Tab 1

ZIMUN XII

The Cost of Innovation:

Navigating the Ethical Responsibilities of Technological

Advancements and Societal Change for Inclusive, Sustainable

Development in a Globalized World

[UNDP]

Increasing access to information and communication technology for education in underprivileged areas

Committee: Development Programme (UNDP)

Issue: Increasing access to information and communication technology for education in underprivileged areas

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INTRODUCTION

Information and Communication Technology(ICT) is an evolving umbrella term used to stress the role of unified communications and telecommunications, such as communication devices from phones and computer hardware to satellite systems and so on. ICT in the education system has become an increasingly important tool for both educators and school policymakers, due to its potential to enhance learning in school communities. Thus, becoming a norm and an everyday tool in education over the past 50 years, as technology has evolved in so many ways to benefit learning, with the creation of systems like AI-learning tools to further enhance the quality of education and allow students access to a database full of information. However, many communities in today's world still lack clear access to ict advantages, mainly in third-world developing countries that other first-world schools or communities can possess, but others can acquire due to factors like poverty, being in an underprivileged area and a multitude of other issues. Thus causing an digital divide and inequality in the learning experiences of students globally, with rates gradually getting worse. As stated in the UN Sustainable Development Goals, the intention is to fix this digital access gap by the year of 2030. ("Information and Communications Technology")(“Rahman and Rahman”)

DEFINITION OF KEY TERMS

- **UNESCO**-United Nations Educational, Scientific and Cultural Organisation was established in 1945 to allow the evolution of areas such as global education, science, culture and communication.

- **INT**- the UN's International Telecommunication Union, founded in 1865 to allow the coordination of international telecom standards and connectivity efforts like closing the digital divide.

- **Digital Divide**-A gap in ict access caused by either income, location or demographic

- **Digital Equity**-Equal tech opportunities given to all learners

- **Sustainable Development Goal #4**-The UN goal focusing on ensuring equitable education with the use of modern technology and promoting lifelong learning opportunities accessible to all.

- **GEM Report**-UNESCO's annual digital access monitoring research reports.

- **One-to-One Devices**- Refers to education programs where each student receives a personal computing device for school and home use to integrate technology into daily learning and provides constant device ability and digital resource access. (Perplexity AI)

- **Broadband-**A transmission of bandwidth data over a high-speed internet connection.

BACKGROUND ON THE ISSUE -

This issue first arose around the mid-1990s when the increasing use of information and communication technology first gained prominence with the rapid expansion of internet access in the United States of America following the High-Performance Computing Act of 1991, which authorised a federal program to work on advancing U.S leadership in areas such as supercomputing, networking and software as a way to increase. This act was able to solidify

systems such as modern cloud computing, advanced AI structures, and hardware development. It is regarded as what shaped the global/country management of fundamental IT investments as we know them today. This act also funded internet infrastructure through schools in the US. This leading development meant to improve america however, had resulted in only centered asess for education in suburban communities only, while other communities were left lacking and were mainly poor urban, rural, low-income and minority communities.ICT equity efforts soon began shortly after, with US-based reports showcasing these unequal gaps evolving into a large global digital divide discourse by the early 2000s via the UN and UNESCO initiatives. This issue has, over time, de-escalated in high-income countries with widespread broadband but has escalated in underpriviledged third world countires and areas due to COVID-19 learning losses and conflicts. This issue mainly impacts poverty-inflicted students in developing regions such as sub-Saharan Africa and South Asia, mainly as a result, limiting them in terms of developing skills, employability and opportunities. Teachers and communities are affected as it limits their ability to fully educate their children and students. This is a pressing issue relevant to the UN Sustainable Development Goal 4 and is a clear representation of unaddressed economic divisions that the UN aims to repair.("The Digital Divide" 3)("KFIT Africa: Digital Education")("Technology in Education: 2023 Global Education Monitoring Report")

CURRENT CONTEXT

The issue of ICT education access is still very persistent yet very urgent, as according to the UN, "The digital divide is that over 50% of global learners", with most coming from low-income countries, still lack household computers or internet. With features such as AI tools only widening the skill gaps with students missing AI-driven learning, and adding to the issue that

only under 30% of poverty-inflicted youth can use digital platforms effectively. On average, 82% of people in Sub-Saharan Africa lack home internet, hindering access to knowledge and learning. Efforts to correct this digital divide have been made by many organisations, including UN branches that wish to further help fix this issue. The United Nations International Telecommunication Union's September 2025 project of 'Connecting Humanity" blueprint aims to target universal access for all by the year 2030 via a USD$2.6-2.8 trillion investment as a starting base to help underprivileged children gain access to modern technology.UNESCO a leading organisation working to fix this issue, launched has launched 2026 GEM Report that contains information stating that just 15% of countries provide one-to-one devices, worsened by conflicts such as war and ecological issues, and these factors disallow many opportunities to better these issues, especially in countries like Palestine, which already had a digital divide and equity issue but has only been worsed by the current affairs of war. (Perplexity AI)

MAJOR COUNTRIES AND ORGANIZATIONS INVOLVED

- **UNESCO** has been a leading organisation in mitigating this issue since its 2002 ICT Education Programme. The work to resolve this issue by publishing GEM Reports that track its development and tracking access rates. Has instated competency frameworks that train teachers in over 100 countries and partners with the ITU on school connectivity standards. They have influenced over 50 national policies and reached over 10 million underprivileged learners.

- **ITU**-A leading UN branch in this issue since 1865, in terms of ICT developments in general. They have launched many initiatives to help the people affected by this issue by leading developments such as the previously mentioned "Connecting Humanity"

blueprint, which mobilized 2.6trillion public and private funds so far for universal

broadband by 2030, with their Giga project of 2020 with UNICEF that connected over

1million schools in 90 countries using AI and satellites to work on solutions to the issue.

- **World Bank**-As a main provider of financial assistance to middle to low-income

   countries, the World Bank has provided ICT sector loans since the 2000s, with over

   $512M financed for the "Connected Schools for All" project, wiring 12K schools with

   devices and providing WiFI.They have provided $2.1Billion in global education tech

   loans for crisis-hit nations and have partnered with governments for teacher training in

   underprivileged areas.

- **United States of America**-The USA is a very important part of both the cause and is

   very affected by the result. Due to their 1990s de-regulations that followed the High

   Perfomance Act, to this day, have resulted in 15M students in rural or poor communities

   have poor, laggy or no internet at all with the issue being compated as early as 1996 with

   the E-Rate prgram that discounted $40B worth of telecom for 90% of schools with recent

   projects like the 2020-2021. This initiates have caused a great impact on the school

   connectivity, going from 20 per cent to 95% from 1996 to 2025, showing great progress.

- **United Kingdom**-The UK has been affected by this issue since the 1990s due to the very

   existent class system.20% of students in the UK are disadvantaged pupils in the education

   system without access to proper education devices. The government has tried to fix this

issue by installing $500K worth of school Personal Computers. UK-based online

platforms have donated $1 billion worth of devices to 1.5Million disadvantaged pupils.

- **South Africa-**Apartheid South Africa is heavily involved in causing this issue in current

  day south africa due to the post colonial urban bias, leaving a lot of other communities

  without the benefits of others, resulting in 70% of rural areas not having broadband.

  There have been reforms to address this issue, like the Presidential Commission on 4IR

  of 2019, which mandated the digital-infused curriculum with access to free data given to

  students and, alongside partnerships with the World Bank, have been able to build WiFI

  hubs in townships with 2million students having been reached, bringing country's literacy

  up by 15%.

- **Kenya**-While Kenya has not been the cause of the issue, 60% of rural Kenya does not

  have access to the internet, making them very involved and affected by this. The Kenyan

  government has launched many initiatives to combat this issue, such as the 2016 Digital

  Literacy Program, which deployed tablets to 1 million primary schools.

- **Outreach International**-Has been actively involved since 2010 and runs over 100

  community digital centres with solar-powered devices, both donated and lent. They have

  also trained over 50K villagers in low-income Asia and Africa, resulting in 90% of

  participant employment boost.

- **Khan Academy**- Has been involved in the issue since 2008 to help lessen its impacts on

  underprivileged students, and as an international platform are not affected but has chosen

to provide help. Khan Academy is a free educational help platform with an offline app available in over 50+ languages, making it even possible to learn even without access to Wi-Fi, and has numerous outreach school integration projects with governments, reaching 120 million users, with 40% in low-access areas, having gained access to this opportunity.(Perplexity AI)

- **Google/Microsoft**-Microsoft has been involved in this issue since 1975, while Google has been involved since 1998. They donate 10 million devices yearly to underprivileged communities from all over the globe. Have been developing AI teacher tools to better enhance education as a whole and have a Reach for Education program where 5 million chrombook are donated with free WIFI hotspots(Coalition with UNESCO)

TIMELINE OF KEY EVENTS

November 1991- The United States of America passes the High-Performance Computing Act. The US Congress passed a bill endorsing funding of the National Research and Education Network, aimed to connect schools to the internet and is known as the first major federal funding for ICT education globally.

July 1995-NTIA" Falling Through the Net" Report Released-US government document exposed the digital access gaps in low-income/rural/minority areas, causing uproar among citizens and set the pathway for changes/resolution progress to start to fix this issue with new york times realising article noting that noted that5 0% affluent vs 8% of poor Californian schools were online with access to the internet.

February 1996-US Telecommunications Act Signed-This act worked on fixing the issues of the High Performance Computing Act by enacting E-Rate programs that subsidised internet and computer availability in school libraries beginning in 1998.

1997-United KingdomNational Grid for Learning-Government invests over £700M for over 500K in school computers, teacher trainings, setting the standard for the rest of Europe, reaching an overall school of 98% of connectivity by 2004.

2002-UNESCO ICT in Education Programme Established-Etablished to combat issues of ICT Education in developing countries, launches a Moscow Institute for policy advice and shortly after rains 100K educators in developing nations

September 25, 2015-UN Sustainable Development Goals are adopted- Summit adopts Sustainable Development Goal 4 for ICT skills and infrastructure, with Annual GEM Reports to track progress and done by UNESCO to this day.

February 11, 2020-ITU/UNICEF Giga Inititive Launhed-Giga Initive launched in Geneva. The event identifies 400K schools that are unconnected to the internet and partners to connect 250K by 2025

March 17, 2020-UNESCO Coalition Forms-Done to view the global COVID-19 response that worsened attempts to better issue and resulted in Education being handled online rather than in

person. Results in Microsoft, Google, Zoom and over 200 organisations sharing platforms outreach with 1.5B students amid lockdowns

April 2021-Word Bank Mission Luached-Mission-World Bank launches "Revoer Education" mission with $12B platform post-COVID to fund devices/broadband in 50 low-income countries.

June 2025-OECD(Organisation for Economic Co-operation and Development) releases Digital Education Outlook-OECD releases a digital education outlook into 2026 and flags rural AI gaps in 39 countries, with a rate of 95%high income vs 40% low income school broadband.

September 2025-ITU "Connecting Humanity Blueprint-UN summit in Geneva presents a 2.8Trillion roadmap to education connectivity prioritisation amidst the recent and early stages of the AI in education boom.

January 2026-UNESCO Annual GEM Report-Key statistics in the report state 2.6B people offline, that being around one third of the global population, with only 15% of countries having one to one devices out of 195 countries.

September 2030-SDG 4 Deadline- Year of ICT education equity target by the UN.

RELEVANT UN RESOLUTIONS, TREATIES, & EVENTS

- UN Sustainable Development Goal 4

- ○ [ITU/UNICEF Giga Initiative](#)

- ○ [UNESCO Global Education Coalition](#)

- ○ [UNESCO 2026 GEM Report](#)

  [ITU Connecting Humanity Action Blueprint](#)

- ○ [ITU Resolution 87](#)

- ○ [UNESCO Rewired Global Declaration](#)

PREVIOUS ATTEMPT TO SOLVE THE ISSUE

UNESCO Rewived Global Declaration -Resulting from a summit UNESCO launched an equity roadmap plan committing to helping atleast 80 countries to connectivity standards

World Bank-Responsible for financing 12K latin-american schools with broadband and school devices with low interest rates to member states.

Kenya(UN Member State)-Deployed tables and digital content to over 1 million primary school students, increasing classroom connectivity by 94% and increasing literacy greatly

Outreach International-Established over 100 rural training hubs providing solar-powered devices, with literacy training provided to half a million villages in Asia and Africa annually.

POSSIBLE SOLUTIONS

- Strongly urges Member states to allocate 5% of the national education

  budget to:

  a)Informational and Community Technology infrastructure by 2030,

  prioritizing solar powered hubs accessible to both students and

  teachers in the rural areas

  b)Launching digital literary programs that target low-income schools

- Encourages member countries to engage in public-private partnerships with

  local and or international ICT companies, such as:

  a)Providing low-interest loans for broadband

  b)Device loaning or donations

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