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Reading Preferences and Patterns of Commerce Students

Social Media Tools and Conflict Resolution Skills

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IMPORTANCE OF INTEGRATING TECHNOLOGY IN PRE-SERVICE TRAINING OF TEACHERS

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ABSTRACT

Teachers need to be knowledgeable about and proficient in using technology to offer to teach if they are to utilize it successfully. Providing pre-service teachers with the necessary technical knowledge and expertise can enable them to better anticipate the needs of their students and encourage them to seek information outside of the conventional traditional channels. To bring this to fruition, expertise in using technologies becomes an essential precondition. This study tried to emphasize the improvement of the integration of technology skills to the pre-service teachers in their training for the betterment of the students

Keywords : *Pre-service training, Technology, Integration.*

Introduction

Technology creates a wide range of options that were previously impossible. It can be challenging to keep up with technology in 2022 because it advances and generates new things virtually every day. Technology in the classroom can open up new possibilities for teachers and students to excel in new ways. The majority of pupils already utilize smartphones, tablets, and other modern technology. Using technological tools to teach students can improve their learning experience. There are benefits and drawbacks to using modern technologies. Teachers and lecturers in 2022 should employ every technological advancement available to enhance and innovate the educational process (Ali Raza, 2022).

Pre-service Teacher Education

The first professional study that people finish before entering the teaching field is Pre-Service Teacher Education (PSTE) courses. This is the education of teachers before they begin their teaching careers. These programs often combine theoretical education knowledge with a practicum, which is a field-based practical experience (First Principles: Designing Effective Pre-Service Teacher Education Programs, USAID from the American people).

Teaching experience and theoretical knowledge are acquired concurrently during this phase of pre-service teacher education programs. Pre-service education is used to train several kinds of instructors. Preparing future teachers involves taking a variety of unrelated classes and participating in fieldwork. These programs are designed to promote and improve teacher learning while giving them more self-assurance. Teachers' practice, efficacy, and dedication to their careers are impacted by the caliber of the training they get through PSTE programs. (Eren & Tezel, 2010; Liage, Ebenezer, & Yost, 2010; Roness, 2010). (First principles: Designing Effective Pre-Service Teacher Education Programs, USAID from the American people).

Teacher educators must understand the approach to connect with the fundamental characteristics of a successful teacher and how to encourage these characteristics in student teachers. Therefore, the caliber of PSTE programmers affects and is reflected in the caliber of teaching and learning that takes place in the classroom. This will result in a greater level of instructor participation in the learning process (Sooraj, 2013).

Technology for Teachers

Technology is developing at a breakneck pace. When technology is in the hands of the student and the instructor, education change as a result of its effects. For many centuries, the most common method used in traditional classrooms is giving a lecture. The emergence of online learning or multimedia education, is the new conventional teaching

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method. Computer-based effective teaching provides pupils with a potent, engaging, and novel approach to learning. Therefore, every teacher must be familiar with technology to effectively educate using modern technologies. Teachers must be able to use and integrate the technologies efficiently.

The potential of technology to advance students' knowledge and pique their interest to increase their subject mastery is maximized by effective instructors. Strategic use of technology can improve access to learning and idea clarification. By utilizing computational technologies, all educational institutions today optimize the learning capacity of their students. They make sure that instructors also have greater access to and knowledge about tools for technology.

The use of audio-visual aids and equipment for enhanced idea understanding is part of the multimedia approach to education that has been widely implemented in all institutions. This resulted in quick and efficient learning. Today, a teacher's responsibilities go beyond just assigning pupils books to read; they may also use internet technology to clarify concepts and then teach their students about them. For this, instructors need to be knowledgeable about the resources. Utilizing online resources may be entertaining, appealing, and rather thrilling. Students frequently use internet-based resources, and when teachers use this technology in the classroom to teach students, they may speak to them in a way that helps them learn more. So it's not a terrible idea to understand a little bit about these technologies. These tools come with a trial period and may be free of charge. These resources can be used to assist in-person instruction or online education. To deliver learning, it transcends physical and geographic boundaries (Importance of Technology, My essay point).

Pre-service Teachers' Technology Skills

Knowledge of technological content awareness is the strategy for fusing technology and content (Zhao, 2003). Pre-service teachers need to understand not just the subject matter they teach, but also how technology may be used to alter that subject matter. Pre-service teachers must be knowledgeable in both the subject matter and the use of technology to communicate it in order to successfully integrate technology into education (Bernard Wiafe Akaadom, 2020).

There is strong evidence that pre-service teachers require instruction in a variety of skills in addition to pedagogy, in order to employ technology in the delivery of teaching. Lee (2007) noted that many pre-service teache who are of mature age have not received compute education or substantial engagement with technology tool As a result, they are in urgent need of training in technolo literacy abilities (Bernard Wiafe Akaadom, 2020).

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The early stage of pre-service teacher preparatio must focus on the utilization and basic operations o technology tools. After completing this and mastering th fundamentals of technology use, pre-service teachers ca go on to pedagogical training to get ready for practice an professional growth. In light of this, Veen (2012) suggeste that training be divided based on the prior experience an computer proficiency of pre-service teachers. By doing thi various training skills might be provided in accordance wit individual needs (Bernard Wiafe Akaadom, 2020).

Another obstacle to pre-service teachers using technology for education, according to Cuckle and Clark (2002), is the absence of technical pedagogical training i teacher training institutes. In their study, they discovered that even while pre-service teachers had enough technica abilities from utilizing technology tools daily, they had trouble applying those skills to using technology for education. As a result, even after receiving technological pedagogical training in technology, they were still unable to put the information and skills they had acquired via their training to use since they were difficult to integrate into their classroom instruction (Bernard Wiafe Akaadom, 2020).

Integration of Technology in Pre-service Teacher Training Programme

The most crucial time for teachers to learn how to incorporate technology into their lessons is during pre-service training. The efficacy of technologies as seen by pre-service teachers can be used to predict how they will utilize technology in the future. These educators believe it is critical to have the required technological resources on hand to address contemporary educational issues and discover answers (Hatice Yildiz Durak,2021).

It has been demonstrated that effective technology integration improves student learning. National Assessment of Educational Progress (NAEP) looked at the amount of

time spent using computers in classrooms, whether students have access to them at home or school, how teachers are trained to use computers in the classroom, and what kinds of instructional activities are conducted using computers in classrooms. The biggest issue with technology use in classrooms was how the instructors used the computers for education, not how frequently they were used. (Misook Heo, 2012).

Pre-service teachers have not been exposed to effective models of technology integration within the university context, despite the social learning theorists' emphasis on the value of modeling and imitation in learning (Bandura, 1969; Bandura & Walters, 1963; Lefrancois, 1982; West & Graham, 2007), (Misook Heo, 2012).

In addition to the dearth of modeling opportunities, the majority of basic instructional technology courses provided in teacher preparation programs place a greater emphasis on hardware and software tools than on strategies for integrating technology into classroom activities (Graham, Culatta, Pratt, & West, 2004), (Misook Heo, 2012).

Pre-service teacher education sometimes lacks a connection to how technology is used in the classroom today (Marion, 2003; Murphy, Richards, Lewis, & Carmen, 2005), (Misook Heo, 2012).

That is, despite the fact that pre-service teachers are often expected to use technology in their teacher education program, they do not do so both during their student teaching experiences and once they have found work (Misook Heo, 2012).

While pre-service teachers' readiness to integrate technology into the classroom would rise as their confidence level increases (Bullock, 2004: Seels, Campbell, & Talsma, 2003; Wahab, 2009). When individuals feel they lack the requisite abilities, they are less inclined to use technology (Angeli & Valanides, 2004; Hong & Koh, 2002), (Misook Heo, 2012).

Conclusion

To increase their use of technology for classroom education, pre-service teachers require additional technological training. More time is required to practice using technology for instruction after receiving adequate instruction in its use. By creating programs that would need greater practical skill training for pre-service teachers, teacher preparation should have a strong emphasis on educating teachers who can incorporate technology in teaching and learning. This would assist pre-service teachers in acquiring the fundamental technological abilities that inhibit them from integrating technology into their lessons and assist in boosting their confidence in utilizing technology in the classroom

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REFERENCES

1. *Ali Raza, (2022).New Technologies in Education in 2022, TechEngage First Principles: Designing Effective Pre-Service Teacher Education Programs, USAID from the American people.*
2. *Altay Eren& Kadir Vefa Tezel, (2010). Factors influencing teaching choice, Professional plans about teaching, and future time perspective: A Mediational analysis. Teaching and teacher education.*
3. *Angeli, C., & Valanides, N. (2004). Examining the effects of text-only and text-and-visual instructional materials on the achievement of field-dependent and field-independent learners during problem-solving with modeling software. EducationalTechnologyResearchandDevelopment, 52(4), 23–36. doi:10.1007/ BF02504715.*
4. *Bandura, A. (1969). Principles of behavior modification. New York, NY: Holt, Rinehart, and Winston.*
5. *Bandura, A., & Walters, R. (1963). Social learning and personality development. New York, NY: Holt, Rinehart, and Winston.*
6. *Bernard Wiafe Akaadom. (2020). Pre- Service teachers' technology skills and its effectsinstruction: In pursuit for quality teacher training. International Journal of Engineering Science and Technology, 10 (9) 18-28.*
7. *Bullock, D. (2004). Moving from theory to practice: An examination of the factors that pre-service teachers encounter as they attempt to gain experience teaching with technology during field placement experiences. Journal of Technology and Teacher Education, 12, 211–237.*
8. *Cuckle, P. & Clarke, S. (2002). Mentoring student-teachers in schools: views, practices, and access to ICT. Journal of Computer Assisted Learning, 18, 330–340.*