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Emerging Trends in Teacher's Education

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Abstract

A quality teacher's education program is rational and streamlined to address some specific pedagogical issues. Basically, it elucidates the idea about what good teaching is all about and then how it organizes course work and all practical experiences around it. Teacher's education courses are very much connected to practice as well as to theory. A good teacher's training programs have teachers working continuously with expert master teachers in a traditional classroom or virtual setting to enhance the knowledge and experience base. However expert teachers are also imparting knowledge about how students learn, how to assess their learning and about effective teaching strategies to provide them a platform to build repertoire. A historical method of qualitative research design was used to propose a new framework on emerging trends in teacher's education.

Keywords: Digital learning, digital literacy, education reform, teacher education, teaching strategies, trends

1. Introduction

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 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 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).

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. Sometime they try to link knowledge in varieties of different way while disseminating the information to students while engaging them in effective learning. 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.

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 the responsibility of quality teaching. The other concept is mentoring, where teachers are groomed and mentored by qualified and experienced teachers in their field of specialization. That means the knowledge base that grows over time can be shared between new comers and experts. The mentors could be colleagues, researchers, retired teachers or else could be senior teachers from reputed university. They could also be people from industry who are developing new ideas and products. There are unlimited potential to support teachers education. This concept can take the teaching level beyond expectations. But, such concept has its practical limitation in the context of real classroom teaching.

These days teacher's education system is facing problem of inaptness and irrelevance. There is a visible gap between how students live and how they learn. Schools and colleges have struggled to keep the pace with the rate of change in students' lives inside and outside the educational institution. Students and scholars spend their adult lives in multitasking, multifaceted, technology-driven, diverse & vibrant world. But, the very same concept of technological interface is missing in teacher's education these days in most part of the world. It must be ensured that all such prospective pre-service teachers have equal access to this new technology regardless of their economic background (Cochran & Fries, 2001). Then the gap between modern teaching methodology and existing traditional teaching methodology may be bridged to certain extent.

2. Methodology

This paper used historical method of qualitative research design .Teacher's past and contemporary education techniques were described and examined to understand the present scenario and to anticipate potential future effects of teaching trends and methodologies.

This paper aimed to provide a conceptual framework to address the critical emerging issues in teacher's education in India and other developed part of the world. An American reform perspective by Zeichner & Liston's (1990) was taken as benchmark for addressing the present teacher's education. Other secondary sources related to teacher's education paradigm were also considered. Substantial care was taken to be objective and to provide the correct presentation of the facts to gain fresh insight in this area.

3. Review of Literature

The literature review focused on landmark study in the area of teaching trends and methodologies. A combined framework of teacher's education reforms by Zeichner and Liston (1990) and Cochran –Smith (2002) were taken into consideration to build the foundation of this paper. Zeichner and Liston (1990) have suggested that throughout the twentieth century there were four clear traditions of American teacher education reforms such as:

1. Academic Tradition
2. Social Efficiency
3. Developmentalist tradition
4. Social Reconstruction tradition

3.1. The Academic Tradition

This reform focused on the importance of disciplinary knowledge for pre-service teacher, gained through a classical liberal arts education combined with an apprenticeship in schools. Here the mastery of subject matter is considered to be the most important goals in educating teachers (Zeichner and Liston, 1990). Teachers should not only be educated in their subject matter at university, but should learn how to teach in the company of more experienced teachers. An academic approach to pre-service teacher education would attract academically talented students in teaching profession.

3.2. The Social Efficiency Tradition

This tradition believed in the concept that classroom teaching provides the basis of building repertoire and teacher's education curriculum. This tradition examined the nature of teacher's work in order to provide basis for studying teaching. Skills and knowledge are set beforehand along with the criteria to measure teaching proficiency. Teachers are viewed as an effective instructor after exhibiting such proficiency in pedagogy. This Competency /Performance Based Teacher Education (C/PBTE) trend became well accepted in teaching education in USA and worldwide, although it received criticism on behavioral aspects (Zeichner and Liston, 1990).

Zeichner & Liston (1990) concluded that teaching demands preparation that reflects the complex and uncertain nature of the work. The important task from this point of view is to enhance teacher's capabilities to exercise judgments about the use of teaching skills. In this framework, the outcomes of teacher's education become consistent with realities of teaching. Since 1990, this approach has become increasingly evident in teaching education reforms (Cochran-Smith and Fries, 2001).

3.3. The Developmentalist Tradition

This concept emphasized that the natural development of the learner provides the basics for determining what should be taught both to pupils in the school and their teachers (Zeichner and Liston, 1990, p. 9). Three metaphors can be used to describe its manifestation in the twentieth century. It proposed teachers as following:

1. The teacher as naturalist
2. The teacher as artist
3. The teacher as researcher

Although this tradition is quite varied, Crook (1974) found that the developmentalist teacher education programs have the following in common:

1. A commitment to involvement in one's own learning
2. An active approach to learning in terms of direct experiences with materials
3. An encouragement of student's communication and perspective teachers' communication with students using skills of observing, reading, speaking, writing and early field experiences.

3.4. The Social Reconstructionist Tradition

This concept focused on two crucial elements such as schooling and teacher education for more equal and empowered society (Zeichner and Liston, 1990). This tradition encourages prospective teachers to seriously look at the ongoing social and political orders that are related with education. Prospective teachers should also try to eradicate the poverty cycle by preparing the mindset to teach in underdeveloped areas where they may not get substantial economic benefit.

Teacher's education curriculum should be designed to ensure that pre-service teachers develop the competencies required by proficient master teacher. A micro-teaching methodology could be adopted to enhance competencies of pre-service teachers. Effective teachers must be aware of the developmental stages of their students and can utilize this knowledge to facilitate meaningful student learning. Teachers can understand and respond to the developmental stages of their students. A good Teacher's Education (T.E.) program is designed to work with learning stages and needs of pre-service teachers which promote the understanding of learning development in students. Political assertions and support behind teacher's education programs would definitely stimulate social consciousness among teachers and educators (Iredale, R., 1996).

Although a new teacher's education concept has evolved over past few years in the United States of America. It emphasized that formal programs of classrooms preparation have generally failed to represent the knowledge, skills and disposition needed for the development of digitally literate students and Netizens. Netizens are the individuals who use internet rather more frequently than others.

The above conceptualizations give an indication that not one single concept is better to devise a sound framework for teacher's education program. But, taking The Social Reconstructionist Tradition as a base a new model could be proposed.

4. Emerging teacher's education trends

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, teacher's 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 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 employers and students as well.

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.

The Educause Center for Applied Research (ECAR), 2005 survey found that over 18,000 students attending sixty three different US College and universities do not want to give up face to

face learning opportunities. Rather, students reported a desire more consistently to utilize Course Management System (CMS) and moderate levels of educational technological aids in their classes. In fact ECAR, 2005 report corroborated that all digital natives were not digitally literate. They need help in developing their capacities to access, analyze and utilize digital information in a variety of contexts by more experienced mentors.¹

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.

Historically, it has been observed that traditional teacher's education methods were passed on to the college of education from generation to generation. So, collaboration among college faculties with practitioners at school or district level to designs a new program for teachers in that region or community is highly desirable.²

There has been a lot of research about what makes a difference in student's achievement for the last ten years. It was found that students learns and copy the same content and methodologies what their teacher's have taught. Teacher's qualification, knowledge and skills also make significant difference in students learning than any other factor. This means if one want to improve student learning one have to invest in the teachers' learning. Teachers must not only understand their content area but also how do students learn and acquire new language. How curriculum be organized in ways that are effective. Almost every study that's done that looked at these factors saw significant effects on what students learn.³ That's way such new methods would be very important for the students who have more difficulty in learning and assimilating the classroom knowledge in the past school days (Sachs & Groundwater-Smith, 1999).

5. Discussion

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 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.

A new teacher education system must evolve by redefining itself in the spectrum of modern age. Getting teachers prepared and getting prospective teachers with mentors into real classroom settings are two important variables in this teacher's education model. There are researches that support such teacher's teaching model. If anyone asks teachers what is most important to them in developing competencies to teach, the number one is that they are acquiring competencies by teaching and secondly they are working with other experienced teachers to bring

¹ <http://www.educause.edu/ers506/>

² <http://www.edutopia.org/c-emily-feistritzer-teacher-preparation>

³ <http://www.edutopia.org/ldh-teacher-preparation>

it to a next level. This indicates the field- based teacher's education model with mentor and teachers.

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 to propagate quality education amongst the next generation by grooming and hiring seasoned educationists and teaching professionals.

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 the students, where a teacher's education would be supported by updated curriculum, novel technological aids and modern teaching methodologies.

Emerging 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 lessons 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 .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.

Such evolving models from the past research have enhanced the focus on the digital literacy to the upcoming teacher's generation who could become the frontrunner in quality education and change agent in the future teacher's education system. Information sharing environments have already taken shape where anyone can be a global content publisher, as well as content consumer. In order to acquire and refine the skills needed for digital literacy, teachers of all generations need to engage in active production and consumption of multimedia content. The availability of digital curriculum for twenty first centuries' learners would be having a dramatic impact on the way teachers and educators prepare tomorrow's classroom leaders. To stay in course without bringing any change would not only be a denial of real digital era but also a blunder in a system of pedagogy.

6. Conclusion

Future research need to review various conceptualization, models and reforms agenda in teacher's education with respect to its geographical and cultural adaptability, because technology and teaching trends has evolved and changed very rapidly in the last few decades. It was observed that teacher's training methodology has not yet evolved at the same rate as information technology.

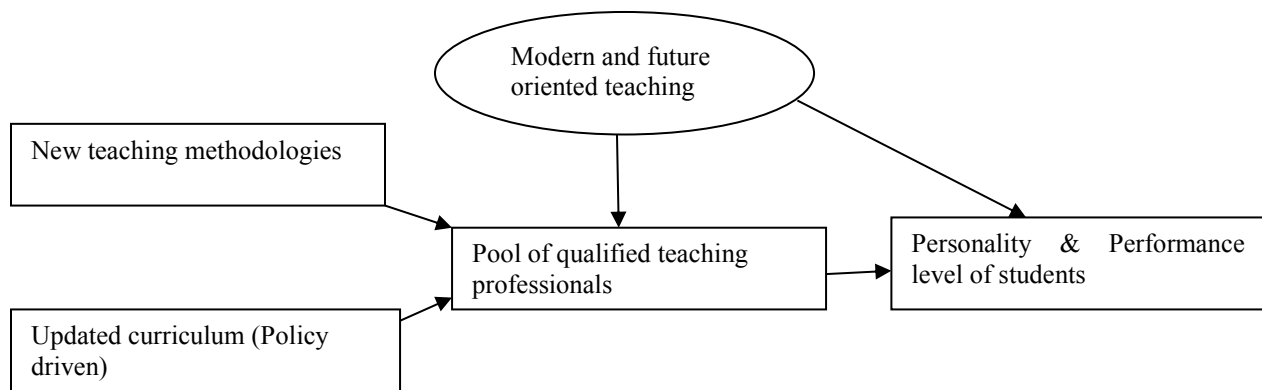
A proper model must to be sought out and conceptualized. A model which has the right amalgamation of technology and tradition based on regional requirement, because most part of

India and developing country is not uniformly developed in terms of educational infrastructure such as availability of good teaching professional and modern teaching aids. So, adopting a complete developed country (US, UK & Australia) teacher's education model in those developing countries may not be successful.

Policy based educational system is still debatable because such system doesn't seem to address the issue of technological innovation in teacher's education. It has an inherent limitation, because technology is changing the psychographic make up of students and teaching professionals very fast. However, policy based education system still hold good for specific developing country where modern educational infrastructure is not yet developed.

A proactive teacher's training framework can be proposed

Figure 1:



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