

Emerging Paradigms in Teacher Education

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Abstract: There has been an unprecedented expansion of school education especially in the developing countries like India, which has further accentuated a demand for teacher education. The demand for qualified and quality teachers has been continuously on the increase, the world over. Quite naturally, the teacher education programs 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 a pertinent expectation that the teacher education programs should reveal or exhibit vibrancy adequate for responding to the emerging perspectives and paradigms of school education and the teacher roles thereof. Institutions of teacher-education fulfill vital roles in the global communities; they have the potential to bring changes within educational systems that will shape the knowledge and skills of future generations. As education is unanimously looked upon as the major catalyst agent of creating a more sustainable development- oriented future, such concern has become an integral part of the processes and practices within our nation, making it mandatory for the students to gain meaningful, holistic experiences.

“It’s now time to call a halt to writing syllabus or developing new curriculum materials until there are effective teacher education and evaluation programs to accompany them.” -Ramsey

Keywords: Unprecedented, Accentuated, Exhibit Vibrancy, Unanimously, Teacher Education.

1. INTRODUCTION

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), “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.

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. The theory is stage specific and is based on the needs and requirements that are characteristic of that stage. 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. 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.

2. NATURE AND NEED OF 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. 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. The focus of teacher preparation had to shift from training to education if it had to make a positive influence on the quality of curriculum transaction in classrooms and thereby pupil learning and the larger social transformation. This is not possible if teacher preparation focused only on training. Holistic teacher building is necessary to deal with the situation and therefore education of the teachers needs more emphasis than mere training.

Individuals come to teacher education with beliefs, values, commitments, personalities and moral codes from their upbringing and schooling which affect who they are as teachers and what they are able to learn in teacher education and in teaching. Helping teacher candidates examine critically their beliefs and values as they relate to teaching, learning and subject matter and form a vision of good teaching to guide and inspire their learning and their work is a central task of teacher education.

Teacher performance is the most crucial input in the field of education. Whatever policies may be laid down, in the ultimate analysis these have to be implemented by teachers as much through their personal example as through teaching learning processes. India has reached the threshold of the development of new technologies which are likely to revolutionize the classroom teaching. Unless capable and committed are teachers in service, the education system cannot become a suitable and potential instrument of national development. 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, imaginative pre-service and in-service training programs.

Teacher education thus has become more sensitive to the emerging demands from the school system. For this, it has to prepare teachers to operate in a larger context and to handle the dynamics as well as concerns impinge upon her functioning. 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 level of par-excellence. **In this context, many new dimensions and perspectives have started to emerge, which requires immediate attention and action from all of us, which are as below:**

3. QUALITY ENHANCEMENT IN TEACHER EDUCATION

In the Call for Action for American Education in the 21st Century in 1996, Clinton indicated that: **“Every community should have a talented and dedicated teacher in every classroom. We have enormous opportunity for ensuring teacher quality well into the 21st century if we recruit promising people into teaching and give them the highest quality preparation and training”**.

Deteriorating standards of education in India is a serious concern bothering all those who believe that national development cannot go beyond the quality of its education system. The major factor hindering the way in providing quality teacher education is the exponential growth of teacher education institution and programs during the past few years. For their monetary gains, these institutions are selling degrees and diplomas, thus characterizing the pathetic teacher education scenario of today. 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. Rigorous screening and strict admission procedure should be followed for correspondence courses for teacher education.

Now a days the number of self financing colleges are also 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 institutions. The affiliating bodies for teacher education institutions should frame such parameters which can enhance the teacher education programs in qualitative aspect rather than quantitative aspect. In order to remove the myth of misconception that the training in teacher education department is superficial and is not incorporated in real situation the professional attitude should be developed. 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. The teaching practice time period should be increased so that pupil teacher become more confident and get familiar with classroom situations.

Moreover the real teaching practice should be supervised by the teacher in a systematic way so that it full fills the objectives of teacher training. 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 audio visual equipments. This can be of great help to formulate the policies, programs for refining the education system.

Otherwise, this dilution in quality of teacher education will have a direct impact on the students of those schools where they are appointed. The emerging new perspectives of modern times, demand for a new role of teacher. To impart quality education to the students and also to upgrade the declining standards of education, quality enhancement in teacher education is called for urgently. Quality in education should be the deciding factor of the quality of the individuals who in turn reflects the quality of society and nation. Quality in education is not an assessment of effectiveness in terms of only academic achievement but of the values that it infuses and life skills that it develops, in individuals to empower them to lead a quality life and also to contribute in the national developmental process as a responsible citizen. Imparting quality education certainly demands the teachers to be well educated and equipped with all qualities of a good teacher. Thus teacher quality should be regarded as a holistic concept. Teacher education should focus on instilling these qualities in order to transform prospective teachers into knowledgeable, skilled, competent, and value oriented teachers with wholesome personalities capable of transfusing the same in to their students. As the onus of nation building lies out rightly on the shoulders of teachers, the quality in education can thus be insured if the teacher education institutions show total commitment in producing quality teachers.

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, and the quality of teachers is solely dependent upon the quality of teacher- education. Therefore, great efforts should be made to improve the quality of teacher education.

4. GLOBALLY COMPETENT TEACHERS TO HANDLE MULTI-DIVERSE STUDENTS

“Even small thing make a difference. Even if we cannot change people, we could make people aware of changes.”

Globalization has already affected our social, cultural and economic life significantly. The impact of globalization is only going to deepen and the consequences will be more broadly felt. For our children to live successfully and peacefully in this globalized world, we need to help them develop the appropriate skills, knowledge, attitudes, and perspectives. This requires a new generation of teachers who are able to act as global citizens, understand the global system and deliver a globally oriented education. To prepare this new generation of teachers, we need a globally oriented teacher education program. This does not mean that schools should abandon their traditions. Quite the contrary, globalization demands schools to be different and unique so they can prepare students who will be able to discover and create their own niche for the 21st century: local but with a global perspective.

Globalization brings many challenges to school, from delivering an education that will help their students succeed in the globalized world to meeting the needs of an increasingly diverse student population. To meet these challenges, schools need teachers who understand the implications of globalization, are able to effectively work with the increasingly culturally and linguistically diverse student population, and deliver a globally oriented curriculum. There is no doubt that teachers are primarily responsible for helping their students learn what is needed in the global economy. The problem however, is that “what” is not well defined and currently hotly debated. Thus, recent and current reforms have been focusing on curriculum standardization, high-stakes testing an emphasis on technological aspects. However, this belief has been seriously challenged by those who believe what is needed for Indian teachers to be globally competitive is that something else is required: creativity, diversity of talents, critical thinking skills, entrepreneurship, right brain directed skills, global competences, and a host of other abilities and knowledge not included in the current curriculum and testing. This debate puts teachers in a tough position and requires them to make sound, professional judgments. To make such judgments, teachers need to have a broad understanding of globalization and its impact, education practices and systems in other countries, and global economic integration and interdependence. It also requires teachers to have the ability to interpret the realities of globalization on behalf of their students. There is no doubt that the nation’s student population has

become more diverse, and as globalization continues, one can only expect the trend to continue. Moreover, the origins of immigrant children have also become more diverse. Most teachers are monolingual, with limited experiences, learning a foreign language or experiencing a foreign culture are struggling to adapt to a new work culture. Thus, how to teach immigrant children present a tremendous challenge to teachers. To teach immigrant children effectively, we need responsive teachers who should have knowledge of what their students bring to school, the ability and skills to interact with students with limited English proficiency, and an understanding of the impact of their student's home and community culture. Teachers are required to be sensitive to cultural and linguistic differences, experiences of migrating, student's life experiences, and living conditions. Global competence is the knowledge and skills needed to function successfully in the globalized world. More specifically, it includes the ability to speak, understand, and think in a foreign language, knowledge of the global system and world history, geography, and other global issues such as health and economics, and knowledge of other cultures. Although some of these knowledge's and abilities can be taught in existing courses, other may require adding new courses and educational activities. Thus, to cultivate global competence, schools will need teachers who are themselves globally competent. In addition, we need specialized teachers in foreign languages, world history, geography, arts, culture, economics, and other related subjects. In short, the challenges globalization presents to schools are challenges to teachers. In the age of globalization, teachers are expected to prepare students to be successful not only locally but also globally. They are affected by education in other nations. In addition, their own profession is affected by international migration as well as a growing number of schools recruiting teachers from other nations, and a growing number of teaching jobs becoming accessible in foreign countries. To prepare teachers to teach in the globalized world is the job of teacher education programs. A few visionary teacher education programs have already embarked on the journey to prepare teachers for the global age by gathering the strategies, programs, and practices from teacher education programs that have already initiated this transformation. The plan should include a comprehensive and coherent curriculum that maps out the courses, experiences, and activities aimed at preparing globally competent teachers. This curriculum should cover all the years of the future teacher's university experiences. Teacher education programs need to work with other units across the campus to devise such a curriculum.

5. RESEARCH AND INNOVATION FOR TEACHER EDUCATION

Teacher education programs should be guided or informed by the research on teacher education that has been conducted elsewhere and at the centre. The research work should lead to development of materials useful for teacher education in form of tasks and identification of aspects that need to be focused in teacher education e.g. articulation and reflection on beliefs held by teachers. The synergy between research and development work contributes to developing

Understanding about 'Teacher learning' and reflective practice of teacher educators involved. Efforts to bridge the gap between teacher education and the work of teaching should be done by using artifacts from teaching like students' errors, examples of classroom interactions for analysis.

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 should be given to research. Teacher educators should be encouraged to take up either major or minor research projects. 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 and developing the various aspects related to teacher education. The teacher education department should encourage conduct of researches, extension programs and exchange programs with different universities within India and outside India that will lead to the enrichment of teacher education programs enormously. So such programs should be sponsored by government and universities, so that different academicians from varied disciplines can contribute in the developmental aspect of teacher education.

To achieve the educational goals visualized by all of us, several resources for effective teacher education should be developed through research and intervention programs. One of the resources is development of activities for Hands on subjects which involves learning from observing and asking questions. Analysis of questions that foster subject-wise inquiry in all classrooms should be researched. Teacher handbooks accompanying curriculum textbooks developed as a

result of trials in classrooms illustrate use of students' ideas as a resource for teaching. Worksheets for teachers illustrating students' alternative ideas help teachers to develop insight into students' thinking by discussing the cause of the errors and alternative hypothesis along with imagining ways to use wrong answers by students to develop students' understanding through activities like role play. Analysis of classroom teaching form an important aspect of teacher education programs. Teachers should watch videos of classroom interactions and then indulge in brain-storming sessions. Refresher courses, orientation programs, seminars, conferences, workshops, symposiums should be encouraged for the professional growth of teacher educators. Teacher workshops aim at building a strong sense of belonging to a community among the participants by encouraging listening and responding to each others' views and an ambience of healthy debate. This may involve sharing and analyzing experiences, making hypothesis about students' thinking, challenging and supporting beliefs about the subject, its teaching and learning. This can lead to a development of mutually shared understanding and professional values.

Different modes of teacher professional development like short and extended residential workshops, collaboration with teachers in schools and teacher educators, and professional development of in-service teachers through a "lesson study" approach where teachers select one topic as focus, develop materials and plan lessons collaboratively in regular meetings, try-out in respective classrooms and share their experiences. All the educationists can be oriented with new developments, changes, innovations in the field of education

6. INCLUSIVE EDUCATION AND ASSISTIVE TECHNOLOGY

According to UNESCO, **"Inclusive education is the education in which the children with special education needs, have same right to education as the other and should be able to have access to ordinary school, which should integrate them in an education system focused around the individual and capable of accommodating their needs."** 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. The need is that teachers should be specially equipped, if the social deprivation has to be overcome through education. Individual differences are found everywhere in the whole world. This world is made up of 3 categories of people: 1. Average 2. Above average 3. Below average. In these three categories- above average and below average individuals need special attention for their development in life or we can say that these are the people with special educational needs.

The real challenge of inclusive education is to meet the special educational needs of all children with and without disabilities. To provide inclusive education we need specially trained teachers. Teacher development has to be heart of initiative for developing inclusive practices in school. This inclusive education system requires a more knowledgeable, highly skilled teaching force. The need is to gear all teacher education programs, to develop pedagogical skills required in inclusive class rooms. Teachers must be trained to address the learning needs of all children, including those who are marginalized and disabled. Teacher education institutions will need to refrain their program courses, to include the perspectives, concepts, and strategies of inclusive education. Change should occur in, pre-service teacher training programs, which needs to be complimented by in service courses so that the existing cadre of teachers can become re-skilled for a changing education system. The success of the implementation of inclusive practices in the class room is contingent upon the training and sensitization of the teachers. This element should be included in the teacher education programs.

Currently, assistive technology is, for the most part, is the only component of the other technology integration classes, which is thought of as needing to be part of the special education section. There exists, the need for the addition of the application of assistive technologies and awareness to a course that is a required part of general teacher education programs. A text-to-speech software program is an apt example of assistive technology. As reading and writing are understood to be basic components of an educational program, providing alternative formats, scaffolds and supports for those activities is necessary to be able to reach all students. Assistive technology is a wide ranging educational tool that is growing in its use and importance and is required for consideration for all students classified with any form of disability

and must be included on that students IEP (individual education plan). As it is wisely remarked, “**Need to be focused on classroom-wide and building-wide contexts, reflecting and alignment within special education as well as between special and general education.**” General teacher education programs must restructure themselves to include content for those teachers concerning special education methodology and pedagogy along with suitable modifications, accommodations, and assistive technology. Assistive technology tools can make a significant difference for students with disabilities. They allow access to information and activities that otherwise are inaccessible. An added benefit is that the tools can also make information and resources more available even to those who don’t have a disability or have not yet been identified as having a disability. The exceptional education teachers are not the only ones who need awareness of assistive technology but all the regular educational teachers are also likely to encounter the main streamed special needs students. The purpose for using the technology ideally should be to allow and support the student in the general student population.

7. ICT AND E-LEARNING IN TEACHER EDUCATION

William Knoke “Cutting-edge technology is as perishable as a truckload of ripe bananas: it’s worth a fortune today, but if not used quickly, it becomes worthless.”

With the onset and proliferation of Information and Communication Technology (ICT), there is a growing demand that it be included in school education. Education without ICT is unimaginable as it plays an imminent role in the process of integrating technology in to the educational activities. The term ICT has been used broadly to mean a range of equipment, resources, electronic and digital materials, internet and networking, educational software and programs which can be used in connection with teaching and learning. ICT opens new vistas for education like online learning, E-learning, E-education, E-generals, and many more. The ICT will enhance the teacher competency as well as quality of teachers. With it comes, three EEE’s related to teacher education in contemporary scenario. **E-teachers** are the new generation of teachers who will work in an internet environment in both regular and virtual classroom situations. They collaborate and discover new learning communities and explore resources as they interact with information, materials, and ideas with their students and colleagues. **E-learning** is learning which takes place as a result of experiences and interactions in an internet environment. It is not restricted to a regular school day and can take place in a variety of locations. **E-education** involves E-teaching and E-learning along with the various administrative and strategic measures needed to support teaching and learning in an internet environment. It will incorporate a local, regional, national, and international view of teacher education. Teachers should be polarized in their acceptance of the new technologies. A shift from teacher centered instruction to learner centered instruction is needed to enable students to acquire the 21st century knowledge and skills. The teacher education empowered by ICT driven infrastructure can have a great opportunity to come up to the center stage and ensure academic excellence, quality instruction and leadership in a knowledge based society. Rapid changes in technology will ensure that ICT will proliferate in the classroom. It is really a challenging task to strengthen ICT in teacher education because a large majority of the teachers are not technology savvy. Thus a major goal of technology training should be to facilitate teacher’s skills and personality through inculcation in teacher education programs. Challenge of the 21st century is not only to impart knowledge but also train students with information and communication skills to become better and competent learners, more independent, development oriented, and possessing dynamic personalities. Unless teacher’s educators make effective use of ICT in their own classes, it will not be possible to prepare a new generation of teachers who would effectively use the new tools for learning. Therefore it is necessary that a well defined component of ICT based learning should be made a part of teacher education curriculum by the name of E-learning. E-learning comprises all forms of electronically supported learning and teaching. The information and communication system, whether networked or not, serve as specific media to implement the learning process. E-learning is also called web based learning, online learning, distributed learning, computerized assisted instruction or internet based learning. There is an immediate need to incorporate E-learning in teacher education program. The students opting for teaching as a profession need to be given wider and extensive exposure to training by E-learning program. E-learning can work in perfect synchronization with the teacher and the book to give the best to our students. The beauty of E-learning is that the new software allows the creation of very effective learning environment that can immerse the learner in the material. Web audio-video conferencing and live broadcasts enhance the interaction levels. E-learning can provide future and existing teachers with access to rich information resources, courses, tools, training programs, online community of practice and opportunities to collaborate with other educators around the world. Information and communication technology refers to digital devices that are used to store, process and communicate information. Two main aims of

teacher trainings are fundamental: Teacher education in ICT; and teacher education through ICT. For E-learning to be an effective teacher development tool, it is essential that teacher trainers and teacher educators should themselves be skilled in and model the use of E-learning in their own teaching practices. Teacher education should be structured to orient and sensitize the teachers 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.

8. CONCLUSION

Often, education is described as the great hope for creating a more sustainable future; teacher-education institutions serve as key change agents in transforming education and society, so such a future is possible. Not only do teacher-education institutions educate new teachers, they update the knowledge and skills of in-service teachers, create teacher-education curriculum, provide professional development for practicing teachers, contribute to textbooks, consult with local schools, and often provide expert opinion to regional and national ministries of education. 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 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, trends and the emerging perspectives.

In the words of **Henry Adams**, “**A teacher affects eternity: he can never tell where his influence stops**”.

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