



GLOBAL EDUCATION: CHALLENGES AND SOLUTIONS

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Abstract

This paper explored the challenges facing global education. The paper is a review paper that depend secondary data. The secondary data were collected from print and online publications. The study concluded that poor investment on education, shortage of infrastructure facilities, shortage of professional teachers, corruptions, persistent inequalities in access to schooling, digital divides between high- and low-income regions, curriculum gaps, limited teacher capacity, and socio-political barriers, conflict, climate change, forced migration, and technological disruptions, out of school children are some of the challenges facing global education. Based on these findings, the study recommends that governments of countries especially developing countries should allocate adequate funding to meet UNESCO's recommended benchmark of 4–6% of GDP and 15–20% of national expenditure on education. Increased investment on education will support modern infrastructure, digital learning tools, teacher development, and inclusive education programs. International donors and multilateral agencies should also expand financial support to low-income countries facing severe resource constraints.

Keywords: Challenges, Global education

1.0 Introduction

Global education has emerged as a critical framework for preparing learners to navigate an increasingly interconnected, interdependent, and rapidly changing world. It transcends traditional classroom boundaries by promoting global citizenship, cultural awareness, digital competence, and collaborative problem-solving. As nations strive to achieve the Sustainable Development Goal 4 (SDG-4) on inclusive and equitable quality education, global education provides both the vision



and the mechanism for equipping learners with the knowledge, skills, values, and attitudes required to thrive in the 21st century.

Despite its growing importance, the pursuit of global education faces significant challenges. Persistent inequalities in access to schooling, digital divides between high- and low-income regions, curriculum gaps, limited teacher capacity, and socio-political barriers continue to undermine global learning outcomes. Additionally, contemporary issues such as conflict, climate change, forced migration, and technological disruptions present new demands that education systems must rapidly adapt to.

Recognising these challenges, scholars, governments, and international organisations have advanced diverse strategies aimed at strengthening global education. These include expanding digital learning infrastructure, promoting intercultural curricula, enhancing teacher training, mobilising international partnerships, and implementing inclusive policies that support marginalised populations. Understanding the interplay between the challenges and solutions is therefore essential for advancing global education in sustainable and equitable ways. This study examines the major challenges confronting global education and explores practical, evidence-based solutions capable of fostering a more inclusive and globally responsive education system.

1.2 Theoretical Framework

Human Capital Theory, developed by economists such as Schultz (1961) and Becker (1964), is highly relevant to the study of global education, its challenges, and potential solutions. The theory argues that investments in education increase individuals' knowledge, skills, productivity, and economic value, which in turn contributes to national development and global competitiveness. Education is therefore seen as a strategic investment that yields both private and societal benefits.

How Human Capital Theory Relates to Global Education, Challenges, and Solutions

1. Education as a Driver of Global Development

Human Capital Theory views education as essential for building a skilled, innovative, and adaptable workforce. In the context of global education:

Education enables learners to develop global competencies such as digital literacy, critical thinking, and intercultural communication. Countries with stronger human capital are better positioned to compete in a globalised economy. Thus, investing in global education enhances economic growth, international collaboration, and sustainable development.

2. Explains the Impact of Poor Investment in Education

The theory helps explain why underfunding is a critical challenge:



When governments invest inadequately in education, human capital formation is weakened. Infrastructure decay, teacher shortages, and curriculum gaps emerge due to insufficient investment. As a result, national productivity and innovation decline. Human Capital Theory therefore justifies increased funding as a solution for building strong education systems.

3. Supports the Need for Skilled and Professional Teachers

According to the theory:

Teachers are central to developing human capital. Shortage of professional teachers reduces the quality of learning and limits students' ability to acquire global skills. Investment in teacher training strengthens human capital and creates a more productive population. This shows why enhancing teacher capacity is a key solution in global education policies.

4. Explains Inequalities, Digital Divides, and Access Barriers

Human Capital Theory argues that unequal access to schooling leads to unequal human capital development.

Challenges such as: digital divides, socio-political barriers, forced migration, conflict, gender inequality, and out-of-school children, All produce gaps in human capital across regions and social groups. To solve these disparities, the theory encourages equitable investment and targeted interventions.

5. Highlights the Need for Modern and Relevant Curricula

Global education requires modern curricula that prepare learners for global employment markets.

Human Capital Theory supports: integrating STEM, digital literacy, climate education, and global citizenship, aligning curricula with economic and technological demands and providing lifelong learning opportunities. Such reforms increase human capital value and global competitiveness.

6. Links Technological Disruptions to Human Capital Formation

The theory explains why countries must adapt rapidly to technological change: Nations that fail to invest in digital skills risk falling behind in global productivity and Digital divides weaken human capital and widen global inequalities. Thus, technology integration becomes a core solution.

7. Justifies Global Solutions and International Collaboration

Human Capital Theory supports: global partnerships, foreign aid for education, international teacher exchange, and cross-border digital learning. These collaborations enhance human capital formation on a global scale. Human Capital Theory is a strong theoretical foundation for studying global education, its challenges, and its solutions. It explains how insufficient investment, teacher shortages, poor infrastructure, digital inequality, and socio-political barriers weaken the



development of human capital. At the same time, the theory supports solutions such as increased funding, improved teacher training, strengthened school infrastructure, expanded digital access, equitable policies, and curriculum reforms. Overall, it helps illustrate why strong global education systems are essential for individual empowerment, economic productivity, and global development.

2.0 Conceptual Terms

2.1 Concept of Global Education

Global education refers to an approach to teaching and learning that equips individuals with the knowledge, skills, values, and attitudes needed to understand global issues and participate effectively in an interconnected world. It promotes awareness of global interdependence, cultural diversity, social justice, sustainable development, and responsible global citizenship. According to UNESCO (2015), global education aims to foster learners who are “informed, critically literate, socially connected, and ethically responsible in addressing global challenges.” It encourages students to see themselves as part of a larger global community, capable of influencing positive change through informed actions.

A key feature of global education is its emphasis on developing global competencies critical thinking, communication, collaboration, empathy, digital literacy, and intercultural understanding. These competencies prepare learners to engage with complex global issues such as climate change, poverty, migration, human rights, pandemics, and technological disruptions (OECD, 2018). Through inclusive and transformative teaching methods, global education helps learners appreciate the interconnectedness of local and global experiences and understand how decisions in one part of the world can affect people elsewhere.

Global education also underscores the importance of integrating global perspectives into school curricula. This involves embedding topics such as global citizenship, sustainable development, peace education, and cultural diversity across subjects. Banks (2017) notes that globally oriented curricula help students challenge stereotypes, analyse inequalities, and embrace the values of inclusion and mutual respect. Furthermore, global education promotes collaborative learning across borders, often through digital platforms that connect classrooms from different countries, enabling students to engage in shared projects and cross-cultural dialogue.

In addition, teacher capacity plays a central role in advancing global education. Educators require training in culturally responsive pedagogy, comparative education, and digital methodologies that support international collaboration. The Global Education Monitoring Report (UNESCO, 2020) highlights that empowering teachers with the right tools and training is crucial for translating global goals into classroom practice.



Global education is a transformative paradigm that prepares individuals to navigate and contribute to a rapidly changing world. It fosters tolerance, intercultural understanding, and social responsibility—qualities essential for peaceful coexistence and sustainable global development. By equipping learners with these competencies, global education strengthens societies and contributes to achieving broader international development goals.

3.0 Method

Challenges facing global education is a position paper that adopted a systematic literature review-based method. The method allows to collect and review the related previous literature from various online sources. With the aid of digital platform, the researcher collected secondary information to generate knowledge on this topic from 2015-2025. The position paper followed qualitative narrative design method. The researcher has visited different online sites to collect the previous literature and analyze the challenges facing global education. The previous findings are critically analyzed and presented in different themes as on the challenges facing global education. (Adapted from Ogunode, 2025).

Inclusion and exclusion criteria

Inclusion

This output of the literatures on the challenges facing global education presents an in-depth study and result that can infer conclusion on the topic. The study includes: online publication; conference paper, journals sorted from reputable international journals such as CEON, Elsevier, Hindawi, JSTOR, IEEE, Learn Techlib, SAGE, Nebraska and Springer (Adapted from Ogunode, 2025v).

Exclusion

Also, the literature review excludes information from edited books, preprints, monographs, information below 2015 and book chapters (Adapted from Ogunode, 2025).

4.0 Result and Discussion on Problems Facing Global Education (Detailed Discussion with References)

Global education continues to play a vital role in promoting inclusive, equitable, and quality learning for all. However, a range of structural, economic, social, and political challenges undermine progress toward achieving global educational goals, especially Sustainable Development Goal 4 (SDG-4). The major problems include poor investment in education, inadequate infrastructure, shortage of qualified teachers, corruption, inequalities in access to



schooling, digital divides, curriculum gaps, limited teacher capacity, socio-political barriers, conflict, climate change, forced migration, technological disruptions, and the growing population of out-of-school children. These issues collectively threaten the ability of education systems to respond effectively to global learning needs.

1. Poor Investment in Education

Many countries, especially in the Global South, suffer from chronic underfunding of their education sectors. UNESCO (2021) notes that most low-income countries spend less than the recommended 4–6% of GDP and 15–20% of public expenditure on education. Insufficient funding limits the availability of teaching materials, reduces school maintenance, and undermines teacher recruitment and training. The financing gap makes it difficult to expand access, modernize schools, or integrate technology into learning.

2. Shortage of Infrastructure Facilities

Inadequate infrastructure such as classrooms, libraries, laboratories, safe water, sanitation, and electricity remains a significant barrier to quality education. According to the World Bank (2020), millions of children in sub-Saharan Africa and South Asia attend overcrowded schools or learn under unsafe and dilapidated structures. Poor infrastructure reduces instructional time, weakens student engagement, and contributes to high dropout rates, especially among girls who need adequate sanitation facilities.

3. Shortage of Professional Teachers

The global teacher shortage is one of the most pressing challenges in education. UNESCO Institute for Statistics (UIS, 2020) reports that 69 million new teachers are needed to achieve universal primary and secondary education. Many countries face a lack of professionally trained educators due to poor salaries, limited training opportunities, and high attrition rates. This shortage directly affects learning outcomes, as untrained teachers struggle with effective pedagogy, classroom management, and assessment.

4. Corruption in the Education Sector

Corruption weakens governance, reduces the quality of education delivery, and diverts resources meant for school improvement. Transparency International (2013) highlights common forms of corruption such as embezzlement of funds, bribery for admissions, sale of grades, and ghost teachers on payrolls. Corruption lowers public trust in educational institutions and undermines efforts to ensure equitable access and quality learning.

5. Persistent Inequalities in Access to Schooling

Significant disparities persist across gender, socioeconomic status, ethnicity, disability, and geographic location. UNICEF (2022) reports that children living in rural communities, conflict-



prone areas, and poor households are far more likely to be excluded from schooling. Gender inequality also remains a critical issue, with millions of girls in low-income countries facing cultural and economic barriers to education. Inequalities reinforce cycles of poverty and limit global progress toward inclusive education.

6. Digital Divides Between High- and Low-Income Regions

The integration of digital learning has introduced new forms of inequality. During the COVID-19 pandemic, the global shift to online and remote learning exposed the severe digital divide. The International Telecommunication Union (ITU, 2021) found that 37% of the world's population lacks internet access, with higher rates in developing regions. Schools in low-income countries often lack electricity, connectivity, and digital devices, making it difficult for students to benefit from modern educational tools and global learning opportunities.

7. Curriculum Gaps and Outdated Learning Content

Many school curricula do not reflect the realities of the 21st century. They often fail to integrate global competencies such as critical thinking, digital literacy, climate education, conflict resolution, and global citizenship skills. According to Banks (2017), outdated curricula hinder students' ability to engage with global issues and limit the development of creativity, innovation, and intercultural awareness. Curriculum gaps also widen learning disparities between developed and developing countries.

8. Limited Teacher Capacity

Even where teachers are available, many lack the necessary competencies to deliver global-oriented education. OECD (2018) emphasizes that teachers need skills in digital instruction, multicultural education, inclusive teaching, and learner-centered pedagogy. Limited professional development and training opportunities prevent teachers from adapting to global educational demands, reducing the overall quality of learning.

9. Socio-Political Barriers

Political instability, weak governance, and restrictive policies hinder the functioning of education systems. In some contexts, governments impose censorship, restrict academic freedom, or underprioritize education in policy planning. The Global Education Monitoring Report (UNESCO, 2020) shows that political bias and poor governance structures disrupt curriculum reforms, teacher management, and equitable resource allocation. Socio-political barriers disproportionately affect marginalized and minority learners.

10. Conflict and Insecurity

Armed conflict and terrorism remain major threats to global education. UNICEF (2021) estimates that more than 100 million children live in conflict-affected areas where schools are destroyed,



teachers are displaced, and learning is interrupted. Attacks on schools, kidnappings, and recruitment of child soldiers destabilize education systems. Conflict also causes psychological trauma, discouraging children from attending school even when facilities are available.

11. Climate Change and Environmental Crises

Climate disasters—including floods, droughts, hurricanes, and heatwaves—force schools to close and displace families. The World Bank (2021) notes that climate change will push millions of children out of school by 2030 due to loss of livelihoods, destruction of infrastructure, and migration. Climate disruptions particularly affect vulnerable communities, increasing absenteeism and dropout rates.

12. Forced Migration and Displacement

The global refugee population has reached record levels. UNHCR (2022) reports that over 36 million children are forcibly displaced, many lacking access to formal schooling. Refugees and internally displaced persons (IDPs) face major barriers, including language differences, lack of documentation, discrimination, and limited school capacity. Displacement often leads to long-term educational disruption, weakening children's life opportunities.

13. Technological Disruptions

Rapid technological change creates new expectations for skills and competencies. Without adequate adaptation, education systems risk falling behind global labor market demands. According to the World Economic Forum (2020), automation and artificial intelligence are reshaping industries, requiring new forms of digital and STEM education. Countries unable to integrate technological innovation into schools face widening educational and economic gaps.

14. Out-of-School Children

Despite global efforts, millions of children remain out of school. UNESCO (2021) estimates 258 million children and youth** are out of school globally, with the highest numbers in sub-Saharan Africa and South Asia. Causes include poverty, child labor, early marriage, disability, conflict, and cultural barriers. The large population of out-of-school children undermines global human capital development and perpetuates intergenerational inequality.

4.1 Findings

The study revealed that poor investment on education, shortage of infrastructure facilities, shortage of professional teachers, corruptions, persistent inequalities in access to schooling, digital divides between high- and low-income regions, curriculum gaps, limited teacher capacity, and socio-political barriers, conflict, climate change, forced migration, and technological disruptions, out of school children are the challenges facing global education.



4.2 Conclusion and Recommendations

Enhancing global education requires coordinated actions by governments, international organisations, educators, communities, and the private sector. The following recommendations offer practical and evidence-based strategies for overcoming the major challenges facing global education and strengthening systems worldwide.

The study revealed that poor investment on education, shortage of infrastructure facilities, shortage of professional teachers, corruptions, Persistent inequalities in access to schooling, digital divides between high- and low-income regions, curriculum gaps, limited teacher capacity, and socio-political barriers, conflict, climate change, forced migration, and technological disruptions, out of school children. Are the challenges facing global education. Based on these findings, the study recommends the followings:

1. Increase Investment in Education

Governments should allocate adequate funding to meet UNESCO's recommended benchmark of 4–6% of GDP and 15–20% of national expenditure on education. Increased investment will support modern infrastructure, digital learning tools, teacher development, and inclusive education programs. International donors and multilateral agencies should also expand financial support to low-income countries facing severe resource constraints.

2. Expand and Modernise Education Infrastructure

Educational infrastructure must be improved to support quality learning. This includes: Building safe, accessible classrooms, Providing functional water, sanitation, and hygiene (WASH) facilities, Equipping schools with laboratories, libraries, and ICT centres and Ensuring access to electricity and internet connectivity. Upgrading infrastructure boosts attendance, supports pedagogical innovation, and ensures learning continuity.

3. Strengthen Teacher Recruitment, Training, and Retention

Addressing the global teacher shortage requires: Hiring more qualified teachers, investing in pre-service and in-service teacher training focused on digital skills, inclusive education, global citizenship, and intercultural competence, offering competitive salaries and incentives to reduce attrition, improving teacher management and career development pathways. Well-supported teachers deliver better learning outcomes and can integrate global perspectives effectively.

4. Combat Corruption and Strengthen Governance

Governments and educational institutions must implement transparent systems to prevent corruption. Key actions include: digitizing financial management and payroll systems, conducting regular audits, enforcing anti-corruption laws, promoting community monitoring of school budgets



and strengthening accountability policies. Reducing corruption ensures that resources reach classrooms and improves public trust in education.

5. Promote Equity and Inclusion in Schooling

To address persistent inequalities, policymakers should:

Expand scholarships and conditional cash transfers for disadvantaged learners. Provide targeted support for girls, children with disabilities, and rural learners. Establish safe school environments free from discrimination. Strengthen inclusive policies for minorities and marginalized groups. Inclusive strategies guarantee that no child is left behind.

6. Bridge the Global Digital Divide

Closing the digital gap is essential for global learning. Recommended strategies include:

Expanding broadband access in rural and low-income regions; Providing affordable devices, such as laptops and tablets. Investing in digital literacy programs for learners and teachers. Collaborating with private tech companies to support digital infrastructure. Technology-enabled learning ensures continuity during crises and broadens access to global knowledge.

7. Reform Curriculum to Meet Global Standards

Curricula should be updated to reflect contemporary global challenges and competencies. This involves:

Integrating global citizenship education, climate education, human rights, and digital skills. Promoting critical thinking, creativity, and problem-solving. Including culturally diverse perspectives and global case studies. Aligning curriculum reforms with global learning standards such as SDG 4. Modernized curricula better prepare students for global opportunities and challenges.

8. Improve Teacher Capacity for Global-Oriented Learning

Teacher capacity-building should emphasize:

Digital pedagogy. Culturally responsive teaching, Peace and conflict education. Climate and sustainability education. Inclusive teaching strategies. Professional development enhances the ability of teachers to deliver holistic and globally relevant instruction.

9. Address Socio-Political Barriers

Education reforms require political stability and supportive policy environments. Governments should:



Prioritize education in national development agendas. Promote academic freedom and reduce political interference in curricula. Strengthen governance structures. Collaborate across ministries to address cross-cutting issues like child labor, insecurity, and poverty. Stable political environments facilitate long-term educational progress.

10. Protect Education in Conflict and Crisis Settings

To safeguard learning during conflict:

Governments must enforce laws preventing attacks on schools. Establish safe-learning zones and emergency education programs. Provide psychosocial support for learners. Collaborate with humanitarian organisations for temporary schooling and recovery programs. Education in emergencies maintains learning continuity and supports post-conflict rebuilding.

11. Integrate Climate Resilience into Education

Education systems should be climate-resilient by:

Building disaster-resistant schools. Including climate adaptation and environmental sustainability in curricula. Training teachers on climate education. Developing early warning and disaster-response mechanisms for schools. Climate-smart education protects learners and prepares them for environmental challenges.

12. Support Refugees and Migrant Learners

Governments and international organizations must:

Create inclusive policies that allow displaced children access to schooling. Provide language support and psychosocial services. Expand community-based and flexible learning programs. Recognize foreign qualifications and reduce documentation barriers. Education for migrants promotes stability and long-term integration.

13. Prepare Education Systems for Technological Change

Countries should embrace emerging technologies by:

Integrating STEM education and digital competencies. Encouraging innovation and entrepreneurship training. Establishing partnerships with tech industries. Updating policies to support the safe adoption of AI and digital tools. Technological preparedness ensures learners remain globally competitive.

14. Reduce Out-of-School Children

Strategies to reduce the number of out-of-school children include:



Eliminating school fees. Combating child labor and early marriage. Expanding early childhood education. Strengthening community outreach to encourage enrollment and Developing alternative and flexible learning pathways

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