



DIGITAL SKILLS IN NIGERIA

A summary of the population's skills and the availability of digital infrastructure in schools

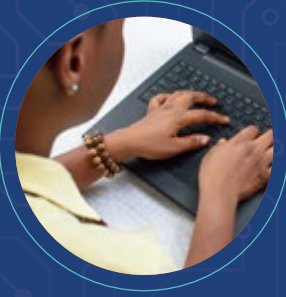
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Introduction

Brief overview of the importance of digital skills

According to the United Nations Educational, Scientific and Cultural Organization (UNESCO), digital skills are the ability to access, manage, understand, integrate, communicate, evaluate, and create information safely and appropriately through digital technologies for employment, decent jobs, and entrepreneurship (UNESCO Institute for Statistics, 2018).

Digital skills play a pivotal role in the modern world, shaping both individual opportunities and societal progress. Proficiency in digital skills is increasingly recognized as a fundamental requirement for active participation in various aspects of life, including education, employment, and social interaction. As highlighted by Smith and Webster (2020), the rapid advancement of technology has transformed the global economy, creating a demand for individuals with digital literacy and proficiency. Moreover, the pervasive influence of digital technologies across industries underscores the necessity for individuals to acquire and continuously update their digital skills to remain competitive in the job market (Ragnedda and Muschert, 2017).

The importance of digital skills extends beyond immediate economic benefits to encompass broader socioeconomic development and the building of human capital. In developed economies such as the United States and European countries, investments in digital skills development have been

integral to driving innovation, enhancing productivity, and fostering inclusive growth (Eurostat, 2020). Moreover, digital skills are recognized as essential tools for empowering individuals to navigate an increasingly digitalized world, enabling them to access information, services, and opportunities previously inaccessible (OECD, 2019). In Africa, where digitalization presents both opportunities and challenges, the acquisition of digital skills is crucial for harnessing the transformative potential of technology to address socioeconomic disparities and drive sustainable development (UNCTAD, 2020).

The acquisition of digital skills from an early age is paramount in preparing future generations for success in today's digitalized world. Beginning digital skills education in primary school not only equips children with essential competencies for navigating the digital landscape but also fosters a foundation for lifelong learning and adaptability. Research by Hu and Hua (2018) underscores the importance of integrating digital literacy into primary education, highlighting its role in enhancing cognitive development, problem-solving abilities, and creativity among young learners. Moreover, exposure to digital technologies from a young age enables children to develop critical thinking skills, digital citizenship, and responsible online behavior, laying the groundwork for informed decision-making and ethical engagement with technology (Fleer and Williams, 2016). By embedding digital skills education within the primary

school curriculum, educators can empower students to harness the full potential of technology as a tool for learning, exploration, and self-expression, ultimately shaping a generation of digitally fluent individuals poised to thrive in the digital age.

Looking ahead, the significance of digital skills is expected to intensify in the coming decades as technological advancements continue to reshape the global landscape. In an era characterized by rapid digitalization and automation, individuals with robust digital skills will be better positioned to adapt to evolving job requirements and capitalize on emerging opportunities in the digital economy (World Bank, 2021). Furthermore, the COVID-19 pandemic has underscored the critical role of digital skills in ensuring resilience and continuity across sectors, further emphasizing the need for investments in digital literacy and capacity-building initiatives to foster inclusive growth and prosperity in the digital age (ITU, 2020).

This reality is also present in Nigeria. The future landscape of jobs is uncertain due to the impact of digital technologies. Consequently, Nigeria's education sector must adapt to accommodate new roles in ICT, e-commerce, and online services, as well as

evolving traditional industrial and artisan jobs. For instance, the advent of digital devices and mobile money will influence the roles of technicians, service providers, mechanics, and retailers, necessitating a range of digital skills from basic to advanced to remain competitive in the digital economy (World Bank Group, 2019). Similarly, consumers will need to develop digital competencies for shopping, payments, work, communication, and education. In addition, the recent advances in generative artificial intelligence make the knowledge of digital skills even more necessary to enter the job market.

In that context, the objective of this policy note is to provide an overview of the status of digital skills in Nigeria from a comparative perspective and understand how prepared educational institutions are to help develop the digital skills of the population. First, the note summarizes the status of access to digital infrastructure and equipment, a pre-condition to developing digital skills. The note also highlights the level of digital skills in the country based on survey data. Finally, the note summarizes the status of digital infrastructure in schools and educational facilities. The report can be seen as a complement to the digital skills section of the *Nigeria Digital Economy Diagnostic Report* (World Bank Group, 2019).

Data sources and methodology used in the analysis

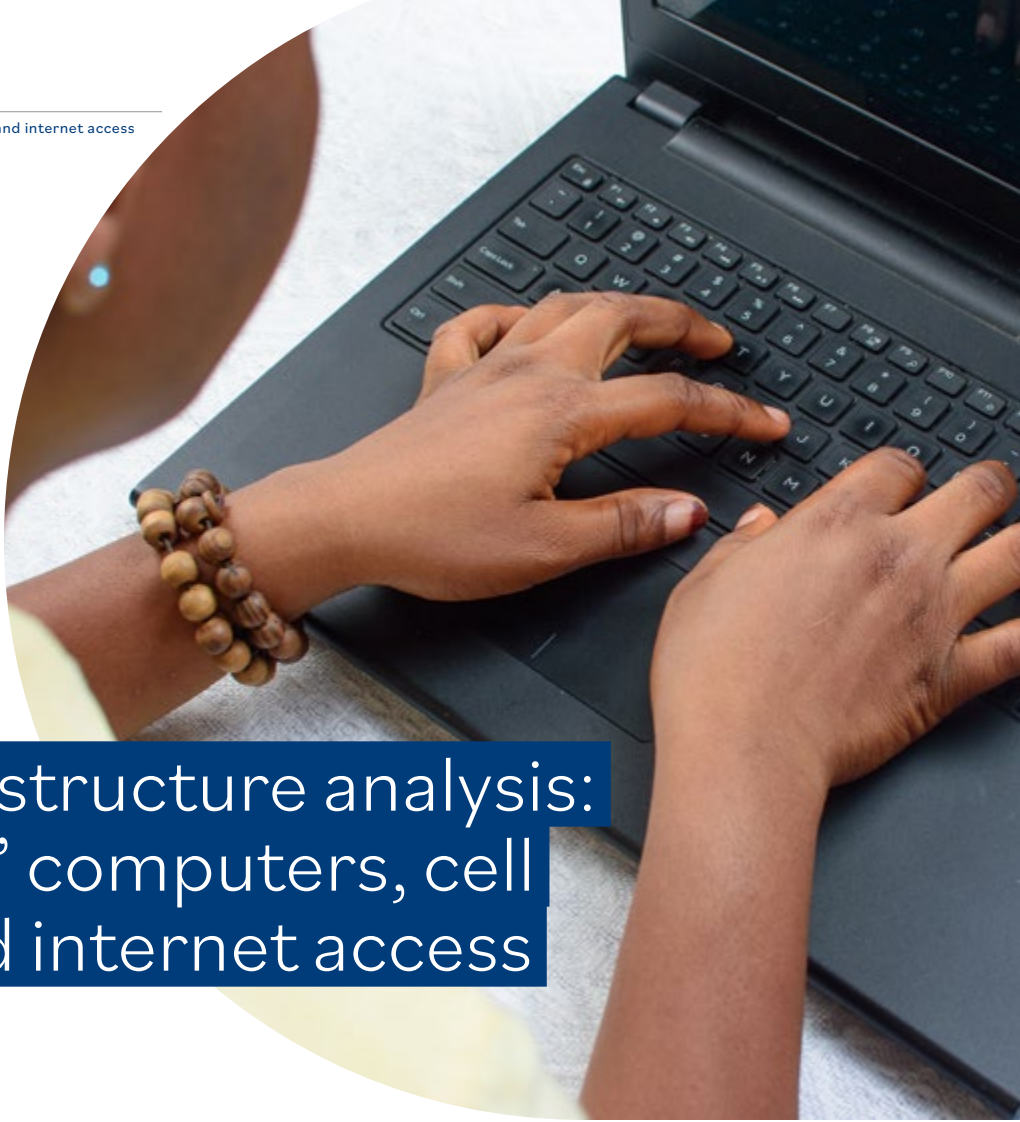
This report uses information derived from the data collected and published in the latest Multiple Indicator Cluster Survey (MICS) for Nigeria, Benin, Chad, São Tomé and Príncipe, Central African Republic, Guinea-Bissau, Democratic Republic of Congo, Ghana, Sierra Leone, and Togo. The MICS contains data for household computer and mobile phone ownership, as well as the use of computers, the internet, and computer-related tasks. This data is usually further disaggregated by gender, age group, location, and state. The report exploits data from the

International Telecommunication Union as a proxy of mobile network penetration across countries.

Additionally, the report uses the latest dataset from Nigeria's National Personnel Audit to assess the availability of digital skills infrastructure in all primary and junior secondary schools in Nigeria. To this end, the availability of laboratories and electronic devices is analyzed in absolute terms; but, more importantly, they are also assessed in terms of pupils, proprietor ownership, location, and state.

1

Digital infrastructure analysis: households' computers, cell phones, and internet access



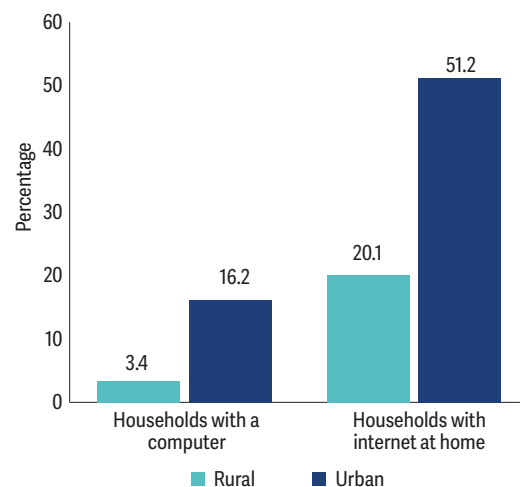
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Access to digital services and electronic and digital devices is necessary, though not sufficient, for people to acquire, maintain, and improve their digital skills. In Nigeria, only 9.4 percent of households own a computer, 34.6 percent have access to an internet network at home, and 66 percent of men and women own a mobile phone, according to the MICS 2021. These aggregate figures mask significant disparities and inequalities that emerge when considering spatial, gender, income, and education dimensions.

Households in urban areas have significantly higher access to computers, mobile phones, and the internet compared to those in rural areas. For instance, in urban settings up to 16 percent of households own a computer and 51 percent have internet access, whereas in rural areas these figures drop to only 3 percent and 20 percent, respectively. On average, 81 percent of men and women in urban centers own a mobile device, while this figure barely reaches 53 percent in rural areas. Significant differences also appear across states and regions, with southern

FIGURE 1.

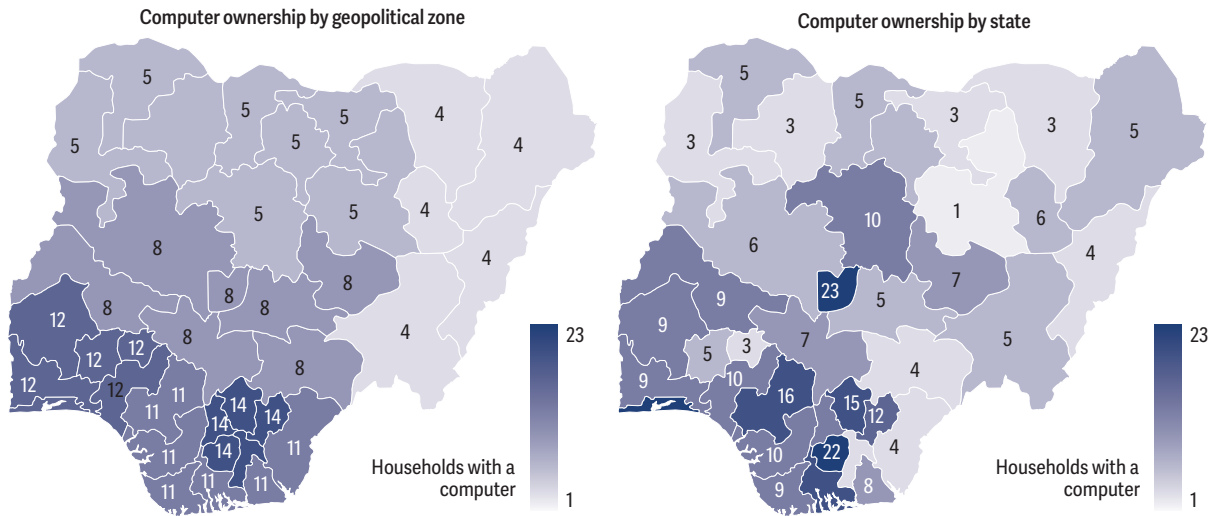
Families in urban areas have more access to computers and the internet than in rural areas



Source: Author's elaboration based on MICS.

FIGURE 2.

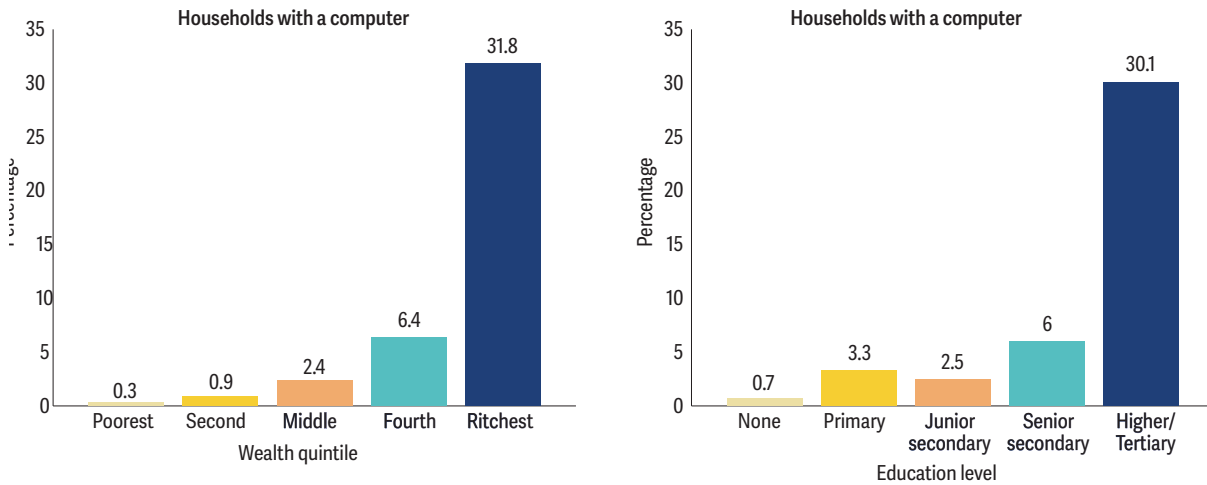
There is high regional- and state-level inequality in households' computer ownership



Source: Author's elaboration based on MICS.

FIGURE 3.

Computer ownership is highly correlated and close in absolute terms across education and wealth levels

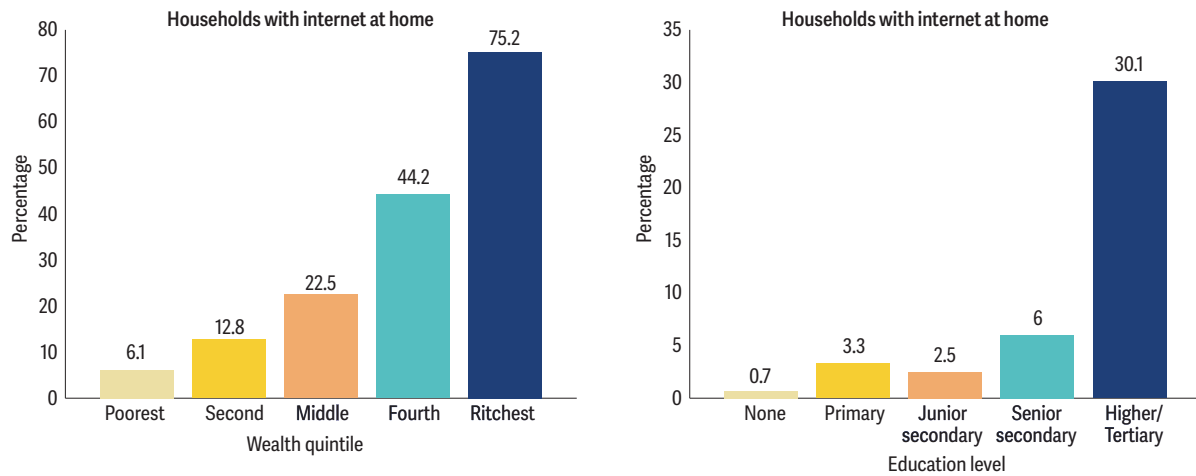


Source: Author's elaboration based on MICS.

states generally showing better access to digital infrastructure than their northern counterparts. For example, in the southwest region, 14 percent of households have a computer and 45 percent have internet access, compared to only 4 percent and 21 percent in the northeast, respectively. These disparities are even starker at the extremes, with states like Imo, Lagos, and Abuja FCT reporting 22 percent computer ownership at home, while states like Bauchi and Jigawa report only 1.4 percent and 2.5 percent, respectively. Figures 1 and 2 below illustrate computer access numbers for all states.

FIGURE 4.

Access to the internet is highly correlated and close in absolute terms across education and wealth levels



Source: Author's elaboration based on MICS.

Given that, generally, educational attainment and wealth are endogenously and positively related, it is not surprising to see that in more educated and wealthier households, device ownership and access penetration are positively correlated. What is remarkable is how these households are close in absolute terms and move *pari passu*. For example, only 0.7 percent and 6 percent of households with no education own a computer and can access the internet, respectively; and for those situated in the lowest wealth quintile, it is 0.3 percent and 6 percent. Meanwhile, in households with either tertiary education or belonging to the richest quintile, 30 and 32 percent have computers, respectively, and 68 and 75 percent have internet access, respectively.

2

Device ownership, accessibility, and utilization as enablers for digital skills



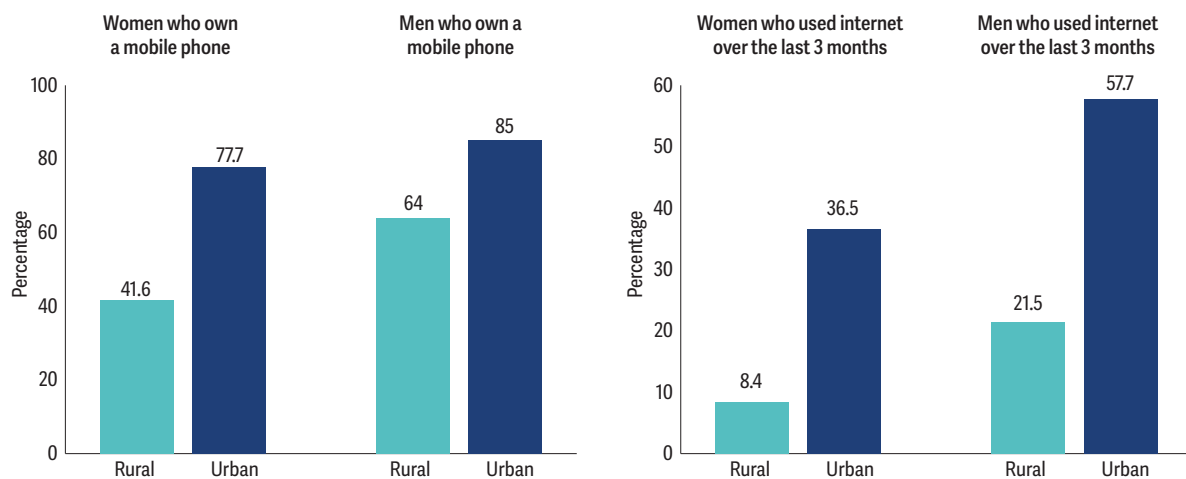
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Even though 66 percent of Nigerians, on average, own a mobile phone, this is the case for only 58 percent of women versus 73 percent of men. **Gender inequality in mobile phone ownership extends to the use of the internet: 21 percent of women used the internet, compared to 38 percent of men.**

Data also shows that living in rural areas equates to having, on average, less access to cell phones and the internet. As expected, this digital gender gap exists irrespective of living in urban or rural areas. What is noteworthy is that the drop for women is larger than for men: 42 percent of women in rural settings have a mobile phone, versus 78 percent in urban centers, equivalent to a 46 percent decrease. Meanwhile, for men this

FIGURE 5.

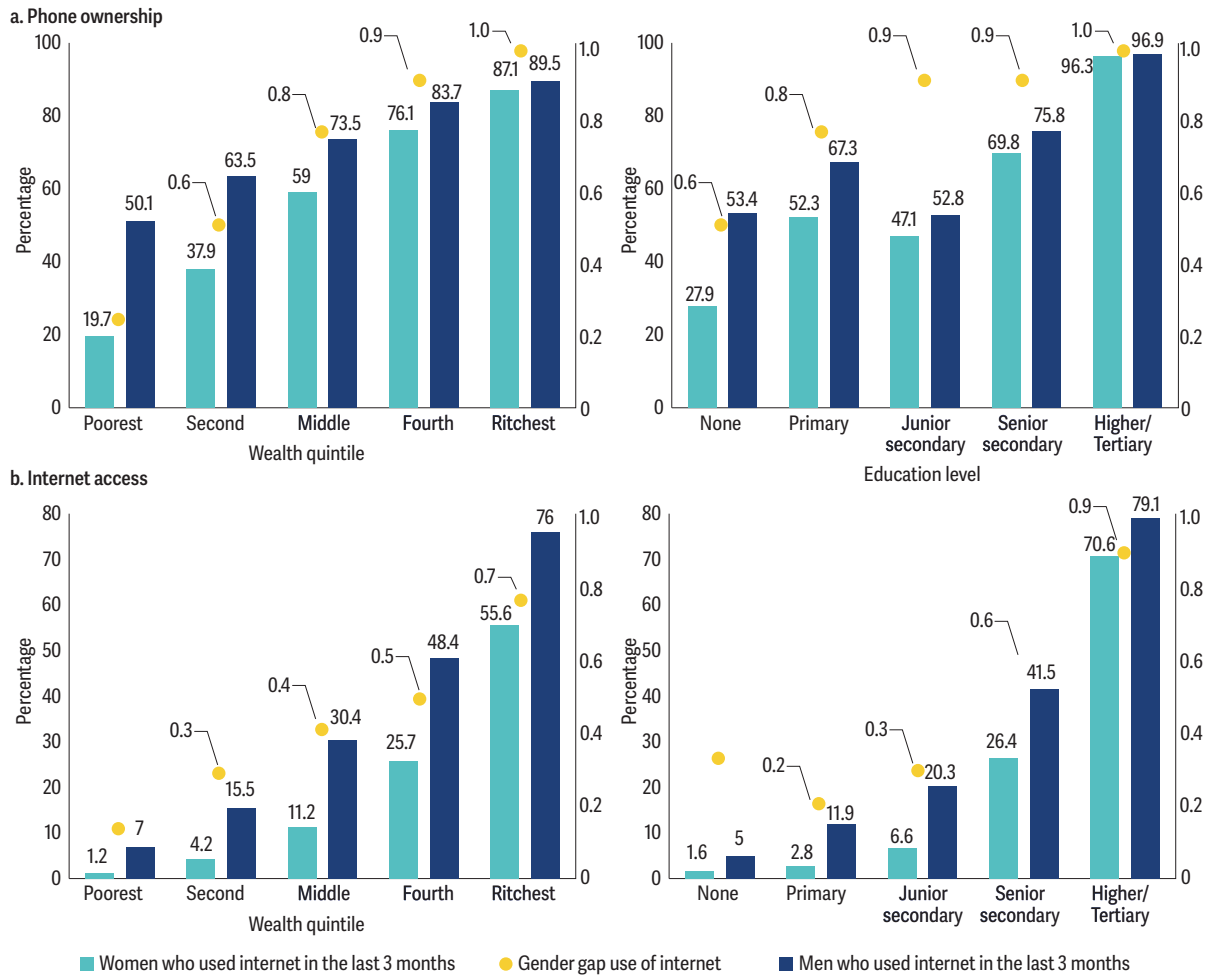
Women in rural areas are even more deprived of owning mobile devices and using the internet



Source: Author's elaboration based on MICS.

FIGURE 6.

Wealthier and more educated Nigerians get more access to cell phones and internet



Source: Author's elaboration based on MICS.

is 64 percent versus 85 percent, representing a 25 percent drop. The decrease in internet usage for the rural population is even larger: women and men in rural areas had 77 percent and 63 percent less internet usage, respectively, than in urban areas.

Mobile ownership and internet usage increase with education and wealth. Almost all women with tertiary or higher education own a mobile phone, and 71 percent have access to the internet. However, for those without education, this is only true for 28 percent and 2 percent, respectively. Likewise, up to 87 percent and 56 percent of women in the richest quintile own a cellphone and use the internet, respectively, versus only 20 percent and 1 percent of the poorest quintile. The data also shows that the gender gap persists: **for every level of education and wealth quintile, men are more likely than women to own a mobile phone and have access to the internet.** For example, up to 53 percent and 5 percent of men with no education own a cellphone and use the internet, which is 25 and 3 percentage points above females.

3

Basic digital skills in Nigeria: gender, educational, wealth, and spatial analysis



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The MICS 2021 also collects information about the execution of tasks that require digital skills. In this context, this section examines the percentage of Nigerians who, over the last three months, either (a) used a computer, or (b) created an electronic presentation using presentation software, including text, images, sound, video, or charts. The first indicator captures the most general and comprehensive proxy for digital skills, while the second captures the ability to perform more complex tasks. Both are utilized to provide a description and analysis of the state of digital skills in Nigeria.

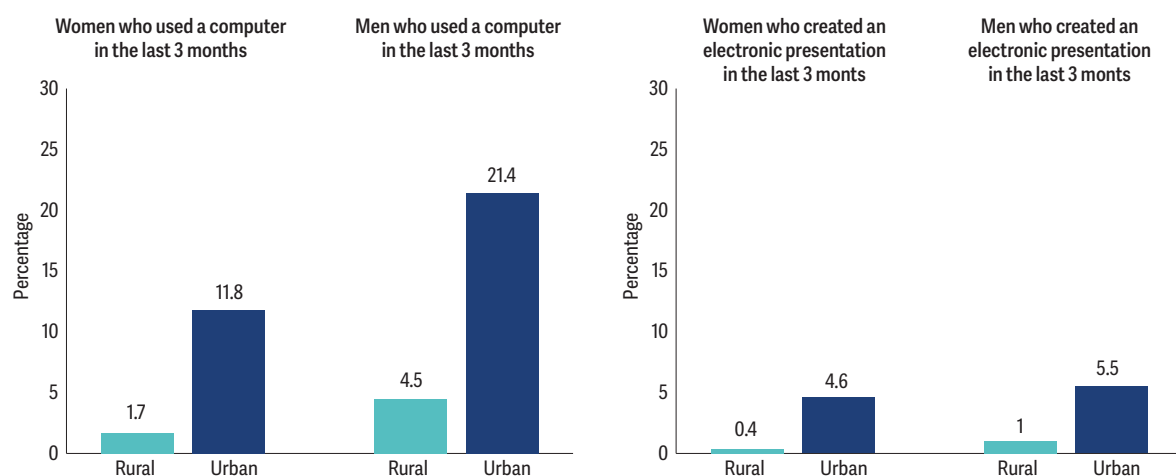
On average, 9 percent of people surveyed used a computer in the last three months, with men using it twice as much as women: 12 percent versus 6 percent. This gender gap persists even when location, region, education, and wealth levels are considered. For example, while in urban areas, 12 percent of women and 21 percent of men used a computer, in rural settings, this is only the case for 1.7 percent of women and 4 percent of men (Figure 8).

For more sophisticated tasks, the performance drops dramatically for both genders and locations. Women practically do not produce electronic presentations in either rural or urban areas, with only 5 and 6 percent of men doing so, respectively.

Lack of an education degree is almost akin to not using a computer at all for both men and women. This is particularly true for individuals in the poorest wealth quintile, with only 0.3 percent of females and 1 percent of males reporting computer use. Digital skills remain relatively low even among those at the top of the socioeconomic pyramid. For instance, among those with tertiary education, 33 percent of women and 43 percent of men have used a computer, but merely 13 percent and 11 percent, respectively, have created an electronic presentation. Similarly, only 8 percent of women and 10 percent of men in the wealthiest 20 percent have engaged in creating digital presentations (Figure 9).

FIGURE 8.

The use of computers and software is extremely low, particularly for women



Source: Author's elaboration based on MICS.

Even among individuals with completed junior secondary education, only 1 percent of women and 2 percent of men have used a computer in the past three months, with almost none having produced a digital presentation. The report further analyses the surveyed population (ages 15–49) by age group to better understand the low performance in digital skills and to assess if younger individuals possess better digital skills in the second decade of the twenty-first century (Table 1).

Computer usage and the creation of electronic presentations peak between the ages of 20 and 30. Within this age group, up to 9 percent of women and 18 percent of men have used a computer in the last three months, and only 3 percent of women and 5 percent of men have created digital presentations. By the time of senior secondary graduation, at ages 18–19, only 7 percent of girls and 8 percent of boys use computers, and 6 percent

TABLE 1.

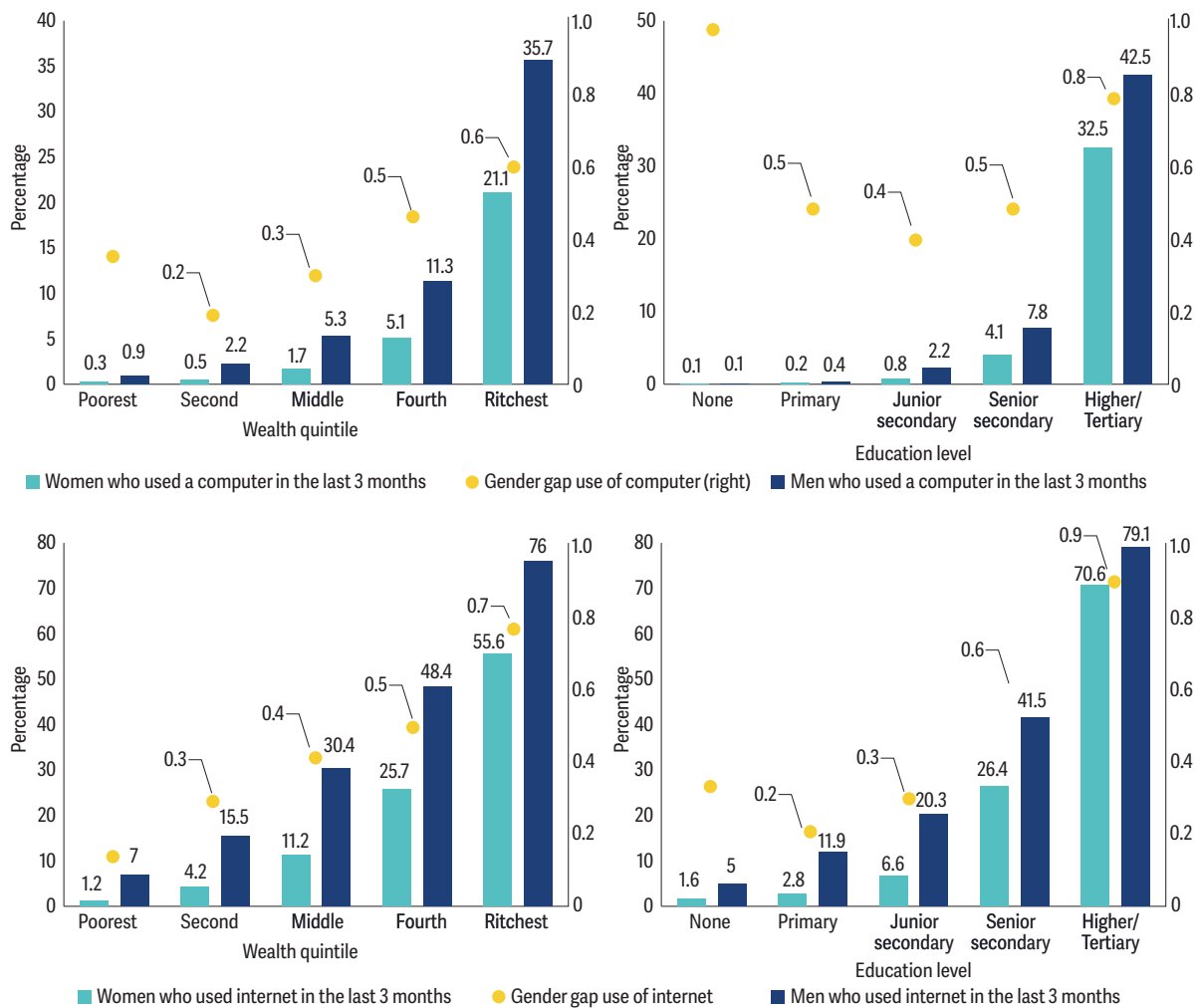
Computer use and electronic presentation creation, in percentages by age group

Age group	Women who used a computer in the last three months	Men who used a computer in the last three months	Gender gap, use of computer	Women who created an electronic presentation in the last three months	Men who created an electronic presentation in the last three months	Gender gap, electronic presentation
15–17	4.3	5.6	0.8	1.1	1.2	0.9
18–19	6.6	8	0.8	1.6	1.9	0.8
20–24	9.2	14.7	0.6	3.1	3	1.0
25–29	7.4	17.5	0.4	2.9	4.6	0.6
30–34	6.9	14.4	0.5	2.9	3.9	0.7
35–39	6.8	14.1	0.5	2.8	3	0.9
40–44	4.5	12.7	0.4	1.7	3.9	0.4
45–49	3	9	0.3	1.3	2.6	0.5

Source: Author's elaboration based on MICS.

FIGURE 9.

The use of computers and digital skills is extremely low, even for senior secondary graduates and the wealthier



Source: Author's elaboration based on MICS.

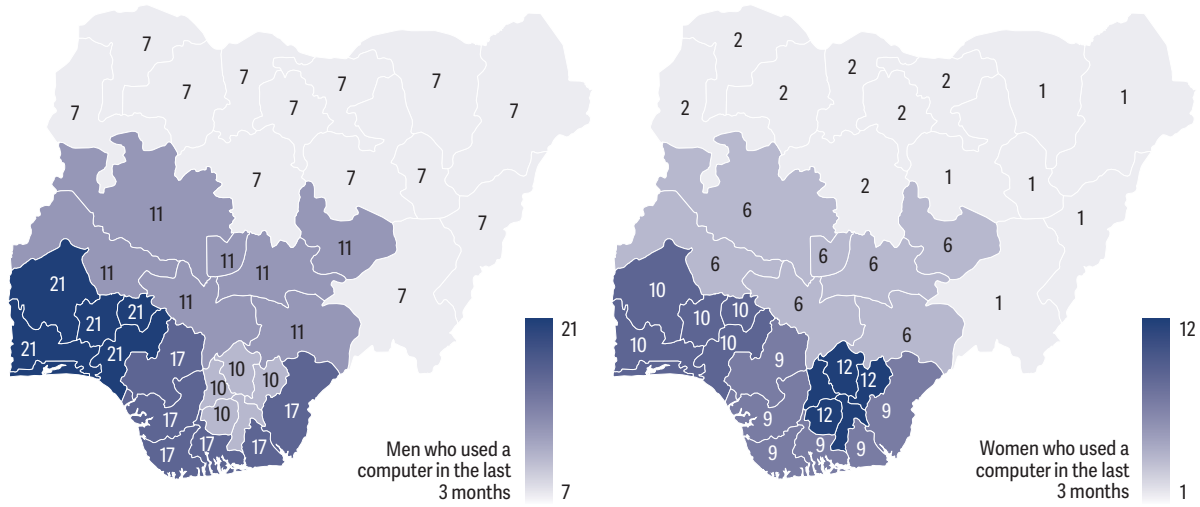
of girls and 7 percent of boys use presentation software. These figures indicate that young individuals do not significantly outperform older generations in digital skills. Also noteworthy is that the gender gap in digital skills is relatively narrow among youth but widens as individuals transition into adulthood. The gender gaps are partly encouraged by social norms. In Northern Nigeria, for instance, 61 percent of fathers discourage their daughters from using the Internet (CITAD, 2021).

Regional analysis shows very low digital skills, particularly for women, in the northeastern and northwestern regions of Nigeria. In the northeast and northwest, over a three-month period, only 1.5 percent of women used a computer, and 0.5 percent created an electronic presentation, versus 7 percent and 2 percent of men, respectively (Figures 9 and 10). Moreover, in these two regions, a man is five times more likely than a woman

to have used a computer or created a digital presentation. On the other hand, in southern regions, the use of computers ranges from 9 to 11 percent for women and from 10 to 21 percent for men over three months. It is noteworthy that in the southeast, more women than men used a computer and produced a presentation, hence reversing the gender gap.

FIGURE 10.

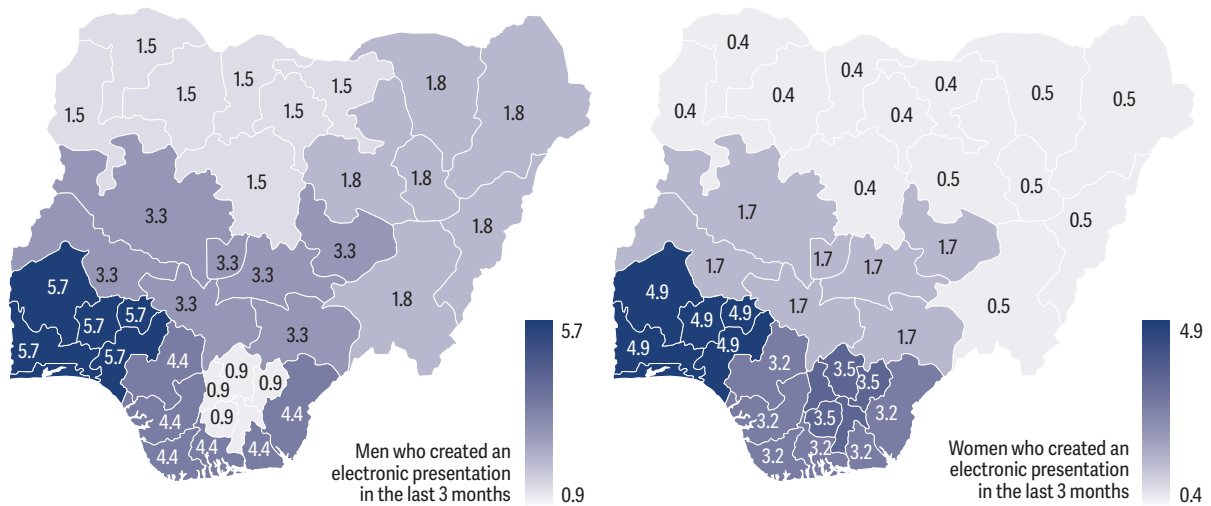
Men and women in southern regions are much more likely to possess digital skills



Source: Author's elaboration based on MICS.

FIGURE 11.

Fewer men and women perform more complex skills-related tasks



Source: Author's elaboration based on MICS.

4

Where does Nigeria stand? An international comparison



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To evaluate Nigeria's international standing in digital skills, this analysis utilizes the latest available data from the Multiple Indicator Cluster Surveys (MICS), which provides insights into digital infrastructure and digital skills-related tasks. This section compares Nigeria with nine other countries in West and Central Africa: Benin, Chad, São Tomé and Príncipe, Central African Republic, Guinea-Bissau, Democratic Republic of Congo, Ghana, Sierra Leone, and Togo.

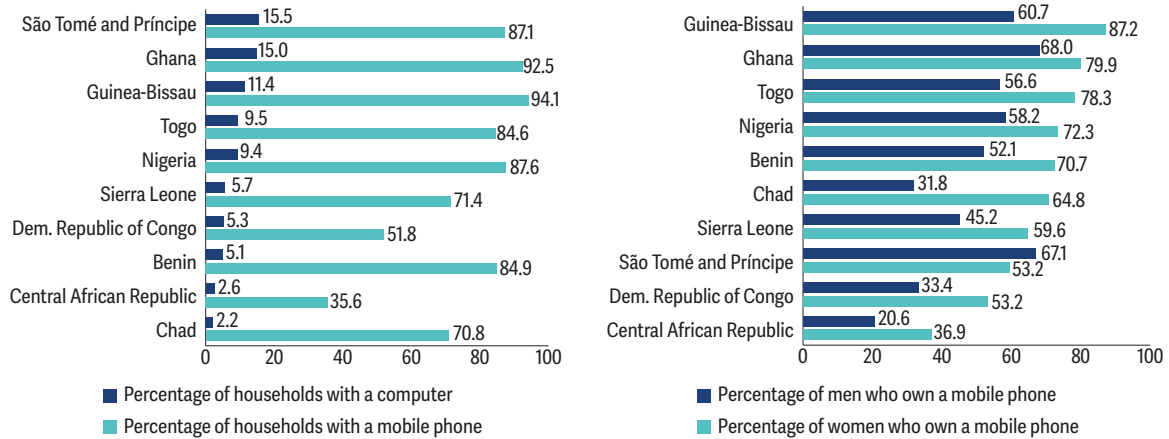
Nigeria and Togo share the same level of computer ownership at home, with 9 percent of households having a computer. In contrast, São Tomé and Príncipe and Ghana report higher levels of computer ownership, reaching approximately 15 percent of homes. At the lower end of the spectrum, Chad and the Central African Republic have only 2 percent and 3 percent of households with computers, respectively. According to data from the International Telecommunication Union (ITU, 2020), Nigeria ranks fourth in mobile subscriptions, with 102 subscriptions per 100 people, following Benin, Ghana, and Guinea-Bissau, which leads with 126 subscriptions per 100 people. MICS data reflects similar trends in mobile phone penetration, with 94 percent and 93 percent of households in Guinea-Bissau and Ghana, respectively, owning a mobile phone, while 88 percent of Nigerian households own one. The Democratic Republic of Congo and the Central African Republic have the lowest mobile phone penetration, at 36 percent and 52 percent, respectively (Figure 12).

When examining the gender gap in mobile phone ownership (measured as the ratio of women to men), São Tomé and Príncipe displays a reversed gender gap with a ratio of 1.1, indicating higher female ownership. Ghana approaches gender parity with a ratio of 0.9, followed by Nigeria at 0.8. The highest gender inequality is observed in Chad, with a ratio of 0.4.

Looking at the use of a computer in the last three months as a proxy for digital skills, men in Nigeria rank 5th out of 10. While 12 percent of Nigerian men used a computer, 35 percent and 21 percent did in São Tomé and Príncipe, and Ghana, respectively. It is interesting to note that for women, with 6.4 percent, Nigeria ranks 4th, after São Tomé and Príncipe (18 percent), and Ghana (7 percent). In fact, higher computer usage for Nigerian women compared to men reflects the narrowest gender gap across all 10 countries. However, even in Nigeria, a man is two times more likely than a woman to use a computer.

FIGURE 12.

Nigeria can increase households' computer and mobile phone ownership relative to its peers

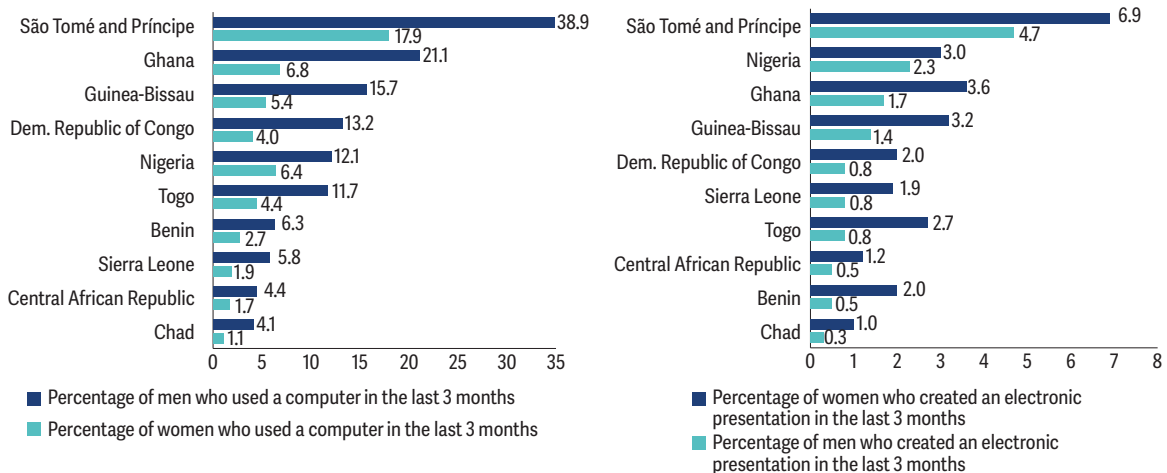


Source: Author's elaboration based on MICS.

For more complex tasks, the country shows better international performance. Up to 3 percent of men created an electronic presentation, close to Ghana (3.2 percent) and Guinea-Bissau (3.6 percent) but far below São Tomé and Príncipe (7 percent). Despite showing lower values than men, Nigerian women perform relatively better in this international comparison. With 2.3 percent of women producing a presentation, they rank only below São Tomé and Príncipe (4.7 percent) and far above Chad (0.3 percent), which is the worst-performing country. The relatively higher computer usage for Nigerian women translates into having a relatively small gender gap across countries.

FIGURE 13.

Nigerians in general use computers and internet less than their regional peers, but Nigerian women use computers more



Source: Author's elaboration based on MICS.

5



Digital infrastructure in primary and junior secondary schools

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This section exploits the National Personnel Audit (NPA) database conducted in 2022 to provide an assessment of the existing digital skills-related infrastructure in primary and junior secondary schools in Nigeria. Unfortunately, the data does not include senior secondary schools, which are expected to have more computer labs.

According to this data, in the country, nearly 30,400,000 children were enrolled in basic education in a total of approximately 171,000 schools. These schools have 50,000 laboratories in use and 3,000 that cannot be used due to bad conditions. According to the same data, a stock of almost 600,000 digital devices (desktop computers, laptops, and tablets¹) are available in these educational facilities, but 16 percent were not working.

These aggregate figures enclose disparities at the regional, state, and school levels. To make this analysis as exhaustive as possible, this section looks at the availability and condition of laboratories and digital devices, combined with the student's universe, disaggregated by region, state, location, and ownership.

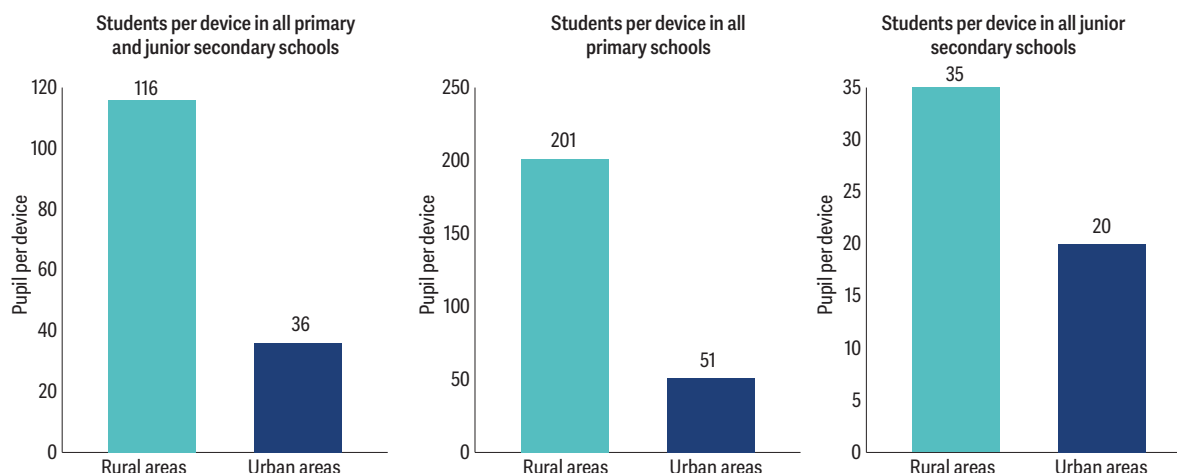
Access to laboratories and digital devices in primary and junior secondary schools

Out of 50,000 laboratories in good condition across Nigeria, the majority are located in junior secondary schools: 15,813 are in primary schools, and almost 35,000 are in junior secondary schools. Meanwhile, digital devices are almost equally distributed across primary and junior secondary schools: out of the 500,000 devices, 50.3 percent were in the former and the remaining in the latter. However, the distribution of labs and stock of digital devices should be analyzed by considering the enrollment distribution and the actual use of computers aimed at students from primary 1 to junior secondary 3. For instance, enrollment reached 24,210,000 in primary school compared to 6,200,000 in junior secondary schools. Therefore, **while there are, on average, 61 students per**

¹ For simplicity, we use the terms “devices” and “computers” interchangeably.

FIGURE 14.

Nigerian schools lack enough computers, particularly in primary establishments and rural settings



Source: authors' elaboration based on NPA 2022

computer across all Nigerian basic education schools, this figure jumps to 96 in primary schools, but it drops to 25 students per device in junior secondary schools.

In line with findings from the previous section, students in urban areas are more likely to benefit from digital devices than students attending schools in rural areas. Data show that schools in urban territories have 1.2 times more computers than in rural territories. In absolute terms, this means that while the former have almost 345,000 computers, the latter have only 155,000. This inequality is exacerbated when considering that total enrollment is much larger than in urban settings (18 million) than in rural settings (12.4 million).

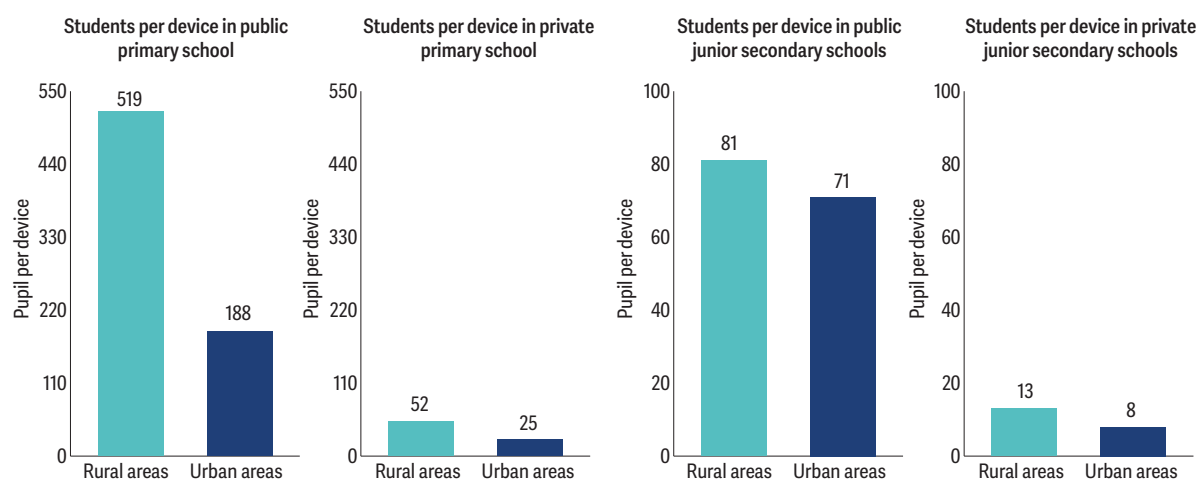
The gap in computer availability is much larger in primary schools than in junior secondary schools, and within this category, much larger in rural than urban areas. Primary schools in rural settings exhibit 201 pupils per device, versus 51 pupils per device in urban settings. While in absolute terms, these numbers are lower for junior secondary, the gap still exists, with 35 students per computer in rural schools versus 20 students per computer in urban schools (Figure 14).

Digital devices in public and private basic education facilities

Students enrolled in basic education in private schools are more likely to have a computer available than those enrolled in public schools. According to the NPA data, there are close to 67,000 private primary schools with 199,000 devices, yielding 32 pupils per device. Even in private schools, pupils living in rural areas are more deprived of device accessibility: there are 51 pupils per device in these schools, while in urban areas there are 25 pupils per device. The contrast with public primary establishments is high. In total, there are about 65,800 schools with 52,300 devices, yielding 340 pupils per computer. Public primary schools in urban areas show 188 children per computer, and in rural areas this figure rises to 519. **In conclusion, public primary schools have 8–10 times fewer computers per student than private schools, both in rural and urban settings.**

FIGURE 15.

Students in public schools are more deprived of access to computers



Source: authors' elaboration based on NPA 2022

The availability of computers in junior secondary schools improves significantly, especially in private schools. With a total of 24,300 schools under private ownership, with access to 191,000 computers, there are 10 students per device. Private junior secondary schools in rural conglomerates have 13 students per device and 8 students per device in urban areas. However, public junior secondary schools host 81 students per device in rural areas, and 71 in urban areas. Thus, while students' access to a computer is highly unequal between public and private schools, overall availability of computers is higher in junior secondary than in primary schools (Figure 15).

Geographic availability of digital devices in public and private basic education facilities

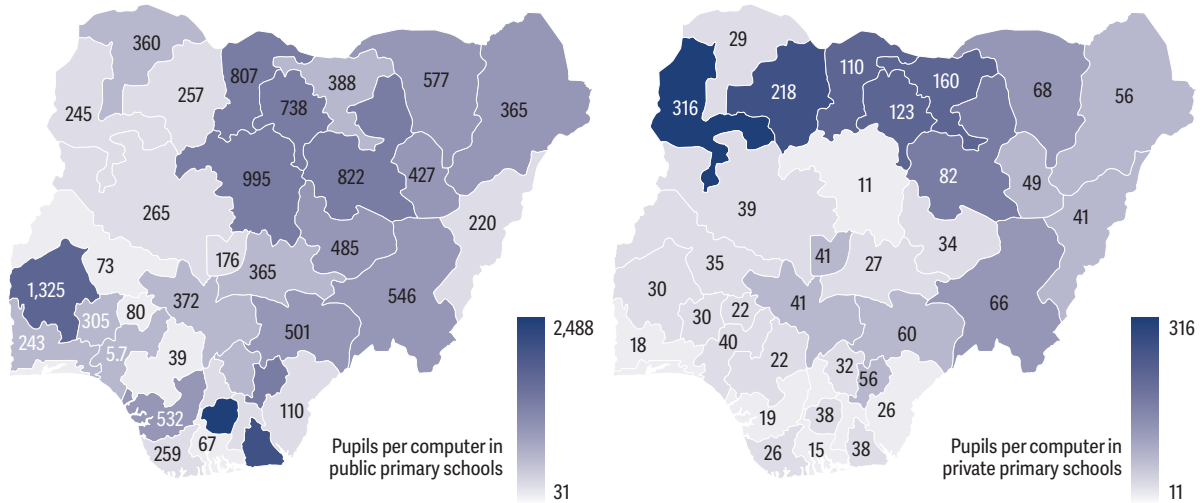
Analysis of the NPA data confirms a high level of geographic heterogeneity in students' access to computers in both primary and junior secondary schools. As expected, northern states generally have fewer computers per student than southern states; this geographic gap persists across public and private public schools.

For instance, the number of children per device in public primary schools in Kaduna, Katsina, and Kano (northern states) are respectively 995, 807, and 738. Meanwhile, these are 39, 80, and 67 in Edo, Ekiti, and Rivers (southern states). However, it is also important to highlight that some southern states like Imo (2,488) and Akwa-Ibom (1,599) seem to have almost no computers in primary establishments. Devices per pupil improve significantly in private primary schools, but geographical gaps persist. For example, Kaduna, Katsina, and Kano states have 29, 110, and 123 computers per pupil, respectively. On the other hand, Edo, Ekiti, and Rivers show 22, 22, and 15, respectively.

The analysis of junior secondary schools yields similar conclusions: generally, schools in northern states have many fewer computers per student than southern schools, and students in public junior secondary schools are more deprived than those in private establishments. Moreover, it is interesting to note that in junior secondary devices are much more available in junior secondary than in primary schools, for both public and private ownership.

FIGURE 16.

Access to a computer is highly unequal across states, and by school ownership

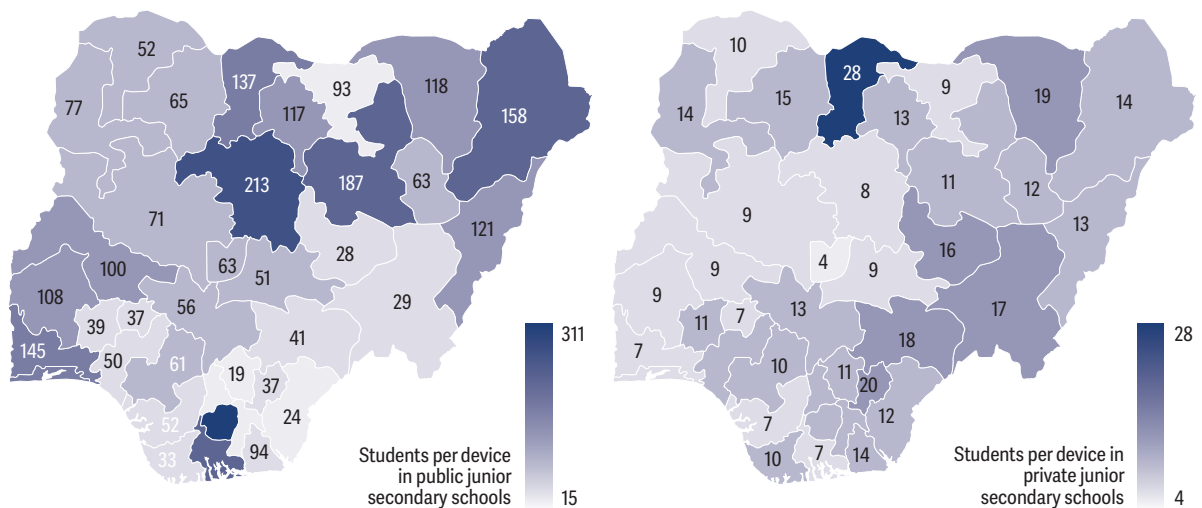


Source: authors' elaboration based on NPA 2022

For example, in Katsina, Kaduna, and Borno (northern states), public junior secondary schools have 137, 213, and 158 children per device, respectively. However, these figures improve to 28, 8, and 14 students per device in private junior secondary schools. In southern states like Edo, Ekiti, and Delta, public junior secondary schools show 61, 37, and 52 children per device, respectively. Nevertheless, for private junior secondary schools, these figures improve to 10, 7, and 7 children per device, respectively.

FIGURE 17.

Paying for a private junior secondary school improves dramatically computer availability



Source: authors' elaboration based on NPA 2022

6

Conclusions



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Nigeria exhibits generally low levels of computer ownership and internet access, even below those of other countries with similar income levels in West Africa. Given these figures and Nigeria's broader context, it is unsurprising that adoption and use of digital skills in the country are also low, especially among women and individuals living in rural areas. Despite the existence of gender and location gaps, this report highlights significant geographic and educational heterogeneity. Educational attainment, in particular, emerges as the most critical factor in achieving digital skills equity.

The overall availability of digital devices remains limited in basic education institutions, particularly in rural, publicly owned, and primary-level schools. While geographical disparities persist, these differences are less pronounced in privately owned educational facilities. This disparity underscores the need for targeted interventions to ensure equitable access to digital resources across all regions and school types.

The low levels of digital skills are concerning, given the growing demand for such skills in the labor market. By 2030, Nigeria's labor force will require approximately 28 million workers trained in digital skills. This means that around 45 percent of all jobs will require digital skills. Most of these jobs will be in the services industry (19.5 million), but manufacturing (2.6 million) and agriculture (6.2 million) will also need a growing supply of workers equipped with digital skills (IFC, 2021). The COVID-19 pandemic has accelerated this trend, with many jobs incorporating digital aspects at a higher rate than expected.

Furthermore, digital skills are not just a requirement for employment; they are essential for participating fully in society. Digital literacy enables individuals to access information, utilize online services, and engage in continuous learning opportunities. As such, improving digital skills across the population will have broad socioeconomic benefits, including enhanced productivity, innovation, and inclusive growth.

Addressing the digital skills gap requires a multifaceted approach. While the main objective of this note is not to provide recommendations, a few elements are worth highlighting. First, substantial investment in digital infrastructure is needed, particularly in underserved rural areas and public schools. Ensuring that all students have access to computers, the internet, and digital learning tools is fundamental to building a digitally literate society. Public-private partnerships could play a crucial role in mobilizing resources and expertise to bridge this gap.

Second, educational curricula need to be updated to include comprehensive digital skills training from an early age. Integrating digital literacy into primary and secondary education will equip students with the competencies they need to navigate the digital world. Teacher training programs should also be enhanced to ensure that educators are proficient in digital technologies and can effectively teach these skills to their students. Two recent policies seem to be a step in the right direction: the National Digital Skills Framework and the Digital Learning Policy, both approved in 2023. However, there seems to be a significant gap between the policies and their implementation.

Third, to address the digital divide between men and women, gender-specific interventions should be prioritized. Programs aimed at encouraging girls and women to pursue digital education and careers in technology should be prioritized. Such initiatives include creating safe and supportive learning environments, providing mentorship opportunities, and challenging societal norms that discourage women from engaging with technology.

Additionally, lifelong learning initiatives should be promoted to ensure that individuals of all ages can continuously update their digital skills. As technology evolves, the skills required in the labor market will also change. Therefore, providing opportunities for ongoing education and training is essential to keep the workforce adaptable and competitive.

Investing in digital skills is crucial to ensuring that Nigerians can access a competitive labor market and that the country can diversify its economy to compete globally. Although the evidence from the literature examining the labor market returns of digital skills in developing countries is nascent, a few studies show positive effects on employment and earnings. For example, a study from India shows that individuals with digital skills earn 10.9 percent higher wages than those without digital skills (Smith, 2016). Studies in developed countries estimate a 3–10 percent increase in earnings (World Bank, 2023).

In conclusion, the digital skills landscape in Nigeria presents both challenges and opportunities. While the current levels of digital infrastructure and skills are low, strategic investments and policy interventions can significantly improve this scenario. By prioritizing digital education, enhancing infrastructure, and addressing gender and geographic disparities, Nigeria can build a digitally literate population ready to meet the demands of the future digital economy. The actions taken today will have lasting impacts on the nation's economic development, social inclusion, and global competitiveness.

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