



# ONLINE ISN'T OPTIONAL

## Student Polling on Access to Internet and Devices

Alyse Gray Parker, Janiel Santos, and Kimberly Dancy  
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**The importance of technology in our lives has never been more apparent. Over a year has passed since the COVID-19 pandemic forced many aspects of our lives online—including postsecondary education. For college students, this shift has meant attending classes and completing coursework online.**

Even as vaccine rollouts allow many institutions to resume in-person instruction, the need for low-cost and reliable high-speed internet and web-enabled devices remains crucial to students completing assignments, studying for exams, communicating with professors and classmates, and participating fully in higher education. This is especially true for students of color and students from low-income backgrounds, who are more likely to face barriers to accessing reliable technology.

A lack of internet connectivity is not just an inconvenience for college students. Being unable to connect may mean being unable to complete a degree or credential. Online courses present unique challenges, with research suggesting lower retention rates for students attending completely online. This research also suggests that constraints related to technology may exacerbate the problem.<sup>1</sup> A lack of reliable internet could also lead students to forgo higher education altogether or leave school before they finish. Indeed, approximately one in five community college students who left school during the pandemic reported not having reliable access to high-speed internet.<sup>2</sup> While institutions may advise students what devices and connections are necessary in order to fully engage in their education, that advice does not address gaps in internet infrastructure or the financial strain imposed by additional technological requirements.<sup>3</sup>

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## WHAT IS BROADBAND?

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According to the Federal Communications Commission (FCC), broadband is defined as “high-speed Internet access that is always on and faster than the traditional dial-up access.”<sup>4</sup> The FCC currently requires a minimum speed of 25 megabits per second download and 3 megabits per second upload for an internet connection to be characterized as broadband<sup>5</sup> and as of February 2021, 77 percent of American adults reported having a broadband connection at home.<sup>6</sup>

Because individuals are not always aware of the technical specifications of their home connections, polling data used in this brief focus on whether connections are reliable, fast, and affordable enough to meet students’ needs. In most cases, meeting this standard will mean a high-speed or broadband connection, and we use “high-speed” and “broadband” descriptors for clarity and convenience throughout this brief.

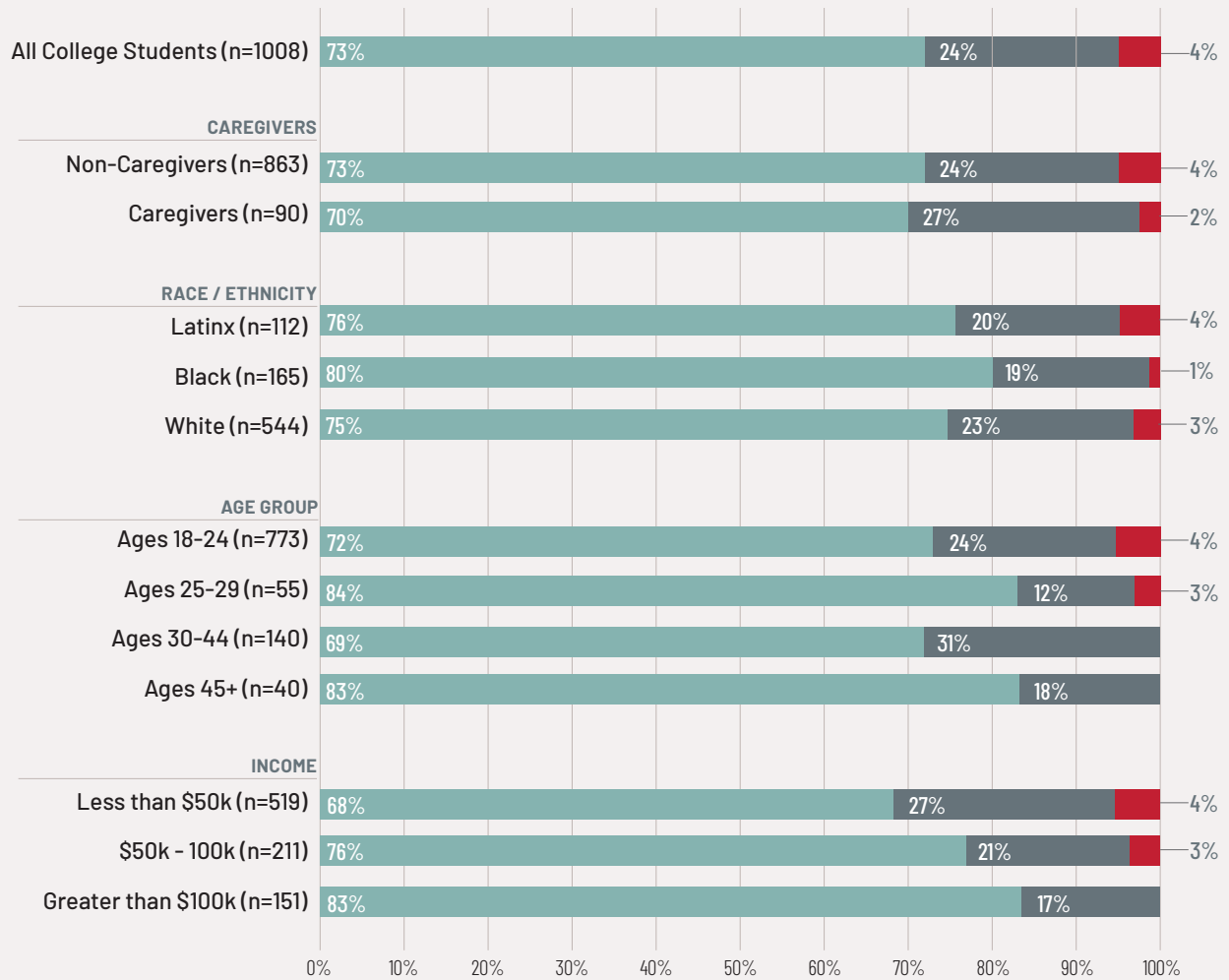


Despite the clear importance of broadband, there are limited existing data that can answer three key questions: who has access to reliable high-speed internet connections needed to access coursework, how much of a financial burden technology costs create for students, and whether students have consistent access to the devices they need to succeed academically. Fortunately, recent polling data provide insight into how connectivity and technology issues are impacting students across the country. This brief draws on data from a national poll of undergraduate students commissioned by New America and Third Way, and sheds new light on the extent of students’ struggles with internet connectivity, costs, and device usage. The data highlighted in this brief include breakdowns by income, age, race and ethnicity, and caregiver status. While polling data are subjective and reflect students’ perceptions of the quality and affordability of their digital connections,<sup>7</sup> the results illuminate the scope and severity of problems students are facing. This brief highlights important findings related to access and affordability of broadband services and provides recommendations on how policymakers and institutional leaders can ensure all students are able to access the technology they need for their postsecondary education.

## While most students report sufficient internet access, many have difficulty connecting to courses

An internet connection may seem ubiquitous in today’s world, but unfortunately the data show that this is far from true. About a quarter (24 percent) of survey respondents report sometimes having difficulty connecting to course content because of internet issues, while an additional 4 percent are never or rarely able to connect. What’s more, 31 percent of students whose household income was less than \$50,000 reported having issues with internet connectivity needed to access course content at least some of the time (see Figure 1), highlighting the fact that a lack of reliable high-speed internet disproportionately burdens these students.

**FIGURE 1**  
**Student Access to Fast and Reliable Internet Connections**



**KEY**

- Always or Often
- Sometimes
- Rarely or Never

*Note: Percentages may not sum to 100 due to rounding. Disaggregated data not available for Asian American and Pacific Islander, Indigenous, or other groups not listed above.*

*Source: IHEP analysis of data provided by Third Way/New America HigherEd Tracking Survey of college students nationwide, conducted from December 2-15, 2020.*



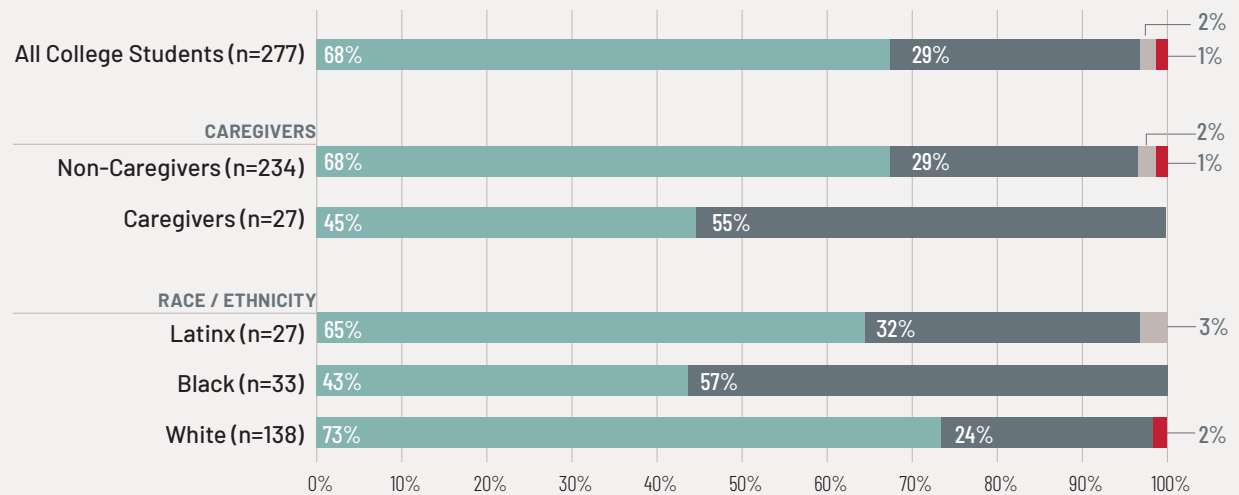
## RURAL ACCESS TO BROADBAND

National data indicate that adults in rural areas have lower rates of broadband access than those in suburban or urban communities,<sup>8</sup> and it is likely that this problem applies to students from rural communities as well. However, the data used for this brief do not allow for analysis of rural students' internet connections. This limitation is one reason that regular, nationally representative data collections are critical to understanding the extent of the issue in rural communities.

Without fast and reliable internet, accessing course content becomes difficult, a burden that is felt disproportionately among certain populations. For instance, of the respondents who noted their internet is unreliable,\* only 45 percent of student caregivers and 43 percent of Black students reported being able to access most of their course content (see Figure 2).

**FIGURE 2**

**For Students with Unreliable Internet, Most Can Access Online Content, But It Can be Slow and Difficult**



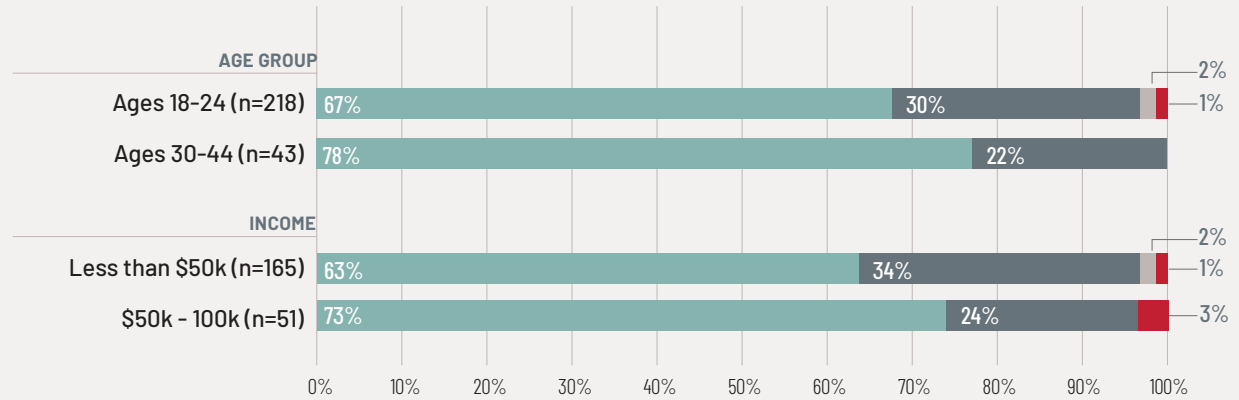
**KEY**

- I can access most course content, but it can be slow, unreliable, or difficult to do so
- I can access some course content, but it can be slow, unreliable, or difficult to do so
- I cannot access most course content with my connection
- I cannot access the internet, generally speaking

\* Respondents with unreliable connections includes those who indicated that they sometimes, rarely, or never had access to a fast and reliable internet connection.

**FIGURE 2 (CONTINUED)**

**For Students with Unreliable Internet, Most Can Access Online Content, But It Can be Slow and Difficult**



**KEY**

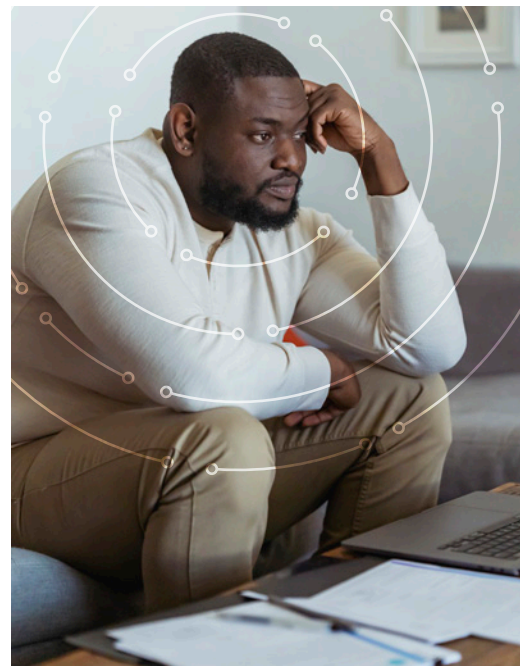
- I can access most course content, but it can be slow, unreliable, or difficult to do so
- I can access some course content, but it can be slow, unreliable, or difficult to do so
- I cannot access most course content with my connection
- I cannot access the internet, generally speaking

*Note: Includes students who indicated they sometimes, rarely, or never have access to reliable internet. Percentages may not sum to 100 due to rounding. Categories with sample sizes less than 25 were excluded from the analysis and are not shown.*

*Source: IHEP analysis of data provided by Third Way/New America HigherEd Tracking Survey of college students nationwide, conducted from December 2-15, 2020.*

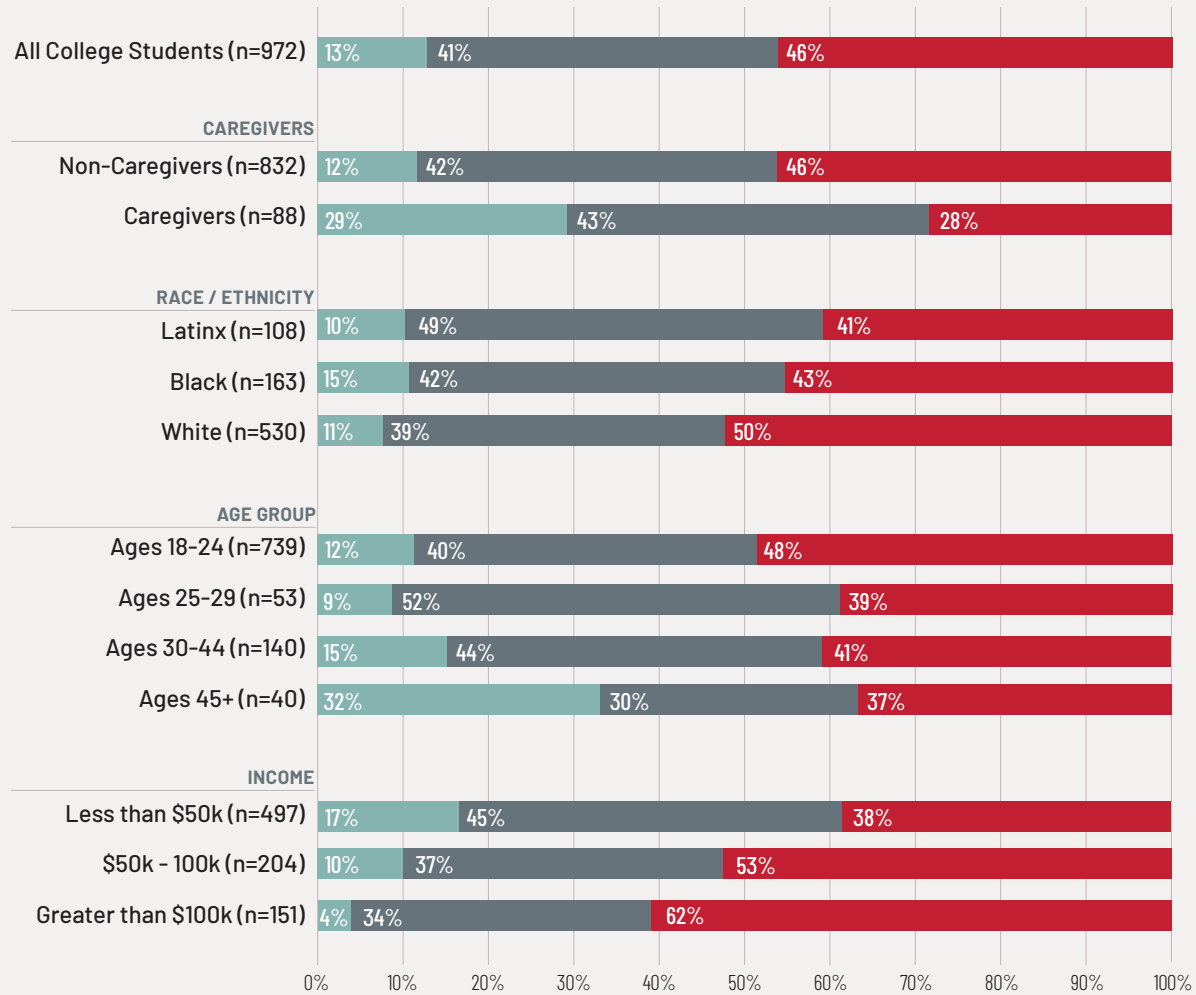
## Internet costs can strain student budgets

Even among students who do have internet access, a high proportion reported affordability as a challenge. Just over half (54 percent) of poll respondents and 72 percent of student caregivers said internet costs placed a somewhat or very significant cost on them. Further, 57 percent of Black students, 59 percent of Latinx students, and 62 percent of students with household incomes less than \$50,000 all reported that internet services are a somewhat or very significant cost, while 50 percent of White students and 38 percent of students with reported income of over \$100,000 report the same (see Figure 3).



**FIGURE 3**

**Students Face Financial Burdens Related to Internet Costs**



**KEY**

- Very significant cost
- Somewhat significant cost
- Not too significant cost or not a significant cost

*Note: Includes students who indicated they always, often, or sometimes have access to reliable internet. Percentages may not sum to 100 due to rounding.*

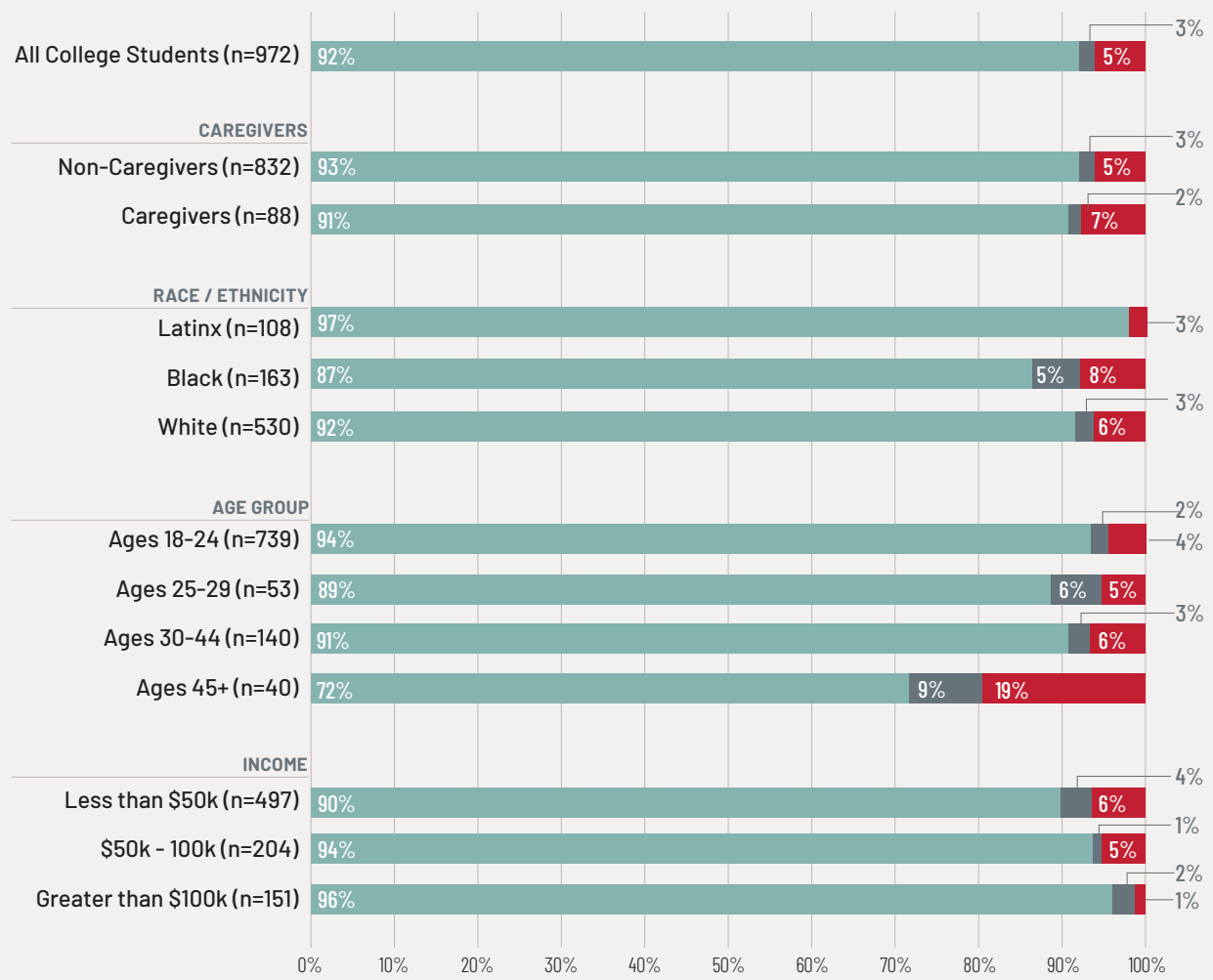
*Source: IHEP analysis of data provided by Third Way/New America HigherEd Tracking Survey of college students nationwide, conducted from December 2-15, 2020.*

## Access to devices can impact academic engagement

While a majority of students access online course content on their laptop, 13 percent of Black students primarily use a tablet or cell phone to complete their coursework, compared to just 8 percent of all college students (see Figure 4). Accessing course content only through a cell phone or tablet may have implications for students' ability to fully engage in their education, particularly if learning management systems are not mobile-optimized.

**FIGURE 4**

**Students Mainly Use Laptops to Complete Coursework, but Some Rely on Tablets or Cell Phones**



**KEY**

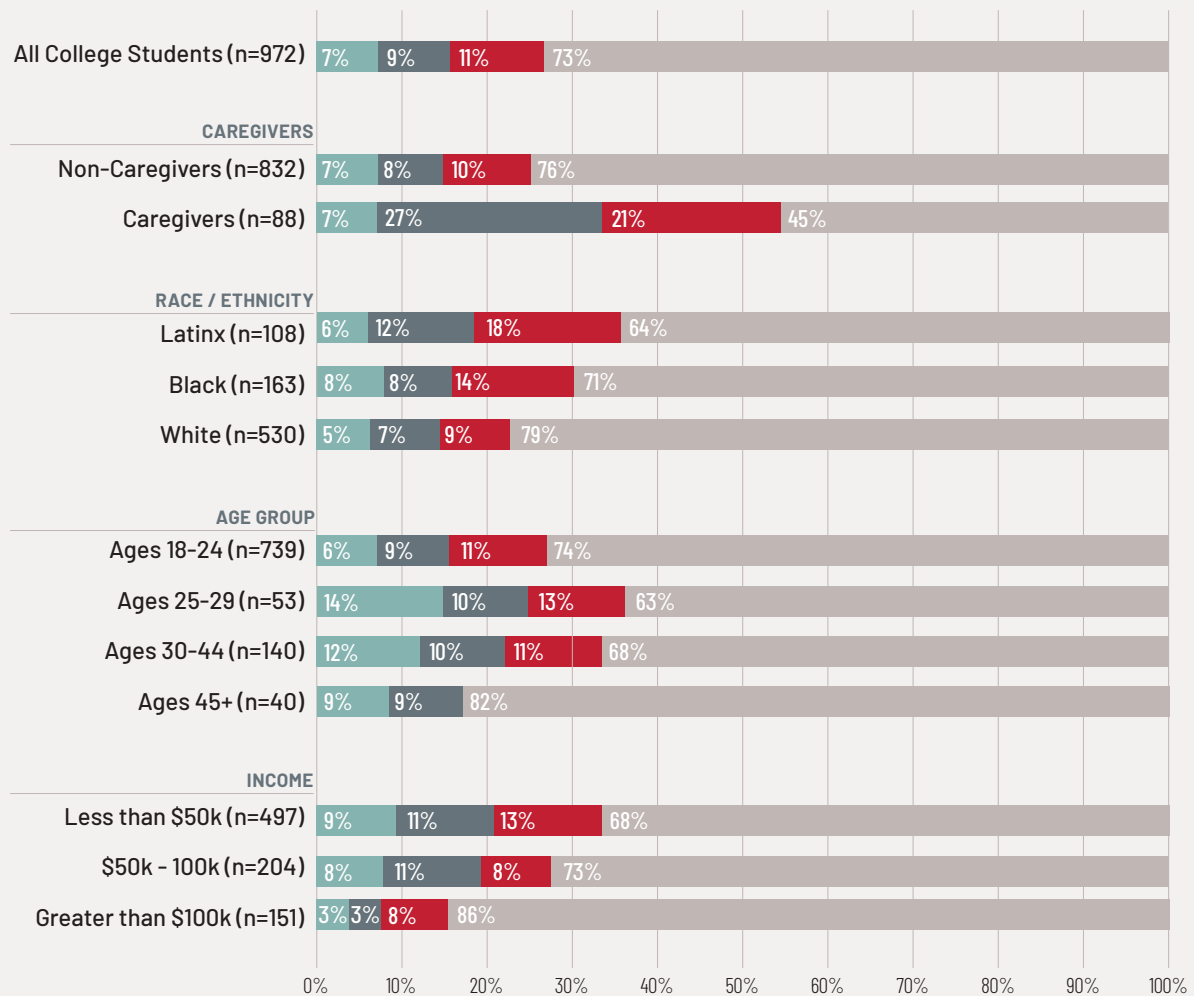
- Laptop or desk computer
- Tablet
- Mobile or cellular device

Note: Includes students who indicated they always, often, or sometimes have access to reliable internet. Percentages may not sum to 100 due to rounding.

Source: IHEP analysis of data provided by Third Way/New America HigherEd Tracking Survey of college students nationwide, conducted from December 2-15, 2020.

Sharing devices within households was also a common practice among respondents, meaning students may not always be able to use their devices when they need to access course content. Over 50 percent of student caregivers and over 30 percent of Latinx students reported sometimes, frequently, or always sharing a device used to complete coursework compared to only 21 percent of White students (see Figure 5). These student caregivers are likely to be parents sharing devices with children who may also be learning virtually.

**FIGURE 5**  
Caregivers are Most Likely to Share Devices with Others



**KEY**

- Always
- Frequently
- Sometimes
- Rarely or Never

Note: Includes students who indicated they always, often, or sometimes have access to reliable internet. Percentages may not sum to 100 percent due to rounding.

Source: IHEP analysis of data provided by Third Way/New America HigherEd Tracking Survey of college students nationwide, conducted from December 2-15, 2020.



# RECOMMENDATIONS FOR IMPROVING BROADBAND AND TECHNOLOGY ACCESS



These findings highlight the importance of expanding access to high-speed internet and ensuring students have access to adequate devices to engage fully in their learning. Trouble accessing the internet and connecting to coursework, reliance on tablets or mobile phones, and the need to share devices with others are all more common among students from low-income households and those who are Black or Latinx.

The COVID-19 pandemic has made clear that wider broadband internet access is needed to build a just and equitable society that provides postsecondary opportunity for all, regardless of race, income, or caregiving status. Closing this digital divide has ramifications for postsecondary education and can ultimately help narrow attainment inequities as well. Policymakers and institutional leaders should ensure students have the fast, reliable, and affordable internet connections and devices they need to fully participate in their education.

Advocates should continue to push for the collection and regular publication of data related to current and prospective students' technology access and needs. Three recommendations to expand broadband and device access include:

- ① **ACKNOWLEDGE TECHNOLOGY AS A POSTSECONDARY EDUCATION NECESSITY BY ACCOUNTING FOR IT IN FINANCIAL AID AND COST OF ATTENDANCE.** Colleges have found creative strategies to support students in accessing online content during the pandemic.<sup>9</sup> As colleges and universities continue to offer hybrid and online classes and as students continue to need access to learning resources, ways to connect with faculty and staff, and means to submit coursework online, it is critical that all students be able to access the necessary technology. Colleges and universities should continue to assess connectivity expenses when determining students' financial need and awarding institutional aid.

At the federal level, the U.S. Department of Education (ED) should require institutions to include internet and technology costs in students' costs of attendance (COA) calculations, ensuring that financial aid can be used to cover these expenses. This change will also help students plan for these costs by accounting for them on institutional net price calculators, financial aid award offers, and other consumer tools that utilize COA.



Ⓞ **COLLECT DATA AND PUBLISH REGULAR UPDATES, DISAGGREGATED BY RACE, INCOME AND GEOGRAPHIC LOCATION, TO UNDERSTAND STUDENT ACCESS TO RELIABLE INTERNET AND TECHNOLOGY.** There are many nuances in the experiences students have with online learning.<sup>10</sup> However, existing data systems and collections do not capture a detailed picture of students' access to reliable broadband service and internet-connected devices, limiting our understand of how students have dealt with connectivity challenges during the wholesale shift this year to online learning, how geography influences connectivity for students from rural communities, and the best ways to address equitable access to technology moving forward.<sup>11</sup> Institutions should regularly assess the technology needs of their students through routine surveys and analysis of student requests and use of Wi-Fi hotspots, loaner laptops and rental technology, and computer labs, and they should use supplemental surveys or touchpoints during times of educational disruptions and shifts to remote learning.

At the federal level, ED should continue to add needed fields to key surveys and data collections to capture students' experiences and connectivity needs. Recognizing the disruption caused by the COVID-19 public health crisis, the National Center for Education Statistics has been proactive, adding questions to the Beginning Postsecondary Students 2020-2022 (BPS:20/22) field test to measure internet access and technology support.<sup>12</sup> Building on this timely effort, ED should work in conjunction with other agencies to enhance student surveys, including the National Postsecondary Student Aid Study (NPSAS), to collect information about broadband and technology access and costs.<sup>13</sup> ED should also add fields to National Student Loan Data System (NSLDS) to collect information about students' experiences moving in and out of distance and hybrid delivery models in order to better contextualize the need for federal, state, and institutional investments in connectivity.<sup>14</sup>

Ⓞ **STRENGTHEN BROADBAND AND TECHNOLOGY SUPPORT FOR STUDENTS, INCLUDING BY LEVERAGING FEDERAL RESOURCES.** As colleges emerge from the COVID-19 pandemic, federal, state, and institutional funding to support internet connectivity for students remains necessary. Institutions can use institution grant funding from The Coronavirus Aid, Relief, and Economic Security (CARES) Act Higher Education Emergency Relief Fund (HEERF) to reimburse costs associated with providing technology and connectivity support to students.<sup>15</sup> Institutions can also distribute HEERF student aid grants to those who need financial assistance to access reliable broadband internet and internet-connected devices at home.

Congress established an Emergency Broadband Benefit program to provide discounts for broadband internet service and laptops during the qualifying emergency as part of the Consolidated Appropriations Act, 2021. Individuals are eligible for the benefit if a member of their household receives a means-tested benefit, including a federal Pell Grant. Students will be contacted by ED and they can submit a letter from their institution, a financial aid award letter, a paid invoice showing Pell Grant receipt, or a copy of their student aid report to verify their eligibility, while the federal government develops a computer-matching system. Institutions should proactively contact Pell Grant recipients to inform them of the benefit and help them apply.

As we turn from crisis to recovery, institutional leaders should continue to build or strengthen sustainable connectivity assistance for students. This should include developing and/or making permanent in-kind support services, such as technology loaner programs or Wi-Fi hotspots, so students can attend classes, contact staff and faculty, and study on and off campus. Institutions should bolster and improve on-campus resources, like open computer labs in buildings and at hours that are accessible for all students, including part-time students, commuter students, and students who work, parent, and caretake. They should also consider providing emergency grants to students who face financial barriers to broadband and technology access. Finally, institutions should clearly communicate these benefits and resources to students in admissions and orientation materials, during required and supplemental advising appointments, on course syllabi, and on institutional websites.

Federal policymakers should also work to permanently extend public broadband benefits to college students who face connectivity challenges, by either making permanent and appropriating additional funding for the Emergency Broadband Benefit program, creating a new Higher Education Connectivity Fund like that proposed in the Supporting Connectivity for Higher Education Students in Need Act, or extending federal Lifeline eligibility to students from low-income backgrounds.<sup>16</sup>





Whether students are pursuing their studies on campus or remotely, the need for reliable technology is not optional and remains a priority to ensure equitable postsecondary access. As the data in this brief show, barriers persist for students, especially students of color, student caregivers, and students from low-income backgrounds. Higher education advocates should continue to address access to technology for college students to ensure their success both online and on campus.

#### POLL METHODOLOGY

Data for this brief provided by New America and Third Way, from a poll commissioned Global Strategy Group to conduct an online survey of 1,008 college students nationwide, including samples of 90 caregivers, 165 Black students, and 112 Latinx students. The survey also included 207 high school seniors nationwide. The survey was conducted December 2 through 15, 2020. The precision of online surveys is measured using a credibility interval and, in this case, the interval is  $\pm 3.1\%$ . The margin on the sub-samples is larger. Care has been taken to ensure the geographic and demographic divisions of the student population are properly represented. Full toelines of the survey can be found [here](#).

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