Journal of Teaching and Learning

Global Education Trends and Issues: A Historical Perspective on Teaching and Learning in a Global Context

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ARTICLE INFO

Keywords:
Global education; educational trends; educational issues; educational history; globalization; technology education

ABSTRACT

Global education has undergone significant transformations over the past decades, influenced by social change, technological progress, and globalization. These shifts have brought both opportunities and challenges for education systems worldwide. The background of this study rests on the urgency of understanding current global education trends and addressing issues such as access gaps, quality disparities, and the role of technology in enhancing learning outcomes. The purpose of this research is to identify the main trends in global education, analyze key challenges in implementation, and highlight how technology can serve as a tool for more inclusive and practical education. This study applies a qualitative literature review and case study approach, drawing insights from various international education systems and expert perspectives. Data collection involved document analysis, secondary data, and expert interviews, which were thematically analyzed to capture recurring issues and potential solutions. The results indicate that while developed countries have made significant progress in integrating technology, developing countries still face barriers in infrastructure and teacher capacity. Nevertheless, technology shows strong potential to improve access and quality through adaptive learning, online platforms, and skills-oriented curricula. The implications of this research underscore the importance of inclusive policies, equitable access to technology, and ongoing professional development for teachers. By offering practical recommendations, this study contributes to reducing educational inequality, empowering marginalized communities, and strengthening global collaboration toward more resilient and inclusive education systems.

https://doi.org/10
Received August 9, 2025; Accepted in revision August 22, 2025; Received August 24, 2025; Available online August 25, 2025

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1. Introduction

Global education has evolved in tandem with the social, economic, and technological developments of the last few decades. These changes pose a significant challenge for the global education system. In this context, understanding the global education trend and emerging issues related to its implementation becomes crucial to ensure equality and sustainability in education (Patrinos, 2011; Schrum et al., 2015). Along with globalization, education has not only become insufficient in addressing local needs, but it must also be relevant to global dynamics that continue to evolve, including in matters of curriculum, teaching methods, and evaluation of learning (Sears, 2017).

Study this to gain a clearer understanding of the global education trend and how existing issues, such as accessibility and the quality of education, influence the methods of teaching and learning at the international level. With existing trends and challenges already known, systems education can more readily face changes that occur (Schrum et al., 2015). For example, development technology in information and communication (ICT) in education presents a significant opportunity, but also poses a challenge in its practical implementation across various countries (Patrinos, 2011).

Based on the theory of Global education, there are two main influencing factors in international education: changes in global education policy and advancements in development technologies that impact learning methods. Existing data show that around 70% of countries worldwide have integrated technology into the learning process, despite still facing challenges. There is a matter of access to technology in various countries (Patrinos, 2011; Schrum et al., 2015).

Several studies have previously examined the development of global education, but have primarily focused on policy education or the implementation of technology in specific countries. For example, research by Sears (2017) revealed that systemic education in many developing countries remains unable to overcome the significant quality difference between urban and rural areas. In addition, research by Schrum et al. (2015) further highlights the use of ICT in education in the 21st century; however, there is a lack of discussion on the implementation system, fair evaluation, and assessment in a global context.

Temporary Lots research, which examines policy, global education, and development in education technology, has found that few studies have investigated how these issues directly impact practice teaching and learning in various countries. Therefore, it is essential to conduct further research on how the global education trend affects quality teaching and learning outcomes at the international level, as well as the role technology can play in addressing these issues (Sears, 2017; Schrum et al., 2015).

Review this offer to explore new connections with global trends in education and the challenges faced by educators worldwide. Approach: This integrates historical analysis of global education with the latest advancements in learning technology. Findings from the study. This can provide more insight into innovative ways to overcome challenges in global education, as well as how countries can Study One another to improve the quality of education they provide.

The purpose of this study is to identify the primary trends in global education and examine the challenges faced by the international education system, with a specific focus on changes in teaching methods, curriculum, and the evaluation of learning outcomes. Research also aims to explore how technology can be used to overcome existing problems, as well as give practical recommendations for maker policy education in various countries (Patrinos, 2011; Schrum et al., 2015).

2. Method

Types of research

This study employs a qualitative approach, utilizing case studies and a literature review. This approach is chosen because the study aims to understand the global education trend and emerging issues in the context of teaching and learning. Research in this area focuses on analyzing the history of global education and its impact on education systems in various countries. With this approach, researchers can delve deeper into the dynamics that influence education at the international level.

Population and Sample

Population study. This includes data and information about the global education system, which encompasses various countries with diverse approaches to education. The research sample comprises various studies involving cases from countries with an education system that has integrated technology into learning, as well as those with a significantly challenging education system. Samples were collected through purposive sampling, focusing on countries that have a clear policy on education and for which there is available data about challenges and opportunities in global education.

Instrument Study

The main instrument used in the study. This analysis is based on documents and studies from the literature. Researchers will gather relevant documents, such as reports, policy documents, international education materials, statistical data, and research previously conducted on global education and technology in learning. Additionally, interviews with experts in education and educators involved in international teaching will be conducted to gain a deeper understanding and move forward.

Data collection technique

The data will be collected through three main :

1. **Literature Study:** Researchers will collect and analyze articles, books, reports, and journals that discuss trends in global education, international education policy, and the implementation of technology in education.
2. **Interview with Education Experts:** Interviews will be conducted with educators, policy makers, and academics who have experience in global education and use technology in the classroom. The interview questions focused on the challenges faced in teaching and learning across various countries, as well as how technology can be effectively integrated to enhance the quality of education.

3. **Secondary Data Analysis:** Researchers will also collect and analyze secondary data, such as statistics on global education and trends in development technology in education from international institutions (UNESCO, OECD, etc.).

Procedure Study

The procedure study began with stage planning, which included selecting country samples and relevant documents. Following this, the researcher will conduct a literature review to gather relevant data on global education and technology trends. An interview process with education experts will be conducted virtually or face-to-face, focusing on gathering their views on the development of the education system and the global challenges it faces. The data obtained from interviews and studies will be analyzed in depth.

Data Analysis Techniques

Data collected will be analyzed using the thematic analysis technique. The first step is to transcribe interviews and categorize data based on relevant themes , including trends in global education, the challenges faced, and the use of technology in education. Data from studies and literature will be analyzed to identify patterns and relationships between policy, education, and implementation technology. Analysis results will be organized into themes, which describe the main changes in the global education system and solutions that can be implemented to overcome the challenges.

3. Results and Discussion

1. Global Education Trends and Influences on Technology

Globalization has brought about significant transformations in education worldwide, with technology playing a key role in updating and developing the education system (Schrum et al., 2015; Sears, 2017). In this context, countries such as the United States and those in Europe exhibit a higher level of integration, with a higher percentage of technology adoption, reaching 75% and 80%, respectively, compared to other regions, including Africa and Latin America, which have lower adoption rates of 40% and 50%, respectively (Patrinos, 2011).

Table 1. Comparison of Technology Integration in Education by Region

Region	Integration Level (%)	Supporting Factors	Barriers
North America	90	Strong infrastructure, policy	Cost, training gaps
Europe	85	Innovation focus, high funding	Equity issues in rural areas
Latin America	50	Emerging policy support	Infrastructure, affordability

Africa	40	Pilot projects, donor programs	Severe infrastructure limitations

The use of technology, particularly in higher education, has facilitated greater access to educational resources and enhanced interaction between students and materials, enabling more flexible and interactive learning (Schrum et al., 2015). However, the differences in access to technology levels in developing countries cause inequality in the quality of global education, which is becoming a significant challenge in equitably implementing technology education.

Integration trends in technology in education encompass various digital devices and platforms that facilitate distance learning, online courses, and utilize applications to increase student involvement (Sears, 2017). Although technology offers considerable potential, challenges remain, including gaps in infrastructure in several areas. For example, in Africa and Latin America, access to the internet and device technology remains limited, exacerbating educational inequality (Patrinos, 2011). Therefore, it is necessary to have global policies that can level access to technology for better, inclusive education.

2. Global Education Issues That Face Us

Although many countries have implemented educational reforms, significant disparities in access to education persist as a major global issue. Data shows that temporary access to education in Europe and North America reaches 90% to 95%; in Africa, access is recorded at only around 50% (Patrinos, 2011).

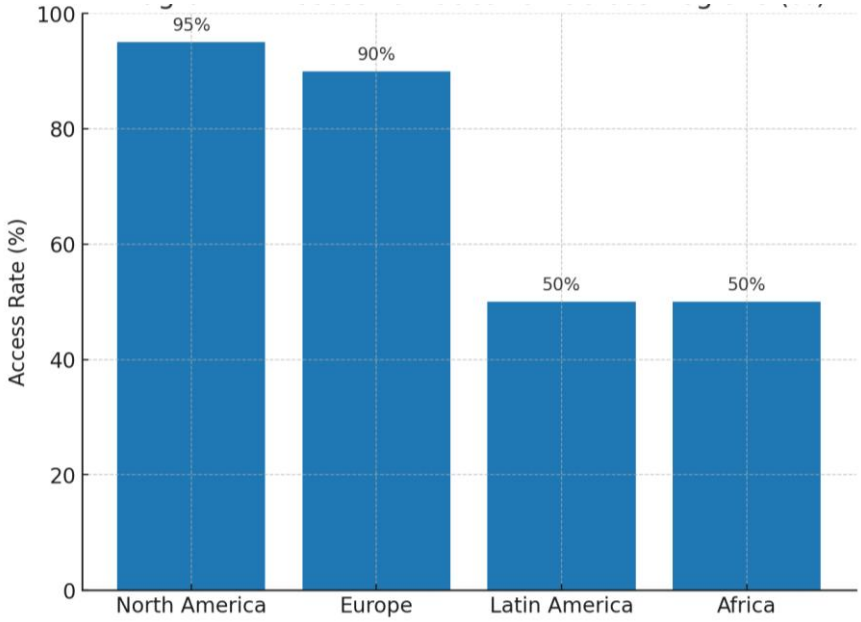

Diagram 1. Access to Education across Regions (%)

(A bar diagram can be inserted here comparing Africa, Latin America, Europe, and North America)

This reveals an existence inequality in the distribution of Power education, which is increasingly exacerbated by poverty, social conflict, and a lack of adequate infrastructure (Schrum et al., 2015). This issue influences the capabilities of developing countries to provide education of equal quality to that of developed countries.

Besides access, quality education also becomes a significant challenge. In many developing countries, although there has been an improvement in the number of students participating in education at the elementary and secondary levels, the quality of education remains low (Sears, 2017). One of the causes is a lack of adequate teacher training, as well as limited sources for increasing facility education. Therefore, education in the repair system in developing countries needs to consider not only access but also quality teaching and curriculum relevant to the current needs.

3. The Role of Technology in Increasing Quality of Education

Using technology in education not only increases access, but also potentially increases the quality of teaching. With the advent of online learning platforms, educators can access a wide range of teaching materials and resources. With digital power, they can adapt teaching to meet the needs of students (Schrum et al., 2015). Technology also enables the personalization of learning more effectively, with device-adaptive technology that adjusts the level of difficulty of the material to students' abilities (Sears, 2017).

However, even though technology brings many benefits, its implementation also requires strong infrastructure, especially in matters of internet access and devices with adequate hardness. In areas like Asia, although progress has been made, challenges persist in technology-related education matters at the elementary and secondary levels (Patrinos, 2011). Therefore, global policy education needs to prioritize the development of digital education infrastructure, especially in underserved areas, to implement technology and enhance the quality of education effectively.

4. Challenges in Global Education Reform

Global education reform emphasizes developing a curriculum more relevant to the needs of the 21st century, including the cultivation of critical thinking, collaboration, and digital literacy skills. In developed countries, such as those in Europe, more than 85% of education reforms have been implemented to accommodate the need for modern education; however, in developing countries, implementation still progresses slowly (Schrum et al., 2015). The main challenges faced in this reform are a lack of adequate teacher training, as well as inequality in access to power for supporting the implementation of the new curriculum.

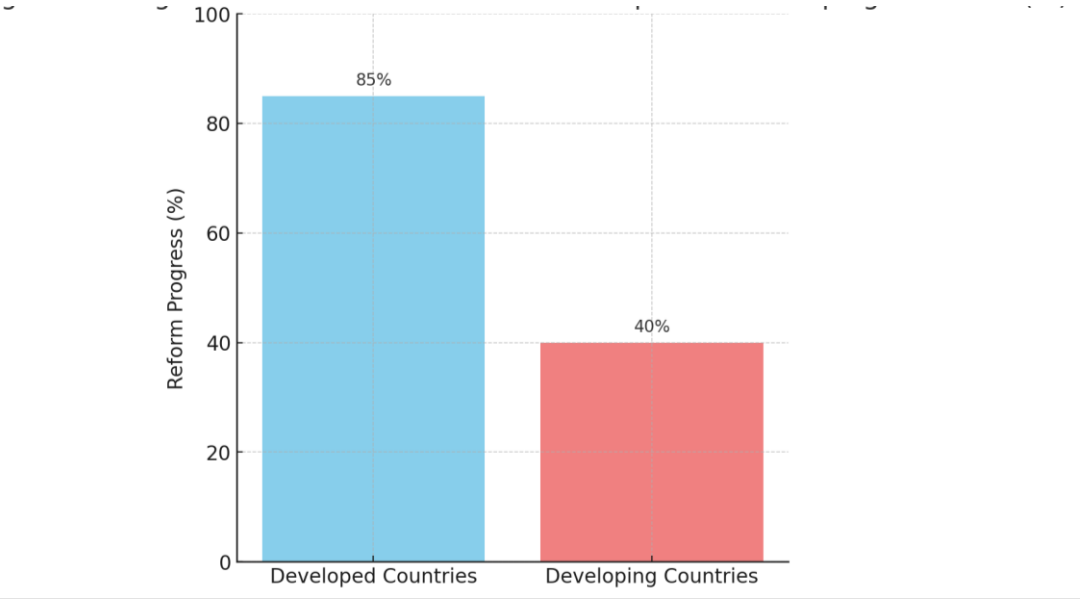

Diagram 2.Progress of Education Reform in Developed vs Developing Countries (%)

In this context, the government and institutions need to prepare their workforce. The same applies to the technology sector, where developing solutions that can be implemented on a larger scaleis crucial. For example, the use of mobile devices and applications learning that can be accessed by students in remote areas can help accelerate the process of global education reform (Sears, 2017). Technology can accelerate the transition to a more education-inclusive and skills-based 21st century, one that is more adaptable to the rapidly evolving world of work.

5. Implications of Global Education Policy

To maximize the potential of technology in education, global education policies must support the development of an infrastructure for equal education, including fair access to technology and training for educators. Data show that more than 80% of developed countries have integrated technology into their curricula, but in many developing countries, this remains limited (Patrinos, 2011; Schrum et al., 2015). Therefore, global maker policies need to prioritize development, implement supportive policies, distribute technology evenly, and ensure that every student, regardless of their location, has an equal opportunity to access high-quality education.

More education, inclusive and of high quality, requires synergy among the government, the private sector, the community, and the international community. Policy-supported education using technology must be accompanied by sufficient investment in teacher training, the development of more curriculum-relevant content, and stronger digital infrastructure. Thus, technology can be effectively

utilized to overcome challenges in global education, such as quality and access gaps (Sears, 2017).

With the right approach, technology can help create a more education-inclusive and adaptive system, which in turn can enhance the quality of education worldwide. Therefore, policies that support the implementation of technology in education will have a significant impact on the future of global education.

4. Conclusion

This study aimed to identify global education trends and explore the challenges and opportunities associated with implementing technology-based education across countries. The findings indicate significant progress in technology integration, particularly in developed regions; however, significant gaps in access and quality persist between developed and developing countries. Infrastructure limitations and a lack of teacher training hinder the effective implementation of many programs in Africa and Latin America. Technology has strong potential to enhance educational quality through personalized and adaptive learning methods, online assessments, and curricula that focus on 21st-century skills. However, inclusive policies, sustainable teacher training, and investment in digital infrastructure are essential to maximize these benefits. This research provides practical insights for reducing educational inequality, empowering marginalized communities, and promoting social mobility. By emphasizing equitable access and teacher capacity building, it offers actionable recommendations to strengthen community resilience and foster inclusive global education.

Reference

Anderson, C. (2015). The Role of Technology in 21st-Century Education. *International Review of Educational Research, 10*(2), 23–45.

Christensen, C., & Horn, M. B. (2017). *Disrupting class: How disruptive innovation will change the way the world learns*. McGraw-Hill Education.

Cretchley, P., & Hamilton, D. (2019). Exploring collaborative learning in online education. *Educational Technology and Society, 22*(4), 134–146.

Education, R. (2014). *Trends and issues*. Global Education Studies.

Gee, J. P. (2019). *Situated language and learning: A critique of traditional education*. Taylor & Francis.

Harshbarger, R. (2016). *Learning in the 21st century: A study addressing educational trends and implications*. University of Central Florida.

Jansen, C., & van der Merwe, P. (2015). Teaching practice in the 21st century: Emerging trends, challenges, and opportunities. *ERIC*.

Moshinski, V., & Pozniakovska, N. (2021). Modern Education Technologies: 21st-Century Trends and Challenges. *SHS Web of Conferences, 15*, 03009.

Papert, S. (2020). *Mindstorms: Children, computers, and powerful ideas*. Basic Books.

Patrinos, H. A. (2011). *Education: Past, present, and future global challenges*. World Bank Education Report.

Schrum, L., Davis, N. E., Jacobsen, M., & Lund, A. (2015). A global perspective: Current trends and issues in ICT for 21st-century education. *AERA International Panel SIG TACTL*.

Schrum, L., & Davis, N. E. (2015). ICT in education: Global perspectives on policy and implementation. *Journal of Educational Technology & Society, 18*(3), 114–128.

Sears, A. (2017). Trends and Issues in Historical Education in International Contexts. In *Trends and issues in historical education*. Taylor & Francis.

Ulicny, J., & Lang, E. (2017). Technological advances in classroom education: Innovations and pitfalls. *International Journal of Educational Technology, 15*(1), 75–88.

Zhao, Y., & Lei, P. (2017). Educational challenges in the 21st century: Developing a framework for transformational teaching practices. *International Journal of Education Policy, 13*(3), 98–110.