Limited Internet access in Zimbabwe a major hurdle for remote learning during pandemic

Afrobarometer Dispatch No. 371 | Simangele Moyo-Nyede and Stephen Ndima

Summary
An estimated 1.59 billion students in 194 countries, or 91.3% of the world’s student population, have been affected by school closures as a result of the COVID-19 pandemic (UNESCO, 2020). That includes 297 million students across the African continent and 4.13 million in Zimbabwe. With support from the World Bank and others, countries are trying to keep education going through remote learning via radio, television, the Internet, and social media (Kuwonu, 2020; World Bank, 2020). In many places, however, inadequate electricity supply, low Internet connectivity, the high cost of data, and an urban-rural digital divide threaten to leave millions of students behind. According to UNESCO (2020), 89% of learners in sub-Saharan Africa do not have access to household computers, and 82% lack Internet access. Even traditional tools such as radio and television can be difficult to access for many.

In Zimbabwe, as the number of COVID-19 cases continues to increase slowly, Parliament has cautioned against a quick reopening of schools (CGNT, 2020). The government is encouraging the use of digital platforms to provide remote-learning services (World Bank, 2020). For example, the private Higher Life Foundation has provided free access to its online Ruzivo learning platform, though uptake has been limited. In its Education Sector Response Strategy, the Ministry of Education plans to focus on ensuring the continuity of learning by providing remote-learning services via radio programming, digital/online resources, and the distribution of supplementary learning materials (Zimbabwe Education Cluster, 2020).

Is this a viable option for students in Zimbabwe? Afrobarometer survey data from 2017 and 2018 show that a majority of Zimbabwean households didn’t have mobile phones with Internet access, computers, or reliable electricity supply. Even among the youngest adults, only one in three regularly went online. While these numbers may have improved in the past two years, they suggest the enormous hurdles that young Zimbabweans would face in participating in online learning (e-learning).

Radio and television ownership is more widespread, but even remote learning via these traditional channels would exclude significant portions of the population, especially in rural areas.

Afrobarometer surveys
Afrobarometer is a pan-African, nonpartisan research network that provides reliable data on African experiences and evaluations of democracy, governance, and quality of life. Seven rounds of surveys were completed in up to 38 countries between 1999 and 2018. Round 8 surveys in 2019/2020 are planned in at least 35 countries. Afrobarometer conducts face-to-

---

1 As of 29 June 2020, affected learners stood at 1.07 billion, or 61% of the world’s student population. Country-wide school closures were in effect in 112 countries, while schools in 82 countries had reopened fully or locally. In Africa, only Botswana and Niger had fully reopened schools.
face interviews in the language of the respondent’s choice with nationally representative samples.

The Afrobarometer team in Zimbabwe, led by Mass Public Opinion Institute and commissioned by the Institute for Justice and Reconciliation, interviewed 2,400 adult Zimbabweans in each of two pre-election surveys between late April and early July 2018. A sample of this size yields country-level results with a margin of error of +/-2 percentage points at a 95% confidence level. The most recent full Afrobarometer survey in Zimbabwe was conducted in January-February 2017 with a sample size of 1,200, producing a margin of error of +/-3 percentage points.

Key findings

▪ As of July 2018, more than nine out of 10 Zimbabwean households (95%) had cell phones, while 77% had radios, 49% had televisions, and only 23% had computers.

▪ Cell-phone service was available in almost all urban zones as of 2017, but 15% of rural areas did not have coverage.

▪ Fewer than half (43%) of cell-phone owners – and only 28% in rural areas – said their phones had access to the Internet.

▪ Only one-fourth of Zimbabweans said they used the Internet “every day” (14%) or “a few times a week” (11%). Six out of 10 (62%) said they “never” went online.

▪ As of mid-2018, almost half (45%) of Zimbabweans lived in areas without a public electricity grid. And only about three out of 10 respondents (31%) said their home had an electric connection that worked “most” or “all” of the time.

Access to communications devices

Afrobarometer asked survey respondents whether they personally own certain communications devices that would be needed to access e-learning programs, and if not, whether someone else in the household owns them. While Afrobarometer interviews only adults (aged 18 or older), findings provide an overview of the resources to which school-age children might have access at the household level.

As of July 2018, more than nine out of 10 Zimbabwean households (95%) had cell phones, more than three-fourths (77%) had radios, and about half (49%) had televisions. Far fewer households (23%) had computers (Figure 1).

Cell-phone ownership was high across key socio-demographic groups and provinces; only among Matabeleland South residents and among senior citizens did more than one in 10 say they had no mobile phone in the household.

As might be expected, household ownership of computers was far more prevalent in cities (51%) than in rural areas (7%) and among the highly educated (80%) compared to their less-educated counterparts (3%-19%) (Figure 2). While about half of households in Bulawayo (53%) and Harare (48%) had computers, the same was true for only 7% of those in Masvingo and Manicaland.

Radios were widely accessible within most socio-demographic groups, although more than one-third of residents in Masvingo (39%) and Matabeleland South (34%) said their households did not have a radio. Other groups in which radio ownership was less common include senior citizens (33% with no household access), rural residents (27%), and women (27%) (Figure 3).

Lack of access to a television shows a similar pattern, but at a much high level, as more than half (51%) of Zimbabweans reported no TV set in the household. This was particularly
Figure 1: Household access to communications devices  |  Zimbabwe  |  July 2018

Respondents were asked: Which of these things do you personally own? [If “no”:] Does anyone else in your household own one?

Figure 2: Access to computers  |  by socio-demographic group  |  Zimbabwe  |  July 2018

Respondents were asked: Which of these things do you personally own: Computer? [If “no”:] Does anyone else in your household own one? (Figure combines personal and household ownership.)
Figure 3: No household access to radio and television | Zimbabwe | July 2018

Respondents were asked: Which of these things do you personally own? [If "no":] Does anyone else in your household own one? (% who said no one in the households owns the device)

Clearly these numbers suggest that on average across the country, mobile phones and radio would be far more accessible as platforms for e-learning than television, although TV does offer very high penetration (88%) in urban areas. Computers are inaccessible to most Zimbabweans.

Access to cell phone service and smartphones

While most Zimbabweans have mobile phones, not all phone owners have access to cell-phone service and the Internet.

Afrobarometer survey enumerators, who recorded the presence or absence of key infrastructure in each community they visited, found that nine out of 10 enumeration areas (90%) in Zimbabwe had mobile phone service (Figure 4).

While almost all urban enumeration areas had mobile phone service (99%), about one in seven rural zones did not (15%) (Figure 5). By province, Bulawayo and Manicaland had 100% coverage, but significant proportions of residents in Mashonaland Central (25%),...
Matabeleland South (18%), Mashonaland West (17%), and Midlands (17%) lived in zones without cell phone service.

**Figure 4: Availability of cell phone services in the enumeration area** | Zimbabwe | May 2018

Interviewers were asked to record: Are the following services present in the primary sampling unit/enumeration area: Mobile phone service?

**Figure 5: Availability of cell phone service** | by urban-rural location and province | Zimbabwe | May 2018

Interviewers were asked to record: Are the following services present in the primary sampling unit/enumeration area: Mobile phone service?
Daily use of mobile phones was high as well: Three-fourths (75%) of respondents reported that they use cell phones every day, in addition to 15% who use them a few times a week. Only one in 20 respondents (5%) said they never use a mobile phone (Figure 6).

Mobile-phone use was higher in cities than in rural areas (97% vs. 85% who use them at least “a few times a week”). Middle-aged respondents were just as likely to frequently use cell phones as youth (92%).

**Figure 6: Mobile phone usage | Zimbabwe | July 2018**

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Every day</td>
<td>75%</td>
</tr>
<tr>
<td>A few times a week</td>
<td>15%</td>
</tr>
<tr>
<td>A few times a month</td>
<td>4%</td>
</tr>
<tr>
<td>Less than once a month</td>
<td>2%</td>
</tr>
<tr>
<td>Never</td>
<td>5%</td>
</tr>
</tbody>
</table>

**Respondents were asked:** How often do you use a mobile phone?

But while most Zimbabweans had cell phones and used them regularly, fewer than half (43%) of cell-phone owners said in 2017 that their phones had access to the Internet (Figure 7). While this proportion may well have increased since the 2017 survey, the findings suggest that a large proportion of students are probably unable to access Internet-based instruction via mobile phone.

**Figure 7: Mobile phone access to the Internet | Zimbabwe | 2017**

- 43% Phone has Internet access
- 56% Phone does not have Internet access
- 1% Don’t know

**Respondents who said they owned a mobile phone were asked:** Does your phone have access to the Internet? (Respondents who said they did not own a mobile phone are excluded.)
Younger cell-phone owners were far more likely to say their phones could access the Internet (57%) than their elders (Figure 8). So were urban respondents (64%. vs. 28% of rural residents). While more than six in 10 cell-phone owners in Harare (65%) and Bulawayo (61%) reported being able to access the Internet, the same was true of only 35% in Mashonaland West and Mashonaland East and 29% in Masvingo.

Figure 8: Mobile phone access to the Internet | by socio-demographic group | Zimbabwe | 2017

<table>
<thead>
<tr>
<th>Socio-demographic group</th>
<th>Phone has Internet access</th>
<th>Phone does not have Internet access</th>
</tr>
</thead>
<tbody>
<tr>
<td>18-35 years</td>
<td>57%</td>
<td>43%</td>
</tr>
<tr>
<td>36-55 years</td>
<td>33%</td>
<td>66%</td>
</tr>
<tr>
<td>56+ years</td>
<td>15%</td>
<td>84%</td>
</tr>
<tr>
<td>Urban</td>
<td>64%</td>
<td>36%</td>
</tr>
<tr>
<td>Rural</td>
<td>28%</td>
<td>71%</td>
</tr>
<tr>
<td>Men</td>
<td>45%</td>
<td>55%</td>
</tr>
<tr>
<td>Women</td>
<td>41%</td>
<td>58%</td>
</tr>
<tr>
<td>Harare</td>
<td>65%</td>
<td>35%</td>
</tr>
<tr>
<td>Bulawayo</td>
<td>61%</td>
<td>37%</td>
</tr>
<tr>
<td>Matabeleland North</td>
<td>43%</td>
<td>57%</td>
</tr>
<tr>
<td>Matabeleland South</td>
<td>37%</td>
<td>59%</td>
</tr>
<tr>
<td>Mashonaland Central</td>
<td>38%</td>
<td>61%</td>
</tr>
<tr>
<td>Midlands</td>
<td>37%</td>
<td>62%</td>
</tr>
<tr>
<td>Manicaland</td>
<td>36%</td>
<td>64%</td>
</tr>
<tr>
<td>Mashonaland West</td>
<td>35%</td>
<td>65%</td>
</tr>
<tr>
<td>Mashonaland East</td>
<td>35%</td>
<td>65%</td>
</tr>
<tr>
<td>Masvingo</td>
<td>29%</td>
<td>70%</td>
</tr>
</tbody>
</table>

Respondents who said they owned a mobile phone were asked: Does your phone have access to the Internet? (Respondents who said they do not own a mobile phone are excluded.)

Internet usage

Whether by mobile phone or computer at home or elsewhere, as of mid-2018, only one-fourth of Zimbabweans said they used the Internet “every day” (14%) or “a few times a week” (11%) (Figure 9). A solid majority (62%) said they “never” went online.

Regular Internet usage was higher among younger respondents (34%), among men (29%), and particularly among urban residents (49%, vs. just 11% among their rural counterparts). But in six of the country’s 10 provinces, fewer than one in five residents said they went online at least a few times a week (Figure 10).

While the proportion of Internet users continues to grow across the continent, large swaths of Zimbabwean students would still be excluded from online learning, especially in rural areas.
Availability of electricity

Another barrier to participating in remote-learning opportunities is a lack of electricity to power the necessary devices. As of May 2018, Afrobarometer enumerators found that only a slim majority (54%) of survey respondents lived in areas served by a public electricity grid. In rural areas, about seven in 10 respondents (69%) did not enjoy the possibility of accessing a public power grid. Lack of an electric grid was particularly common in Matabeleland South (85%), Midlands (69%), and Mashonaland Central (62%) (Figure 11).

Respondents were asked: How often do you use the Internet? (% who said “every day” or “a few times a week”)

Availability of electricity

Another barrier to participating in remote-learning opportunities is a lack of electricity to power the necessary devices. As of May 2018, Afrobarometer enumerators found that only a slim majority (54%) of survey respondents lived in areas served by a public electricity grid. In rural areas, about seven in 10 respondents (69%) did not enjoy the possibility of accessing a public power grid. Lack of an electric grid was particularly common in Matabeleland South (85%), Midlands (69%), and Mashonaland Central (62%) (Figure 11).

Respondents were asked: How often do you use the Internet? (% who said “every day” or “a few times a week”)

Availability of electricity

Another barrier to participating in remote-learning opportunities is a lack of electricity to power the necessary devices. As of May 2018, Afrobarometer enumerators found that only a slim majority (54%) of survey respondents lived in areas served by a public electricity grid. In rural areas, about seven in 10 respondents (69%) did not enjoy the possibility of accessing a public power grid. Lack of an electric grid was particularly common in Matabeleland South (85%), Midlands (69%), and Mashonaland Central (62%) (Figure 11).
Looking at the household level, as of early 2017, only about three out of 10 respondents said their home had an electric connection that worked “all of the time” (8%) or “most of the time” (23%). Six out of 10 (60%) said they had no electric grid in the area or no connection to an existing grid (Figure 12). This proportion reached 90% in rural areas.

Respondents were asked: Do you have an electric connection to your home from the mains? [If yes:] How often is electricity actually available from this connection?
Conclusion

The government of Zimbabwe is encouraging the use of digital platforms to provide remote-learning services during the COVID-19 pandemic, but data showing that most households lack Internet access and reliable electricity suggest that many students will find it difficult or impossible to participate. The government should also provide remote-learning services via radio and television, which are more widely accessible, though even this approach will exclude many students. In the longer term, major improvements in electricity supply and Internet connectivity, especially in rural areas, will be needed to move Zimbabwean education into the remote-learning era.

Do your own analysis of Afrobarometer data – on any question, for any country and survey round. It’s easy and free at www.afrobarometer.org/online-data-analysis.
References


World Bank. (2020). How countries are using edtech (including online learning, radio, television, texting) to support access to remote learning during the COVID-19 pandemic. Brief.


Simangele Moyo-Nyede is a researcher for Mass Public Opinion Institute in Harare, Zimbabwe. Email: simangelemn@mpoi.org.zw.

Stephen Ndoma is principal researcher for Mass Public Opinion Institute in Harare, Zimbabwe. Email: stephen@mpoi.org.zw.

Afrobarometer, a non-profit corporation with headquarters in Ghana, directs a pan-African, non-partisan research network. Regional coordination of national partners in about 35 countries is provided by the Ghana Center for Democratic Development (CDD-Ghana), the Institute for Justice and Reconciliation (IJR) in South Africa, and the Institute for Development Studies (IDS) at the University of Nairobi in Kenya. Michigan State University (MSU) and the University of Cape Town (UCT) provide technical support to the network.

Financial support for Afrobarometer Round 8 has been provided by the Swedish International Development Cooperation Agency (SIDA), the Mo Ibrahim Foundation, the Open Society Foundations, the William and Flora Hewlett Foundation, and the U.S. Agency for International Development (USAID) via the U.S. Institute of Peace.

Donations help Afrobarometer give voice to African citizens. Please consider making a contribution (at www.afrobarometer.org) or contact Bruno van Dyk (bruno.v.dyk@afrobarometer.org) to discuss institutional funding.

Follow our releases on #VoicesAfrica.

Afrobarometer Dispatch No. 371 | 30 June 2020