

# 2022 Global Economic Forum Closing the Digital Divide - Equality in Education Background Briefing Paper

"We must also promote global access to the Internet. We need to bridge the digital divide not just within our country, but among countries. Only by giving people around the world access to this technology can they tap into the potential of the Information Age."

- Al Gore, former Vice President of the United States

#### **Defining the Growing Digital Divide**

Conversations around the 'digital divide' have, from their conception, been conversations on **access**, **equity**, and **justice**. The **digital divide** describes the uneven distribution of technology resources, often called **information and communication technology (ICT)**, which includes computers, the Internet, and mobile phones, among other technologies. The digital divide was initially described as a persistent issue within a single country, where certain populations had more or less access to technology than others. In recent years, the definition of the digital divide has grown to include uneven distribution of technology between countries and global regions. Technology, the Internet, and mass communications have always suffered from a split between those who have, and those without. Interestingly, the digital divide is not a linear progression, as technological advances and globalization have caused both times of significant gaps and times of a relatively narrow divide.

Historically, the first digital divides were between those who had the financial means and technological know-how to have home computers basic internet and access, and those who didn't. Over time, these initial barriers to access shifted with the advent and **ubiquity** of cell phones and satellites in the 1990's. As technology and faster broadband internet continued to develop, inequality grew once again, as higher income



Gini coefficients for telecommunication capacity (in kbps)

countries for 1986–2014. Telecommunications Policy. www.martinhilbert.net/the-bad-news-is-that-the-digital-access-divide-is-here-to-stay/

A Gini Coefficient is a measure of inequality in a population, and is primarily used in wealth or income inequality. Values range from 0 to 1, with a '0' representing perfect equality and a '1' representing absolute inequality.



households gained access to faster and more reliable internet. Looking forward, global conversations on digital equity and access have shifted to conversations around abundant high speed internet, next generation cellular networks like 5G, and even the accessibility of advanced healthcare procedures.

Regardless of the size of the gap between those with access to technologies and those without, the digital divide has significant consequences for nearly everyone. The Internet has become a necessary component of almost every facet of modern life including how we learn, communicate, shop, and even



Two-thirds worldwide use the internet, but fewer do in Africa and South Asia

participate in the fundamental aspects of a democracy and with government institutions. Each year, as technology continues to improve, even more aspects of life become internet-based, including healthcare systems, banking and financial institutions, and our educational systems. Recognizing the growing importance of internet connectivity, the United Nations in 2016, declared in a non-binding resolution that access to the Internet as a fundamental human right.

There exist significant digital divides both within countries and between countries and global regions. Many developed countries struggle to provide equitable access to Internet services and are plagued by issues of low digital literacy, especially within less educated and older populations. In developing



**regions**, one of the major barriers is an underdeveloped **internet and technology infrastructure**. For many countries, simply building the infrastructure needed to provide internet to millions of citizens is simply too costly. Throughout the world, these equity issues primarily affect certain populations including women, racial and ethnic minorities, people with lower incomes, rural residents, people with disabilities, and people with lower levels of education. While each country and each region face differing and unique challenges when confronting the digital divide, these equity concerns remain at the forefront of any discussion on this important topic.

## **COVID-19 and the Digital Divide**

For decades the digital divide fluctuated based on advancements in technology, internet infrastructure, and the widespread adoption of internet connected devices such as cell phones. During this time, the digital divide remained relatively immune from wider global events. While shifts in politics, global conflict, terrorism, and even the growing threat of climate change had impacts on the digital divide, nothing has had as significant of an impact as the COVID-19 pandemic.

A public health crisis derived from a contagious virus spread through close human contact forced a drastic and overwhelming shift in the lives of billions around the world. No single event has previously triggered such widespread change to how people live, learn, and interact with others. Fundamental to this change is the acceleration of services and institutions from in-person to digital engagement.

In many countries, entire institutions and core societal systems such as education, healthcare, banking, and retail quickly shifted online. Within days and weeks, entire societal systems moved rapidly, with significant consequences around access and equity to core services. Suddenly, high speed internet and a connected device became critical to simply access school, speak with a doctor, pay bills, or receive critical municipal services. Even for the most digitally literate populations, the shift was immediate, drastic, and overwhelming.

Like other aspects of the pandemic, certain countries and certain populations were better equipped to handle this paradigm shift than others. Generally, **developed countries** with strong Internet infrastructure were able to handle the increased digital needs of their citizens. However, access and equity issues still predominated for many of the under-resourced populations mentioned above in these highly developed countries. In developing nations, the digitization of these critical services and institutions was prohibitively expensive or near impossible in such a short amount of time. While the digital divide represented persistent equity issues globally, the COVID-19 pandemic brought them to the forefront in a dramatic and uncompromising fashion.

#### **Education and the Digital Divide**

Free, compulsory, **primary education** is one of the world's greatest human rights achievements, and one of the most important institutions for continued growth and global prosperity. Throughout history, education systems required in-person, face-to-face instructions between students, their peers, and instructors. While virtual schooling and digital education platforms are increasingly prevalent, the



COVID-19 pandemic accelerated these shifts, with far reaching consequences to educational systems around the world.

Education systems had already started a profound transformation with the rise of the Internet. Information, once dominated by **gatekeepers** or with significant barriers to access, suddenly became democratized and available to anyone with an internet connection. Information once buried deep inside a library or within obscure technical manuals suddenly became widely accessible, drastically increasing speed and efficiency throughout the education system. A revolution in internet-based communications also drastically changed education, as new avenues for learning developed and teachers and students began to communicate more effectively and more efficiently. However, the same internet revolution in education brings challenges, one example being the technological and digital literacy needs for students and teachers that have continued to grow.

While there are many barriers and challenges confronting educational systems throughout the world, access to reliable high-speed internet and access to internet compatible devices remain the largest and most expensive gaps in the digital divide. Access to high speed and reliable internet infrastructure is critical in an age where information is a valuable resource. Likewise, access to internet compatible devices like computers and cellphones is an incredibly important barrier for many countries to overcome. These challenges lead to significant effects on many students, namely lower performance for those students without access to important technologies, as well as a competitive advantage for those students who do have access to such technologies.

In addition to the technical barriers associated with the digital divide for education, there are significant concerns about the **social-emotional learning** for millions around the world. Early childhood education and primary school teaches the fundamentals of how we interact, learn, and socialize with others. Distance learning threatens these critical foundations of a successful educational system. In addition, in-person education serves a dual purpose, allowing parents to be employed without needing to provide childcare. This dynamic is especially important in lower-income households, where two incomes are vital to meeting life's necessities. Higher income households often have parents with more flexible work schedules and/or the opportunity to hire educational supports for students, further increasing the educational divide between higher and lower income households.

As stated above, concerns over access and educational equity are some of the most pressing issues facing both in the United States, and the entire world. In many countries, low-income, disabled, rural, elderly, and minority populations are often the first people to be affected by these significant gaps in equity and access to technology. In addition, younger students are at greater risk to their education based on lower digital literacy skills and the importance of in-person social emotional learning. Creating equitable solutions to these issues is of critical importance to the global community as education represents the world's greatest hope for continued progress and growth.



#### The Charge - Create a Regional Policy Proposal Presentation

The **2022** Global Economic Forum will simulate the international community's fight against growing digital inequality, which has gained increased global attention and has been exacerbated by the COVID-19 pandemic. The World Bank is seeking to fund innovative solutions to this crisis, and has called for interested policymakers to submit their proposals. Invited Student Delegates (that's you!) will represent an assigned global region and committee topic related to the issue of *Closing the Digital Divide*. Each team will present their strategy for combating this evolving issue to other students in their committee representing other global regions at the very beginning of the Forum's first committee breakout session. After hearing each region's initial presentation, your committee will then collaborate on a collective policy proposal aimed at solving your committee's topic on a global scale, while representing the needs and opportunities of each represented regional group.

During the Closing Plenary at the end of the program day, each committee will present their policy proposals to the Closing Plenary. One member of each region in the committee group will present the committee's newly-created collective policy proposal. A panel of judges representing the World Bank will hear each committee proposal, ask clarifying questions, and ultimately determine a winning committee team, awarding them fictitious funding for their policy proposal.

It is critical that you read the separate <u>Instructions for Creating a Regional Policy Proposal</u> <u>Presentations</u> for further details and expectations. Teams are encouraged to utilize the provided presentation template (in your school's Google Drive program folder) when creating their Regional Policy Proposal presentations. Each team will have 3-5 minutes to present and should have no more than 5 slides in their presentation (<u>not</u> including the title slide). Each team should be prepared to answer 3-5 minutes of questions from their peers about their policy proposals.

This briefing paper should serve as a starting point for understanding the overall challenges of your assigned committee topic, however, you will also need to conduct additional research. Please see the Council's Global Economic Forum resources <u>webpage</u> for suggested additional resources. The purpose of this Forum is not only for Delegates to gain a holistic understanding of the social, political, and economic implications and consequences of the digital divide, but also for Delegates to also gain experience in the policymaking process as it relates to critical international issues. Best of luck!

## **Quick Facts**

Find at least five quick facts from this briefing paper or in reputable online sources that will be useful in creating your Regional Policy Proposal. Quick facts should be about one sentence long and provide useful information on your assigned committee topic.

- 1. Just 53 percent of adults with incomes less than \$30,000 have broadband at home, compared with 95 percent of those with incomes above \$75,000.
- 2. Nearly 68 percent of those without broadband at home live in rural communities.



- 3.
- 4.
- 5.

## **Questions to Consider**

Answer the following questions to the best of your ability based on the information presented in the briefing paper above and any additional research you have already conducted on your own.

- 1. Define the digital divide. Give 2 examples of how the digital divide manifests in society.
- 2. Who is most at-risk from the digital divide? Why are these populations at the most risk?
- 3. Why is education so important for global development and prosperity?
- 4. Define gatekeeping and provide a real or fictional example of gatekeeping. How has gatekeeping influenced education throughout history?
- 5. This paper argues that the digital divide is an issue of equity and access. How does the digital divide impact equity and access?

Term	Description
5G	The fifth generation technology standard for broadband cellular networks, which cellular phone companies began deploying worldwide in 2019, and is the planned successor to the 4G networks which provide connectivity to most current cell phones.
Access	The opportunity to obtain something or the ability to enter a particular space. For example, someone with a bank account has access to a loan, whereas someone with a bank account does not have access to the same item, in this case a loan.
Broadband internet	The transmission of high-quality data. In its simplest form, Broadband is a high-speed Internet connection that is continuously present.
Developed countries	A developed country is a sovereign state that has a high quality of life, developed economy and advanced technological infrastructure relative to other less industrialized countries.
Developing regions	A developing region is a sovereign state with a less developed industrial base and a low Human Development Index relative to other countries.
Digital divide	The gap between those who have ready access to Information and Communication Technology (i.e. computers and the internet), and those who do not.
Digital literacy	An individual's ability to find, evaluate, and clearly communicate information through text and other media on various digital platforms.
Equity	Fairness and justice in terms of outcome. Equity means understanding unique backgrounds and abilities and searching for the most equitable outcome. Equity does not equal equality.



Gatekeepers	Gatekeeping is the activity of restricting or limiting access to something.
Information and communication technology (ICT)	An extensional term for information technology (IT) that stresses the role of unified communications and the integration of telecommunications (telephone lines and wireless signals) and computers, as well as necessary enterprise software, middleware, storage and audiovisual, that enable users to access, store, transmit, understand and manipulate information.
Internet and technology infrastructure	The physical hardware, transmission media, and software used to interconnect computers and users on the Internet.
Justice	The quality of being impartial, or fair in treatment and/or outcome. Justice involves an understanding of the backgrounds and histories of people and the fairness of their outcomes based on these priors.
Non-binding resolution	A written motion adopted by a deliberative body that cannot progress into a law.
Primary Education	The first stage of formal education includes reading, writing, basic arithmetic and critical social-emotional learning. Primary education is generally considered to include elementary and middle schools (as is common in the United States).
Social-emotional learning	An education practice that integrates social and emotional skills into school curriculum.
Ubiquity	The fact of appearing everywhere or of being very common.
United Nations	An intergovernmental organization aiming to maintain international peace and security, develop friendly relations among nations, achieve international cooperation, and be a center for harmonizing the actions of nations. It is the world's largest and most familiar international organization.

## **Works Cited**

The Digital Divide - Information, People and Technology - Penn State University

UN Condemns Internet Access Disruption as a Human Rights Violation - The Verge

Disconnected: Seven Lessons on Fixing the Digital Divide -Federal Reserve Bank of Kansas City