality of education and new ways of interaction.
- Development of a new learning culture,
- Sharing of costs and of training time with the employees,
- Increase portability of training,
- Increase the capacity and cost effectiveness of education and training,
- To support and enhance the quality and relevance of existing educational structures.
- To ensure the connection of educational institutions and curricula to the emerging networks and information resources
- To promote innovation and opportunities for lifelong learning,
- Improving the efficiency of educational administration and management at every level from the classroom, school library, through the school and on to the sector as a whole.

Need of ICT in Education

In the new educational system, there are likely to be four levels of learning. The first level will consist of student who, able to afford the high cost of education, will obtain it from either public or private institutions of higher education. They will be getting the best of the facilities and will soon form educational elites. The second level of learners will consist of intelligent and competent students, who unable to afford the cost of education, will obtain it from existing public institutions and will soon be competing with the first level of membership in the educational elite. A third level of students will consist of the academically and financially poor student who will seek access to education from lower quality institution of higher learning. And the last group of learners would be most of the illiterates and the poor, whom we will be addressing as a part of our work. Current ways of imparting adult education use extensive ground work in the field and require both large numbers of trained personnel as well as committed individuals working in a world where access to technology is going to determine the gap between the haves and the have not’s.

Approaches to ICT integration in Teacher Education

Use of ICT within teacher training programs around the world is being approached in a number of different ways with varying degrees of success. These approaches were subsequently
described, retained and merged into following approaches:-

**ICT skills Development Approach:** Here importance is given to providing training in use of ICT in general. Students teachers are expected to be skilled users of CT for their daily activities, knowledge about various software, hardware and their use in educational process is provided.

**ICT pedagogy Approach:** Emphasis is on integrating ICT skills in a respective subject. Drawing on the principles of constructivism, pre-service teachers design lessons and activities that centre on the use of ICT tools that will foster the attainment of learning outcomes. This approach is useful to the extent that skills enhance ICT literacy skills and the underlying pedagogy allows students to further develop and maintain these skills in the context of designing classroom-based resources.

**Subject- specified approach:** In this approach ICT is embedded into one’s own subject area. By this method, teachers/subject experts are not only exposing students to new and innovative ways of Learning but are providing them with a practical understandings of what learning and teaching with ICT looks and feels like. In this way ICT is not an ‘add’ on but an integral tool that is accessed by teachers and students across a wide range of the curricula.

**Practice Driven Approach:** Emphasis is given for providing exposure to the use of ICT in practical aspects of teacher training. Focus is on developing lessons and assignments. Using CT and implementing it in their work experience at various levels provide students an opportunity to assess this facilities available at their school and effectively use their own skills. Thus ICT in teacher training can take many forms, teachers can be trained to learn how to use ICT tools. ICT can be used as a core or a complementary means to the teacher training process (Collis & Jung, 2003). The various ways in which ICT teacher training efforts could be classified into four categories are in

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<td>ICT as a part of content</td>
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From the above suggested approaches, regarding ICT as a core component at the pre-service level, integration of all approaches would help in developing proper attributes among prospective teachers. There should be joint efforts of educators and prospective teachers in implementing and sharpening ICT skills. Whatever approach is followed in educational institutions to develop knowledge about ICT, it has inherent limitations. Coupled with other reasons, we are not making student teachers fully confident in using ICT in their daily classroom activities.

**ICT in Teacher Education**

The integration of ICT into teacher preparation programs is first and foremost, creating an environment for students activities and sustainable learning experience. ICT in teacher education provides a holistic framework and defines area of ICT competency in four groups.

**Content and pedagogy:** Focus on the teachers who apply ICT in their respective disciplines to support and extend teaching and learning

**Collaboration and networking:** ICT extends learning beyond the classroom and development of new knowledge and skills
Social Issues: The use of ICT in the promotion of healthy society, understanding moral codes, legal.

Technical Issues: Include technical proficiency and the provision of both technical infrastructure and technical support for ICT integration throughout the curriculum.

These competencies are developed and utilized in technology-pedagogy integration in the following four supporting themes—Context and Culture, Leadership and Vision, Lifelong Learning and Management of Change.

UNESCO planning guide for ICT in teacher education cites three key principles for effectiveness of ICT development in teacher education.

- Technology should be infused into the entire teacher education program.
- Technology should be introduced in context.
- Student-teachers should gain experience through innovative technology in teacher education programs.

These three principles will be a milestone in effectively integrating ICT in teacher education.

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Teachers are the backbone of education system in any country. The need of teachers’ professional development has been accepted weighty for the improvement of education all over the world. Therefore the expectancy for quality in teacher education is becoming higher with every day. The traditional methods of teacher training are not serving the requirement. The present programs have been failed in preparing teachers that are required in a real classroom because the stress is on theory and not the practical. The curricula of teacher education need to be improved so that the expectations can be met. Thus the present paper highlight the history of teacher education, teacher education in India in 21st century and essential components for teacher education.

Teacher training course in India is designed for aspiring teachers to learn interactive and better ways of teaching to make a subject interesting. Socially, politically and economically the world is changing at a dramatic rate. Hence, it is certainly not possible to foresee any slowing in the pace over the next decade. As the world has changed, so has the school, and so has what we mean by teaching and by learning. The teacher-student relationship is far more complex and demanding than ever before. The implication of this more diversified role for the teacher is what impelled a new view of the process of teacher education and training. Thus, teacher education is seen as a continuous process, beginning with a phase of initial training and continuing throughout the teacher’s professional life throughout regular and sustained periods of in-service training. Maintaining the view that a teacher must remain a learner during the scope of their service is mandatory.

Robertson (2008) argues that teacher education institutions need to be sustained as autonomous from social and political centers, which would turn teacher preparation toward their own interests. The social and political context that we find ourselves in today has implications for science teacher educators, and especially if the focus of teaching is on experiential learning. As teacher educators, we need to think about how these realities influence our work: the polarized political climate, the educational assessment and accountability movements, and challenges to schools of education.

The Indian sub-continent has one of the largest education system as well as teacher education system. There are several affiliated colleges and institutes that offer teacher education programs. All the programs are identical but its standards vary. Some unscrupulous institutes are simply money making centers and results in certified but incompetent teachers. The National Council for Teacher Education (NCTE) is a regulatory body but because the country is so diverse with innumerable institutions it sometimes get difficult to monitor all the institutions. NCTE has four regional offices in four different zones of the country for regulating the function of these institutes and to prevent them from becoming commercial institutions.
The situation of elementary teacher education is still better in the country and can also be compared to international standards but secondary and vocational teacher training situation needs drastic regulation and change. Over the last few decades the teacher education has been severely criticised for being very theoretical and obsolete. Teacher education system is strongly evolving so that quality of teachers in India improved. The curriculum of teacher education is being severely revised since 1998. In this internet age, the use of IT and computer should be used for training teachers and the curriculum now also advocates the use of internet to be used by teachers for teaching students.

The National Council for Teacher Education has defined teacher education as – A programme of education, research and training of persons to teach from pre-primary to higher education level.

Teacher education is important as efficient teachers can shape an efficient future society. Teachers can greatly influence young minds and hence it’s important that competent teachers are recruited for the gullible and vulnerable young minds. This is only possible only if there is efficient teacher training curriculum with an efficient regulatory body. NCTE is doing a good job but a lot has to be done to improve the status and quality of teachers in India.

**Teacher’s Education in India from 1947-1990**

With Indian independence in 1947, several educational reforms were made in system and also made changes for the education of teachers’ in India. One of the first steps was establishing University Education Commission which happened in 1948, and regulated the educational requirement of teachers in India. The commission made some rules for people to qualify as teacher and these were as follows:

- All the undergraduates who wanted to pursue teaching as a career option were recommended a two year training program
- One year teacher training program for graduates.
- The commission stressed on exchange of teachers from teachers colleges, schools etc.
- The commission also stressed on training for organizing curricular activities.

Later in late 1960 the commission emphasized on the necessity of a professional training course in order to improve the education system. It gave stress on building a more comprehensive teacher training course for students, and also laid importance on practice teaching. Another way to attract people to join this Nobel profession was by increasing the salary of teachers in Government schools or by providing other incentives like house etc. in a rural setting. During the same time National council of Educational Research and Training (NCERT) was also formed, and this body reviewed and regulated the education of teachers.

In 1974, National Council for Teacher Education was established; this non-statutory body was a part of NCERT. Gradually several changes were made and universities and colleges revised their curriculum for teacher training course. Various steps were taken by the Commission to enhance the education system. Its selection procedure was regulated and emphasis was given on theory as well as practical work. Gradually by 1990’s this profession had become popular with opening of several private schools and colleges and improved salary structure in both Government and Private schools.
Teacher Education in India in 21st Century

Dr. Kamlesh Joshipura, Vice Chancellor, Indian Institute of Teacher Education, Gandhinagar (Gujarat) says that in the second decade of the 21st century, education has an enormous role to play in the social, intellectual and political transformation of the world. From UNESCO to UGC, all are of one accord that never before education was invested with powers as well as responsibilities of the kind we see today. While our policy reflects our commitment to transformation of education, we have yet to find a way of translating it into reality. We have heavily invested ourselves in everything except teacher quality.

The current goal of the Indian Government is to provide education for all. They are trying out with schemes that would enhance enrolment and are ensuring that every child gets access to school. The Government is providing incentive of free meals at rural schools there by ensuring better attendance at school. They are also focusing on the number of hours a child spends in school as well as certain number of years, so that the child can have a bright future. A lot of planning and resource has been spent on education in India and at the same time for improving the quality of education. One simple way of uplifting the standard of educations is by improving the quality of teachers. A great teacher can make a huge difference to the life of children. A lot of stress is given on teacher training course in India; unfortunately there are several loopholes in the system and a lot of times incompetent teachers get recruited. If you recall, your affinity to a subject was generally because of the teacher. This clearly indicates that an efficient teacher can influence a student and can also make the toughest subject interesting for a student. Most of the current teachers aspire to get recruited by private schools as private schools give out better salaries and it’s because of this that the standard of Government school is deteriorating. To overcome this problem Government is coming up with a better profile for teachers including pension and housing perks.

Teacher Education in India

Teaching methods have to be different for different age groups, for instance primary level teaching is a lot different from secondary or college level. The educational requirement for a primary and secondary teacher is also different. People who wish to teach primary school should minimum pass higher secondary examination with 50% marks whereas for teaching at secondary school, one needs to be postgraduate in the subject one wishes to teach. There are several schools and colleges in India which cater to teacher training schools in India and these offer teaching courses for different levels. Teacher education in India is institution based, along with internship programs in real classroom settings. Teacher education curriculum has faced severe criticism over the years, as its general too technical and obsolete which is not applicable in contemporary Indian school and society. Because of this drastic changes are required to bring a big change to the curriculum. These changes are slow but can be seen as International teaching agencies with a more advanced teaching curriculum is helping to shape better teachers in India. Teacher education is provided by several Universities, affiliated colleges, private and open Universities in India. Some of these institutions are more like an eye wash and provide certification just by paying the fee, and this leads to rise of unqualified teachers in India. The situation of primary teachers in India has seen a dramatic change but lot has to be done to improve the curriculum of secondary
and vocational teachers. Teachers play an important role in shaping the future of the country.

**Seven Essential Components for Teacher Education**

1st. **High social and community content:** The Inclusive Teacher is a professional in education with a strong commitment to his/her community. The Teacher Preparation Programme should include subjects with high social and community content because they need to be sensitive to the needs of students and the environment; It is important to recognize the school as a point of encounter among different people, it promotes agreements among all the members of the community and meaningful relationships among the components that impact the learning of the students by removing barriers, promoting high expectations and a positive environment characterized by continuous improvement and values.

2nd. **Individual differences and implements learning strategies for all:** The Inclusive Teacher recognizes individual differences and implements learning strategies for all. The educational intervention is oriented to diversity and promotes learning strategies for all (equality), for quite a few and for only one (equity). These are other essential aspects in the teacher Preparation Programmes. Quality, equality and equity concepts should be translated into specific actions of educative interventions. In inclusive education, the school and classrooms are very dynamic and have a lot of interactions and roles. The exchange and experience enrich individuality. Diverse contexts indicate diverse relationships and interactions.

3rd. **The collaborative work among educators:** Facilitates inclusion and needs to be promoted in the Teacher Preparation Programme. Inclusion is founded on a collective of teachers, a team sharing knowledge, making decisions, solving problems together and generating actions in order to improve the school and to increase the learning for all. In consequence, the collaborative work is a source of dialogue, co-teaching and updating. Information on the process of collaborative work now follows.

4th. **Interpretative and critical paradigms:** All programmes for pre-service teachers and in-service teachers must be based on the interpretative and critical paradigms. Allowing encounter with others, and the collective and interpretive insight into environments and circumstances and the development of research activities are fundamental. The inclusive teacher has strong skills in action research methods. Recognizing that the other, is not a continuation of me, but has its own worldview leads teachers to explain, interpret and act from their personal background. Collaboration takes the value of the other as implicit – this implies strengths, occupations and concerns. This vision then transforms from two ideas (you and me) to a new figure (us). Such dialogue and collaboration are key elements in inclusive education.

5th. **Contextual Preparation:** Connecting with the educational services, allowing identification of diversity as an enriching element has three great steps outlined below. For teachers to promote inclusive education, their training should link directly with the educational services in so called contextual professional practice. This approach, in our experience, must be presented to all throughout the training process structuring with multi-directional flow between theoretical and experiences close to educational field. Three important steps are proposed:

- **Re-significance of own school experience of future teachers:** This period of time is essential. Each future teacher should discuss his/her own experience as a student, analyze emotions
and be aware of school and pedagogical theory made by teachers, allowing them to ‘see’ those components that were previously ‘hidden’ such as school’s culture, school’s type, teachers, uses and customs that marked the dynamic school and the values that predominated, characterizing the experiences from other angles and points of view.

**Approach to various contexts of school children:** This consists of visiting previously selected schools, taking part in observation activities and educational practices in three stages:

- Planning activities: after assessing the educational context, it is important to develop instruments of work; observation guides, questionnaires, interviews and to make teams to provide all aspects for implementing the planned approaches.
- Critical route implementation.
- Presentation of experiences: This is done in the classroom where all of the evidence and results are presented from the previous phase.

As a result of these activities, each student keeps a portfolio and checks research to support their actions. At all times they are accompanied by an experienced teacher. Certainly, they should include diverse environments, contexts, and educational services that characterize the educational system.

**Professional practices in real environments:** In the teacher’s training, the student must remain for a long period of time, in a school under the tutelage of a teacher. This teacher must exert mentoring activities, to enrich their teaching experience with the knowledge of a mentor who attends and promotes inclusion activities. At this time, the Faculty holds an agreement with diverse educational centers.

**6th.Cross Categorical/Multi-tiered formation:** Diversity needs a global and common vision; philosophy, values, legal frame, language and shared knowledge as learning theories, special educational needs, support systems, educational intervention; strategies for large and small groups and individuality, tutoring and curricular adjustments. Inclusive education must characterize all training teacher programs, offering skills and common benchmarks for everyone regardless of education level to be entered (e.g. Primary, Secondary and High Education). The common reference on inclusive education frameworks that must be present in all Teacher Training Programs are:

- **Common vision:** The philosophy of inclusion, legal frameworks that enable an education for all with quality and equity, educational policy that promotes attention to diversity, the historical evolution from marginalization to inclusion and conceptions among others, are fundamental aspects in educational programs.
- **Language and common knowledge:** Emphasize the student’s possibilities and support systems, with a clear vision that all children can learn. In this way the school needs to prevent the barriers and limitations for learning that could marginalize children and young people from their potential. It also includes learning conception, individual differences, the values of solidarity, respect, and collaboration. Cognitive and affective elements framed in the conception of collectivity and community empowerment as well.
- **Educational attention to diversity practices:** Includes strategies for large or small groups and one-on-one, mentoring, curricular adjustments, alternative support systems, diversity
assessment actions, collaboration with other professionals and co-teaching, trans-disciplinary action, among others. They are essential for the development of the professional skills of attention to diversity.

**7th. Mentoring:** New teachers must participate with experienced teachers at least during the first two years. This includes dialogue sessions, reviews of situations, decision-making arrangements and work plans, among others to provide the following to the new teacher: intervention (guidance), facilitation (advice), and cooperation (co-responsibility). The new teacher needs counseling and mentoring actions to consolidate his/her skills as an inclusive teacher. Mentoring are actions carried out by a teacher, preferably of the same school, or networks of teachers that assume this important task. It requires a lot of creativity and a clear and definite plan for the monitoring of such actions. The time should be defined by each environment, however this task should be carried out at least in the first year very closely and the second year in a more distant way. Nieto (2004) identifies three models of advice that characterize actions of accompaniment and mentoring:

**Intervention:** The role of the experienced teacher is directive and assumes a leadership position, where instruction is given through interpersonal behavior which provides materials and ideas to be adapted, and so dominates the transmission of information with an emphasis on the explanation and application of knowledge and skills.

**Facilitation:** The role of the experienced teacher is consulting. His/her interaction with the novice teacher provides advice and listens, encourages and clarifies. The experienced teacher provides materials designed for this purpose and promotes the discussion and review of diverse conceptions. This model focuses on interactive work methodology and improves the quality of action processes.

**Cooperation:** A critical friend or colleague is the experienced teacher role and their relationship is interdependent and a source of mutual learning, shared responsibility, experience or convergence of perspectives. Materials and ideas are developed together. There is an awareness of reaching agreements and reaching a consensus on courses of action. Cooperative research is promoted. Both input to the improvement plan. There is shared leadership and promotion of interdependence, reciprocity, collegiality and solidarity. The best features of accompaniment and mentoring are developed under the facilitation and cooperation approach.

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E-COMMUNICATION

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E-Communication is the way of communicating information electronically. E-Communication create new option for extending & enhancing education. It increases competition among trading firms by lowering transaction costs. The internet and E-Communication doesn’t just mean new tools for communications, it means, new ways to communicate. Today our society interacts with its various constituents differently- Teachers, Employees, board-members & other depending upon the nature of the message, the goals you are trying to achieve. Many people now find that E-Communication is faster and more convenient to use than their hard copies. The government has set a target to making all government services available online by 2005. In research paper we include the uses, functions, advantages and disadvantages and role in education of E-Communication.

Electronic communications have revolutionized business communications, although the huge increase in use has taken some organizations by surprise. It is commonplace now for people at work to use e-mail as easily as using the telephone, and Internet access is often part of the setup of a workstation. Many people now routinely use e-mail and the Internet for personal communication and interest as well as in the workplace. Electronic communication dates back to the telegraph that used Morse code to send messages long distances over wires. After that, the electronics industry added the wired telephone, the wireless radio and television.

Present Scenario

Communication is needed for decision making, co-ordination, control and planning. Communication is required for processing information in the accounting department, finance department, personnel department, establishment, of public relations, sales department, market research, production department, purchase department etc. Communication with the government, shareholders and prospective investors, customers etc. is also required for the day to day functioning of the business concern. Conventional process of communication is not sufficient to meet the multidimensional needs of the business enterprises. So, the need for modern communication technology emerges to meet the desired need of modern business enterprises. Worldwide communication has been facilitated by the electronic transmission of data which connects individuals, regardless of geographic location, almost instantly.

Types

Web Pages

World Wide Web users post content on websites for others to view. The content may be simple text, but it might also contain multimedia files including images, sounds, videos or streaming
content. Unlike many other forms of electronic communication, most Web content is pulled from the Web by users who are seeking information, rather than pushed to subscribers. While not as permanent as traditional media like paper, Web pages can archive information for extended periods.

**Email**

Email is a method originally intended to imitate physical mail. Messages are delivered from one specific address to one or more specific addresses. Users are alerted to the presence of new messages in their inboxes by email clients that display the content and offer an opportunity to reply. Messages are primarily text but may include file attachments of various types including images and short movies. Unlike instant messages, emails are generally not expected to be read immediately upon receipt. Most email readers keep track of conversations that include multiple people through the use of threads. Thus email is ideally suited for long, involved conversations between two people or among small groups of people.

**Forums**

Conversations that go on indefinitely, involve large numbers of people or need to be archived are not well suited to email. Forums, often hosted on the Web, provide an alternative that combines many of the aspects of email and Web pages. They involve discussions around a single, limited topic but can take place over months or years and involve dozens or even hundreds of participants. Most use a treelike structure that allows participants to jump in at whatever level their comments are most appropriate.

**Text and Instant Messaging**

Text messaging uses cellular airwaves and protocols to deliver textual messages from one cellular phone to another or from one phone to a group of other phones. Text messaging is usually intended as near-instant communication and can be quicker than a phone call because the sender doesn’t have to wait for the recipient to answer before delivering a message. Because text messaging is informal and easy, it’s sometimes called chatting. Text messaging can also facilitate private discussions when there is a chance that a phone call could be overheard. Instant messaging is similar to text messaging but is carried over the Internet rather than over cell phone airwaves.

**Social Networking**

Social networking sites facilitate communication among people with common interests or affiliations. Sites such as Facebook and LinkedIn provide places for people to interact, sometimes in real time. Microblogging services like Twitter, allow short textual messages of no more than 140 characters to be broadcast to a large audience. Unlike text messages, which are delivered to only small groups, microblog posts are intended to be seen by all of a user’s followers. Microblog users can repost messages that they want to share with their own followers, so a microblog post can spread quickly. A widely reposted message is called a viral post.

**Video Chat**

Like instant messaging, most video chatting is conducted over Internet protocols that stream
images from one device to another. At times, nothing beats a face-to-face conversation. Video chats provide an immediacy to a conversation. Because a person’s tone is often easier to read when you can see his face, businesses often use videoconferencing to aid in virtual meetings.

Uses

The Internet and electronic communications (also called computer mediated communications, or CMC) doesn’t just mean new tools for communication; it means new ways to communicate. Today your organization interacts with its various constituents differently - employees, board members, customers, partners and others - depending upon the nature of the message, the goals you are trying to achieve and the strengths (and weaknesses) of the available media - telephones, voice mail, fax machines, print, etc.

Electronic communications adds a powerful new channel that not only will change how you use this mix of options, but it will create entirely new ways to interact. For example:

- Electronic communications lets you combine numerous media - text, graphics sound, video, etc. - into a single message. That can result in far more meaningful communications tailored to the nature of your particular audience. In contrast to broadcasting, narrowcasting reflects the ability to develop numerous communications for subsets of your market or constituencies.

- Electronic communications is interactive. It engages audiences in active, two-way communications. That requires a new way of thinking about advertising copy and the handling of public relations. The pay-off, however, is a self-selected audience, engaged and actively participating in the communications process.

- Two-way communication is nothing new. But electronic communications creates a new form of many-to-many communications that lets geographically distributed groups communicate interactively and simultaneously through text, sound and video. You can hold inexpensive video conferences or press conferences from your desk, or conference with people at several desks located across the world. One of the burgeoning phenomena of the Internet is businesses and organizations sponsoring, supporting and moderating discussion groups about issues, products, strategies - anything of interest to the organization and its constituents. Sponsorships are also solicited for popular resources, such as indexes and other Internet search tools, and these provide a further communications and marketing opportunity.

- Many organizations are using electronic communications facilities, such as the World Wide Web, as internal communications tools to enhance team work. Many individuals at different locations can work on the same documents, hold meetings and integrate research findings.

- Electronic communications removes the power of communications gatekeepers to both positive and negative effects. Most organizations are used to controlling the messages that go out to its constituents through managers, spokespeople and others. But with the Internet, constituents begin to talk among themselves, requiring new approaches and a new emphasis on listening and reacting, not just talking.

- With the Internet you have the ability to transmit and receive large amounts of
information quickly to and from individuals and workgroups around the world. This changes the way activists, for example, can galvanize communities, inform legislators and change public opinion. It changes the sources and depth of your constituents’ knowledge levels. It also lets those constituents reach you with new kinds of communications they may never have attempted before.

Challenges
However, in introducing electronic communications the organization should consider possible problems, which may include:

- e-mail is not the informal and transient form of communication that many people think it is, even ‘deleting’ or ‘trashing’ a message does not mean it is unrecoverable.
- Intensive use of e-mail, and unnecessarily wide broadcasting, can lead to ‘information overload’ and stress as workers try to keep up with the number of e-mails received.
- The ease and speed of e-mail can lead to inadequate thought going into a message, and the possibility of the words or tone being misinterpreted by the recipient.
- There are a number of laws that cover electronic communications and employer monitoring of e-mails and internet use by workers.
- It is essential that any organization using these technologies, or thinking of installing them, considers the impact they might have, the position of workers and the legal liabilities that may be incurred.
- having a proper policy in place will help everyone understand the boundaries that may be imposed.

Advantages of Electronic Communication
The following points highlight on the advantages of electronic communication:

1. **Speedy transmission**: It requires only few seconds to communicate through electronic media because it supports quick transmission.
2. **Wide coverage**: World has become a global village and communication around the globe requires a second only.
3. **Low cost**: Electronic communication saves time and money. For example Text sms is cheaper than traditional letter.
4. **Exchange of feedback**: Electronic communication allows instant exchange of feedback. So communication becomes perfect using electronic media.
5. **Managing global operation**: Due to advancement of electronic media, business managers can easily control operation across the globe. Video or teleconferencing email and mobile communication are helping managers in this regard.

Disadvantages of Electronic Communication
Electronic communication is not free from the below limitations:

1. **Volume of data**: The volume of telecommunication information is increasing in such a fast rate that business people are unable to absorb it within relevant time limit.
2. **Cost of development**: Electronic communication requires huge investment for infrastructural development. Frequent change in technology also demands for further
investment.

3. **Legal status**: Data or information, if faxed, may be distorted and will cause zero value in the eye of law.

4. **Undelivered data**: Data may not be retrieved due to system error or fault with the technology.

5. **Dependency**: Technology is changing every day and therefore poor countries face problem as they cannot afford new or advanced technology. Therefore poor countries need to be dependent towards developed countries for sharing global network.

**Role of E-Communication in Education**

Electronic communication courses familiarize students with the history of electronic communications and demonstrate how modern communications technologies have transformed society. Some common course offerings in electronic communication are presented in this article. Courses in electronic communication are typically offered through undergraduate diploma and degree programs in communications, broadcasting, audio production and journalism. These courses may also be offered as part of master’s degree programs in fields such as broadcast and electronic communication arts. Undergraduate courses generally introduce students to the field’s various components, while graduate courses often focus on advanced research projects and seminars. Some courses include hands-on practice with sophisticated electronic equipment and/or communications software.

**List of Common Courses of E-Communication in Education**

Below are the descriptions of the most common electronic communication courses.

**Electronic Media Course**

The history of and current technologies found in electronic media are examined in this foundational class. An exploration of the development and consumption of electronic media, the evolution of technology from radio to television and the Internet is explored. In addition to historical facts, technical aspects of broadcasting may also be explored.

**Electronic Communications Course**

Students in this introductory electronic communications class examine the history of electronic technologies used for communications, including the telephone, radio, television and Internet. They investigate the political, economic and social atmosphere that spurred the development of these electronic technologies.

**Audio Production Course**

Audio production courses are typically a combination of lab and lecture. Students discover how to use and control sound in different situations, including on stage, over the radio, on TV and in the recording of music and film productions. In the lab portion of the course, students record and edit their own audio productions.

**Online Media and Publishing Course**

This course familiarizes students with the types of online publications available, which include videos, magazines and newspapers. Students gain experience with HTML and simple web
publishing programs for print and Web-based production. The course includes an overview of the ways Internet access has influenced literature and literacy in the United States.

**Ethics in Electronic Media Course**

The Internet and other electronic mediums have changed the way people receive, interpret and spread information. Additionally, these technologies have influenced the ethical obligations of media professionals. Journalists, television hosts and radio broadcasters must remain neutral, fair and balanced. In this course, students discuss ethical issues facing journalists. They also discuss the responsibilities of communications professionals to report unbiased information without violating human rights.

**Conclusion**

At last we can say that due to electronic technology, jobs, working locations and cultures are changing and therefore people can easily access to e-communication without any physical movement. It will make teaching learning more efficient and interesting. Students can easily understand. It helps them in remembering the concepts. By this we shall get good students in future. Beside this it is also helpful for teachers to teach. They can teach with the help of relevant pictures, videos, audios etc. in nut shell E-Communication brings quality in teaching and learning.

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TEACHER EDUCATION THROUGH DISTANCE EDUCATION

Ms. Amanpreet Kaur* & Ms. Gurpreet Kaur*

There was a time when studying through correspondence was seen to be the option only for those who did not meet the cut-off and so could not get admission in the 'regular' courses of their choice. This mode of education was considered a poor attempt at being on par with those who studied in recognized colleges pursuing the regular courses that were on offer. However, today, distance learning has been revolutionized and it has become a preferred mode of studying for many, including schoolchildren, bored housewives, corporate executives, professionals, entrepreneurs and young adults.

Introduction

Education is an engine for the growth and progress of any society. It not only imparts knowledge, skills and inculcates values, but also responsible for building human capital which breeds, drives and sets technological innovation and economic growth. In today’s era, information and knowledge stands out as very important and critical input for growth and survival. Teacher education is a vast terrain of scholarly activity. It refers to both pre-service and in-service programs, which adopt both formal and non-formal approaches. It is a continuing process, which focuses on teacher career development. According to UNESCO (2005), teacher education “addresses environmental, social, and economic contexts to create locally relevant and culturally appropriate teacher education programmes for both pre-service and in-service teachers.” Thus, the teacher can be rightly called a nation builder. The teacher is a representative of the society who inculcates moral precepts. In the development of a country, great attention has to be paid to education and learning, as well as good morals, and nobody is more suited to assist in this process than the humble teacher. Without teachers, both knowledge and morals would suffer. According to International Conference Conferred by Teacher Federation, “Good teaching depends upon good teachers. Hence our aim should be to improve the quality of teachers”. Teacher education generally includes four elements: improving the general educational background of the trainee teachers; increasing their knowledge and understanding of the subjects they are to teach; pedagogy and understanding of children and learning; and the development of practical skills and competences. The balance between these four elements varies widely (Perraton, 2010). Distance education is a recent innovation in the field of education. It is modern system of non-formal education. It is imparted through correspondence or postal course; connect programs electronic media and other audio-visual aids. It is a systematically organized form of self-activity. Without taking anything away from the significance of technology in distance learning, what should not be forgotten is that distance education comes with a long history in India.

The Indira Gandhi Open University (IGNOU) has been offering distance learning since 1987, and Delhi University’s School of Open Learning has been doing it since 1962. Now private

universities too have been taken in by the huge market of students, who want to learn but at their pace and on their own terms, waiting to be tapped. Most universities offer diplomas, certificates and graduate and postgraduate level modules that can be pursued through distance education. According to Holmberg, "Distance study is learning supported by those teaching methods in which, because of the physical separateness of learners and teachers, the interactive, as well as the preactive phase of teaching is conducted through print, mechanical or electronic devices." Distance learning is based on non-contiguous communication, that is, "the learner is at a distance from the teacher for much, most or even all the time during the teaching learning process". Based on this definition, we may infer that the concept of distance learning is wider than that of correspondence learning, with which it is sometimes confused. Lovely Professional University has the LPU e-Connect that links the university with students and others located at different geographical locations. The university is also using technology to provide 24x7 accessibility which helps in removing barriers of physical presence. Students, who register for the university’s distance education programs, are given personalized user ids and passwords, which they can use to access the interactive features of the web portal. e-Connect supports all the programs that the university offers through its distance learning wing. On similar lines, Amity University too is relying on providing a very strong hi-tech back end support system for delivering study material on time at either a learner’s home or workplace. With an experience of 13 years in the field of distance education and a number of awards under its belt, Amity also has special offers for people from different walks of life, like home makers, army officers, doctors and lawyers, who want to pursue studies through its distance learning programs.

How is Distance Education Delivered?

A wide range of technological options are available to the distance educator. They fall into four major categories:

- **Voice** “Instructional audio tools include the interactive technologies of telephone, audio conferencing, and shortwave radio. Passive (i.e., one-way) audio tools include tapes and radio.
- **Video** “Instructional video tools include still images such as slides, preproduced moving images (e.g., film, videotape), and real time moving images combined with audio conferencing (one-way or two-way video with two-way audio).
- **Data** “Computers send and receive information electronically. For this reason, the term “data” is used to describe this broad category of instructional tools. Computer applications for distance education are varied and include:
  - Computer Assisted Instruction (CAI) uses the computer as a self-contained teaching machine to present individual lessons.
  - Computer Managed Instruction (CMI) “uses the computer to organize instruction and track student records and progress. The instruction itself need not be delivered via a computer, although CAI is often combined with CMI.
  - Computer Mediated Education (CME) “describes computer applications that facilitate the delivery of instruction. Including: electronic mail, fax, real-time computer conferencing, and World Wide Web applications.
- **Print** “Print is a foundational element of distance education programs and the basis
from which all other delivery systems have evolved. Various print formats are available including: textbooks, study guides, workbooks, course syllabi and case studies.

- **Personal Contact Programs (PCP):** It is an important tool for teacher training at the in-service education stage. Although teacher and taught live a part throughout the programs, there are personal contact programs which arrange to the face to face contact between the teacher and taught to solve all academic problems of the students.

**Distance Learning: Best Apps, Tools and Online Services**

- **Adobe Connect:** Much like teachers and students need to know their way around the company’s ubiquitous PDF files, it also pays to be familiar Adobe’s collaboration and learning solutions. The educational version of the company’s online meeting software allows teachers to easily tweak presentations, provide real-time quizzes and facilitate interaction, breakout sessions and more. There are also a number of tracking mechanisms to allow for real-time feedback on course content and setup, as well as monitoring of students’ progress.

- **Coursera:** Coursera is an online portal that hosts courses from universities around the country and the world, essentially providing a way for students anywhere to “audit” classes they would otherwise not have access to. It provides a readymade way to learn online and see the benefits of distance learning firsthand.

- **edX:** edX is one of the leading sites for accessing MOOCs, or massive open online courses. The venture was founded by Harvard and MIT, and offers classes from those prestigious institutions, as well as material from an expanding list of partners.

- **ePals:** Collaboration site ePals offers a way for groups of students around the world to be matched up and paired with other classrooms, and allows teachers to create their own projects or join another class’ existing ones.

- **FaceTime:** Just as millions of everyday users have come to embrace Apple’s popular videoconferencing tool, so too should teachers and educators give it a look — it’s among the simplest and most widely-available ways to connect via voice and video with others online. Both users will require an Apple device to participate in discussion and learning, however.

- **Google Plus Hangouts:** Google’s social network shines for its own online video chat solution as well, which lets teachers, students and third-party experts easily videoconference in groups — we’ve even seen it used to broadcast presenters live to packed auditoriums.

- **iTunes U:** Apple’s in-house solution for online and connected learning, iTunes U provides thousands of audio and video courses on-demand. Using it, you can access learning and presentations from many top K-12 schools and universities worldwide — and learn more about the world without setting foot in a formal classroom.

- **Skype:** Skype ranks among today’s most widely utilized ways to make voice or video calls online, providing for communication across PCs, smartphones, tablets and mobile devices, making it a useful tool in educators’ arsenal. Thousands of teachers and kids can use it to connect with experts, or fellow pupils and educators, for real-time chats — and for free.

- **Udacity:** Another major player in the MOOC scene, Udacity sees its role as “democratizing education,” as it brings online lessons and classes to more than 160,000 students in nearly 200 different countries.
• **YouTube:** With so many educational videos and classes available online, YouTube provides a surprisingly robust information resource, and source of insight into topics ranging from science to mathematics, history and geography.

**Conclusion**

Distance learning is a way of learning remotely without being in regular face-to-face contact with a teacher in the classroom. There are no classrooms; instead there are places where multidisciplinary teams comprised of redactors, authors, audio-visual experts, and so on, plan and compose the materials that will be used. In distance learning we find no “academic semesters”. The students may at will discontinue studies whenever he needs or wants to do so. It is a distinct approach to impart education to learners who are removed in space and / or time from the teachers or the teaching institution on account of economic, social and consideration.

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INNOVATIONS IN TEACHER EDUCATION

Mr. Bikramjit Singh* & Mr. Gurpreet Singh*

Change is inevitable and the world is changing at jet's speed. The generation today is being served with hi-tech equipments in the tray as soon as they are born. In such a scenario the education of such techno-savvy generation has become a challenge for the teachers. Thus our education system is floating with new challenges; to supply well trained teachers is major issue in front of Indian Teacher education system. Though much is being talked about all this still we are far away from the road of excellence. The present paper will attempt to provide a brief awareness about the need for change in the teacher education system, the problems being faced and the efforts being made in this direction.

Introduction

Innovation is the key to improvement. In current time the obsolete ideologies and methods of teaching do not work. One has to be innovative with teaching. Time is constantly changing and the only way to keep up with it is to keep growing and evolving and this is also applicable to teachers. In order to relate with children teachers need to keep themselves upgraded with new ways of teaching. For instance if a teacher is not net savvy in current times then he/she cannot make History classes interesting. Today is the age of videos and podcasts and children can easily learn through this interactive media and hence teachers of current India need to keep up with the current technology.

Present Scenario

An overview of the numbers of schools, teachers, teacher educators, teacher education institutions, and enrolments in schools and in teacher education institutions would give an idea of the enormous expansion of the school education system and of the problems which the teacher education system needs to handle. While the percentage of trained teachers in schools is around 90%, the issue of providing in-service education to more than 4.5 million teachers at regular intervals imposes heavy demands on the system, which becomes all the more acute as capacities of teacher education institutions are limited and are suffering from lack of resources, infrastructure, training materials, and professional expertise. The system needs to recruit more teachers as a large number of children, still outside the fold of elementary education, have to be brought into schools or alternative learning centres.

National Curriculum Framework 2005 under the heading “Encouraging Innovations” in Chapter 5 entitled “Systemic Reforms” has made the following observations: In our schools individual teachers often explore new ways of transacting the curriculum in addressing the needs of students within their specific classroom context (including constraints of space, large numbers, absence of teaching aids, diversity in the student body, the compulsion of examination, and so on). These efforts, often pragmatic but also creative and ingenious, by and large remain invisible

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to the school and the larger teaching community, and are usually not valued by teachers themselves. The sharing of teaching experiences and diverse classroom practices can provide opportunities for an academic discourse to develop within school as teachers interact with and learn from each other. This will also encourage new ideas and facilitate innovation and experimentation. How can innovative and creative ways of teaching and learning be encouraged and supported by the system so that they can become a body of practice that can be brought to a stage when they can be built back into the system? For a start, there is a need to create structured spaces within schools, and at the level of the cluster and block where teachers are encouraged to share and discuss classroom practices and experiences. If seen as worthwhile, some of these ideas and practices can be systemically followed up. It is also important to bring together groups of teachers within and across schools and provide support to them in terms of resources as well as time to work together.

Thus an overview of the teacher education system and school education in India clearly indicates that much needs to be done if we want to improve the quality of education and provide well trained and efficient teachers to Indian Education System.

**Problems of Teacher Education**

Teacher education institutions have been proliferating and mushrooming all over the State with profit motives until the National Council for Teacher Education (NCTE) with its headquarters in Bangalore, came up with and insisted on mandatory norms and standards for these institutions. As a result of their intervention, many institutions have constructed buildings with classrooms and procured infrastructure to meet their standards. These institutions were even forced to increase the salary of teacher educators to the basic amount in the government scale. But later, the effectiveness of NCTE intervention reduced and the powerful lobby of private education institutions had their way in running their teacher education shops. There has been a great expansion of higher education over the years. Today, there are more than 200 universities and 8000 colleges. Kothari commission remarks “The destiny of India is being shaped in its classrooms.” No doubt education plays a significant role in nation’s development but the quality of education is greatly determined by the quality of teachers, therefore, great efforts were made and still are being made to improve the quality of teacher education. Some of the problems concerning teacher education are discussed below:

- Deficiencies of small time period provided for teacher’s training
- Selection problem
- Incompetency of students and teachers
- Teacher Education Program have narrow and rigid curriculum
- Defects concerning papers
- Problems of practice teaching
- Problem of supervision of teaching
- Lack of subject knowledge
- Insufficient financial grants
- Lack of Culture-Specific Pedagogy
- Narrow Scope of Teacher Education
- Faulty methods of teaching
- Isolation of teacher’s education department
- Poor academic background of student-teachers
- Lack of proper facilities
- Lack of regulations in demand and supply
- Inadequate empirical research
- Lack of facilities for professional development

**Need To Develop Humane and Professional Teacher**

Teacher Education for preparing humane and professional teachers needs to be wholistic. Along with content and methodology there is also a need to integrate emotional competencies, such as, self-awareness and self-management, social sensitivity and social management. It is also essential to integrate life skills, such as, self-awareness, empathy, interpersonal relationship, effective communication, critical thinking, creative thinking, decision making, problem solving, and coping up with emotions and stress with teaching and learning. We need to integrate info-savvy skills, such as, asking, accessing, analyzing, applying and assessing. It is needed to integrate techno-pedagogic skills, such as, media message compatibility, media designing, integration of message media and modes, realizing proximity of message forms, media language proficiency, media choice, message authenticity and media credibility, media automation, media integration and media acculturation. It is required to integrate human development climate through trust, risk taking, openness, reward, responsibilities, top support, feedback, team spirit and collaboration. There is a need to integrate spiritual intelligence dimensions, such as, knowledge of God, religiosity, soul or inner being, self awareness, quest for life values, convention, commitment and character, happiness and distress, brotherhood, equality of caste, creed, colour and gender, inter-personal relations, acceptance and empathy, love and compassion, flexibility, leadership, life and death. The Teacher Education programs need to integrate in numerous skills & competencies. It is necessary to shift to more powerful learning paradigms, such as, linear to hypermedia learning, instruction to discovery and construction, teacher centered to learner centered education, absorbing material to learning how to navigate and learn, learning as taxing to learning as fun, teacher as transmitter to teacher as facilitator. We need to bridge the gaps between to have and to be. There is a need to bridge the gaps between Teaching Styles and Learning Styles providing differentiated differential learning experiences to learners of all the learning styles- audio, video and kinesthetic; cognitivistic, behaviouristic and constructivistic; accommodators, divergers, convergers and assimilators. Instructions should be directed to the whole brain, because if the instructions are directed more to the left half of the brain it results into aggression, fragmentation and rationalization, whereas, considering the right half of the brain results into assertion, integration and responsiveness. Every institution should make efforts for inculcating the basic values, such as, cleanliness, punctuality, equality, truthfulness, duty fullness, national identity, perseverance, sense of responsibility, and cooperation. Teacher Education Institutions should help realize the sensitivity towards cultural values, such as, honesty, loyalty to self and others, Love and affection for family and home, absolute norms, work hard ethics, compassion, peace, inoffensive speech, politeness, and personal responsibility. Education should be value added. Character building should
be on of the primary aims of education.

**Innovative Approaches**

Every innovation has a unique culture, created by the innovators. novel ideas, personal dedication, institutional social support, persistent struggle are some of the features of innovations. It is evident through each one of the following innovative approaches.

- Specialized Teacher Education
- ICT Mediated Education
- Bridging the gaps between Teaching Styles & Learning Styles
- Developing Integrated Integration of Micro-Teaching Skills
- Integration of Life-Skills
- Training Thinking
- Choice Based Credit System
- Electronic Distribution of Examination Papers (EDEP)
- Double Valuation
- Integration of Techno-Pedagogic Skills
- Problem Solving Through Participatory Approach
- Personalized Teacher Education
- Integrated Teacher Education
- Thinking Styles
- Total internal Continuous Comprehensive Evaluation
- Constructivist Approach

**Innovative Programs in Teacher Education**

Teacher Education Institutions at different levels, particularly in higher and technical education field countrywide, have innovated and institutionalized a number of programs, namely M.Tech Ed by NITTTR, Bhopal and Chennai, M.Tech Engineering Education by NITTTR, Chandigarh, M.Tech HRD by NITTTR, Chennai, B.C.Ed. (1989) by DAVV, Indore, M.C.Ed. (1991) by DAVV, Indore, Master of Educational Technology (Computer Applications) by SNDT, University, Mumbai, M.Tech. (Educational Technology) by Kurekshetra, University, Kurekshetra, B.Sc. in Teaching Technology by Sikkim Manipal University, HSTP, Training Teachers, Eklavya, MP (1982), Activity Based Teacher Education Program, DAVV, Indore (1991), Personalized Teacher Education Program, Lucknow University, Lucknow (1996), Comprehensive Teacher Education Program, Gandhi Shikshan Bhavan College of Education, Mumbai University, Mumbai (2000), Four Year Integrated Program of Teacher Education, Kurekshetra University, Kurekshetra (1955), Four Year Integrated Program of Teacher Education, RIE, NCERT (1963), B.Ed. (Educational Technology), AEC Teacher Training College, Pachmadi, MP, Early Faculty Induction Programme (EFIP) under QIP by AICTE, New Delhi, Induction Training Programme (ITP) under QIP by AICTE, New Delhi, University of Teacher Education, Chennai, Tamilnadu (2008), IGNOU Institute of Professional Competency Advancement of Teachers (IIPCAT, 2009), IGNOU, India, Indian
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Though a comprehensive list of Innovative Programs is available, innovations are very rare. It may be attributed to various factors. Novel ideas do not incubate because of the adverse external conditions. There are wide gaps between the visionaries and actors. So, very often the innovations have short life and die down in the institutions, where these originate. Sometimes, the most innovative programs fail in the formal system, because, these are beyond the view purview of the apex bodies. Four year Integrated Secondary Teacher Education Programs need excellent Teacher Educators who are Philosophers of basic Disciplines, as well as, Education. Such a combination is rarely found. In addition to this, these need to have scope for vertical mobility. Activity based, Personalized Teacher Education Programs though originated with zeal, yet need to struggle to sustain themselves in the forms envisaged.

**Innovative Teacher Education: Some Features**

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**Suggested Innovative Courses, Programs and Actions in Teacher Education**

**A. Certificate/ Diploma Courses**

There can be innovations in Teacher Education through E- Open Sourcing in many areas, such as,

1. Personality Development
2. Human Rights Education
3. Life Skills Education
4. Techno-Pedagogic Skills
5. Management of Learning Systems
6. Media Program Appreciation
7. Multi-cultural Education
8. Environmental Education
9. Adolescence Education
10. Adult Education
11. E-Teacher Education
12. Old Age Education
13. Technology Integrated Education
14. Instructional Design
15. E-Content Development
16. E-Communication
17. Non-Verbal Skills
18. Vocational Education
19. Psychological Appraisal
20. International Understanding & National Integration

**B. Programs**

1. e-Teacher Education
2. Modular Teacher Education
3. Integrated Teacher Education
4. Specialized Teacher Education
5. Personalized Teacher Education
C. Actions

1. There is largely scarcity of Professors in the M.Ed. Program offered all over India. The services of the retired Professors could be sought, more so, through Distance Mode through State and National Open Universities to strengthen the M.Ed. Program.

2. To qualify the entrance test for induction into the Ph.D. Programs has become mandatory throughout India as per the UGC guidelines. Various Universities are designing their own entrance tests. An online test may be conducted by the UGC.

3. Identification of the innovative research could be done if all the Departments of Education countrywide contribute in this area. They may periodically produce the Research Abstracts of the Studies conducted in their respective Departments, which may be made available on the World Wide Web.

4. Every Teacher Educator may be given Unique Identification Number. It will facilitate Manpower Planning in Teacher Education.

5. There should be networking amongst all the Teacher Education Institutions to learn from the innovative practices of each other.

6. Efforts should be made to realize holistic Teacher Education by integrating various skills, such as, microteaching, info-savvy, techno-pedagogic, life skills in the various Teacher Education Programs. Along with cognitive development there should be adequate focus on Emotional maturity, psycho-motor development, health and environment, and inter disciplinary development.

7. It is imperative to strengthen Vocational Teacher Education in almost all the domains of Vocational Education, such as, agriculture, horticulture, sericulture, servicing of the electric and electronic appliances. Innovative approaches need to be evolved.

Conclusion

Hence much needs to be done as far as infusing new strength into our teacher education system is concerned. Indian education system has a vast potential but much depends upon how well trained and efficient teachers we supply to the system. A step by step reform and upgradation will definitely help to fill the lacuna, thus a concerted effort by all the stake holders is required in this regard.

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TOTAL QUALITY MANAGEMENT- AN IMMINENT NEED FOR TEACHER EDUCATION

Ms. Jasvir Kaur*

The indomitable spirit of higher education paves the way for the growth of a nation in the political, economic, social, intellectual and spiritual dimensions. Teacher education is one of the areas in higher education which trains student-teachers in pedagogy, which in turn helps them to train the young minds of educational institutions. The “Fate of the nation is decided in the classroom,” is a remark made by the Education Commission of India. Such classrooms are created by committed and dedicated teachers. These teachers are trained in teacher education institutions. Teacher education institutions should maintain quality to ensure the academic excellence of trainees who come into the teaching profession. Quality is a comparative standard prescribed for those institutions that are on the quest for output brilliance. Quality assurance in teacher education reflects on the high profile of the institution and the competency of student-teachers. Here this paper consist of Functions of TQM, Components of TQM, Role of Teacher training colleges, Problems in TQM in teacher educations & Suggestions for TQM in Teacher training colleges.

Quality refers to basic and essential character, the distinguishing element or characteristic of a product, service, organization or entity. Consumers look at these elements in deciding whether or not to buy particular products or services. According to Bennis (1993) “Quality often is not measured at all, but is appreciated intuitively. One’s response to quality is a feeling, a perception that is connected intimately with our experience of meaning, beauty and values in our lives.” Quality has been defined by several management experts. The dictionary meaning of quality is “the degree of excellence”. Juran says quality is “fitness of purpose” i.e. something is of good quality if it satisfies one’s need. Deming is of the opinion that “quality is a positive concept. Product or service which helps someone and enjoys good sustainable markets is of good quality. According to Crosby if a product or service conforms to requirements then it is said to be of good quality. Seymour opines that “quality is continuous improvement”.

Characteristics of Quality

- **Quality is a matter of perception, not logic**: It is the perception that resides outside the product, service or organization. Peter Drucker (1990) says “the results of an organization are always outside the organisation. Inside, there are only costs. The result of a business is a satisfied customer, the result of a hospital is a healed patients and the result of an educational institution is a student who has something of value which he/she can use ten years later.” Thus, quality is perceived by the consumer.

- **Quality is relative and not absolute**: It is a matter of degree. Theoretically, there are no maximum or minimum limits. Quality improvement, like pursuit of excellence, is
a journey without a destination. There is nothing that cannot be little better in some way or the other.

- **Quality is subjective**: The criteria for judging quality can be substantially different from people to people, based on experience, values and culture.
- **Quality is a contextual idea**: Indicators of quality are institution specific. A high rate of job placement of graduates is a legitimate indicator of quality for vocational-technical-professional education programmes, but would not hold for humanities and liberal arts education. Each institution has a mission, a clear understanding of what it is, why it exists and what its primary obligation is. All functions and activities are informed by this mission. Assessment of performance and quality are valid only in terms of mission and goals.
- **Quality can be measured inferentially**: Like intelligence, motivation, attitude and other educational outcomes indicators of quality are established that serve as a basis of measurement.
- **Quality is attainable**: Quality is not something that is bestowed by others it is attained and maintained as a result of ceaseless striving (Sapre 1999)
- **Quality is applicable to the system and its parts**: Quality is applied to each component of a system i.e. input-process-output.

### Quality in Education

Quality has become a defining element of education in the 21st century in the context of new social realities. The information communication revolution, the knowledge economy and globalization are greatly influencing the ‘next society’. How to provide quality education to large numbers at affordable costs is the primary concern of developing countries. Quality makes education as much socially relevant as it is personally indispensible to the individuals. In this sense quality becomes the defining element of education. In this context, quality and excellence should be the vision of every higher education institution including teacher education. Acquisition of quality and excellence is the great challenge faced by all higher education institutions.

### Total Quality Management in Teacher Education

Applied to the field of Teacher Education, quality refers to the totality of features and characteristics of the student teacher acquired as a result of the teachers education programme. If the expectations of the schools, students, parents and the society are met that indicates the right type of teachers have been prepared by the teacher education institutions. And if the teachers continue to improve themselves then there is value addition in education (Feigenbaum, 1951). Such teachers will continue to meet the needs of the society. There is fitness of educational outcome and experience for use (Juran and Gryna 1988). There will be defect avoidance in education process (Crosby 1979) of teachers in a quality teacher education institution. In any educational institution there are three aspects to be managed-academic, administrative and financial. Besides these there are the human and physical resources to be managed to their optimum level. In other words management of input-process product is of utmost concern of the system of teacher education. If every component is of good quality then the final product i.e. the
teacher will be perceived as fulfilling the needs of the consumers. Quality in teacher education can be indicated by the 'educatedness' of the products of the institution i.e. the student teachers. Quality teachers are indicated by their 'educatedness' that they have achieved through their education and training. The teachers are well informed and possess knowledge about facts figures, concepts in their subjects. They are cultured and possess integrated personality which is warm, empathetic and ethical. One level ahead of being cultured is emancipation wherein teachers are individuals who rise above the known artificial boundaries of religion, caste, creed, gender, linguistic and geographic belongingness, social mores, cultural traditions and forms and treat their students fairly. Finally, teachers should achieve the best of potential already in them.

Manivannan, M.; Premila, K. S.(2009), has conducted research on Application of Principles of total quality management (TQM) in Teacher Education Institutions. The findings focus on the strong and weak areas of various teacher education institutions according to the quality indicators. The study recommends further strengthening of quality indicators, which are already strong, and the revamping of weaker quality indicators. It is also recommended that institutions should adhere to the quality standards set by national and international assessment and accreditation bodies. In conclusion, the global scenario expects skilled teachers to produce students with a versatile personality for which teacher education should be strengthened.

However, if the following questions are answered by the educational institutions in general they will be able to achieve quality. What key outcomes have we achieved? How well do we meet the needs of our stakeholders?, How good is our delivery of education processes?, How good is our management?, How good is our leadership?, What is our capacity for improvement?

**Quality Indicators for Teacher Education**

It includes Curriculum Design and Planning, Curriculum Transaction and Evaluation, Research, Development and Extension, Infrastructure and Learning Resources, Student Support and Progression and Organization and Management

**TQM Theory and Principle:** Philosophy, Vision, Strategy, Skills, Resources, Rewards and Organisation are the principles of total quality management (Myron Tribus, 1994). Many people have their own definition of quality and restrict the concept of quality to some sectors only. Education is an obligation and quality should extend its reach to the Education Diaspora. The concept of quality instruction goes above and beyond innovation. It is not that we do not know how to make learning more innovative and joyful. We do, it is that we need to design educational experience that will deliver predictable learning. Success can come from thinking about acting strategically to define, design and deliver quality instruction. Teachers should design Quality Instruction Planning Programme to optimize learning. They have to define, design and deliver educational experiences in the context of quality provided the instruction is innovative and will be useful for the target learner. The learning experience should be rewarding, leading to lifelong learning, so that the learners learn where and when to use them effectively to empower themselves (Kaufmanns and Zahn, 1993). When applying TQM principles to learning, care should be taken to give due importance to all the above principles. The omission of any one in this chain renders the theory inoperable since all are interlinked.

**Philosophy:** The presence of sound philosophy leads to inspiration but in the absence of
philosophy, there are no followers. Application of TQM principles to classroom teaching will inspire the learners, which will lead them to adopt a similar methodology in their future assignments.

**Vision:** A good vision leads to life-long learning while the absence of vision may lead to confusion. This is a longterm benefit that a learner will enjoy. Lifelong learning is an important aspect in one’s life. Any course or degree should not be considered an end to learning. The teacher should be a visionary in inculcating a passion for life long learning in the learners.

**Strategy:** The presence of a sound strategy leads to developing learning skills; otherwise there will be a problem from the very beginning. To achieve the objectives of learning and to have the desired learning outcomes, it is necessary to devise the learning instruction in such a way that learners learn to learn. Developing learning skills are very important not only to accomplish the immediate course or degree requirement but also to imbibe the quality to learn. **Skills:** Presence of good skills leads to a holistic approach but in the absence of skills there is anxiety. A holistic approach to learning ensures quality in education and makes learning a pleasure and joy. The attachment to learning should be healthy. It requires dedication and commitment to facilitate self-directed learning.

**Resources:** The availability of appropriate resources leads to optimum usage of available resources and facilities. The absence of resources leads to frustration among both learners and teachers. Before going in for procuring new resources and facilities for facilitating the process of innovative teaching and practice, the existing resources should be used in an optimum manner. Instead of wasting precious time, money and energy, a teacher should use the available resources.

**Reward:** Rewards and recognition for innovative teaching leads to the desired learning outcomes. The following are some of the rewards that can motivate the teachers for Completion of units of the course in an innovative way like Involvement of all learners in the learning process, Recognition from learners, colleagues and the head of the institution, Benefit from teamwork and learning the art of working as a team, Different learning environment resulting in development of leadership qualities, Co-operative and collaborative learning, Recognition and appreciation of peers.

**Organisation:** Cooperation of support services for any innovative experiment to be successful, the co-operation of both the teaching and the non-teaching staff of the educational institution are necessary. In the absence of organization, there is no co-operation of support services which hinders organized learning.

**Problems in TQM in Teacher Educations**

Major problems includes dearth of faculty, Low quality research, administrative difficulties, Deterioration of values, Lack of academic staff, Defective Curriculum and examination system, Lack of flexibility in higher education, Low confidence level of students, Fear of failure and psychological barriers practice, Lack of strategic planning, lack of qualitative and quantities infrastructure, lack of co-operation among colleges.

**Suggestions for TQM in Teacher Training Colleges**

Got establishing quality circle and healthy practices in teacher training institutions, Focus on need and resource based research and innovation, to create relationship between institutions and
alumni, Focus on proper needs of market, Achieve top quality performance in all areas, Produce system for achieving quality performance, Develops measure of achievement, Help institutions to become competitive, Develop team approaches, improve communications, Reward outstanding achievement

**Conclusion**

Therefore, today there is a need of total quality management in teacher education to face the present challenges in India and worldwide. So there is an urgent need of drastic changes in educational planning, educational administration and educational management and supervision, teaching-pedagogy, admission procedures of the students and selection procedure of the faculty etc. to maintain the total quality management in teacher education in the global world.

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INNOVATIONS IN TEACHER EDUCATION

Ms. Jaswinder Kaur* and Mr. Satkartar Singh**

An innovation can impact on the choice of content to be included in a programme, and on the structure of courses included in a programme. All the three levels of teacher education like, (A) pre-service, (B) in-service and (C) on service can contain an element of innovation. The pre-service and in-service teacher education programs have shown paradigm shift with its emphasis on globalization and individualization. This paper discusses about the need of teacher education program to be innovative, and also the scenario of innovative teacher education program in various universities and institutes of the country. The paper also discusses the basic features of some of these innovative teacher education programs and approaches and at the end suggests some innovative features of teacher education programs.

Teacher Education is a discipline which educates the progressive generations on what has gone by, where we are, where we want to go, and what we like to create, observing healthy, meaningful and long life. It is one of the significant areas where a lot of innovative ideas can be tried out and practiced. Teacher education is a program related with teacher proficiency and competence that would make them competent enough to face new challenges in the education. Now a days the field of education is not only limited with books but has broadened in various new horizons. Development and changes in education have affected teacher education necessitating review and reforms. The soul of a gardener resides in the seeds, the soul of a philosopher resides in the mind, the soul of a piper resides in the pipe, the soul of a singer resides in the voice, the soul of a teacher wanders with the learners. Dancing crops, flowing wisdom, enchanting music, touching songs, resonating dance, immersing verses, speaking sculptures, and enlightened learners are the wonderful springs of nature. Teacher Education is a discipline which educates the progressive generations on what has gone by, where we are, where we want to go, and what we like to create, observing healthy, meaningful and long life.

According to NCTE (1998) teacher is the most important element in any educational program. He plays a central role in implementation of educational process at any stage. The level of achievement of learner is determined by teacher competence. So the quality of education basically depends on the quality of teachers. Kothari commission has very rightly said, “The destiny of India is being shaped in its classrooms.” As the population in India is growing very rapidly day by day the need of well qualified and professionally trained teachers will also increase in the coming years. So lots of efforts should be made to improve teacher education. Teacher education is a continuous process and its pre-service and in-service components are complimentary to each other. Education is instrumental in the preparation of teachers who can in their practice ensure transformative learning, where teacher and learner are co-constructors of knowledge.

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315
Present Scenario

India has a large system of education. There are nearly 5.98 lakh Primary Schools, 76 lakh Elementary Schools and 98 thousand high/Higher Secondary Schools in the country, about 1300 teacher education institutions for elementary teachers and nearly 700 colleges of education/ university departments preparing teachers for secondary and higher secondary schools. Out of about 4.52 million teachers in the country nearly 3 million are teaching at the primary/elementary level. A sizeable number of them are untrained or under-trained. In certain regions, like the North-East, there are even unqualified teachers. As far as in-service education is concerned the situation is not very encouraging. In this scenario it has been observed that teacher educators are not professionally committed and overall competencies of teachers leave much to be desired. Sharma (2012) stressed on the fact that ICT can play a major role in professional growth of the teacher and shaping the global economy. Unless teacher educators model effective use of technology in their own classes, it will not be possible to prepare a new generation of teachers who effectively use the new tools for teaching and learning. All these problems are closely associated with increase in sub-standard institutions of teacher education and there are numerous reports of gross malpractices; and the support system provided by the State Councils of Educational Research and Training (SCERTs) and the University Departments of Education has been insufficient and there is no support system below the state level. The DIETs are charged with the responsibility of organizing pre-service and in-service programmes in addition to being the nodal resource centers for elementary education at district level. Likewise, Colleges of Teacher Education (CTEs) and Institutions of Advanced Study in Education (TASEs) have been given the responsibility of introducing innovations in teacher education programmes at the secondary and higher secondary stages and in vocational education.

Problems of Teacher Education

It is universally acknowledged that education is an effective means for social reconstruction and to a great extent it offers solutions to the problems a society is faced with. These problems may be economic, social, cultural, political, moral, ecological and educational. Since the teachers play a major role in education of children, their own education becomes a matter of vital concern. Various problems in the way of teacher education are following:

- Short Duration of Teacher Training Programs
- Teacher Education Program have narrow and rigid curriculum
- Superficial Practice teaching
- Methods of Teaching are lacking in innovation –
- Poor Academic Background of Student-Teachers
- Deficient in facilities for pupil-teacher
- Lack of Regulations in Demand and Supply
- Insufficient financial grants
- Narrow Scope of Teacher Education
- Lack of Culture-Specific Pedagogy

Teacher education must, therefore, create necessary awareness among teachers about
Innovations in Teacher Education

their new roles and responsibilities. Education of teachers needs to strengthen and stress upon the main attributes of a profession, such as, the systematic theory, rigorous training over a specified duration, authority, community sanction, ethical code and culture, generating knowledge through research and specialization. It is acknowledged that formal professional training on continuous basis is necessary for becoming a good teacher as it caters to the development of one’s personality and sharpening of communication skills and commitment to a code of conduct.

Innovative Programs in Teacher Education

Though a comprehensive list of innovative programs is available, innovations are very rare. It may be attributed to various factors. Novel ideas do not incubate because of the adverse external conditions. There are wide gaps between the visionaries and actors. So, very often the innovations have short life and die down in the institutions, where these originate. Sometimes, the most innovative programs fail in the formal system, because, these are beyond the view purview of the apex bodies. Four year Integrated Secondary Teacher Education Programs need excellent Teacher Educators who are Philosophers of basic disciplines, as well as, Education. Such a combination is rarely found. In addition to this, these need to have scope for vertical mobility. Activity based, Personalized Teacher Education Programs though originated with zeal, yet need to struggle to sustain themselves in the forms envisaged.

The Regional Colleges of Education, established by NCERT (National Council of Educational Research and Training) in 1963, introduced quite a number of programmes which were in accordance with the requirement of diversified curriculum at higher secondary stage. The programmes were diploma and degree programmes in science, technology, agriculture, industrial crafts, fine arts and home science. But except B.Ed and M.Ed. programmes, all others were wound up one by one. The curricular masters didn’t have the patience to give a fair trial to courses like technology, fine arts and commerce. There was undue pressure from the students, their parents and also the universities because they were interested only in traditional programmes. The curricular masters are now trying hard to implement vocational programmes, but there are no trained teachers. Same is the case with teachers of English and other Indian languages. Despite the above situation a good number of programmes have been implemented as more and more teachers were required for the Universalization of Education (UEE) and resulting high enrolments at the secondary stage. Following is a description of selected innovative programmes which were planned and implemented according to the needs and demands of school system in India. To some extent these were introduced mainly for experimentation and in the context of cost factors, for e.g. recruitment of Para teachers with low salaries. Most of the innovate programmes e.g.; 4 year B.Ed. were not replicated by universities due to cost factors. Innovations outlined as under, are not necessarily in chronological order. Most of these innovations were suggested and implemented by national level bodies like the NCERT (National Council of Educational Research and Training), NCTE (National Council Of Teacher Education), IGNOU (Indira Gandhi National Open University), Rehabilitation Council of India (RCI), UGC (University Grants Comission) and certain non-government organization e.g. HSTP. Selected programmes are outlined as following:- Four year B.Ed. programmes were planned by the NCERT and CIE (Central Institute of Education) in science, languages, commerce and technology, B.Ed.
school cum correspondence course) was implemented from 1967 to 1985 to clear the backlog of untrained teachers; B.Ed (elementary education) was tried for some time. Two year B.Ed. programme is being organized at the four RIEs on the bases of recommendation contained in NCTE’s Curriculum Framework (1996)- IGNOU’s B.Ed (distance education) programme is being conducted all over the country at selected study centers with the use of self-learning materials. Several State Open Universities and also conducting their own B.Ed. programmes in Regional languages. Diploma in Education (D.Ed.) of various modes-face to face, correspondence course, inservice-is being implemented by State Boards of Secondary Education or SCERTs and open universities. The IGNOU (Indira Gandhi Natioinal Open University) is conducting diploma programme in primary education in distance mode for North Eastern States. The MHRD (Ministry of Human Resource and Devlopment) has granted permission to the B.Ed.Colleges also to conduct D.Ed.programme for a period of 3 years. This has again led to commercialization as it was before the formation of NCTE as a statutory body in 1993. In 2001, University Grants Commission (UGC) has brought out a comprehensive set of programmes in Education discipline starting from B.A. (education) to M.Phil degree in Education. These programmes have been incorporated by most of the Universities in the country with modification and suitable adaptation. In 2004, the BabasahebAmbedker University (BOU),took the initiative to develop a framework of M.Ed. (Open Distance Learning-ODL) programme and submitted it to the DEC which resulted in the development of a joint DEC-NCTE National M.Ed.programme of two years duration in ODL mode. This is an innovative programme utilizing self instructional material and in formation technology along with interactive personal contact programmes. The programme is based on multi-media approach, i.e. self instructional material, audio-video, teleconferencing, assignments, counseling sessions and workshops. As Sachhar committee, set up by the MHRD pointed out towards educational backwardness among minority Muslim community. The children did not have the opportunity to study through Urdu medium. The MHRD, has established recently four colleges of teacher education (CTEs) for the B.Ed. and inservice programmes through Urdu medium, one each at Srinagar, Bhopal, Darbhanga and Hyderabad. These colleges are under the control of Maulana Azad National Urdu University (MANUU),Hyderabad. Outstanding books written in English and other languages are being translated into Urdu. Innovative Components of Teacher Education Programmes : This sub-section contains components of teacher education programme which had not only an element of innovation and originality but became an integral part of the whole curriculum of teacher education. Microteaching for training of teachers in teaching skills has become an integral part of teacher training. Working with community as suggested by the NCTE (1988) curriculum was a great innovation but could not be implemented properly. NCERT’s Centres of Continuing Education (CCE) were established in 1976 to impart quality inservice training to the science teachers of secondary schools and elementary teacher educators. However, the project did not prove to be as success as University/College faculty did not like to work during vacation. There were nearly 220 CCEs. Programme of Mass Orientation of School Teachers (PMOST) emerged as a result of NPE-1986. The PMOST programmes were based on policy components and modular-based trainings were conducted for four years. Training was imparted on cascade model. Teacher orientation for Value Education and training in Population Education concepts was also an important activity of the NCERT. It was
based on UNFA’s funds and expertise. DPEP (District Primary Education Programme) projects for ‘SSA’ with the involvement of DIETs (District Institute of Education and Training) and colleges of Education of various states are being conducted. Special Orientation of School Teachers (SOPT) for training of teacher educators in concepts like Environmental Studies, Operation blackboard and teaching at primary school was also an innovative programme organized at RCEs with teleconferencing. Internship in teaching is also considered as an innovative activity but it has not been replicated by other institutions, except its selected aspects. Need-based teacher education curriculum with longer internship period is based on the recommendation of expert committee set up by the NCERT. Training of para teachers with the use of self-instructional materials is being conducted at the SCERT (State Council of Educational research and Training). The training is imparted at the centers set up by the DIETs.

**Conclusion**

Since the teacher is the pivot of the entire educational system and is the main catalytic agent for introducing desirable changes in the teaching learning process, all attempts need be made for motivating teachers to become innovative and creative. It goes without saying that a self-motivated and really industrious teacher can utilize his own resources to keep himself abreast of new knowledge and skills. It has been recognized that teacher education program should be structured and modified in a way that enables them to respond dynamically to the new problems and challenges in the field of education, then only teacher can help in national development.

**References**


PROBLEMS IN TEACHER EDUCATION

Ms. Pawandeep Kaur* & Mr. Ajay Kumar*

Education plays a very significant role in nation’s development but the quality of education is greatly determined by the quality of teachers, therefore, great efforts were made still are being made to improve the quality of teacher education. Yet we do not find much improvement in general education. This situation makes us to analyse critically the teacher education programme to find its weaknesses and according to make some suggestion to overcome the problems of teacher education.

The success of any educational system depends largely on the quality of teachers. The teacher education institutions have a very important role to play in improving the system of education by training a body of inspiring men and women. The essence of programme of teacher education is ‘quality’. If this is lacking, the programme is not only to become a financial waste but also a source of deterioration in educational standard. This has to be avoided at all cost. Thus maintenance of academic standard is our prime concern now a day. It has been observed that although some changes have been incorporated such as change in nomenclatures like educational instead of training, student teacher instead of pupil-teacher etc. by large, the system of teacher education in practice has remained unaltered. The existing system in neither flexible nor dynamic and hence cannot cope with new objectives of teacher education.

Problem Concerning Teacher Education

- In India, the period of training of teachers for secondary schools have all along been of one year after graduation – the effective session being of eight or nine month. The main purpose of teacher education programme is to develop healthy attitude, broad based interest and values consistent with the dignity of training and develop a personality.
- Due to this gap between the school and training institution, the growth of content stagnates; methodology get stale and contact with academic discipline becomes weak. Therefore, there should be a close matching between the work schedule of the teacher in a school and the programme adopted for preparation in a training college.
- A student teacher should know the meaning of education, its objective, background, various agencies that influence education etc. But a proper preparation toward good orientation is impossible in short duration of 9 months.
- The B.Ed. programme does not emphasize the knowledge of basic subject. There is not provision to increase the knowledge of particular subject. The TP remains indifferent with the regard to the subject knowledge of student teacher.
- The whole B.Ed. Programme does not make the student to complete his whole syllabus in the real teaching life within the limited time of session. The student should not be given a chance to face the real problem in classroom teaching.

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Problems in Teacher Education

In most of the states, teacher education is run by the fee collected from student teachers. While the share of state grants is much too small, most of them are in a bad shape of sub-standard nature.

Problems in Student Teaching

Like other arts, the art of education requires a life-long preparation. The educative process is continuous and leads to the actualization of potentials within the student. This, however, is possible only when the prospective teachers are provided opportunities through which they acquire the technical know-how, and also get a proper orientation. Consequent to this, many problems have emerged in effective implementation of student teaching. Problems in student teaching can be categorized into the following heads:

Problems of Preparatory Institutions

The institutions which are charged with this responsibility are those matching the expectations made by them. Hence, many problems have emerged in the effective implementation of student teaching, these are conducted to the defects in the following fields:

- Selection of student teachers
- Conducive environmental practices in the conduct of student teaching
- No qualified staff
- Insufficient practicing staff
- Insufficient discussion lessons

Suggestions to Remedy the Problem of Teacher Education

- Developing a conceptual framework and a theory of instruction, innovative practices of teaching such as micro teaching, stimulation and interaction analysis procedures.
- Theory courses to be prescribed at various levels.
- Staff college for in-service educational training.
- College and university teachers, as in the case of agriculture, there should be at least one school of education in each state which should provide different levels of teacher education programmes.
- Library in teacher education institutions are generally very poor. In each state, there should be a complete and comprehensive References section equipped with all available journals for use by all researchers.
- A document centre must be set up to code all research material related to education.
- The course of studies both in theory and practice should be reorganized. For this, a pragmatic research should be conducted by some universities to see what is the course structure which will be helpful for the realization of the goals of teacher education.
- There should be a planning unit in each state education department. The function of this unit should be to regulate the demand and supply of teachers at various levels of schools.
- The admission procedure of B.Ed. should be completely systematized and steps should be taken to make it full-proof against tempering and meddling as far as possible.

Induction of Beginning Teachers

Teaching involves the use of a wide body of knowledge about the subject being taught, and another set of knowledge about the most effective ways to teach that subject to different kinds of learners; it therefore requires teachers to undertake a complex set of tasks every minute. Many teachers experience their first years in the profession as stressful. The proportion of
teachers who either do not enter the profession after completing initial training, or who leave the profession after their first teaching post, is high. A number of countries and states have put in place comprehensive systems of support to help beginning teachers during their first years in the profession. Elements of such a programme can include:

- **Mentoring:** the allocation to each beginning teacher of an experienced teacher, specifically trained as a mentor; the mentor may provide emotional and professional support and guidance; in many U.S. states, induction is limited to the provision of a mentor, but research suggests that, in itself, it is not enough.
- **A peer network:** for mutual support but also for peer learning.
- **Input from educational experts** (e.g. to help the beginning teacher relate what she learned in college with classroom reality)
- **Support for the process of self-reflection** that all teachers engage in (e.g. through the keeping of a journal).

### Continuous Professional Development

Because the world that teachers are preparing young people to enter is changing so rapidly, and because the teaching skills required are evolving likewise, no initial course of teacher education can be sufficient to prepare a teacher for a career of 30 or 40 years. In addition as the student body continues to change due to demographic issues there is a continuous pressure on academics to have mastery of their subjects but also to understand their students. Continuous Professional Development (CPD) is the process by which teachers (like other professionals) reflect upon their competencies, keep them up to date, and develop them further. The extent to which education authorities support this process varies, as does the effectiveness of the different approaches. A growing research base suggests that to be most effective, CPD activities should:

- Be spread over time
- Be collaborative
- Use active learning
- Be delivered to groups of teachers
- Include periods of practice, coaching, and follow-up
- Promote reflective practice
- Encourage experimentation, and
- Respond to teachers’ needs.

### Conclusion

In the end we can say that in education colleges the student in order to get the practical experience of teaching and to develop the required skills. Thus for effective programme of teacher preparation, co-operation of practicing schools with the teacher education colleges is must. But generally these schools do not co-operate with the teacher institutions and have the wrong attitude towards the pupil teachers who come to these schools for practice.

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TEACHING PRACTICE WEAKEST LINK IN TEACHER EDUCATION

Dr. Pargat Singh Garcha*

Teachers deal with the most dynamic resource i.e. human beings. So, Teachers are central to the question of education’s quality and relevance. For this purpose Teacher training programmes require continuous innovations to respond to changing needs. Teaching practice is a crucial aspect of teacher preparatory programme in teacher training institutions. New NCTE regulation-2014 has increased the time duration of teaching practice for bringing some qualitative changes. But still I have doubt on the practical implications of theoretically good planning’s. Some of concerns and probable suggestion related to teaching practice are related to Pre Teaching practice, Model lessons, Professionalism, Role of supervisors, Methodology, Relationship between practicing school and Education College and demonstration school.

Teachers are central to the question of education’s quality and relevance. How they are educated and prepared for their work is a critical indicator of what kind of educational quality and relevance is being sought (UNESCO 1998). The importance of teacher and the training programme i.e. Teacher education can be seen from the letter written by Abraham Lincoln to the Headmaster of a school in which his son was studying. It contains an advice, which is still relevant today for executives, workers, teachers, parents and students. Teaching practice is a crucial aspect of teacher preparatory programme in teacher training institutions. It is the periods when student teachers are aided to put into practice the theories and principles of education which they have learnt in the classroom as they teach students in the practice schools. It is the event in a pre-service teacher’s educational career that warrants the application of that theoretical knowledge and transforms the “pre-service teacher” to “real teachers” (Katrina, 2004). This experience gives opportunities for pre-service teachers to apply their content and pedagogical knowledge with children and to further develop personal teaching philosophies (Plourde, 2002).

Practice teaching, which is pivot of teacher education program, has always been a matter of concern not only to the educators, but also to educational planners, administrators, policy makers, researchers, etc. Some researchers have found interesting and alarming facts before us like Bhatnagar (1980) reviewed 39 studies on student teaching programme of B.Ed. course from 1952 to 1978 and concluded that the student teaching programme as the weakest component of the teacher education programme. A study on student teaching programme in Odisha undertaken by Mohanty (1984) revealed that defective organization of the programme, poor supervision system, lack of co-operation between school and college teachers and use of few selected methods of teaching as the major constraint in organization of the programme. The review of 40 learning-to teach studies by Kagan (1992) concluded that extended interaction with pupils is

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essential if beginners are to make appropriate planning, implementation and assessment decisions. The study conducted by Behari (1998) showed that the methodology of teaching paper is more helpful than foundation papers taken together in developing abilities especially skills, but practice teaching is found to be more helpful than rest of the teacher education programme in developing abilities, especially skills. The study done by Kiraz (2004) explored how interaction between student teachers and supervisors create professional development opportunities during practicum. Above studies clearly shows that teaching practice remains still a weakest link in preparation of teacher Education programme. New NCTE regulation-2014 has increased the time duration of teaching practice for bringing some qualitative changes. According to revised regulations of NCTE, teaching practice will be conducted in two periods. Ist period is of 4 weeks in the first year of the course and second period is of 16 weeks in the second year of the course. But still I have doubt on the practical implications of theoretically good planning’s. We have also made beautiful documents and policies before these new regulations of NCTE but the big question is that how far we will go in materializing the theoretically sound changes. Some of my concerns and suggestion related to teaching practice are given below:

**Concerns and Suggestions Related to Teaching Practice**

**Pre Teaching practice:** Micro teaching, simulated teaching etc. are good tools for preparation of good teacher. Firstly these are not practiced by all the teacher education colleges as recommended. Few college give proper emphasis to pre-teaching practices phase but It has been observed that during this period they also give more emphasis on use of various teaching skills and forget to give emphasis on integrated impact of these skills on teaching. It need attention of each and every teacher educator, head of the institution because we cannot send untrained pupil teachers to play with the future of children in schools on the name of teaching practice.

**Model lessons:** Most of the student teachers imitate the style of their own teachers. But it is felt that most of the teacher educators also need to improve their way of demonstration lesson to would be teachers. Teacher educator should work as model for pupil teachers in term of creativity, innovations, variety and constructivism approach in their model lessons. To provide variety model lessons should include lessons by Teacher educators, best teachers from schools, and best pupil teachers of past years. In the age of ICT a number of good recorded Model lessons can be made available on college websites. These lessons should be based on constructive approach of NCF-05.

**Professionalism:** Teacher educators as well as pupil teacher lack professionalism approach in the field of teacher education. All the activities related to teaching practice are taken very casually in most of the college. We see internship part very exciting, planned, committed in other professions like doctors, lawyers etc. Their success in the field depends upon the success of internship period. Only by increasing the duration of teaching practice will not do miracle unless or until approach of implementing this is not professional.

**Role of supervisors:** Before student teachers leave for practice schools a workshop can be held by faculty members of college for supervising teachers of the school. This can give insight to supervising teachers as what they have to keep in mind while observing student teachers in the class. It has been observed that comments of supervising teachers remain limited to use of various skills like Black board writing, way of introducing the chapter, the general behavior of
students in the class, whether teaching aid is used or not and less emphasis is given on gradual improvement of student teachers. During teaching practice daily improvement sheet should be prepared to see the gradual effect of teaching practice on pupil teachers. In long duration of teaching practice as proposed in new regulations school teachers and teacher educator will perform supervisory duty by coordinating with each other.

**Methodology:** Innovative methods are not adopted by student teachers in the classroom. Most of them cover the lesson on dotted lines. They adopt usual ways of teaching. NCF-05 is a beautiful draft which provides guidelines to teach students in schools with constructive approach. But even after more than 9 years of publication of this document we are still not ready to implement it during teaching practice. Pupil teacher see that school teacher are using traditional method and slowly they start following them and forgetting whatever they have learned from educational colleges. Now when they will be for longer duration in schools special care should be given to motivate them to use innovative methodologies during teaching practice. Motivation should be provided to use of innovative techniques to deliver the lesson to the students like—cooperative learning, Digital Inclusion, Mobile Learning, Social Networking Sites(SNS), Games and Learning and Informal Learning, Learning Spaces (Creating transformed physical and virtual environments), Learner Voice (Listening and acting upon the voices of learners), Learning in Families (Children, parents and the extended family learning with and from one another), self learning modules, etc. One of the important objectives of teacher education is to create awareness and understanding of importance of research in the classroom. Thus, Action research became a part of the syllabus where in, the students are expected to prepare action plans and implement the same during their practice teaching sessions. It needs special attention during teaching practice.

**Relationship between practicing school and Education College:** We are witnessing that most of the schools either have negative attitude toward pupil teachers or took teaching practice duration as enjoyable time for them. In both the cases they are not ready to work as facilitator or guide for new teachers. They are not ready to accept them as teachers. Sometime they even demotivate pupil teachers. On the other hand if pupil teachers are ill prepared at pre-teaching phase they play with the future of students. They feel they have no responsibility on their shoulders for their good or bad result. They only concentrate on planning lesson and delivering it in stereotyped manner. This will be more problematic when the duration of teaching practice will be increased in two year B.Ed. There may be few problems at departmental level to allocate schools for long term teaching practice. Now Teacher educator on duty and pupil teachers should understand that teaching in the classroom is not only the objective of teaching practice, but also to provide training in all activities / work. They have to participate in all the activities of school e.g preparation of timetable, preparation and maintenance of different registers, evaluation of class work and home work, morning assembly, co-curricular activities, decoration of classroom, preparation and maintenance of attendance board, news board, information board, look after and arrangements of A V aids room, home economics room, science laboratories and library. They have to develop cordial relationship with school staff.

**Demonstration Schools:** There is big gap between theoretical and practical implication of B.Ed. course. We need to practice but we teach in classrooms. For this purpose teacher training institutes should run their own internship schools in the same campus. This would be beneficial to
both, the college and the community. The college would be able to train the students at their own suitable times and the economically weaker sections of the society will also gain by sending their wards to these innovative schools which would be run on charity basis.

**Conclusion**

The principals of teacher training institutions must take responsibility for proper organization and management of all aspects of teacher education programme in general and of the internship programme in particular. The principals must pay due attention towards the preparatory phase of the internship programme with all sincerity. It is the involvement of teacher educators during the preparation phase, which will help a lot in forming right attitude and develop the competencies among the prospective teachers. Pupil teachers should be really interested in the B.Ed. course and take internship programme seriously. The headmasters of practicing schools should take all possible steps to create healthy environment in their schools so as to help pupil teachers in developing teaching competency.

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ICT: BOON FOR QUALITY ENHANCEMENT IN TEACHER EDUCATION

Dr. Satwant Kaur*

The present paper highlights the role of information and communication technology in education for quality enhancement in teacher education. The use of information communication technology in various modes like: print medium, radio, tape recorder, telephone, mobile, television, overhead projector, LCD projector, Video, computer and other computer assisted technologies play a very important role in education for modernizing its input process to get the output in the form of quality oriented teaching. ICT can enable new types of teaching and learning styles for most of the part they are being used to support traditional learning practices. The use of ICT is essential need of society to cope with inevitable socio-economic changes. If teachers and teacher educators are excellent, the nation will have excellent citizens. So professional development of teachers is important not only for institute they are going to serve but also help themselves in so many ways so that they do not lag behind in their field and move ahead with their new knowledge, ideas and concepts.

Information and communication technology is an effective technique in education to tackle all the problems that were existed in the conventional teaching learning process. It has become the driving force of change in the new world. It has altered economic structure and ways we communicate. It has completely revolutionized life by making whole human society into global village.

Cross and Adam (2007), and Bhattacharya and Sharma (2007) found that ICT eliminated time barriers in education for learners as well as teacher. It eliminates geographical barriers as learners can log on from any place.

Jaiswal (2011) found that the teacher education system empowered by ICT - driven infrastructure can have a great opportunity to come up to the centre stage and ensure academic excellence, quality instruction and leadership in a knowledge-based society.

Oye, Shallsuku and Iahad (2012) revealed in their study that that the use of ICT would make education system more effective for university undergraduate learners. It has brought revolution in education field. It is widely used effectively in current education system all over the world. ICT is one of the effective medium to impart education and it has become an exhortation in Indian education system.

Computer is an essential tool in ICT for making teaching and learning effective. Teachers and professors use computers for teaching, giving presentations, maintaining database of students, communication in the form of e-mails or chat, browsing the Internet and preparing students to have a competitive edge in the global job market. Computers have revolutionized the learning for students in a big way. It helps the students to enhance their education process in a very short
period of time. The others modes of ICT in education are as follows:

1. **Electronic Learning:** It is the innovative application of computer in teaching learning process which includes text, graphics, animation, audio, video and combination of several things. E-learning encompasses learning at all levels, both formal and non-formal that uses an information network—the Internet, an intranet (LAN) or extranet (WAN)—whether wholly or in part for course delivery, interaction, evaluation and/or facilitation. E-learning has benefited the distance learners by reducing environmental impact; making quality education affordable; providing convenience and flexibility; providing global opportunities for learning; increasing collaborations among students; fostering greater instructor – learner contact; Allowing students to choose content and tools appropriate to their differing interests, needs and skill level. Hence e-learning has brought hope to millions who had abandoned the dream of continuing education due to paucity of time and money.

2. **Teleconferencing:** This facility allows many people to get simultaneously connected so that discussion can take place even when participants do not meet. It allows transfer of both spoken and written form to anyone at any time. Teleconferencing is used in both formal and non-formal learning contexts to facilitate teacher-learner and learner-learner discussions, as well as to access experts and other resource persons remotely. In open and distance learning, teleconferencing is a useful tool for providing direct instruction and learner support, minimizing learner isolation. The teleconferencing can be audio or video or both.

3. **Interactive audio and video:** It allows real time communication using phones and computer. Voice and multimedia presentations can be delivered to a dispersed class with questions and answers. It also includes the following facilities like voice mail and touch tone interaction.

4. **Software:** Many software applications are designed to facilitate distance learning. These programs integrate material and organize it so that it can be easily accessible from computers. Students can record lessons and can access pictures, slides and notes from software programs. Software programshelp students for tomorrow carriers, access to technology and prepare to learn.

5. **Space Technology:** Satellite communication offers unique capability of being able to simultaneously reach out to very large numbers spread over large distances even in the most remote corners of the country. In September 2004, Indian govt. launched the educational satellite EDUSAT, the first exclusive satellite strengthened the educational sector by augmenting curriculum based teaching, providing effective teachers – trainers, community participation and increasing access to education as well as to new technologies through an effective ground segment configuration. It has also made the learning process more cost effective, more enlightening and more interesting by way of having live interaction for imparting skill or building capacity, sitting in various locations, with the help of technology – enabled learning with the constraint of distance and bigger infrastructure.

6. **Encourage teachers to use newspapers:** Newspaper use in classrooms is increasing as teachers try to keep up with our rapidly changing world. The newspaper is a continuing source of information for all of us, but used in the classroom as an instructional tool, it becomes a resource to help motivate students. Newspapers bring present-day excitement to language arts, math, science, civics, social studies, geography, history and other subjects. Research shows
that students who use newspapers as a learning resource have a better awareness of the world. Their achievement scores and reading skills increase. Used in schools and read at home, a daily newspaper is the bridge that links these skills with our lives and community. Utilizing the newspaper promotes a lifetime of good reading habits.

7. **Use of On-line education journals, magazines:** Publish articles in the journals or magazines that encourage educators to think about new approaches to teaching and new ways to use technology in the classroom. These technology sources provide thoughtful, illuminating articles that will assist educators as they face the challenge of integrating information technology in teaching and in managing educational organizations.

**Capacity building of In-service Teachers and Pre-service Teachers**

Capacity building of teachers will be the key to the widespread infusion of ICT enabled practices in the school system. A phased programme of capacity building will be planned. In service training of teachers will comprise of Induction Training as well as Refresher Courses. The induction trainings will be imparted by the Regional Institutes of Education of the NCERT, State Councils of Educational Research and Training or such other institutions of the Central and State Governments and will preferably be completed before the commencement of the academic year. The refresher trainings will be carried out every year to enable teachers to share, learn and keep abreast of the latest trends in ICT based teaching learning processes. The induction training will be followed by teacher’s evaluation to ensure that the minimum competency is achieved.

All pre-service teacher education programmes will have a compulsory ICT component. The existing curricula for pre-service teacher’s training will be revised for including appropriate and relevant applications of ICT. All teacher trainees passing out of teacher education programmes will obtain adequate levels of competency in ICT and ICT enabled education. This proficiency will gradually form a part of the eligibility criteria for teacher appointments.

**Other Benefits of Using ICT**

- It helps the teacher to go deeper into the subject and investigate new areas.
- It enhances motivation level to learn. They stay on task for longer periods. Their persistence remains much greater than the traditional learning.
- Better decisions are made as more information can be readily available in a timely way to support decisions.
- Appreciable amount of time saving and finding time for other works.
- It envisages more informal interaction between teachers and students and students.
- It helps teacher to learn by exploring more and more opportunities through ICT.
- It reinforces self-learning.
- It helps in accessing high quality learning material, designed by experienced experts.
- It opens avenues for new curriculum and new services like distance education.
- Computer assisted instruction enhance the self-confidence and self-esteem of teachers and students.
- In traditional classroom situation, it is practically impossible to give due attention to
each and every student with learning difficulty may feel ignored in such situation. CAI packages eliminate this barrier.

- Sometimes use of new technology is less expensive than doing things the old way.
- CAI is available to students on demands anytime and any number of times with same efficiency to enable the student to learn, what he is supposed to learn.

Hence, teachers can use ICT to develop learning skills, learn in more varied ways, can work effectively at their own pace, can work independently on research and collaboratively on project work, can work flexibly away from the classroom, can receive immediate feedback when completing interactive materials created with authoring software, create multi-skill tasks. At last, use of ICT helps the learner to have access to efficient and more cost effective services. The potential of each technology varies according to how it is used. For the successful integration of technology in teacher education, it is essential that teachers should undertake mandatory training of information and communication technology programmes to be competent with practical and functional knowledge of computer, internet and associated areas of ICT.

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INNOVATIVE TEACHING PRACTICES

Sarabjit Kaur*

Education is an engine for the growth and progress of any society. It not only imparts knowledge, skills and inculcates values, but is also responsible for building human capital which breeds, drives and sets technological innovation and economic growth. Information and communication technology has made many innovations in the field of teaching and also made a drastic change from the old paradigm of teaching and learning. Now we need to have interactive teaching and this changing role of education is inevitable with the introduction of innovative teaching practices like multimedia, role playing, words-words approach, Z-A approach etc.

Education is a light that shows mankind the right direction to surge. If education fails to inculcate self-discipline and commitment to achieve in the minds of student, it is not their fault. We have to convert education into a sport and learning process has to generate interest in the students and motivate them to stay back in the institution than to run away from it. Education should become a fun and thrill to them rather than burden and boredom. It is an integral part of their growth and helps them become good citizens. Education is an engine for the growth and progress of any society. It not only imparts knowledge, skills and inculcates values, but is also responsible for building human capital which breeds, drives and sets technological innovation and economic growth. In today’s era, information and knowledge stand out as very important and critical input for growth and survival. Rather than looking at education simply as a means of achieving social upliftment, the society must view education also as an engine of advancement in an information era propelled by its wheels of knowledge and research leading to development.

Traditional Teaching Method

In the pre-technology education context, the teacher is the sender or the source, the educational material is the information or message, and the student is the receiver of the information. In terms of the delivery medium, the educator can deliver the message via the “chalk-and-talk” method and overhead projector (OHP) transparencies. This directed instruction model has its foundations embedded in the behavioral learning perspective (Skinner, 1938) and it is a popular technique, which has been used for decades as an educational strategy in all institutions of learning. Basically, the teacher controls the instructional process, the content is delivered to the entire class and the teacher tends to emphasize factual knowledge. In other words, the teacher delivers the lecture content and the students listen to the lecture. Thus, the learning mode tends to be passive and the learners play little part in their learning process (Orlich et al., 1998). It has been found in most universities by many teachers and students that the conventional lecture approach in classroom is of limited effectiveness in both teaching and learning. In such a lecture students assume a purely passive role and their concentration fades off after 15-20
Some limitations which may prevail in traditional teaching method are:

- Teaching in classroom using chalk and talk is “one way flow” of information.
- Teachers often continuously talk for an hour without knowing students response and feedback.
- The material presented is only based on lecturer notes and textbooks.
- Teaching and learning are concentrated on “plug and play” method rather than practical aspects.
- The handwriting of the lecturer decides the fate of the subject.
- There is insufficient interaction with students in classroom.
- More emphasis has been given on theory without any practical and real lifetime situations.
- Learning from memorization but not understanding.
- Marks rather than result oriented.

Innovative Teaching Practices

Multi Media Learning Process: Multimedia is the combination of various digital media types such as text, images, audio and video, into an integrated multi-sensory interactive application or presentation to convey information to an audience. Traditional educational approaches have resulted in a mismatch between what is taught to the students and what the industry needs. Currently, many institutions are moving towards problem-based learning as a solution to producing graduates who are creative and can think critically, analytically, and solve problems. Since knowledge is no longer an end but a means to creating better problem solvers and encourage lifelong learning, Problem-based learning is becoming increasingly popular in educational institutions as a tool to address the inadequacies of traditional teaching. Since these traditional approaches do not encourage students to question what they have learnt or to associate with previously acquired knowledge (Teo & Wong, 2000), problem-based learning is seen as an innovative measure to encourage students to learn how to learn via real-life problems (Boud & Feletti, 1999). The teacher uses multimedia to modify the contents of the material. It will help the teacher to represent in a more meaningful way, using different media elements. These media elements can be converted into digital form, modified and customized for the final presentation. By incorporating digital media elements into the project, the students are able to learn better since they use multiple sensory modalities, which would make them more motivated to pay more attention to the information presented and retain the information better.

Mind Map: Mind maps were developed in the late 60s by Tony Buzan as a way of helping students make notes that used only key words and images, but mind map can be used by teachers to explain concepts in an innovative way. They are much quicker to make and much easier to remember and review because of their visual quality. Mind Maps are also very quick to review, as it is easy to refresh information in your mind just by glancing once. Mind Maps can also be effective mnemonics and remembering their shape and structure can provide the cues necessary to remember the information within it. They engage much more of the brain in the process of assimilating and connecting facts than conventional notes.

Z TO A Approach: This approach attempts to explain the application part of a particular
concept first. The teacher should explain the application of a particular concept first and explain the effects of such applications. For example in management subject - motivation is explained in a manner that the organization get extensive benefits out of using some techniques like promotions and awards. So here the use of promotion is explained first and later students would get interest in knowing what are promotions and awards. The teacher starts explaining what is promotion and explains what motivation theory in management is. Another example we can try is that in accounting the Income statement and Balance Sheet can be explained first and later drawing their attention to double entry system of book keeping.

**Role Playing and Scenario Analysis based teaching:** Role playing and scenario analysis is mostly used in organizations that try to analyze a problem pertaining to the organization, and this is also used in management institutions. But the similar kind of practice can be tried in other specialization too like science and engineering. Science and engineering courses have practical but in support of those practical if students are given a scenario and other options to solve a particular issue, then the students are exposed to decision making in a given environment.

**Mnemmonics Words- Words –Words Approach:** Here the teacher is not supposed to talk on a particular concept for a quite long time. But to make it clear to the students he can just go on saying mnemonics or its associated meaning in words. Here he goes on saying only words instead of sentence, and once they come to a basic understanding of the meaning of a particular concept then the teacher will explain in sentences. For example in teaching language courses this technique can be used as an effective medium by the teacher to develop word power.

**Teaching with Sense of Humour:** Everyone loves a teacher with an infectious sense of humor. Looking at the lighter side of life not only fosters cordial relations between professors and students, but also provides welcome relief while trying to follow a difficult lecture on a complicated subject. When there is a willingness to change, there is hope for progress in any field. Teaching is a challenge. Learning is a challenge. Combining both effectively is a challenge. Being humorous is a challenge. However, laughing is easy. We are convinced both by experience and research that using humour in teaching is a very effective tool for both the teacher and student.

**Conclusions**

Information and communication technology has made many innovations in the field of teaching and also made a drastic change from the old paradigm of teaching and learning. In the new paradigm of learning, the role of student is more important than teachers. The concepts of paperless and penless classroom are emerging as an alternative to the old teaching learning method. Nowadays there is democratization of knowledge an the role of the teacher is changing to that of facilitator. We need to have interactive teaching and this changing role of education is inevitable with the introduction of innovative teaching practices like multi media, role playing, words –words approach, Z-A approach etc.
INNOVATIONS IN TEACHER EDUCATION

Ms. Yogita*

Innovation is concerned with creation of better to more effective products, processes, services, technologies or ideas that are accepted by markets, governments and society. Innovation differs from invention. Innovation refers to the use of new idea or method whereas invention refers more directly to the creation of the idea or method itself. Technically, “innovation” is defined as “introducing something new”, there are no qualifiers of how ground-breaking or world-shattering that something that needs to be – only that it needs to be better than what was there before. Innovation means different things to different people (Brianna Sylver, 2006). The word innovation derives from the Latin word innovates, which is the noun form of innovare, “to renew or change”, stemming from in- “into” + novus – “new”. Any significant change in education must ultimately affect the relationship of the teacher and the taught. Innovative practice in teacher education enabled teacher educators to transform education from teacher centric to student centric.

The learners of today also need considerable freedom to explore, enquire and investigate. This means that teacher education curricula should give enough space to student teachers to develop logical reasoning, critical thinking, problem solving and meaning making. The National Curriculum Framework for School education (2005) and National Curriculum Framework for Teacher Education (2009) reflects the efforts to rejuvenate school education as well as teacher education towards modernization, contextualization and professionalization (Pedagogical Rejuvenation of Teacher Education : The National Curriculum Framework for Teacher Education 2009). The NCF 2005 expects a teacher to be the facilitator of students learning in a manner that helps them to construct knowledge, meaning utilizing their individual experiences. The teachers innovations are discussed in terms of crucial components of the universalization of primary education : strategies for enrolment; pedagogical and curricular innovation designed to promote learning with enjoyment and hence to retain children in school; institution-building initiatives; resource mobilization strategies and personal motivation and self-regulation. To bring about innovations in education TEACHER is the key factor which can cause and the entire education system.

Innovation in Teacher Education

It is the teacher who knows the need and goals of education in 21st century. Every day and every step there is a new innovation. Innovations in school and classroom are but expected and taken for granted of the teacher. Teacher centered education has undergone a paradigm shift’ ‘Mathetic’ has become common. Behaviour of learner is focused upon. The teacher sets his theories of teaching matching the needs suited to the behavioral pattern of the student. Thus innovative methods are used by the teachers. Along with the virtual and electronic aids various

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Innovations in Teacher Education

allied methods are used to cause learning more effective. The teaching must bring about creativity, intelligence and critical thinking in the child. Innovations in relation to policies as single track system non formal education introduced to supplement formal schooling from the early 1980’s; Rajasthan ShikshaKarmi Project 1987; Total Literacy Campaign 1988; Mahila Samkhya in Karnataka, UP and Gujrat 1989; Bihar Eduaction Project 1991; Rajasthan Lok Jumbish 1992 are the examples.

Today world is within reach. Education has crossed geographical boundaries cross cultural issues have been resolved. The present policy of education with tremendous scope for innovation the educational system have undergone sea change.

Today’s students want an education that meets their individual needs and opportunities that connect them to what is happening around the globe. They challenge teachers to be innovative and to make learning environments more exciting, challenging and rewarding. Students inhabit a borderless world offering limitless connection, data and mobility. They can choose to access knowledge and participate in dialogue on a global scale. They need education delivered in ways that are compatible with and support their world view and their bond with communication technology. So the teachers can use technology more creatively to move beyond classroom walls and can transform education with completely new ways to learn new skills. Innovation is about doing things in new or different Ways. It may range from continuous improvement of existing practices through to transformation of how we achieve goals or rethinking what these goals are.

**Innovations and Teacher Education**

Innovation is the key to improvement. In current time the obsolete ideologies and methods of teaching do not work. One has to be innovative with teaching. Time is constantly changing and the only way to keep up with it is to keep growing and evolving. In order to relate with children, teachers need to keep themselves upgraded with new ways of teaching. For instance if teacher is not set savvy in current times then he/she cannot make classes interesting. Today is the age of videos and podcasts and children can easily learn through this interactive media and hence teachers of current India need to keep up with current technology. As we all know, learning never stops all life, and for teachers to evolve, as a good teacher needs to explore themselves and try innovative educational measures to teach children. In such times if teachers stick to with a decade old way of teaching then it is difficult for children to relate to them. Teachers have to look beyond textbooks and take up help from audio and visual aids of teaching to make teaching interesting.

**Teaching with Digital Technologies**

Digital technologies are electronic tools, systems, devices and resources that generate, store or process data. These include social media, online games and applications, multimedia, productivity applications, cloud computing, interoperable systems and mobile devices.

**What is digital learning ?**

Digital learning is any type of learning that is facilitated by technology or by instructional practice that makes effective use of technology. Digital learning occurs across all learning areas and domains. It encompasses the application of wide spectrum of practice including viz Blended
and virtual learning, Game-based learning, Accessing digital content, Collaborating locally and globally, Assessment and reporting online, Active participation in online communities, Using technology to connect, collaborate and create.

**Ways to Use Technology in the Classroom, Even for Technophobic Teachers**

Everyone wants teachers to use technology in the classroom. But you’re busy — meeting standards, prepping students for tests — and maybe you’re not too fond of computers, anyway. Never fear – there are easy ways to bring your classroom up-to-date, technologically.

Many tech-savvy teachers have used Microsoft PowerPoint to create review games based on famous game shows, including “Jeopardy!,” “The Weakest Link,” and “Who Wants to Be a Millionaire?!” These templates are available online for teachers to download and revise, including their own content. Check out this template or search “powerpoint game show template” online. A fun way to practice using a projector and get your students to review important material!

**Try a Webquest:** A webquest guides students to search the Internet for specific information. For example, students are asked to serve as curators of a museum on a particular topic. They must search the Internet to determine what artifacts belong in their museum and explain their choices.

**Use technology as a topic for a writing assignment:** For younger students, have them write a “how-to” piece about using technology in the classroom. It’s a natural fit, as young people usually have a higher comfort level with technology than many adults. Tell kids to write a piece instructing someone – maybe a grandparent? – on how to send an email, set up an Ipod, or play a video game. For older kids, have them research the impact technology has had on a particular time in history or science or include a unit on science fiction and technology in your Language Arts curriculum.

**Use an online grading system:** While some schools are mandating the shift to web-based gradebooks, you don’t have to wait to try one out. Sites like MyGradebook.com (http://www.mygradebook.com) offer the opportunity to track grades, record attendance and seating charts, and compile reports on student progress. You can also email students and parents directly to allow them to view their updated grades. Never worry again about bringing home your gradebook – you can access it from any computer.

**Do an email exchange:** Try the 21st-century version of that by instituting an email exchange. Have your students exchange emails with students in another school, city, state, or country – especially valuable if both sets of students are studying the same material. Or arrange for a group of experts to accept emails from your students on a particular topic. Students who fail to see the “real world implications” of math or science may develop new interest if you can put them in touch with a video game designer, astronaut, or engineer who uses those skills every day. And for adults who might want to volunteer but feel pressed for time, email can be a great way to help out, since they can respond on their own schedule.

**Give multimedia presentations – or have your students give them:** Liven up a traditional lecture by using a PowerPoint presentation that incorporates photographs, diagrams, sound effects, music, or video clips. For high school teachers, consider having your students develop presentations as a review tool before semester exams. Their work may be so good that
you will want to use it in future classes!

Supplement your lessons: When you’ve taught the same material for awhile, you—and your students—may find it less-than-exciting. A quick Internet search may help you identify ways to supplement your lessons with interesting new material. Make a habit of searching before you begin each new unit. You may find photographs, sound clips, video clips, and more that can bring your lessons to life. Many museums now offer online “virtual tours” and teachers are constantly developing new presentations and webquests, which are posted online. Add these in to keep your lessons fresh.

Advanced Ed Tech Activities

Create a class blog or wiki: Take appropriate precautions for Internet safety, but a class blog or wiki can be a great way to integrate technology in the classroom and develop student knowledge. Some teachers use blogs to drive outside-of-class discussion—particularly helpful for AP/IB students who are motivated but short on class time. A wiki is a website that uses software which allows many different people to edit it (think Wikipedia). Have your students work together to create a wiki on a topic they are studying. They will need to correct each other’s work and collaborate in order to make it a success.

Listen to—or create—a Podcast: There are thousands of podcasts available on the Web. Search for ones that meet your students’ needs. Some colleges are offering professors’ lectures via podcast, which can be great for advanced students. In other cases, you may be able to find an interview with the author of a book your students are reading, or other supplemental material. Make arrangements to download it and play it for your students. For the really ambitious, have students create their own podcasts to document their progress through the year or discuss their ideas on a variety of issues pertaining to the course.

“Publish” your students’ work: Tools exist today to allow your students to create really professional looking work using a desktop computer. Have students create a short film, run an ongoing class website that features student work and opinions, or—if they’re really ambitious—raise the money to have their work professionally published by a self-publishing company like iUniverse or Lulu.

Teaching with the Use of ICT Having Different Categories

e-learning: Electronic learning is a general term used to refer computer enhanced learning. It is associated with the field of Advanced Learning Technology, which deals with both the technologies and associated methodologies in learning using networked or multimedia technologies. It can cover a spectrum of activities from the user of technology to support learning as part of a blended approach to learning that is delivered entirely online.

u-learning: Ubiquitous learning, also known as u-learning is based on ubiquitous technology. The most significant role of ubiquitous computing technology in u-learning is to construct a ubiquitous learning environment. It allows individual learning activities embedded in daily life.

Conclusion

Just adding a technology tool to a traditional teaching approach does not produce more effective instruction and make the process harder and complex without providing much benefit.
In order for technology to be used effectively in the classroom, teachers have to make sure that they are using it as part of an approach that involves the students in activity. Technology utilized in the classrooms based on the constructivist method, students are engaged in activities that they can structure the instruction to satisfy various levels and methods of learning. They also can extend the variety of resources which are presented to students. Technology is regarded as a part of theory of learning and it is viewed more than a tool; it becomes the methodology framework. As technology assists the teacher to plan their teaching materials in a way that supports their theoretical approach, they get less reluctant to use technology. The better application is that both constructivist theory and technology are integrated in the classroom effectively, since preparers the tools which are vital for teachers to plan a teaching model that satisfies the requirements of a learner-oriented spotlight.

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INNOVATION IN TEACHER EDUCATION

Dr. Pawan Kumar*

Innovation plays an important role in improving the quality in teacher education at secondary stage. In such programmes efficient and good teacher are prepared who always try to introduce new ideas, techniques and practices in classroom transaction, curricular or co-curricular activities. Teacher education is a program related with teacher proficiency and competence that would make them competent enough to face new challenges in the education. This main purpose of this paper is to indicate main changes that has incurred in teacher education in India and also provide an overview of trends, reforms and innovations in teacher education (integrated teaching, teacher curriculum and teacher innovations). It also discusses the need of teacher education program to be innovative and various practices that can be included. It has been recognized that teacher education program should be structured and modified in a way that enables them to respond dynamically to the new problems and challenges in the field of education, then only teacher can help in national development.

According to NCTE (1998) teacher is the most important element in any educational program. He plays a central role in implementation of educational process at any stage. The level of achievement of learner is determined by teacher competence. So the quality of education basically depends on the quality of teachers. Kothari commission has very rightly said, “The destiny of India is being shaped in its classrooms.” As the population in India is growing very rapidly day by day the need of well qualified and professionally trained teachers will also increase in the coming years. So lots of efforts should be made to improve teacher education.

Teacher education is a continuous process and its pre-service and in-service components are complimentary to each other. Education is instrumental in the preparation of teachers who can in their practice ensure transformative learning, whereteacher and learner, learner and learner are co-constructors of knowledge. Today there are new expectations for education where the focus is on having teachers - be futurist leaders to ensure sustainable education. The paradigm shift is from teacher dominated classroom practices to that of partnership between the teacher and the learners and their peers. The key role of educational institutions is reflected in a variety of initiatives taken to transform the nature and function of education - both formal as well as non-formal. Universal accessibility to quality education is considered essential for development. This has necessitated improvement in the system of teacher education so as to prepare quality teachers.

Present Scenario

India has a large system of education. There are nearly 5.98 lakh Primary Schools, 76 lakh Elementary Schools and 98 thousand high / Higher Secondary Schools in the country, about 1300 teacher education institutions for elementary teachers and nearly 700 colleges of education / university departments preparing teachers for secondary and higher secondary schools. Out of

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about 4.52 million teachers in the country nearly 3 million are teaching at the primary/elementary level. A sizeable number of them are untrained or under-trained. (Singh 2014)

Unless teacher educators model effective use of technology in their own classes, it will not be possible to prepare a new generation of teachers who effectively use the new tools for teaching and learning. All these problems are closely associated with increase in sub-standard institutions of teacher education and there are numerous reports of gross malpractices; and the support system provided by the State Councils of Educational Research and Training (SCERTs) and the University Departments of Education has been insufficient and there is no support system below the state level. The DIETs are charged with the responsibility of organizing pre-service and in-service programmes in addition to being the nodal resource centers for elementary education at district level. Likewise, Colleges of Teacher Education (CTEs) and Institutions of Advanced Study in Education (TASEs) have been given the responsibility of introducing innovations in teacher education programmes at the secondary and higher secondary stages and in vocational education. Although National Council for Teacher Education (NCTE) as a non-statutory body has taken several steps as regards quality improvement in teacher education. Its major contribution was to prepare Teacher Education Curriculum Framework consequently; teacher education curricula have witnessed many changes in teacher preparation programmes in various universities and boards in the country. During the last decade, new thrusts have been posed due to rapid changes in the educational, political, social and economic contexts at the national and international levels.

Two-Year B.Ed. Programme

Many commission and committees like Education Commission (1964-66), Chattopadhya Committee (1983-85), Ramamurti committee (1990) and Yashpal committee (1993) had recommended increasing the duration of B.Ed. programmes on the basis of research studies. In 1998 NCTE also brought out curriculum framework for quality Teacher Education and suggested two year duration B.Ed. programme. In the light of the above recommendations, for two year B.Ed. programme was introduce at Ajmer, Bhopal, Bhuvneshwar and Mysore during 1999 for the first time in the country. Norm of innovative features of the programme is as follows:

- Emphasis has been made for development of professional teachers through overhauling of admission procedures preparing appropriate content knowledge in relevant areas and practice teaching of longer duration.
- New trust in formulation of training content, centrality of learner, teaching process and research based strategies and culture learning has been integrated in teacher training programme.
- ICT has been followed during teaching learning process.
- More emphasis of practical works related to work experience, working with community, health and physical education. These activities develop managerial skills, organizational efficiency, leadership abilities, democratic attitude and creative activities.

Problems of Teacher Education

It is universally acknowledged that education is an effective means for social reconstruction and to a great extent it offers solutions to the problems a society is faced with. These problems
may be economic, social, cultural, political, moral, ecological and educational. Since the teachers play a major role in education of children, their own education becomes a matter of vital concern. Various problems in the way of teacher education are following: Selection problem, Short Duration of Teacher Training Programs, Incompetency of Pupil Teachers, Teacher Education Program have narrow and rigid curriculum, Superficial Practice teaching, Problem of supervision of teaching, Deficient in content of the Teaching Subject’s Knowledge, Methods of Teaching are lacking in innovation, Segregation of Teacher Education Department, Poor Academic Background of Student-Teachers, Deficient in facilities for pupil-teacher, Lack of Regulations in Demand and Supply, Lack of facilities for Professional Development, Insufficient financial grants, Narrow Scope of Teacher Education and Lack of Culture-Specific Pedagogy.

Teacher education must, therefore, create necessary awareness among teachers about their new roles and responsibilities. Education of teachers needs to strengthen and stress upon the main attributes of a profession, such as, the systematic theory, rigorous training over a specified duration, authority, community sanction, ethical code and culture, generating knowledge through research and specialization. It is acknowledged that formal professional training on a continuous basis is necessary for becoming a good teacher as it caters to the development of one’s personality and sharpening of communication skills and commitment to a code of conduct.

No teacher education program can prepare teachers for all the situations they will encounter. Teachers themselves will make the final decisions from among many alternatives. Such judgments may be good or poor. Therefore, it is important for teachers to constantly reevaluate their decisions. This can be achieved through collaborative and reflective practices in teacher education. Cooperative learning in teacher education can instill in future teachers the value of social interactions. Reflection improves a teacher’s ability to make appropriate and sound judgments and, therefore, become an empowered decision. One teaching method, teaching model, or teaching strategy cannot be applied to teach any complete subject or even different topics in the same subject. Following innovative practices can be used in teaching:

**Model of Teaching**

Another significant innovation in teacher education has been regarding models in teaching; models of teaching are therefore, teachers may model their behaviour in accordance with the demands of different teaching models. In the words of Bruce Joyce and Marshall Weil a model of teaching is a plan or pattern that can be used to share curriculum, to design instructions in the class rooms and to guide instructions in the class rooms and others setting. In 1984, department of teacher education NCERT took a research project on models of teachings. At that time Prof. Bruce Joyce also joined NCERT as a visiting professor. Thus, several orientation programmes were organized to develop awareness about the models of teaching. Today many colleges of education use different teaching models of prepare prospective teachers.

**Co-operative and Collaborative Learning**

**What is Cooperative Learning?**

Cooperative or collaborative learning is a team process where members support and rely on each other to achieve an agreed upon goal. The classroom is an excellent place to develop
teambuildingskills you will need later in life. Cooperative learning is a successful teaching strategy in which small teams, each with students of different levels of ability, use a variety of learning activities to improve their understanding of a subject. Each member of a team is responsible not only for learning what is taught but also for helping teammates learn, thus creating an atmosphere of achievement. Students work through the assignment until all group members successfully understand and complete it. It has five basic elements: Positive Interdependence, Face-to-Face Interaction, Individual and Group Accountability, Interpersonal and Small-Group Skills and Group Processing.

**Constructivist and Reflective Learning**

Reflection is a natural process that facilitates the development of future action from the contemplation of past and/or current behavior. Reflection refers to the ongoing process of critically examining and refining practice, taking into careful consideration the personal, pedagogical, societal (including social, political, historical and economical) and ethical contexts associated with schools, classrooms and the multiple roles of teachers (Knowles, Cole and Presswood, 1994).

Educators and researchers have struggled to define the term “reflection.” While Dewey (1933) believed that reflection is an aim of education, others view it as a means to help preservice teachers become effective. Much of the writing on reflection in teacher education is derived from Dewey (1933). He believed that reflectivity involves active, persistent and careful consideration of any belief or practice in light of its supporting grounds and its eventual consequences. Dewey implies that two distinct components are involved in reflective thinking: the process and the content. In order to have a better understanding about teachers’ reflective thoughts, both the process and the content of reflective thinking must be considered simultaneously. Teachers must also consider appropriate teaching methods:

1. Reflection is not biologically or psychologically determined, nor is it pure thought; reflection expresses an orientation towards action and is about relation between thought and action in real historical situations.
2. Reflection is not the individualistic working of the mind as a kind of mechanism or speculation; it presupposes and shapes social relations.
3. Reflection is not value-free or neutral as regards values; it expresses and serves concrete human, social, cultural and political interests.
4. Reflection is not indifferent or passive towards social order, nor does it extend socially accepted values; it either reproduces actively or transforms the practical ideologies that support social order.
5. Reflection is not a mechanical process or a purely creative exercise to construct new ideas; it is a practice that expresses our power to reconstitute social life through participation in communication, decision making social action. These propositions highlight the transform Tory potential and empowering role of reflection, both at individual and social levels.

Constructivism is a philosophy of learning founded on premise that, by reflecting on our experiences, we construct our own understanding of the world we live in. Each of us generates our own “rules” and “mental models,” which we use to make sense of our experiences. Learning,
therefore, is simply the process of adjusting our mental models to accommodate new experiences.

**In a Constructivist Classroom, Teaching is . . .**

**Constructed:** Students are not blank slates upon which knowledge is etched. They come to learning situations with already formulated knowledge, ideas, and understandings. This previous knowledge is the raw material for the new knowledge they will create.

**Active:** The student is the person who creates new understanding for him/herself. The teacher coaches, moderates and suggests, but allows the students room to experiment, ask questions, and try things that don’t work. Learning activities require the students’ full participation (like hands-on experiments). An important part of the learning process is that students reflect on, and talk about, their activities. Students also help set their own goals and means of assessment.

**Reflective:** Students control their own learning process, and they lead the way by reflecting on their experiences. This process makes them experts of their own learning. The teacher helps create situations where the students feel safe questioning and reflecting on their own processes, either privately or in group discussions. The teacher should also create activities that lead the student to reflect on his or her prior knowledge and experiences. Talking about what was learned and how it was learned is really important.

**Collaborative:** The constructivist classroom relies heavily on collaboration among students. There are many reasons why collaboration contributes to learning. The main reason it is used so much in constructivism is that students learn about learning not only from themselves, but also from their peers. When students review and reflect on their learning processes together, they can pick up strategies and methods from one another.

**Inquiry based:** The main activity in a constructivist classroom is solving problems. Students use inquiry methods to ask questions, investigate a topic, and use a variety of resources to find solutions and answers. As students explore the topic, they draw conclusions, and, as exploration continues, they revisit those conclusions. Exploration of questions leads to more questions.

**Advantages of Constructivism**

1. Students learn more, and enjoy learning more when they are actively involved, rather than passive listeners.
2. Education works best when it concentrates on thinking and understanding, rather than on rote memorization. Constructivism concentrates on learning how to think and understand.
3. Constructivist learning is transferable. In constructivist classrooms, students create organizing principles that they can take with them to other learning settings.
4. Constructivism gives students ownership of what they learn, since learning is based on students’ questions and explorations, and often the students have a hand in designing the assessments as well. Constructivist assessment engages the students’ initiatives and personal investments in their journals, research reports, physical models, and artistic representations.
5. By grounding learning activities in an authentic, real-world context, constructivism stimulates and engages students. Students in constructivist classrooms learn to question
things and to apply their natural curiosity to the world.

6. Constructivism promotes social and communication skills by creating a classroom environment that emphasizes collaboration and exchange of ideas. Students must learn how to articulate their ideas clearly as well as to collaborate on tasks effectively by sharing in group projects.

**Suggestion to problems of Teacher Education**

Following are the main suggestion viz Reorganization of Courses, Suitable Method of Teaching, Innovations, Development of professional Attitude, Co-operation of Practising Schools, Proper Admission Procedures of B.Ed., Nucleus for Research, Provision for Funds, Supply of Reading Material and Documentation.

**Conclusion**

Since the teacher is the pivot of the entire educational system and is the main catalytic agent for introducing desirable changes in the teaching learning process, all attempts need be made for motivating teachers to become innovative and creative.

**References**


In the fast changing world of the early 21st century public education is also changing. As part of the changes the role of schools and education will also be different both in the educational system and in the society. Together with them the role of teacher also changed. In this technological era he is not only an information provider but also a facilitator. He has to play several roles in the school. He has to play the role of teacher leader in the school for the betterment of the institute. In this paper the role of teacher as class teacher and teacher leader has been discussed.

The young today are facing a world in which communication and information revolution has led to changes in all spheres: scientific, technological, political, economic, social and cultural. To be able to prepare our young people face the future with confidence purpose and responsibility, the crucial role of teachers cannot be overemphasized. New demands are often placed on the schools in addition to the existing ones, to be equipped with current knowledge and modern methods of acquiring new knowledge. The most modern concept that has already popped up in the schools of developed countries is flipped class rooms, where students watch teachers lectures at home and do what otherwise called homework in class. Teachers record lessons which students watch on their smart phones or on other electronic device anywhere at any time according to their convenience. In class they do project exercise or lab work in small groups while the teachers are just the facilitators. Many reputed Indian Schools are practicing this trend on trial basis but in no time this will be also a trend in most of the Indian schools too. In India online education is booming where one can learn any subject in free and massive online courses are available. While online courses can make high quality online education available to anyone for the price of an internet connection they also have potential to displace humans, with all that implies for teachers and students. Like everything disruptive online education is also highly controversial but the flipped classroom strategy might be famous and get approval of all. Such flipped classrooms can be achieved only when teachers are committed, motivated, and are willing to perform for the benefit of the learners, community and the society.

Role of Teacher in Teaching Learning Process: The changes that took place in schools have changed the roles of teachers, too. In the past teachers used to be the major source of knowledge, the leader and educator of their students’ school life. Nowadays, teachers provide information and show their students how to tackle them. Although they are still considered to be a kind of leader in the class, they can be thought of as facilitators in the learning process. If we focus on the teaching process, we still realize that there are a great number of changes in this field as well, and all of them have an influence on the role of teachers. Curriculum design is a
task teachers have to be prepared for, although the present generation of teachers has been growing into making up syllabi for years. Another difference between the past and present tasks of teachers is represented by the technical background they need to be able to use and handle effectively the electronic devices used in teaching learning process and must be technology savvy. One of the biggest challenges for teachers is that their role in the school management has also changed. The school needs them as individuals, who can make decisions and cope with the stress of the changing world of schools. At the same time teachers need to be able to work in teams, co-operate with colleagues and parents. A teacher has to generate that energy in oneself and handle it in one’s work of educating children. A teacher has not only to instruct but also to inspire the students beside that he also plays vital role in the development of institution. Teacher leaders assume a wide range of roles to support school and student success. Whether these roles are assigned formally or shared informally, they build the entire school’s capacity to improve. Because teachers can lead in a variety of ways, many teachers can serve as leaders among their peers. Following are some roles a teacher can play for the success of the institution.

**Resource Provider:** Teachers help their colleagues by sharing instructional resources. These might include Web sites, instructional materials, readings, or other resources to use with students. They might also share such professional resources as articles, books, lesson or unit plans, and assessment tools.

**Instructional Specialist:** An instructional specialist helps colleagues implement effective teaching strategies. This help might include ideas for differentiating instruction or planning lessons in partnership with fellow teachers.

**Curriculum Specialist:** Understanding content standards, how various components of the curriculum link together, and how to use the curriculum in planning instruction and assessment is essential to ensuring consistent curriculum implementation throughout a school. Curriculum specialists lead teachers to agree on standards, follow the adopted curriculum, use common pacing charts, and develop shared assessments.

**Classroom Supporter:** Classroom supporters work inside classrooms to help teachers implement new ideas, often by demonstrating a lesson, co-teaching, or observing and giving feedback. Blase and Blase (2006) found that consultation with peers enhanced teachers’ self-efficacy (teachers’ belief in their own abilities and capacity to successfully solve teaching and learning problems) as they reflected on practice and grew together, and it also encouraged a bias for action (improvement through collaboration) on the part of teachers.

**Learning Facilitator:** Facilitating professional learning opportunities among staff members is another role for teacher leaders. When teachers learn with and from one another, they can focus on what most directly improves student learning. Their professional learning becomes more relevant, focused on teachers’ classroom work, and aligned to fill gaps in student learning. Such communities of learning can break the norms of isolation present in many schools.

**Mentor:** Serving as a mentor for novice teachers is a common role for teacher leaders. Mentors serve as role models; acclimate new teachers to a new school; and advise new teachers about instruction, curriculum, procedure, practices, and politics. Being a mentor takes a great deal of time and expertise and makes a significant contribution to the development of a new professional.
School Leader: Being a school leader means serving on a committee, such as a school improvement team; acting as a grade-level or department chair; supporting school initiatives; or representing the school on community or district task forces or committees. A school leader shares the vision of the school, aligns his or her professional goals with those of the school and district, and shares responsibility for the success of the school as a whole.

Know the Students’ Strengths and Weaknesses: A teacher has to know all students strength and weakness and share it with others. Although teachers have access to a great deal of data, they do not often use that data to drive classroom instruction. Teacher leaders can lead conversations that engage their peers in analyzing and using this information to strengthen instructing. On the basis of data all the teachers can plan their strategies according to students need and make teaching learning more effective.

Catalyst for Change: Teacher leaders can also be catalysts for change, visionaries who are “never content with the status quo but rather always looking for a better way. Teachers who take on the catalyst role feel secure in their own work and have a strong commitment to continual improvement. They pose questions to generate analysis of student learning.

Learner: Among the most important roles teacher leaders assume is that of learner. Teacher can learn from environment and also from classmates. A teacher leader can initiate this process and try to learn new things from his or her colleagues and try to implement in his or her classroom. He or she can discuss strategies with others and also take others opinion on strategy. So a teacher is a learner for whole life.

Teachers exhibit leadership in multiple, sometimes overlapping, ways. Some leadership roles are formal with designated responsibilities. Other more informal roles emerge as teachers interact with their peers. The variety of roles ensures that teachers can find ways to lead that fit their talents and interests. Regardless of the roles they assume, teacher leaders shape the culture of their schools, improve student learning, and influence practice among their peers.

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