BAUMUN

JUNIOR

UNESCO
Study Guide

Welcome To Your Future

Table of Contents

1. Letter from The Secretary-General

Honorable Delegates,

Welcome to BAUMUN Junior'26! As your Secretary-General, I am proud to see you taking on one of the most important roles in the world: advocating for the rights of children.

Education is not just a privilege; it is a fundamental human right. However, for millions of children around the globe, a classroom is a distant dream. In this committee, you are not just students—you are diplomats. Your goal is to find creative, fair, and practical ways to make sure every child, no matter where they are born, has a desk, a book, and a teacher.

I look forward to hearing your ideas and seeing your passion in action.

Best regards,
Abdulrahman Murat Secretary-General,
BAUMUN Junior'26

2. **Introductions**

2.1 **Introduction to the Committee**

Established in 1945 with the mission of promoting peace and security through international cooperation in education, science, and culture. It plays a central role in shaping global education policies and setting international standards.
UNESCO works to ensure inclusive and equitable quality education for all, as outlined in Sustainable Development Goal 4 (SDG 4). The organization supports countries in developing education systems, training teachers, and promoting lifelong learning opportunities.
In the context of technological advancement, UNESCO has taken a leading role in addressing both the opportunities and ethical challenges of digital learning. It has developed frameworks on artificial intelligence in education, digital literacy, and open educational resources, emphasizing that technology should serve humanity and not replace the human element in learning.

2.2 **Introduction to the Agenda Item: Using Technology to Improve Learning Worldwide**

Technology has become a powerful tool in transforming education systems across the globe.

From online learning platforms to artificial intelligence-driven tutoring systems, digital tools have the potential to make education more accessible, personalized, and efficient.
However, the benefits of educational technology are not evenly distributed. Many developing regions still face limited access to the internet, devices, and digital infrastructure, creating a significant “digital divide.” This gap risks widening existing inequalities in education rather than reducing them.
Additionally, the use of technology in education raises concerns about data privacy, the quality of online content, and the potential loss of human interaction in the learning process. The challenge for the international community is to balance innovation with responsibility. This agenda item invites delegates to explore how technology can be used to:

- Expand access to education in underserved areas
- Improve the quality of teaching and learning
- Ensure ethical and safe use of digital tools
- Promote global cooperation in educational innovation

Delegates must develop solutions that are realistic, inclusive, and adaptable to different national contexts, while aligning with global goals such as SDG 4.

3. **Issues Regarding the Use of Technologies in Education**

While technology has the potential to revolutionize education, its implementation is accompanied by a range of challenges that must be addressed to ensure equitable and effective outcomes. These issues can be broadly categorized into individual, infrastructural, and systemic factors.

3.1 **Individual Factors**

At the individual level, disparities in access and skills significantly affect the ability of learners to benefit from educational technologies.

Digital literacy remains one of the most critical barriers. Many students and educators lack the necessary skills to effectively use digital tools, limiting the impact of even the most advanced technologies. Without proper training, technology can become more of a hindrance than a benefit.

Income inequality also plays a major role. Students from low-income households may be unable to afford essential devices such as laptops, tablets, or smartphones. Even when devices are available, shared usage within families can reduce learning time and effectiveness . Additionally, device access is uneven across regions. In many parts of the world, students rely on outdated or insufficient technology, which may not support modern educational platforms. This creates a significant disadvantage compared to peers with access to up-to-date tools.

These individual-level challenges highlight the importance of inclusive policies that ensure equal access to both technology and the skills required to use it.

3.2 **Infrastructure Gaps**

Beyond individual limitations, infrastructure plays a crucial role in determining the success of technology in education.

Internet access is one of the most significant barriers globally. Many rural and remote areas lack reliable or affordable internet connectivity, making online learning inaccessible. Even in urban areas, unstable connections can disrupt learning experiences.
Electricity availability is another fundamental issue. In some regions, frequent power outages or lack of access to electricity entirely makes consistent use of digital devices impossible. Geographical challenges further complicate access. Remote and isolated communities often face logistical difficulties in building and maintaining the infrastructure needed for digital education. This results in a widening gap between urban and rural education systems.

Addressing these infrastructure gaps is essential for ensuring that technological advancements in education reach all populations, not just those in well-developed areas.

3.3 **Policy & System Challenges**

At the systemic level, the effectiveness of educational technology is heavily influenced by government policies and institutional frameworks.

Government policy plays a decisive role in shaping how technology is integrated into education systems. In some countries, the lack of clear strategies or regulations leads to inconsistent implementation and limited impact.

Funding constraints also present a major obstacle. Implementing and maintaining digital education systems requires significant investment in infrastructure, training, and content development. Many governments, particularly in developing countries, struggle to allocate sufficient resources.

Education system limitations can further hinder progress. Traditional curricula and teaching methods may not easily adapt to digital tools, and educators may resist change due to lack of training or support.

Finally, cultural factors must be considered. In some societies, there may be skepticism toward technology in education or a preference for traditional face-to-face learning. Language barriers and lack of localized content can also reduce the effectiveness of digital platforms.

These policy and system-level challenges emphasize the need for coordinated, long-term strategies that align technological innovation with educational goals and cultural contexts.

4. **Solutions for Digital Learning**

To fully harness the potential of technology in education, comprehensive and inclusive solutions must be implemented at multiple levels. These solutions should address not only access to technology, but also its effective, equitable, and sustainable use across different regions and communities.

4.1 **Infrastructure Development**

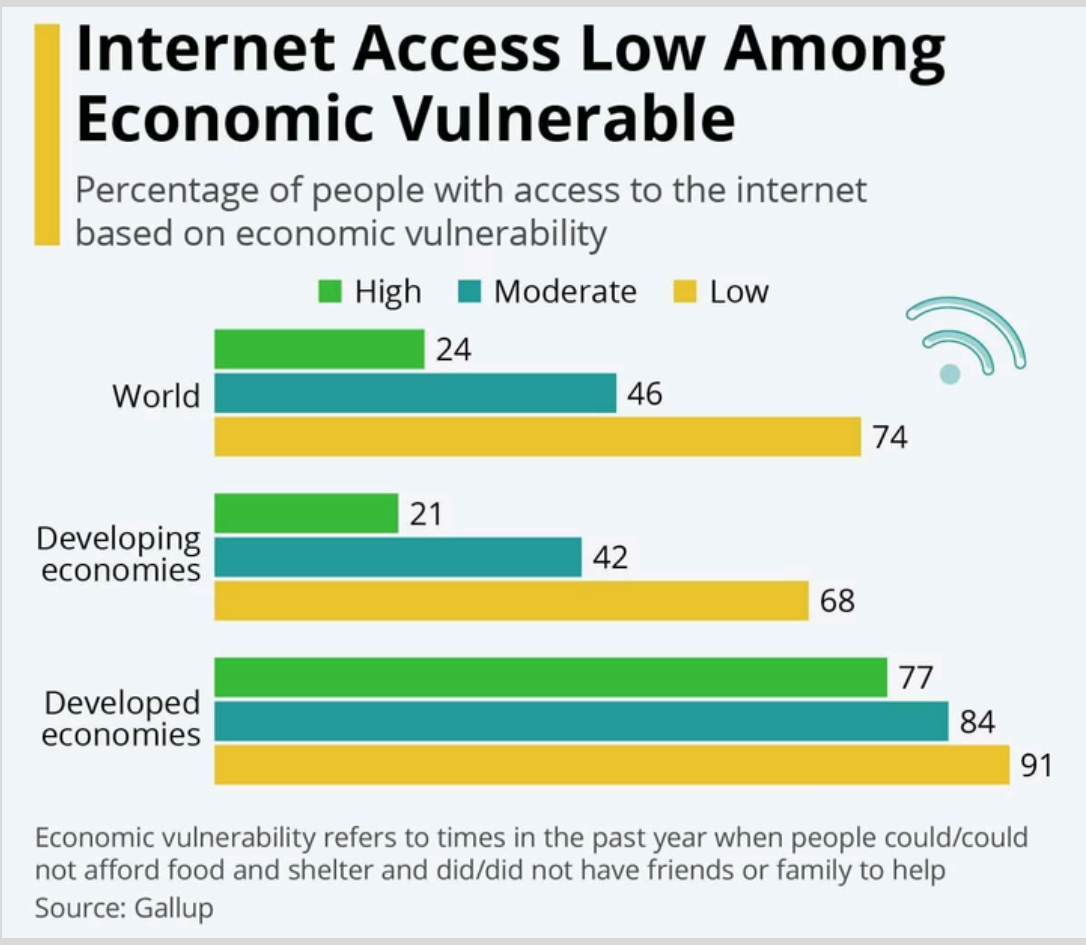
A fundamental step in advancing digital learning is the development of reliable and accessible infrastructure. Expanding internet connectivity is essential, particularly in rural and underserved areas. Governments and private sector partners can collaborate to invest in broadband expansion, satellite internet, and mobile data solutions to ensure widespread access.

Providing affordable and accessible devices is equally important. Initiatives such as subsidized laptops or tablets, device-sharing programs, and partnerships with technology companies can help ensure that students and teachers have the necessary tools for digital learning.The creation of digital classrooms further enhances the learning experience. This includes equipping schools with smart boards, online learning platforms, and interactive educational software. Blended learning models—combining traditional teaching with digital tools—can also improve both engagement and learning outcomes. These efforts must be supported by long-term maintenance plans to ensure sustainability and continued functionality.

4.2 **Inclusive Access and Equity Measures**

Ensuring that no one is left behind is a core priority in digital education.
To bridge the digital divide, governments and organizations must prioritize disadvantaged communities, including low-income households, refugees, and rural populations. Programs that provide free or low-cost internet access and devices can significantly reduce inequality.

Special attention should be given to marginalized groups, such as girls in certain regions, students with disabilities, and linguistic minorities. Digital platforms should be designed to be accessible, incorporating features such as screen readers, subtitles, and multilingual content.



Alternative solutions are also important for remote or crisis-affected areas. These may include offline digital content, radio and television-based education, and portable learning devices that do not require constant internet access.

By focusing on equity, digital learning can become a tool for inclusion rather than a source of further inequality.

4.3 **Frameworks and International Cooperation**

Global cooperation and clear frameworks are essential to guide the effective use of technology in education. Organizations such as the United Nations Educational, Scientific and Cultural Organization play a key role in developing international guidelines, sharing best practices, and supporting countries in implementing digital education strategies. UNESCO has also emphasized ethical considerations, particularly in the use of artificial intelligence in education.
International partnerships between governments, NGOs, and private sector actors can facilitate knowledge sharing, funding, and innovation. Collaborative initiatives allow countries to learn from successful models and adapt them to their own contexts.

Additionally, the integration of digital learning aligns with global efforts such as the United Nations Sustainable Development Goals, particularly Goal 4, which focuses on ensuring inclusive and equitable quality education for all. Establishing clear policy frameworks at both national and international levels ensures that technology is used responsibly, effectively, and in a way that supports long-term educational goals.

5. **Past Initiatives**

To understand the current landscape of educational technology, delegates must analyze the historical efforts led by international bodies to bridge the digital divide. These past initiatives serve as the blueprint for current policies, offering critical lessons on what happens when global cooperation meets local challenges. By studying these programs, your committee can identify which strategies have successfully scaled and which faced "implementation gaps" due to a lack of funding or cultural alignment.

5.1 **UNESCO Initiatives**

UNESCO has long served as the primary "norm-setter" and intellectual architect for digital learning on the global stage. One of their most influential contributions is the "ICT Competency Framework for Teachers," which provides a comprehensive roadmap for nations to move beyond simply installing computers in classrooms toward training educators in sophisticated digital pedagogy. By 2026, this framework has been further modernized to include "AI Literacy," ensuring that teachers across all member states are equipped to guide students through the ethical and practical complexities of generative artificial intelligence.

Another landmark effort is the "UNESCO Global Education Coalition," which was originally launched as an emergency response to the COVID-19 pandemic but has since evolved into a permanent, multi-stakeholder platform.

This coalition has successfully coordinated over 200 partners—ranging from tech giants like Google and Microsoft to non-profit organizations—to provide distance learning solutions to hundreds of millions of students in over 100 countries. Furthermore, UNESCO's "Beijing Consensus on Artificial Intelligence and Education" remains a cornerstone document for your debate, as it was the first ever set of global recommendations to offer guidance on how to leverage AI to achieve Sustainable Development Goal 4. These initiatives emphasize that technology must always be "human-centered," meaning that digital tools should support and enhance the role of the teacher rather than attempting to replace the human element of education.

5.2 **International Organizations**

While UNESCO provides the policy frameworks, organizations like UNICEF and the World Bank act as the primary "implementers" and financial engines for digital transformation. A standout initiative is UNICEF's "Learning Passport," developed in partnership with Microsoft, which has become a vital lifeline for displaced, refugee, and marginalized children. This digital platform provides a portable, personalized record of a student's learning history that can function entirely offline, allowing children in conflict zones or remote camps to continue their education despite a lack of stable internet.

In tandem with this, the "Giga" initiative—a joint project between UNICEF and the International Telecommunication Union (ITU)—aims to map every single school in the world and connect them to the internet. As of 2026, Giga has mapped over 2 million schools, providing the granular data that governments need to target their infrastructure investments with surgical precision.

The World Bank complements these ground-level efforts by providing the massive financial capital required for large-scale digital shifts. Through its "Global Education Strategy 2030" and the "EdTech Hub" research partnership, the World Bank provides billions of dollars in grants and low-interest loans specifically aimed at "Digital Economy" projects in developing nations. Unlike early 21st-century programs that focused purely on buying hardware, the World Bank's modern approach prioritizes "Evidence-Based EdTech," meaning they only fund programs that have proven to improve actual learning outcomes in literacy and numeracy.

Additionally, multilateral partnerships like the "Global Partnership for Education" (GPE) coordinate donor funding to ensure that the poorest countries can afford the recurring costs of software licenses and IT training. These organizations prove that when the world's financial power is aligned with humanitarian goals, the barriers to digital education can be systematically dismantled, provided that there is a long-term commitment to maintaining the systems once they are built.

6. Historical Background / Timeline of the Issue

The integration of technology into education has evolved over decades, shaped by global developments in communication, computing, and international cooperation. Understanding this progression helps contextualize current challenges and opportunities in digital learning.

Pre-1990s: Early Foundations

Before the rise of the internet, educational technology was limited to tools such as radio, television, and basic computers. Distance learning programs using broadcast media were implemented in various countries to reach remote populations.
Organizations like the United Nations Educational, Scientific and Cultural Organization began promoting educational access through non-digital means, laying the groundwork for future technological integration.

1990s–Early 2000s: Rise of the Internet

The expansion of the internet marked a turning point in global education. Schools and universities began incorporating computers and online resources into teaching.
In 2000, the adoption of the United Nations Millennium Development Goals highlighted the importance of universal primary education, encouraging countries to explore innovative methods, including technology, to improve access.
However, disparities in access to the internet became evident, introducing the concept of the “digital divide.”

2010–2015: Growth of Digital Learning

During this period, rapid advancements in smartphones, cloud computing, and online platforms transformed education. E-learning, virtual classrooms, and Massive Open Online Courses (MOOCs) gained global popularity. In 2015, the United Nations Sustainable Development Goals were adopted, with Goal 4 focusing on inclusive and equitable quality education. Technology was recognized as a key tool in achieving this objective.
UNESCO and other organizations began developing structured frameworks for integrating ICT (Information and Communication Technology) into education systems.

2020–2022: COVID-19 Pandemic and Global Shift

The COVID-19 pandemic caused an unprecedented disruption in education systems worldwide. Schools in over 190 countries closed, affecting billions of students. This crisis forced a rapid transition to remote learning, making digital education a necessity rather than an option. Platforms for online learning, video conferencing, and digital resources became central to education systems.
However, the pandemic also exposed deep inequalities, as many students lacked access to devices, internet, or supportive learning environments.

2023–Present: Recovery and Innovation

Following the pandemic, countries have focused on strengthening digital education systems and building resilience against future disruptions.
There has been increased emphasis on:
Hybrid (blended) learning models

- Artificial intelligence in education
- Digital literacy and teacher training
- Ethical frameworks for technology use

International cooperation, led by organizations such as UNESCO, continues to promote inclusive and sustainable digital transformation in education.

7. **Case Studies**

Examining real-world examples helps illustrate both the potential and the challenges of using technology in education across different contexts. The following case studies highlight how digital learning has been implemented in developing regions and during emergency situations.

7.1 **Developing Countries**

In many developing countries, technology has been used as a tool to expand access to education despite limited resources. However, outcomes have varied depending on infrastructure, policy, and local conditions.
For example, in India, government-led initiatives have introduced digital platforms and low-cost devices to reach millions of students. Programs such as national online learning portals and mobile-based education have allowed students in rural areas to access educational content. However, disparities remain due to inconsistent internet access and varying levels of digital literacy.
Similarly, in Kenya, mobile technology has played a key role in education. With relatively high mobile phone penetration, SMS-based learning and mobile applications have been used to support students, especially in remote regions. Despite these innovations, challenges such as device affordability and infrastructure limitations persist.
In parts of Brazil, digital education programs have been implemented to support public schools, including the use of online platforms and digital classrooms. While these efforts have improved access in urban areas, rural regions continue to face connectivity issues.

These examples demonstrate that while technology can significantly improve access to education in developing countries, its success depends on addressing underlying issues such as infrastructure, training, and inequality.

7.2 **Education in Emergencies**

Technology has proven to be particularly valuable in maintaining education during emergencies, where traditional schooling is disrupted.
During the COVID-19 pandemic, countries worldwide adopted remote learning solutions. Platforms such as video conferencing tools, online classrooms, and educational apps became essential. In many cases, governments partnered with organizations like United Nations Children's Fund to deliver digital content and support students.
However, the pandemic also exposed inequalities. In regions without reliable internet, alternative methods such as television broadcasts, radio lessons, and offline materials were used to ensure continuity of education.
In conflict-affected areas, such as parts of Syria and Yemen, digital tools have been used to provide some level of educational access despite instability. Mobile learning platforms and remote education programs have helped displaced and refugee students continue their studies.
Nevertheless, challenges such as limited infrastructure, safety concerns, and funding constraints remain significant barriers.

These cases highlight the importance of flexible and adaptable education systems. Technology can play a crucial role in ensuring continuity of learning during crises, but only if supported by inclusive planning and adequate resources.

8. **Questions to Consider**

To guide debate and encourage the development of comprehensive resolutions, delegates should consider the following questions:
How can governments ensure equal access to digital education for students from low-income and marginalized communities?

1. What measures can be taken to bridge the digital divide between urban and rural areas, as well as between developed and developing countries?
2. How can countries balance the use of advanced technologies, such as artificial intelligence, with ethical concerns including data privacy and security?
3. What role should organizations such as the United Nations Educational, Scientific and Cultural Organization and the United Nations Children's Fund play in supporting digital education globally?
4. How can governments ensure that teachers are adequately trained to effectively integrate technology into their teaching methods?
5. What strategies can be implemented to provide reliable internet and electricity in remote and underserved regions?

6. How can digital education systems be adapted to remain functional during emergencies, such as pandemics or armed conflicts?
7. In what ways can public-private partnerships contribute to improving infrastructure, funding, and innovation in educational technology?
8. How can education systems ensure that technology enhances learning without replacing human interaction and critical thinking?
9. What steps can be taken to develop inclusive digital content that accommodates different languages, cultures, and students with disabilities?

BAUMUN
JUNIOR

9. **References**

United Nations Educational, Scientific and Cultural Organization. Education in a Digital World.

United Nations Educational, Scientific and Cultural Organization. ICT Competency Framework for Teachers.

United Nations. Transforming Our World: The 2030 Agenda for Sustainable Development.

United Nations Children's Fund. Remote Learning and COVID-19 Response Reports.

World Bank. Education and Technology: World Development Reports.

Organisation for Economic Co-operation and Development. Education at a Glance Reports.

COVID-19 pandemic. Global Education Impact Studies.

International Telecommunication Union. Measuring Digital Development: ICT Statistics.