INTERSECTING HORIZONS: EXPLORING THE CONVERGENCE OF SCIENCE, TECHNOLOGY, AND ART

Published: December 30, 2023 | Pages: 139-141

REQUIREMENTS FOR PROFESSORS AND TEACHERS IN FORMING DIGITAL EDUCATION SKILLS OF STUDENTS IN THE PRIMARY EDUCATION DIRECTION

Begisheva Nailya Rinadovna

doctoral student at Chirchik State Pedagogical University, Uzbekistan

ABSTRACT: The integration of digital technologies in education has significantly transformed the teaching and learning process, especially in primary education. This article explores the essential requirements for professors and teachers to effectively form digital education skills in students pursuing primary education. Key areas discussed include digital literacy, innovative pedagogical practices, and adaptive teaching methods. The study also highlights the importance of continuous professional development (CPD) and the application of emerging technologies like AI, VR, and gamification in enhancing digital learning. By addressing these requirements, educators can ensure students acquire the necessary competencies to thrive in a technology-driven educational environment.

KEYWORDS: Digital education skills, Primary education, Professors and teachers, Continuous professional development (CPD), Pedagogical innovation, AI in education, Virtual reality (VR), Digital literac.

INTRODUCTION

The rapid advancement of digital technologies has profoundly impacted all levels of education, including primary education. Professors and teachers play a pivotal role in equipping future primary school educators with the digital skills necessary to create engaging, interactive, and inclusive learning environments. However, this requires educators themselves to possess a comprehensive understanding of digital tools and methodologies.

In the primary education direction, the formation of digital education skills involves not only technical proficiency but also the ability to integrate these skills into effective teaching practices. Educators are expected to adapt to the changing demands of digital education, align their methods with emerging technologies, and foster an environment where students can develop critical thinking, problem-solving, and collaborative abilities through digital platforms. This article outlines the core requirements for professors and teachers in achieving these goals.

Digital literacy is the foundation for forming digital education skills. Professors and teachers must be proficient in using digital tools such as learning management systems (LMS), interactive whiteboards, and subject-specific applications. Beyond technical expertise, they should also be capable of critically evaluating digital resources to ensure their relevance and reliability in the educational context.

Published: December 30, 2023 | Pages: 139-141

Moreover, educators should teach students about digital ethics, including issues related to privacy, security, and responsible technology use. By fostering a strong sense of digital citizenship, professors can prepare future primary educators to guide young learners in navigating the digital world safely and effectively.

To effectively form digital skills, educators must embrace innovative pedagogical approaches. These include:

- Blended Learning: Combining traditional and digital methods to create a flexible learning environment.
- Gamification: Incorporating game-like elements into lessons to enhance engagement and motivation.
- Flipped Classrooms: Encouraging students to review digital content independently and use classroom time for interactive discussions and problem-solving.

Professors and teachers should model these practices in their own teaching to provide students with firsthand experience of modern educational methodologies.

Recognizing the diverse needs of students is critical in forming digital education skills. Adaptive teaching involves tailoring instruction to individual learning styles, preferences, and abilities. Technologies such as artificial intelligence (AI) can assist in creating personalized learning experiences by analyzing student data and providing targeted recommendations.

For professors in the primary education direction, this means equipping students with the knowledge and tools to implement adaptive teaching strategies in their future classrooms. For example, introducing AI-powered platforms can help them understand how to customize lessons based on student performance.

Continuous professional development (CPD) is essential for educators to adapt to the dynamic nature of digital education. As technology continues to evolve, educators must stay updated and refine their skills to meet the demands of modern teaching. CPD programs play a critical role in enabling educators to master new technologies and integrate them effectively into their teaching practices. By keeping up with emerging trends in educational technology, such as augmented and virtual reality (AR/VR), educators can incorporate innovative tools and methods that enhance the learning experience.

Moreover, professional development provides opportunities for educators to build networks, share best practices, and collaborate on innovative teaching solutions. This collaboration fosters a sense of community among educators and promotes the exchange of ideas that can lead to more effective and engaging teaching strategies. Institutions should actively support this process by organizing regular training sessions, workshops, and providing access to a wealth of online resources. These initiatives ensure that educators remain equipped with the knowledge and skills necessary to thrive in a rapidly changing digital landscape, ultimately benefiting their students' learning outcomes.

Emerging technologies like AI, VR, and gamification are transforming the educational landscape. Professors and teachers should not only be familiar with these technologies but also understand how to incorporate them effectively into their teaching.

Published: December 30, 2023 | Pages: 139-141

- AI: Assists in automating administrative tasks, analyzing student progress, and offering personalized learning pathways.
- VR and AR: Create immersive learning experiences that make complex concepts accessible and engaging.
- Gamification: Encourages active participation and develops critical thinking and problem-solving skills.

By integrating these technologies into their teaching, educators can prepare students to utilize similar methods in their future classrooms.

Professors and teachers should foster a collaborative environment where students can learn to work in teams, exchange ideas, and solve problems collectively using digital tools. Additionally, they must exhibit strong leadership skills to guide and inspire students to explore innovative teaching methods and technologies.

Collaboration with industry experts, educational institutions, and technology providers is also essential for staying updated on the latest tools and trends. This helps educators bridge the gap between theoretical knowledge and practical application.

CONCLUSION

The formation of digital education skills in students pursuing primary education requires professors and teachers to meet specific requirements in terms of digital literacy, pedagogical innovation, and professional development. By leveraging emerging technologies, adopting adaptive teaching methods, and fostering a collaborative learning environment, educators can equip students with the competencies needed to succeed in a digital-first world. Institutions must support these efforts by providing resources, training, and opportunities for continuous growth.

REFERENCES

1. UNESCO (2021). Digital Learning: Policy and Practice. Retrieved from https://unesco.org
2. World Economic Forum (2020). The Future of Jobs Report.
3. Selwyn, N. (2016). Education and Technology: Key Issues and Debates. Routledge.
4. Hwang, G. J., & Fu, Q. K. (2019). Advances in Educational Technology: AI and AR in Education. Computers & Education, 135, 1–3.
5. European Commission (2020). Digital Education Action Plan 2021-2027. Retrieved from https://ec.europa.eu
6. Microsoft Education (2021). Transforming Education with AI and Technology. Retrieved from https://education.microsoft.com
7. International Society for Technology in Education (ISTE) Standards.
8. Bates, A. W. (2019). Teaching in a Digital Age: Guidelines for Designing Teaching and Learning.