HOW MANY CHILDREN AND YOUNG PEOPLE HAVE INTERNET ACCESS AT HOME?

Estimating digital connectivity during the COVID-19 pandemic

GENERATION UNLIMITED

giga

unicef | for every child

ITU

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Foreword

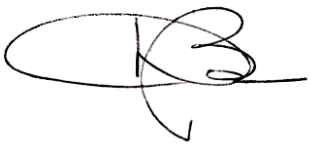
The COVID-19 pandemic has caused the largest mass disruption of education in history and worsened the global learning crisis. In April 2020, more than 190 countries instituted national school closures, putting up to 1.6 billion students at risk of falling behind at great cost to their education and futures.

In response, ministries of education all over the world have deployed different remote learning policies, and education stakeholders have been inspired to "reimagine education" by harnessing technology to close the persistent gaps in access to education that limit the potential of children and young people around the world.

The digitalization of society has made ICT skills and access to technology important, but the COVID-19 pandemic has turned these things into essential human rights in terms of the educational, social and professional needs of children and young people. The lack of connectivity among the most marginalized populations – children and young people from poor households and rural areas – places them at an extreme disadvantage, and all but eliminates any chance they might have of participating in the modern economy.

To this end, UNICEF has joined forces with the International Telecommunication Union (ITU) to launch Giga, an ambitious global initiative to connect every school to the internet and every young person to information, opportunity and choice. With the support of Generation Unlimited, UNICEF now works under the Reimagine Education initiative which aims to address the learning crisis and transform education by giving children and young people equal access to quality digital learning.

This report supports these efforts with findings from a first-of-its-kind analysis that delivers critical insights about the vast numbers of children and young people whose education and professional futures are jeopardized by a lack of access to digital technology at home. Today, 2.2 billion children and young people are still unconnected, deprived of the digital technologies and services that have proved so essential during the pandemic. Closing the digital divide will require significant resources, cooperation and dedication. But we must act – the ability of many children and young people to achieve their full potential depends on it.



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Key messages

1. Globally, 2.2 billion children and young people aged 25 years or less – two-thirds of children and young people worldwide – do not have an internet connection at home.[1]
2. More than two-thirds of school-age girls and boys aged approximately 3 to 17 years (1.3 billion children) and 63 per cent of youths aged 15 to 24 years (almost 760 million youths) lack internet access at home.
3. 768 million children and young people aged 25 years or less who lack internet access live in South Asia. In the regions of East Asia and Pacific, West and Central Africa and Eastern and Southern Africa more than 300 million children and young people per region lack home internet access, totaling more than 900 million without access.
4. There is marked inequality in internet connectivity across the world's regions. Only 5 per cent of children and young people aged 25 years or less in West and Central Africa, and just 13 per cent in South Asia and in Eastern and Southern Africa, have internet access at home, compared to 59 per cent in Eastern Europe and Central Asia.
5. Differences in access to the internet are even starker between rich and poor countries. Among children and young people aged 25 years or less only 6 per cent in low-income countries have internet access at home, compared to 87 per cent in high-income countries.
6. A large difference is also seen globally in levels of home internet access between children and young people who live in rural areas (25 per cent) and their urban peers (41 per cent).
7. Socioeconomic inequalities within countries also produce notable differences in internet access. Globally, 58 per cent of children and young people aged 25 years or less whose families are among the richest 20 per cent in their countries have internet access at home, whereas only 16 per cent of children and young people from the poorest 20 per cent of households in their countries have such access. While high-income countries have high rates of internet access, sizable gaps exist – although the richest households have near universal access at 97 per cent, only 74 per cent of the poorest households have access.
8. The gap in home internet access between children and young people aged 25 years or less from the poorest and richest households is greatest in upper-middle-income countries, where it exceeds 50 percentage points. In contrast, while only 2 per cent of children and young people from the poorest households in low-income countries have internet access at home, just 16 per cent of their richest peers are connected, which underscores the low prevalence of internet access.
9. The impact of wealth on internet access is also visible at the regional level. In West and Central Africa, internet access for the poorest populations is almost non-existent. In Eastern and Southern Africa, just 3 per cent of children and young people aged 25 years or less from the poorest families have internet access at home, compared to 40 per cent of children and young people from the richest families. The largest regional disparity in internet access due to household wealth is seen in the East Asia and Pacific region, where only 23 per cent of children and young people from the poorest households have internet access compared to more than 80 per cent among the richest households.

[1] This report looks at children and young people aged 25 years or younger who have a fixed internet connection at home. Fixed internet access is distinct from cellular networks that can be used through mobile phones.

Introduction

Despite progress in providing access to education in recent decades, a global learning crisis persists and hundreds of millions of children are still being left behind. Before COVID-19, one in five school-age children of primary to upper secondary school age was out of school.[2] Moreover, even children in school are not necessarily learning – 617 million children and adolescents worldwide, many of whom are in school, cannot read or perform basic mathematics.[3] Global school closures in 2020 – which the World Bank estimates that could result in a loss of US$10 trillion in lifetime earnings for this generation of children – further exacerbate this dire state of affairs.

At the onset of the crisis, governments and education actors began developing systems to deliver education remotely, and recent data show that over 90 per cent of education ministries worldwide have implemented remote learning approaches that involve radio, television or the internet.[4]

Connectivity is critical in today's world, and UNICEF has been working to reach every child and adolescent worldwide with digital learning technologies. This work has been supported by the considerable data that are available on internet use among different age groups across the world's regions and countries. However, the disruption to education and other essential activities caused by the COVID-19 pandemic make it necessary to understand how many children and young people aged 25 years or less are able to access digital technology at home that can support their educational, professional, social and other needs.

As such, rather than simply estimating the share of households with an internet connection, this analysis leverages household survey data from 87 countries and looks specifically at the number of children and young people aged 25 years or less who live in households that have an internet connection. Therefore, the statistics presented in this report are influenced by the number of family members aged 25 years or less in each household. More details on the methodology are available in the Annex.

The unique findings presented in this report provide new insights on children and young people's access to connectivity worldwide, as well as the factors that drive inequities among and within countries. It also aims to serve as a resource for stakeholders who seek to reimagine education and enhance internet access in their communities.

[2] UNESCO Institute for Statistics (2018). One in Five Children, Adolesvcents and Youth is Out of School. http://uis.unesco.org/sites/default/files/documents/fs48-one-five-children-adolescents-youth-out-school-2018-en.pdf

[3] UNESCO Institute for Statistics (2017). More Than One-Half of Children and Adolescents Are Not Learning Worldwide. http://uis.unesco.org/sites/default/files/documents/fs46-more-than-half-children-not-learning-en-2017.pdf

[4] UNICEF (2020). COVID-19: Are children able to continue learning during school closures? https://data.unicef.org/resources/remote-learning-reachability-factsheet/

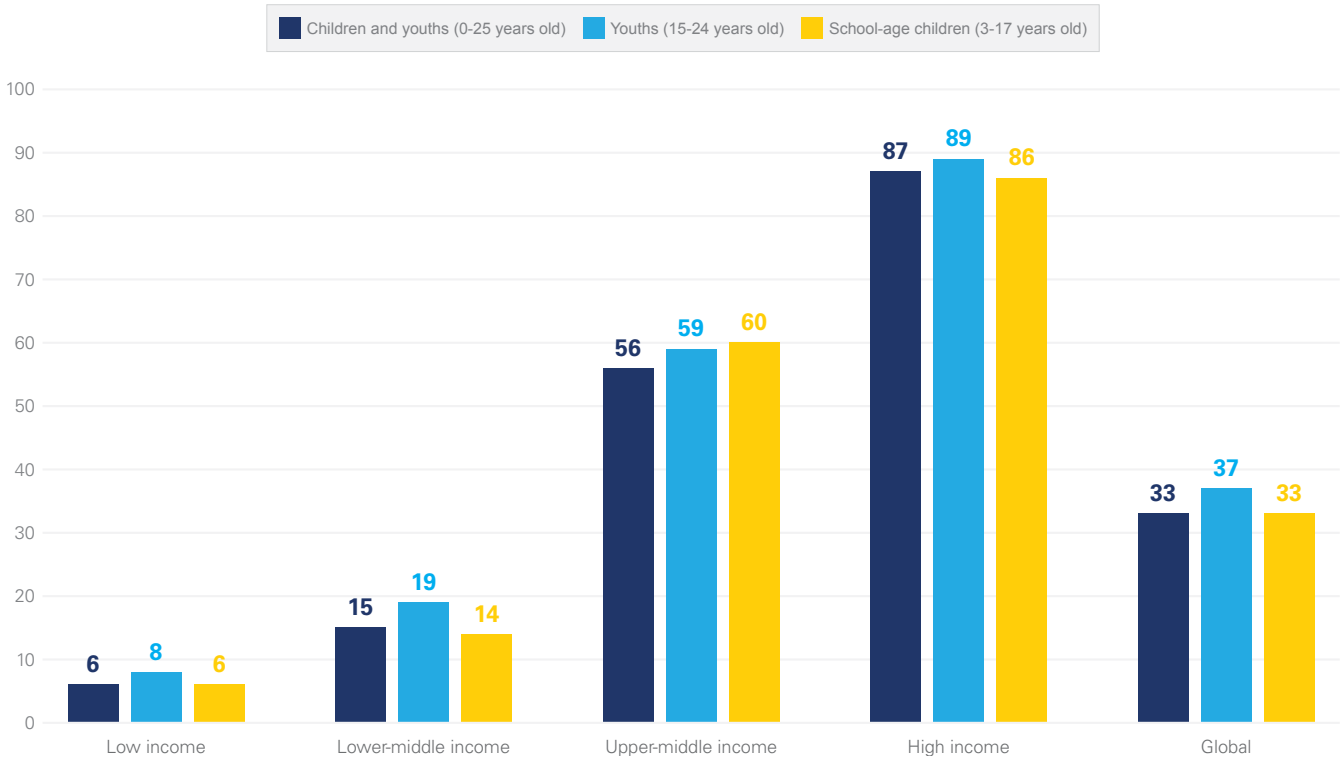
How many children and young people have access to the internet at home?

Globally, two-thirds of children and young people aged 25 years or less do not have an internet connection at home. However, access varies widely depending on countries' relative wealth: in high-income countries 87 per cent of children and young people have an internet connection at home, but in low-income countries only 6 per cent do. This pattern holds true for the other age groups analyzed (school-age children 3 to 17 years old and youths 15 to 24 years old).

Strong inequality in digital connectivity can also be seen across the world's regions. In Eastern Europe and Central Asia, approximately 60 per cent of children and young people aged 25 years or less have internet access at home. A similar situation is observed in the East Asia and Pacific and Latin America and Caribbean regions, where at least 50 per cent of children and young people have internet connectivity at home. However, in South Asia as well as Eastern and Southern Africa only 13 per cent of children and young people have internet access at home, and in West and Central Africa access is even lower at 5 per cent.

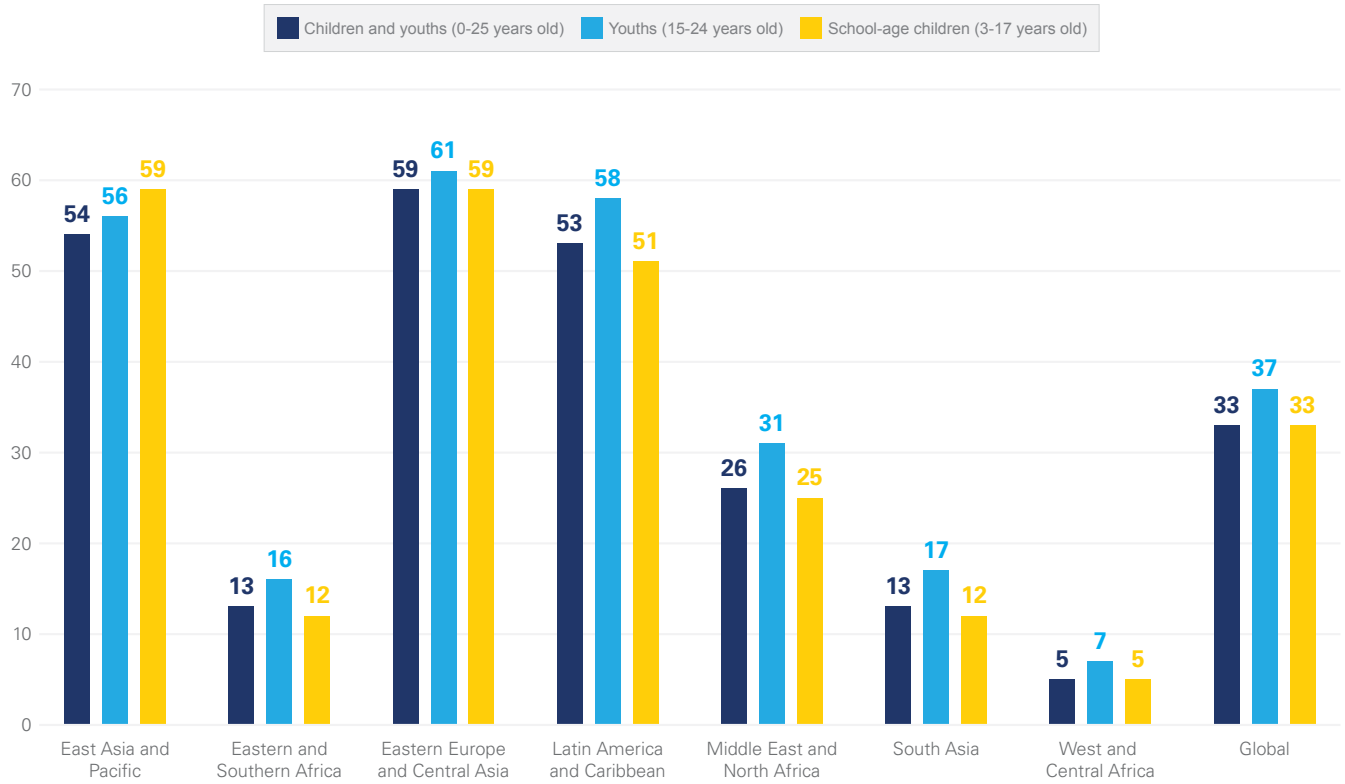
The actual headcounts behind these percentages are striking: 2.2 billion children and young people aged 25 years or less worldwide – out of which approximately 1.3 billion are school-age girls and boys between 3 to 17 years old and nearly 760 million are youths aged 15 to 24 years – do not have an internet connection at home. 768 million of these children and young people aged 25 years or less live in South Asia. In the regions of East Asia and Pacific, West and Central Africa and Eastern and Southern Africa more than 300 million children and young people per region lack home internet access, totaling more than 900 million without access.

Figure 1
Percentage of children and young people with internet access at home, by country income group



Source: Authors' calculations based on Multiple Indicator Cluster Surveys, Demographic and Health Surveys and other national household surveys (2010-2020).

Figure 2
Percentage of children and young people with internet access at home, by region



Source: Authors' calculations based on Multiple Indicator Cluster Surveys, Demographic and Health Surveys and other national household surveys (2010-2020).

Figure 3
Number of children and young people with and without internet access at home (in millions), by region

	Children and youths (0-25 years old)		Youths (15-24 years old)		School-age children (3-17 years old)	
Region	**Access**	**No Access**	**Access**	**No Access**	**Access**	**No Access**
South Asia	117	768	57	282	59	449
East Asia	435	369	174	136	265	183