

The Digital Divide Hits U.S. Immigrant Households Disproportionately during the COVID-19 Pandemic



Two women use their laptops. (Photo: #WOCinTech Chat/Flickr)

The internet is a critical component of modern life, and never has that been clearer than during the COVID-19 pandemic, where online connectivity has proven an essential lifeline to telework, distance learning, telemedicine, and relationships with relatives and friends. In the United States, 87 percent of adults said they considered the web to be important or essential for them during the outbreak. Yet neither access to the internet nor vulnerability to the coronavirus are spread equally. Immigrants are over-represented in frontline pandemic-response occupations such as doctors, home health aides, and grocery store

workers, leaving them more exposed to the disease. Meanwhile, the foreign born also make up a disproportionately large share of groups with lower levels of digital skills. As such, questions surrounding digital inclusion and a push for digital equity have come to the fore, especially for populations that have been disproportionately hit during this public-health crisis.

In the United States, 36 percent of native-born, native-language adults were at higher levels of proficiency solving problems in digital environments or using digital tools as of 2015, compared to just 12 percent of U.S. residents who are foreign born and speak a language other than English, according to the Program for the International Assessment of Adult Competencies (PIAAC) study run by the Organization for Economic Cooperation and Development (OECD). The proportion of U.S. adults with no computer experience is also much higher for immigrants who speak a language other than English in the home, PIAAC found, at almost 21 percent compared to approximately 5 percent for English speakers. The situation in the United States is part of a global trend and is similar to that of other countries with similar proportions of immigrants, such as Germany and Canada. Across OECD countries, which are high-income economies, native-born adults who speak the native language have higher levels of proficiency with digital problem-solving than do immigrants.

This article outlines available data on immigrants' digital access and digital literacy skills in the United States and examines the essential nature of these digital tools and experience with them during the COVID-19 pandemic.

Immigrants and Digital Access

Digital access is defined as an individual's ability to obtain tools such as computers and smartphones, as well as consistent connection to the internet. As such, access can be varied and does not have a one-time cost, but requires multiple recurring expenses over time. For example, an individual may have inconsistent access due to the constant need to add prepaid mobile airtime or replace and repair technologies. Families might also share a single device between multiple individuals, which limits each person's access. Digital skills, meanwhile, refer to an individual's "ability to manage information and solve problems using digital devices, applications, and networks," per the OECD's definition. These skills include tasks such as using a mouse and completing a multistep online form by navigating across applications.

The ability to access and use digital services is especially relevant for finding and keeping a job, attaining education and other credentials, addressing the homework gap, and receiving health-care services. However, data on immigrants' digital access and skills are inconsistent. At the classroom level, some numbers focus not on immigrants as a group but on the population of English Learners (ELs), who are comprised of immigrant students as well as the U.S.-born children of immigrants in K-12. Other data on the digital divide evaluate disparities in race or ethnicity, including categories such as Hispanic, but without delineating between the foreign and native born.

What is clear is that the gap in access to communications technology is often larger for people of color, those with lower incomes, and those with lesser levels of education. Immigrants who fall into these subpopulations appear to be especially vulnerable to digital inequities.

A Longstanding Divide

The digital divide has long been an issue of concern for advocates, economists, and others.

In all, 18 million of the estimated 129 million U.S. households are without internet access, including many immigrant households. One-tenth of families headed by Hispanic immigrants had no access to the internet in 2016, which was greater than the 7 percent of U.S.-born Latinos without access and twice the rate of non-Hispanic White residents, according to a study published by the Sesame Workshop's Joan Ganz Cooney Center. According to researchers at the Pew Research Center, although Hispanic immigrants comprise about half of all Hispanic internet users, in the 16 percent of U.S. Hispanics that did not access the internet in 2016, 77 percent were immigrants. However, the situation is not the same across immigrant backgrounds. Black immigrant households, for example, access digital technology at rates similar to the general U.S. population—a reality perhaps consistent with the fact that they are among the most highly educated immigrant groups.

Imprecise data aside, scholars suggest the digital divide appears to be narrowing. For example, Latino immigrants' use of the internet was 16 percent lower than White individuals in 2009, but in 2015 Hispanic immigrants narrowed the gap substantially, coming in at only 5 percent lower use than White residents.

Still, while the pool of digital have-nots may be declining, the gap continues to be felt by some immigrants and marginalized groups.

It is not clear precisely how many immigrants use mobile phones as their sole or primary means of accessing the internet. Individuals with lower incomes represent a higher portion of this smartphone-dependent population, as do people of color and those with lower levels of education. Among people with incomes under the national median, 41 percent of foreign-born Hispanics with children said in 2016 that they only ever accessed the internet via mobile device, compared to 17 percent of U.S.-born Latinos in the same income group. Similarly, 44 percent of immigrants who are Hispanic did not use a computer at all—although they may use a mobile device—compared to 19 percent of U.S.-born Hispanics, a rate similar to other ethnic groups.

Immigrants and Digital Skills

Effective use of the internet for work, school, handling of finances, and for other tasks requires not only access but also the digital skills and experience to know what to do online. Immigrants and Limited English Proficient (LEP) workers were over-represented in populations with limited or no digital skills identified by OCED's PIAAC study and shared in a 2020 report by the National Skills Coalition. Although they account for about one-sixth of U.S. workers, immigrants make up more than one-third of the workforce without digital skills. They also account for nearly one-quarter of workers with limited digital skills, in other words those who are able to complete basic computer tasks but would have difficulty sorting emails. Among Hispanic immigrants with children, 20 percent said in 2016 they do not use the internet at all.

Yet the situation is complicated, and there is not a clear understanding of the overall types of digital skills that immigrants possess. When it comes to mobile phones, immigrants with cell phones or smartphones used more features at greater numbers than the total U.S. population of smartphone users, according to a 2012 survey of Philadelphia residents. Cellphone-using immigrants were three times as likely to use video-calling services, twice as likely to post on social media, and nearly twice as likely to send emails using their phones compared to the overall cell phone-using public. This may be unsurprising, given immigrants' desires to maintain connections with communities in their countries of origin.

However, people who are smartphone-dependent are also likely to have what is considered fragmented knowledge. They may be able to pay bills through a mobile app, but may not have experience filling out a job application on a desktop computer. This fragmented knowledge may allow people to perform some digital tasks that are necessary for their everyday lives, but could restrict them from developing deeper digital problem-solving skills required for a wider range of functions, and which will be increasingly important as more tasks move into the digital realm.

Digital Access and Skills during COVID-19

The public-health crisis has highlighted the importance of digital access and skills for four essential outcomes: employment, adult education, children's education, and access to health services.

Employment

The impact of stay-at-home orders and social distancing caused economic activity across the United States to come to a near-halt beginning in late March 2020, resulting in spiking unemployment rates that reached a record 14.7 percent in April for the overall workforce, and significantly higher for some immigrant groups. During the pandemic, as many as 70 percent of employees have worked remotely at least sometimes. As a result, the internet has been an invaluable resource for finding and keeping employment during the pandemic.

The shift to remote work has forced many to quickly adapt to new technological situations, obtain digital access, and improve digital skills, which can be difficult for immigrants and others with a weak foundation of online experience. In this way, the pandemic aggravated a trend that had been growing before COVID-19. Increasingly, even entry-level positions now require some type of digital skill, and four out of five middle-skilled jobs—which typically require less than a bachelor's degree but pay a living wage, and which account for nearly half of the overall labor demand—now require higher digital skills. As such, immigrants who have been working remotely or searching for employment may find themselves without the necessary digital access or experience to advance or maintain their careers.

Adult Education and English Literacy Instruction

Nearly one in every ten workers is LEP, and these individuals—the large majority

of whom are immigrants—also earn 25 percent to 40 percent less than the English-proficient population. English language proficiency has been associated with an average earnings increase of 10 percent to 20 percent for adult male immigrants, so access to adult English literacy instruction can be an important factor for improving employment-related outcomes. However, immigrants and LEP individuals enroll in adult education, including English literacy programs, for a variety of often overlapping purposes, including to attain high school equivalency, prepare for postsecondary education, obtain a better job through the pursuit of additional credentials and other occupational training, support their children's education, and obtain citizenship.

Additionally, digital skills are strongly correlated with general literacy and number-counting (numeracy) skills, and the OECD reported in 2013 that one-third of those with lower literacy and numeracy scores are immigrants. This connection has become more pronounced during the public-health crisis, with significant pockets of the education world moving to a distance format, making sufficient digital skills into a prerequisite for broader learning.

A July 2020 survey of adult education providers, including those who serve LEP and immigrant individuals, found that limited access to technology and limited digital literacy have been among their most pressing challenges in the rapid transition to remote learning during the shutdown. Forthcoming research from the Goodling Institute for Research in Family Literacy examines one immigrant-focused family literacy course that transitioned to remote instruction, in which several parents struggled to use a tablet or computer but were comfortable working on their smartphones, pointing to the pitfalls of fragmented digital knowledge.

Children's Education

Nearly all K-12 schools moved to distance learning at some point during the pandemic, during which time there has been renewed interest in the so-called homework gap, or disparities in children's ability to use technology to complete homework assignments. Fifteen percent of U.S. households with school-age children do not have a high-speed internet connection at home, the Pew Research Center estimates. Although it is too soon for robust research evaluating the pandemic's effect on immigrant and second-generation students, teachers and families attest the homework gap has been especially pernicious for these

students. In June, immigrant Latino families were more likely than native-born Latinos to report wanting one-on-one tutoring and increased time with teachers, suggesting their particular needs were not being met. However, the challenges are not unique among immigrants; among both foreign- and native-born Latino families with school-age children, 26 percent said they needed better access to the internet or technology, while 65 percent said they felt that learning was more difficult because of challenges communicating with teachers.

Even before the coronavirus outbreak, children of Hispanic immigrants were 18 percent less likely to have a computer in the home compared to children of native-born Hispanics. One in five immigrant Latino parents never used the internet at all according to a 2016 study, and 45 percent of those who did had done so for fewer than four years, suggesting many parents lack both the access and experience to help their children succeed with remote schoolwork. The problem is especially acute for ELs in small and rural school districts that employ few translators, and as a result the translation of documents such as lesson plans can take more than a week.

School districts have attempted to respond to the disparities. Many have provided children with laptops and other devices to access online materials or promised physical copies of lessons, but devices do not always work in every situation and printouts have not always been available. Instead, some children have reportedly borrowed cell phones and computers to form makeshift Wi-Fi hotspots to do schoolwork. Arlington County, Virginia, for example, was already providing iPads and MacBook Air laptops to students, and after the pandemic hit expanded its free Wi-Fi spots in places such as school parking lots. Yet across the United States, many students, including ELs, have simply not shown up for school online and have not been reached by their school district.

Access to Health-Care Services

The use of telehealth services has increased dramatically during the pandemic, up to 44 percent of Medicare primary-care visits in April, according to the U.S. Department of Health and Human Services, and is projected to reach 1 billion interactions by the end of the year. Telehealth services have offered a low-risk way for patients to see medical professionals without exposing themselves to the coronavirus, and they can also save time and money compared to traveling to a medical facility. Some of the changes are likely to outlast COVID-19. During the

outbreak, the federal government has temporarily expanded its coverage of telehealth services via Medicare, and the Trump administration has made moves to increase the services permanently.

Unsurprisingly, use of telehealth is linked to reliable internet access and the experience to utilize it. Yet despite the fact that many immigrants have increased exposure to COVID-19 due to their employment in pandemic-response occupations, their reduced connectivity and familiarity with digital tools may prevent them from using telehealth services. In addition to technological challenges, those who have limited English proficiency may have difficulty using telephone services without visual cues, or they may require translators, adding a layer of complexity.

Furthermore, immigrants of all types use fewer health-care expenditures than the native born. In other words, even before the pandemic immigrants were often less likely to receive health-care services than the native born, and to lack health coverage. By magnifying the effects of the digital divide, the surge of telehealth services will likely exacerbate this trend.

Conclusion

National policies and initiatives have grown out of the renewed energy to address the digital divide, though there does not appear to be a specific focus on its disproportionate impacts on immigrants. Congressional Democrats have proposed major new investments in broadband internet infrastructure as well as subsidized internet access to families with low incomes or who have recently experienced unemployment. However, federal stimulus efforts have thus far mostly been silent on providing such assistance.

Meanwhile, private-sector and nonprofit efforts have continued or expanded, aiming to address the gap in a variety of ways. Launched in 2019, Digital US is a national coalition of service providers, policymakers, and other stakeholders aiming to address inequitable access to technology and opportunities to build digital skills. The Cristina Foundation, which has distributed refurbished computers to a range of recipients since 1984, in April teamed up with the Federal Reserve Bank of Kansas City and others to redouble its efforts. The National Skills Coalition has provided data and recommendations to policymakers. At the local level, multiple families and service providers have

stepped up to support their community members in a variety of ways large and small.

The pandemic has illuminated the extent of the digital divide and its wide-ranging impacts, including on immigrant populations. Nevertheless, the scope of immigrants' digital access, digital literacy, and potential inequities remain somewhat unknown and require further research to better allocate resources to support populations in need. While some immigrants have higher levels of digital skills and similar digital access as other U.S. residents, others rely on smartphones and pay-as-you-go data plans, and have much less experience using digital tools. In context of longstanding structural inequities, the intersection of race, income, and education should be an important consideration in this research as it impacts digital access and opportunities to build digital skills for immigrants.

To address this sweeping challenge, U.S. government policies and other large-scale efforts should define the digital divide as not only involving internet connectivity, but also a family's ability to maintain connectivity and access the most useful technology to utilize it, such as tablets and computers. Digital skills are difficult to assess in full, with many individuals possessing fragmented digital knowledge. As the pandemic has illustrated, these skills have become requirements for employment, education, and, increasingly, health care, and so they should also become a leading priority for policymakers and advocates.

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