International Journal of Advance Studies and Growth Evaluation

Empowering Pupil Teacher by use of Technology

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Abstract
Present era is the era of technology. Technology has entered in all facets of our life. Technology has changed the pattern of Education. The process of teaching and learning is facilitated by many technological tools. If the pupil teacher means students pursuing any teacher education course are well equipped with these technological tools definitely it will give a boost to our education system. This paper discusses the advantages of integrating technology to empower pupil teacher, challenges in integrating technology in teacher education courses and implications of integration of technology in teacher education program for pupil teacher. It also describes some important online resources, government initiatives and various AI tools which can be utilised by Pupil Teacher to enhance their teaching skills.

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Keywords: Pupil teacher, technology

Introduction

Pupil Teacher means any learner pursuing teacher education course may it be B.Ed., BA B.Ed., B.Sc. B.Ed. or ITEP course under New Educational Policy 2020. The main motive of teacher education courses is to prepare learners for teaching in school. After completing their course, they are eligible for teaching in schools. Schools allows only trained teachers to be eligible for teaching. So Pupil Teacher are learners who are equipped with skills to teach in school. They undergo internship during their course where they go to schools for one semester to perform teaching in school. Now in present era technology has entered in all facets of our life and education is no longer and exception. Specially with the advent of technology the process of teaching and learning has changed drastically. If pupil teacher are trained to use these technological tools they will definitely contribute to upliftment of teaching and learning aspects.

Advantages of Using Technology by Pupil Teacher

Access to global Teaching and Learning Resources: There are many teaching and learning resources which can be utilised. Many open education resources can be utilised. There are plenty of textbooks, audio, video and online courses which can be utilised to enhance their own capabilities and their teaching skills.

Strengthen Pedagogical Skills: Technology plays an important role in enhancing pedagogical skills of pupil teacher. Pupil teacher can use various technology tools for classroom management, for lesson planning and teaching and also for assessment work.

Interactive and Participating Teaching: Technology plays an important role in creating an interactive atmosphere for teaching and learning. These tools allow student to be more active throughout the process of teaching and learning.

Facilitates Personalised Learning: Learners can learn at their own pace. To learn online they can learn from anywhere and anytime as per their convenience. If they want to learn any content which is difficult to understand in one shot, they can repeatedly go through the content available.

Challenges towards Technology Integration

Lack of Proper Infrastructure: Although our country has been continuously progressing in technological advancement like facilities for internet connectivity, use of mobile by

common persons but still there are problems in access to internet connectivity specially in remote areas. Many times, there is hardware malfunctioning which effects the access to online resources.

Digital Divide: It is one of the major challenges in integrating technology among Pupil teacher. Some pupil teacher have good infrastructure facilities, access to internet and online resources. On the other hand some Pupil Teacher belonging to low income group and residing in rural areas may suffer from digital divide. They may not have equal access to internet resources and lack of proper infrastructure. This may restrict some disadvantaged pupil teacher to use technology.

Teacher Training: Training in technology should be properly integrated in teacher training programme which is a big challenge. Although NEP has emphasised that technology should be incorporated in all Teacher's Training Programme but practical implementation is a major concern as there are many hurdles in this task.

Online Resources for Pupil Teacher
Educational Platform: Different educational platforms are there which help to manage various class room activities like uploading course content, assignments, quizzes, evaluation etc. Some of popular and commonly used platforms are as below-

Google Class Room: It is a free cloud based service provided by Google which helps teachers to manage class room activities efficiently. It integrates all Google tools like Google drive, docs, sheets and meet. Google classroom empowers teachers to manage all their classroom activities digitally.

Kahoot: It is a tool which can be used by teachers and students for any subject like literature, mathematics and science for improved learning through game based activities. It helps to make learning interactive and assess knowledge in real time through multiple choice questions.

Canva for Education: Canva is a very popular tool to empower both teachers and students. It helps to create effective visual content in very easy and effective manner. Students can create use canva to present their project on any for demonstrating their understanding regarding any topic. Teachers can create their teaching content or resource in effective manner. It can be collaboratively used by both teachers and students for communicative teaching and learning.

360 Learning: It is a centralised platform helps in collaborative learning which can be utilised to create and share content. It helps in an automating various teaching and learning tasks like course distribution, tracking progress and engaging students and teachers to communicate.

MOOCS Platform for Pupil Teachers: Massive Open Online Course helps pupil teacher to empower them by offering a large number of courses to improve their professional skill. It helps them have professional certification and recognition, collaborative and lifelong learning. Some popular MOOCs platforms are as below.

Cousera: It is an American global learning platform that offers wide varieties of courses from different universities and organisations providing ample number of opportunities to teachers to enhance their skills.

edX: It is MOOC offered by Harvard and MIT that offers diverse range of courses which are taught by faculties from top universities.

Future Learn: It is a British MOOC platform which provides large variety of courses for teaching and learning from different top universities of world.

Swayam: It is an initiative of Indian government which offers courses from large range of disciplines from school to postgraduate level. It offers many courses for teachers training also. It provides platform to teachers from different universities to host and run a course. Any faculty can launch a course on Swayam platform. It helps to have online access and certification for good quality educational content for any learner.

MOOC by British Council: It is a MOOC platform for English Language to offer teachers accessible and flexible opportunities to learn language online and develop their skills.

Digital Initiative by Government of India which can be utilised by Pupil Teacher
PM e-VIDYA: It is a comprehensive initiative of government of India which unifies digital, online and on-air education, enabling multi-mode access to education. It includes

DIKSHA (Digital Infrastructure for Knowledge Sharing): It is a digital platform which provides interactive learning material, teacher professional development module and many other resources. It supports teacher training and capacity building.

Swayam: (Study Webs of Active-Learning for Young Aspiring Minds)-This is Indian government MOOCS platform for education, including teacher training programs. NITTTR (National Institute of Technical Teachers Training and Research) is National Coordinator for Teachers Training on Swayam. NIOS and NCERT provide number of programs related to school education.

Swayam Prabha TV Channels: It is a group of DTH Channel which telecasts number of educational programs 24 hours a day and 7 days a week. It provides channels for school education for classes 1 to 12 specifically.

NISHTHA-(National Initiative for School Heads' and Teachers' Holistic Advancement): According to NEP2020 empowerment of teachers is very important as they shape the future of nation by educating children. NISHTHA portal provides capacity building program aimed at improving school education quality through integrated Teacher Training.

AI tools to be utilised for Pupil Teacher: Pupil teacher can use number of AI tools for teaching learning journey. AI tools can be utilised for lesson planning, content creation, presentations, assesment and evaluation of students. These tools include Education Copilot, QuiliBot, Gradescope, Tech Mate AI, Educafe AI etc.

Pupil Teachers should realise the importance of integrating technology in teaching learning process. Following steps should be taken by them in this regard

- Should develop digital literacy and technical skills
- Use online educational resources and educational platform
- Integrating technology in teaching practice
- Should participate in professional development programs

Conclusion
According to NEP 2020 teachers play a very important role in shaping the future of nation by educating children. Pupil teacher are the future teacher of our nation. Empowerment of pupil teacher is very essential if the quality education is to be provided to school going children. In present era technology integration is very essential in teaching learning process. Though there are many challenges for pupil teacher in this regard but if they overcome the hurdles they will have access to global learning resources, they will strengthen their pedagogical skills, they will be able to evaluate and assess

students in better manner. Their teaching skills will definitely be nourished if they will utilise the educational e-resources and technological tools. Government has also taken many initiatives to improve the quality of school education. These initiatives if properly used by pupil teacher it will definitely help them to enhance their skills of teaching and learning.

References

1. Blanchard J. Teacher Education and the Integration of Technology: a reading and language arts perspective, Journal of Information Technology for Teacher Education. 1994; 3(2):187-198.
   https://www.tandfonline.com/doi/pdf/10.1080/096202994 0030206
2. Lachner A, Backfisch I, Franke U. Towards an Integrated Perspective of Teachers' Technology Integration: A Preliminary Model and Future Research Directions, Frontline Learning Research. 2024; 12(1):1-15. ISSN 2295-3159, DOI: https://doi.org/10.14786/flr.v12i1.1179
3. Jay Blanchard Teacher Education and the Integration of Technology: a reading and language arts perspective, Journal of Information Technology for Teacher Education. 1994; 3(2):187-198
   DOI: 10.1080/0962029940030206 To link to this article: https://doi.org/10.1080/096202994003020
4. Rathore K. Technology and Innovation in Teacher Education: Transforming Pedagogy for the 21st Century, Journal of Emerging Technologies and Innovative Research (JETIR). 2024; 11(12):12-17. ISSN-2349-5162, https://www.jetir.org/papers/JETIR2412603.pdf
5. Theodorio AO. Zayd Waghid Z. Wambua A. Discover Technology integration in teacher education: challenges and adaptations in the post-pandemic era Education. 2024; 3:242.
   https://www.researchgate.net/publication/385977436_Te chnology_integration_in_teacher_education_challenges_ and_adaptations_in_the_post-pandemic_era
   https://doi.org/10.1007/s44217-024-00341-1
6. Haleem A, Javaid M *et al.* Understanding the role of digital technologies in education: A review, Sustainable Operations and Computers. 2022; 3:275-285. ISSN 2666-4127,
   https://doi.org/10.1016/j.susoc.2022.05.004.
   https://www.sciencedirect.com/science/article/pii/S26664 12722000137
7. Rajan KE. ICT Enabled Teacher Education, Indian Online Journal of Experimentation and Innovation in Education, 2012.
   https://www.researchgate.net/publication/266023790_IC T_Enabled_Teacher_Education
8. Raja R, Nagasubramani P. Impact of modern technology in education, Journal of Applied and Advanced Research. 2018; 3(S1):33.
   DOI:10.21839/jaar.2018.v3iS1.165
   https://www.researchgate.net/publication/325086709_Im pact_of_modern_technology_in_education
   https://doi.org/10.1007/s44217-024-00341-1
9. https://www.ed.gov/sites/ed/files/documents/ai-report/ai-report.pdf
10. https://gndec.ac.in/sites/default/files/Digital%20ICT%20I nitiatives_MHRD.pdf
11. https://pmevidya.education.gov.in/