

## **NEED AND IMPACT OF INNOVATIVE PRACTICES ON TEACHER EDUCATION**

**C. Arundhathi Bai\***

**Dr. Y. Chakradhara Singh\***

---

### **ABSTRACT**

The Teacher is the most important element in any education program. It is the teacher who is mainly responsible for implementation of the educational process at any stage. 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 to books but has broadened in various new horizons. It demands understanding with investigative minds, assimilating required transformations, accommodating and responding to the universal needs. To move according to the needs teachers have to be innovative, should have the ability to think beyond the boundaries and create something which is different from that which already exists. For this there is a need of training to teachers with new perspectives and it starts from their training institutions. The pre-service and in-service teacher education programs have shown paradigm shift with its emphasis on globalization and individualization. The main purpose of this paper is to discuss about the various practices that can be included along with the need of teacher education program to be innovative and various practices that can be included.

**Keywords: Teacher Education, Teacher Proficiency, Innovative Teaching Practices, National Development.**

---

\* **Asst Professor, Faculty of Education, ICFAI University, TRIPURA**

## Introduction

“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.”

“Teacher” is the most important element in any educational program who 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. It is known that the destiny of India is being shaped in its classrooms. And the Education imparted by teachers in classrooms is the most powerful weapon which can be used to change the world. And now-a-days it is clearly visible that 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 which demands understanding with investigative minds, assimilating the required transformations, accommodating and responding to the universal needs.

Teacher education is a program related with teacher proficiency and competence that would make them competent enough to face new challenges in the education. In the contemporary sphere of Teacher education there has been constant paradigm shift where teacher education programs have shown paradigm shift with its emphasis on globalization and individualization in delivering contents to the student. Consequently, modern teaching trends in higher education exhibit a paradigm shift from the conventional classroom teaching methods adopted in the past to non-conventional teaching aids so as to encourage interactive forms of learning in students through active participation and integrative reasoning where the relationship of the teacher and the taught has undergone tremendous transformation. Though ancient to modern education has been defined in infinite ways according to social and cultural needs and values of the community, education is the only tool which develops the traits of the nationality among future citizens to make them good leading persons.

In our educational systems, the teaching and learning process is generally characterized by the traditional lecture, in which the teacher explains the student about behavioral pattern of the

domain. As the present requirement of the student has changed, who are in need of deep, flexible and transferable knowledge, some of the non-conventional teaching methods like learning through active participation by the students through computer-assisted learning (CD-ROMs), Web-based learning (undergraduate projects), e-learning, virtual laboratories, seminars, audiovisual aids (video-based demonstrations) and so on must be adopted. At present computer is playing vital role in schools, which is helpful both to focus on study and at the same time support for teaching and learning.

### **Student's interest**

Transfer of learning has been described as the application of skills, knowledge, and/or attitudes that were learned in one situation to another learning situation (Perkins, 1992). It refers to the ability of applying knowledge in one context to new contexts. The knowledge students learn in school will be applied outside of school. The student capability to recall what has been learned in the Teaching- Learning process always depends upon only by chance. Generally student wants to experience the information which he obtained in class room in real life situation. The problem occurs when the student is unable to identify what knowledge is needed to address a problem outside the context in which it was learned. It is believed that when students are taught in a context that closely resembles the situation in which they will have to apply the information, a greater chance for transfer of learning occurs (Schell & Black, 1997). It is well known that students learn more when they are involved actively in learning than when they are passive recipients of instruction (Jukes, N, 2003). 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 (Rao, SP et al, 2001). It has been observed that, in every group of 30 students, an average of 22 are able to learn effectively as long as the teacher provides a blend of visual, auditory, and kinesthetic activities. The remaining eight students differ in their preferences for modalities of learning and fail to understand the subject matter unless it is presented in their mode of preference. To meet these needs, teaching should be multi-sensory and filled with variety (Grinder M., 1991).

It is quite natural that the innovative teaching practices would certainly have greater impact on

the learning habits of students 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. However, here is very little documentation of the effectiveness of various active learning strategies, and often faculty are reluctant to incorporate such new strategies into the teaching curriculum (Rao, SP et al, 2001).

Study of the relationship between the practice of innovative teaching practices and its impact on performance of Students and Teachers certainly provides an insight into the realm of relevant teaching practices in the contemporary period and in turn facilitating the proliferation of the same so that wider number of students can be benefited from such teachings. The documentation of such teaching practices has not been quite active and hence there is an urgent need to develop more interest as well as confidence in the innovative teaching methods and enable the students to benefit from the same.

Innovative teaching methods though distinct from each discipline of the education, there have been certain commonalities. For example quiz, mind mapping, gaming, team- teaching, and video taping/audio-visual teaching are innovative teaching methods which can be applicable to all the disciplines of teaching. Similarly, CD-ROMs can be used in different disciplines to enhance the learning capacities of the students. Similarly, the specific innovative teaching practices practiced in science discipline can also be applicable in the field of other sciences too. The innovative teaching practices have a strong inter-disciplinary approach.

Many Educators have the opinion that new methods (ICT) can assist students 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 examine and break down the information into its constituent elements or parts.
5. Synthesis: The learner assembles the information together in a different way by combining elements or parts in a new or alternative pattern to form a whole.
6. Evaluation: The learner makes judgments about the value of material or methods for a given purpose.

The concept of teaching students in a context as close to real life as possible can be dated back to the sixteenth century. In fact, the school fieldtrips that students take today could be a result of the belief that students learn without the textbook; fieldtrips give students an opportunity to interact with society and gain valuable experiences. Creating a setting in which students learn as realistically as possible is a goal of teachers who use contextual teaching and learning. Teachers who use contextual teaching and learning practices not only place emphasis on fieldtrips, but they also emphasize practices such as learning by doing, problem solving, and cooperative learning.

Based on his work on innovative teaching practices in higher education in India, Prateek Shah (2004), opined that the innovative teaching practices enable the learners to understand the difficult task much faster than the usual traditional methods. He argues that even in the technological applications in teaching, there is a need to introduce new methods of teaching in higher education in India. Assessed on extensive research in the classroom, the conclusions presented are especially meant for the study by aspiring teachers for colleges and universities. However, the traditional methods of teaching have still been largely practiced in India. The teachers in teacher education arena are not aware of innovative practices of teaching being practiced in the country due to lack of documentation of such practices and also due to lack of publicity in reference to authentic impact of these teaching practices.

Despite of best efforts, the use of Information and Communication Technology (ICT) in Indian education is lagging behind our expectation. The N.C.T.E (National Council of Teacher Education) established as a statutory body in 1993, is very particular about the introduction of

ICT in the syllabus of teacher education programmes. According to NCTE teacher training institutes have to shift their focus from the present system to that of future education.

Research has consistently shown that few schools and teachers implement computer support to a degree where the potential benefits are likely to be realized. There are a number of significant problems which impede and prevent teachers from achieving the full advantage offered by computer applications (New Paul house, 2002). Cradler (2002) gave seven requirements for effective use of Information and communication technology (ICT) in education:

### **Seven requirements in ICT Education**

- Suiting technology to education 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 curriculum and technical support for teachers,
- providing the infrastructure of hardware and software,
- school organization, design, policies and practices,
- schooling, and
- Management support.

According to Lankshear & Snyder, 2000 the job of teaching is diverse in nature with each teacher bringing to their own meaning and set of beliefs they have about teaching and learning upon which they base practice. Effective use of ICT is a matter of “becoming proficient with a range of interlocking, complementary procedures, knowledge’s, understandings and dexterities”. This involves the two-way relationship between ICT, curriculum and pedagogy. This develops as teachers have contextual experience with the use of ICT. In the ideal classroom environment, the central problems are those concerning student learning and the associated teaching strategies. If every class is an ideal classroom then the findings from a good deal of research would lead us to

believe that computers would find an important place in most classrooms.

## **Innovative learning in Education**

### **1. Teacher training for ICT in education**

In order to improve the quality of education, institute must arrange Teacher Training Program where elements like: steps towards ICT integration, ICT integrated curriculum, Instructional Practice, Collaboration, Creativity & Innovation can be captured.

### **2. ICT infrastructure in all schools**

Facilities like a PC per teacher, Internet access to classrooms must be designed.

### **3. Use of ICT Tools in Education**

ICT tools like Computer Labs, Online Course Warehouse, Multimedia, Multi-media CD's, Information Services, Computer Radio, Broad-casting via Satellite, interactive software and digital content, White-boards, Digital Library , Digital Textbook ,Web based integrated Education Information services for student, teacher & parents must be used to enhance quality of education.

### **4. Introduction & Expansion of computer education in curriculum**

The institute must arrange CAI training Program, Get comprehensive Support by Government Computer Education Stage, Computer Education opportunity (ICT Literacy)

### **5. Education information service system**

EDUNET, ICT literacy education

The opinion of the students is that the traditional method is knowledge oriented and, modern & innovative teaching method provides employment oriented skills development. The teachers feel that by adopting innovative teaching in learning process, the students can gain certain advantages.

## **Advantages in innovative teaching**

1. Student Motivation Levels increases: Easy to manage student and direct towards the task. Students have a chance of distraction towards computer from the tasks the teacher wanted to.
2. Removing Stressful tasks: Better satisfying experience to teachers to direct less tedious tasks. Few teachers may prefer students to be busy and engaged.

3. Self or independent learning: Learning may not be directed towards teacher's objectives classroom. More and extra coordination of classroom
4. Extension of students thinking: Ideas and thinking of students may go beyond teacher's capabilities and experience which may bring and provide double confidence levels of teachers.
5. Active Learning Process: Student's may go beyond the teacher's own subject of expertise. More complex to direct and manage student learning.
6. Instruction to the right learner: Teachers feel easy to spend time with students that need extra attention and practice to catch up with the subject.
7. Attention: Slow learners can also concentrate on the teaching-learning process without deviation and distraction.

### **Conclusion**

Teacher education has become more sensitive to the emerging demands. In order to meet the challenges of the new millennium, Teacher education needs to orient itself to these new challenges and enable its students to compete level, else classroom may result in underperformance in educational outcomes. Teacher education is a global profession, and it is essential for the teacher to grasp global perspective and make assumptions about it in the near future and to utilize the best thinking and instructional models in the present times. It is the duty of teachers to place future citizens at a higher place by possessing new skills and attitudes as well as competitive knowledge in the stream of education concerned. And it is possible by giving intensive and effective training in various aspects related to new innovative teaching practices in Teacher Education, which not only improves education, but also empower people, strengthen governance and galvanize the effort to achieve the human development goal for the country.

### **REFERENCES**

1. Bloom, B.S (Ed), (1964) Taxonomy of Educational Objectives : The classification of educational goals/ by a committee of college and university examiners, London: Longman
2. Cross P.K, 1987, Teaching for learning, An Assoc. Higher Educ Bull 39:3-7
3. Grinder M. 1991 Riding the Information Conveyor Belt, Portland, OR: Metamorphous,
4. Lankshear, C & Snyder. 2000 I Teachers and Techno literacy, St.Leonards, NSW, Allen & Unwin,



5. Macaulay, 2000. Transform of Learning.
6. Paul Newhouse, C. 2002 The Impact of ICT on Learning and Teaching (Literature Review), published by Specialist Educational Services. Western Australia,
7. Prateek Shah, 2004, Teaching And Learning in Higher Education, Dominant Publishers and Distributors, New Delhi.
8. Singh, R.P. 2011 Teacher Education To-day , Shipra Publications, New Delhi, Vasudeva Rao, B.S. & Gupta, P.V. 2012, Changing paradigms of Education and Human Development, The Associated Publishers, Ambala Cantt
9. [www. Interniche.org/ca/student?](http://www.Interniche.org/ca/student?) Page 24
10. [www.uis.unesco.org/..](http://www.uis.unesco.org/)