Enhancing Techno- Pedagogical Skills of Prospective Teachers

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ABSTRACT

In the rapidly expanding knowledge based society, teaching becomes one of the most challenging professions so it is necessary for teachers to use and applies modern technologies in their teaching. Merely introducing technology to the educational process is not enough. One must ensure technological integration since technology by itself will not lead to change. Rather, it is the way in which teachers integrate technology that has the potential to bring change in the education process. Therefore, the aim of teacher education is to develop skills and appropriate knowledge among teacher trainees for using and integrating the correct technology in an appropriate manner. Every teacher should know how to use technology, pedagogy and subject area content effectively in their daily classroom teaching. There must be congruence between the school curriculum and teacher training curriculum. Otherwise, teachers are not ready to utilize their knowledge to effectively design teaching/learning processes, project work, and assignments. This will help student teachers to develop the concept of 'techno pedagogy' to a greater extent.

Keywords: Techno- pedagogical skills, Prospective teachers

INTRODUCTION

"Education is not the filling of a pail, but the lighting of a fire."
Education may be defined as a systematic process of determining the extent in which the objectives are achieved by the public. According to Tagore, ―Education is that which does not merely give us information but makes our life in harmony with all existence.‖ As the twenty-first century approaches, the literate citizen is increasingly expected to use computer technology to access and manipulate information. Knowing how to manage electronic information from an ever-widening array of resources and in proliferating formats is essential. The education system was now witnessing a paradigm shift from the traditional chalk and-board teaching methodology to digitizing the pedagogical approach through technical devices. A transformation would not only increase the capability of the teachers but would also widen the knowledge base of students so as make them competitive in the international arena. Therefore the technology orientation needs to improve in order to equip themselves to face the students belong to the digital era and also to face the challenges in the modern classroom.

TECHNOLOGY IN MODERN EDUCATION

Modern technology in education According to the latest insights as to how exactly modern students of today prefer to use technology and how does their learning get an impact if they use technology, it was revealed that the use of modern equipment technology and tools, the learning and interactivity of students increases. They also find it much more interactive, as well as full of interesting areas, when aided by technology. The transfer of knowledge becomes very easy and convenient, as well as effective. What this means is, that our minds now tend to work faster when assisted with the use of modern technology, be it any part of life, here we talk about education. The reliance and dependence of such an innovation, that simply makes life an easy, smooth journey is completely unavoidable these days even in schools, universities and colleges. Students today can make use of technology in the following ways:

Internet connection and round the clock connectivity
The internet has grown in importance by many folds, over the process of decade. Its importance in the education world can now never be undermined. Despite the chances of fraud and drawbacks, the use of the internet is like a blessing for students. Today, the internet is something that is present in almost everything we use. From television to gaming consoles, and our phones, the internet is literally everywhere. The use of the internet allows students to find amazing convenience,

they can find various kinds of help, tutorials and other kinds of assisting material which could be used to academically improve and enhance their learning.

Using projectors and visuals

Visual images always have a strong appeal compared to words. Using projectors and visuals to aid in learning is another form of great technological use. Top institutions around the world, now rely on the use of amazing PowerPoint presentations and projections in order to keep the learning interactive and interesting. Technological use such as projectors within the schools and colleges can take the interaction and interest levels right up and also improve motivation. Students like to see appealing visuals and something that entices them to think rather than just reading words. The learning part also becomes pretty efficient when it comes to technology.

Digital footprint in the education sector

If we talk about digital and education, then the penetration of digital media within the education sector has now grown. This penetration has resulted in round the clock connectivity with students and different forums that are available for different kinds of assignments or help. As the power of digital increases, there are and there will be more applications that will assist students in development and learning.

Online degrees with the use of technology

Online degrees now have become a very common phenomenon. People wish to take up online courses for their learning and certifications. Top institutions offer amazing online programs with the use of various applications and the internet. This is a concept that will continue to rise as it gets more support and awareness. The online degree scenario around the world is more famous among students who work and look for flexible studying program

NEED FOR TECHNO PEDAGOGICAL SKILLS

Teacher education holds the most crucial position and helps in the success of any educational system. A teacher educator is the topmost academic and professional person in the educational pyramid who shapes the future teachers and the onus of quality of teachers therefore rests on the teacher educators themselves. Technology is a broad and constantly changing skill-set required of faculty and selecting the appropriate techno-pedagogical strategies to effectively engage students in the content is a separate skill-set. Media literacy influences student development and developing a critical analysis of media consumption is an important skill for students. In understanding how technology and media intersect with learning, consider the compatibility between theories of technology and education and how that relates to the content There is a need for teacher educators and training graduates as well as the institutional level to identify and articulate the occupational realities when technology and competencies intersect, while understanding and communicating how technological resources and strategies can engage students and enhance student learning.

IMPORTANCE OF TECHNO PEDAGOGY

In educational context, ICT has the potential to increase access to education and improve its relevance and quality. Tinio (2002) asserted that ICT has a tremendous impact on education in terms of acquisition and absorption of knowledge to both teachers and students through the promotion of:

Active learning:

ICT tools help for the calculation and analysis of information obtained for examination and also students' performance report are all being computerized and made easily available for inquiry. In contrast to memorization-based or rote learning, ICT promotes learner engagement as learners choose what to learn at their own pace and work on real life situations' problems.

Collaborative and Cooperative learning:

ICT encourages interaction and cooperation among students, teachers regardless of distance which is between them. It also provides students the chance to work with people from different cultures and working together in groups, hence help students to enhance their communicative skills as well as their global awareness. Researchers have found that typically the use of ICT leads to more cooperation among learners within and beyond school and there exists a more interactive relationship between students and teachers (Grégoire et al., 1996). "Collaboration is a philosophy of interaction and personal lifestyle where individuals are responsible for their actions, including learning and respect the abilities and contributions of their peers." (Panitz, 1996).

Creative Learning:
ICT promotes the manipulation of existing information and to create one's own knowledge to produce a tangible product or a given instructional purpose. Integrative learning: ICT promotes an integrative approach to teaching and learning, by eliminating the synthetic separation between theory and practice unlike in the traditional classroom where emphasis encloses just a particular aspect.

Evaluative learning:
Use of ICT for learning is student-centered and provides useful feedback through various interactive features. ICT allow students to discover and learn through new ways of teaching and learning which are sustained by constructivist theories of learning rather than students do memorization and rote learning.

Positive Impact
1. ***Enhanced Teaching and Learning***: Technological developments like digital cameras, projectors, mind training software, computers, Power point presentations, 3D visualization tools; all these have become great sources for teachers to help students grasp a concept easily. ☐ It has to be understood that visual explanation of concepts makes learning fun and enjoyable for students. They're able to participate more in the classroom and even teachers get a chance to make their classes more interactive and interesting.

2. ***Globalization***: When school in different parts of the state, students can —meet‖ their counterparts through video conferencing without leaving the classroom. ☐ Some sites, such as www.glovico.com are used to help students learn foreign languages online by pairing a group of students with a teacher from another country.

3. *No Geographical Limitations*: With the introduction of online degree programs there is hardly any need of being present physically in the classroom. Even several foreign universities have started online degree courses that student can join. ☐ Distance learning and online education have become very important part of the education system now a day.

INCORPORATING TECHNOLOGY INTO CURRICULUM

Some educators may remember life before the invention of the computer, internet, e-mail, chat, cellphones and video gaming systems. However most children today can't. they have grown up in a world where devices are essential tools. They are an integral part of how students communicate, learn, and have fun. Many children are familiar with technology, and they do things differently than people did it in the past. Today many children regularly use the internets instead of a book to research. They sen an email or use chat instead of picking up the phone to call a friend moreover, they frequently use the computer to type a document instead of writing it out by hand. Technology is seamlessly integrated into their daily lives.

Discover the five reasons to integrate technology into curriculum
- Creates meaningful learning experiences
- Prepares students for the future
- Develops essential skills
- Provides fair an equal opportunities
- Promotes digital citizenship

PROSPECTIVE TEACHERS VS TECHNO SAVVY

Teacher candidates who were enrolled in a teacher education programme and in their final year of education. Some qualities of a good teacher include skills in communication, listening, collaboration, empathy and patience. Other characteristics of effective teaching include an engaging classroom presence, value in real-world learning, of best practices and a lifelong love of learning Tech-savvy teachers never do anything simply for technology's sake. They can articulate exactly how a particular technology advances their goals. They use technology in their day-to- day lives. These teachers don't leave their technology at work. It is fast becoming a necessity for teachers to be tech-savvy if they want to connect with students and parents. They have to learn to be a digital citizen and integrate tech skills into everyday life. Teachers should be smart enough to know that technology can baffle or fail at times. Tech-savvy teachers are needed in order to direct learning activities in a way that enhances education. Tech-savvy educators promotes positive environment where students find learning enjoyable.

CONCLUSION

Education plays a vital role in enriching the society and human resource. Teacher educators and training graduates can play an effective role only if they are prepared in a creative, resourceful and efficient manner to use techno-pedagogical skills to nurture the students as per the demand of the changing times. Teacher educators and training graduates must also adapt and change and be familiar with using emerging technologies that can encourage student participation. Teaching with use of modern technical facilities enhances student's knowledge and improves the teaching-learning process in this fast changing complex world

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