

## The Digital Divide in Education

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*This fact sheet focuses on the latest available data, from 2019 and 2020.*

➤ **The COVID-19 pandemic accelerated the adoption of technology in education.**

In a 2019 Gallup survey, an overwhelming majority of teachers (85%), principals (96%), and administrators (96%) favored increased use of digital learning tools. Nearly half of teachers reported assigning technology-based homework at least sometimes. Nationwide, 20% of K–12 districts have adopted or are considering post-pandemic virtual schooling, and another 10% anticipate continued use of hybrid models. Distance learning is even more popular in higher education. In fall 2018, nearly 6 million undergraduates nationwide (or 35%) enrolled in distance courses, up from 4.6 million in 2013. It is likely that the pandemic accelerated this trend.

➤ **COVID-19 also highlighted the digital divide and other inequities.**

The pandemic highlighted long-standing digital gaps that have affected African American, Latino, and low-income students. In 2019, 13% of K–12 students and college students did not have broadband at home. College students in rural (22%), low-income (21%), and Latino (16%) households were particularly likely to lack home broadband. Almost 10% of K–12 teachers lacked access to home broadband. At the onset of the pandemic, only 67% of K–12 students had reliable access to computing devices; access levels were particularly low among low-income (52%), Black (58%), and Latino (61%) students. As schools shifted online, the digital divide may have worsened other inequities: many students—particularly English Learners and those with disabilities—rely on schools for occupational therapy, academic and social support, **mental health care**, and other services.

➤ **Distance learning has been challenging—especially for K–12 schools.**

The closure of public schools and colleges in March 2020 created unprecedented demand for broadband and device access—particularly for K–12 schools, many of which were new to distance learning. The average size of households with school-age children is four; multiple users need additional bandwidth for reliable access. More than a quarter of K–12 students (29%) lacked reliable internet access in spring 2020, and the **PPIC Statewide Survey** found that half of California parents had concerns about providing productive learning environments.

➤ **Policymakers and educators scrambled to bridge the digital divide during the pandemic.**

California’s K–12 schools and colleges received more than \$6 billion via the federal CARES Act and used some for technology. The California Department of Education established public-private partnerships to secure devices for students, and districts across the state outfitted school busses with Wi-Fi, partnered with internet service providers, or built cellular towers. The higher education system, including the University of California, California State University, and California Community Colleges, provided students with digital equipment and services. The December 2020 federal relief package included \$7.8 billion for California’s K–12 schools and community colleges, which can be used for technology.

➤ **Many K–12 students have gained access to devices—but internet access remains a problem.**

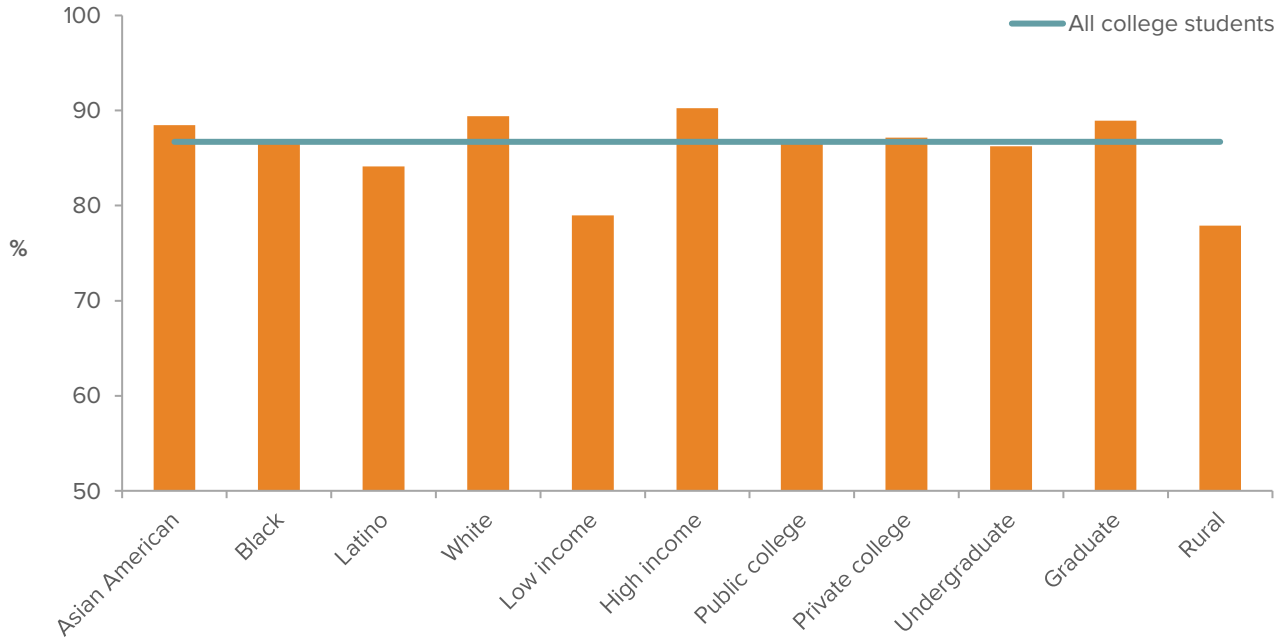
Federal, state, and local investments have **expanded access to devices among K–12 students**. By fall 2020, 79% had access to devices, and access levels were significantly higher among low-income (72%), African American (83%), and Latino (73%) students. However, internet access remains uneven: nearly 40% of low-income K–12 students lack reliable internet at home, and students in rural areas are especially likely to lack reliable internet.

➤ **The federal government may play a key role in closing the digital divide.**

The Federal Communications Commission recently allocated \$9.2 billion for the construction of rural broadband networks over the next decade; California received \$695 million. President Biden’s recovery plan includes universal broadband and infrastructure modernization, and the most recent federal relief package set aside \$7 billion for broadband and infrastructure. In 2020, Governor Newsom issued an executive order requiring state agencies to address the digital divide, and the state released a Broadband for All Action Plan. This should help California make the most of federal support. Federal and state coordination is key.



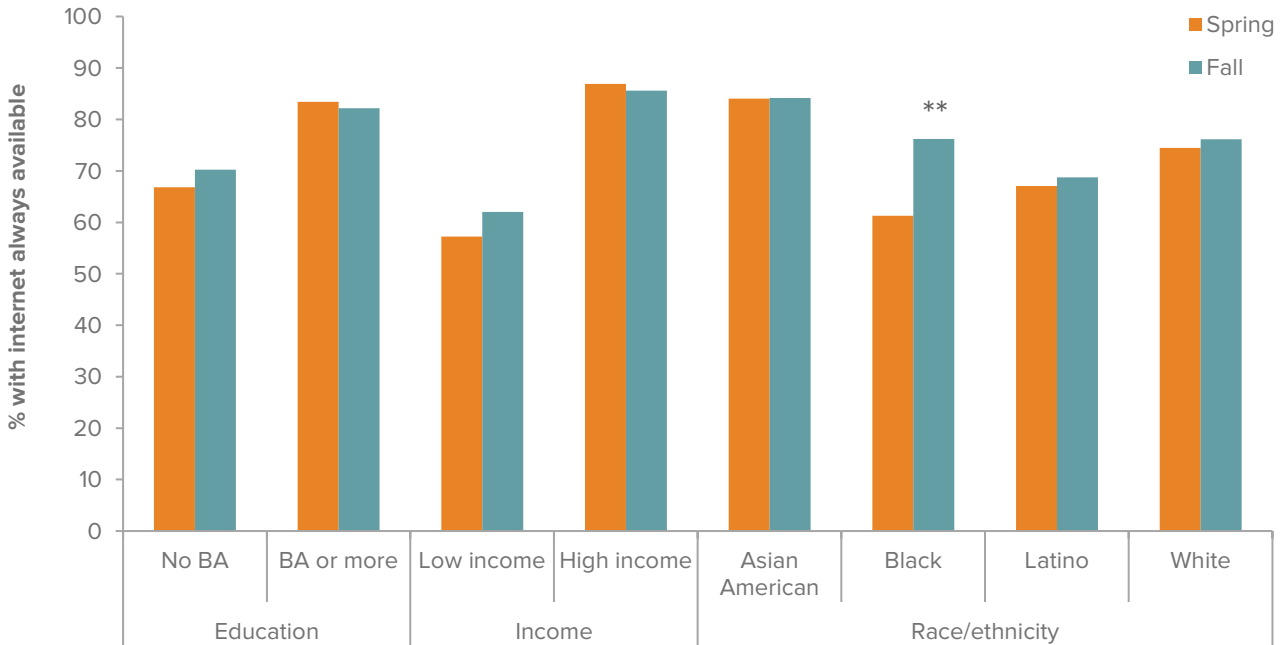
**Broadband access varies among college students**



Source: American Community Survey 2019.

Note: Low-income households have income less than \$50,000 and high-income households have income above \$100,000.

**Internet access gaps persisted in fall 2020**



Source: Household PULSE Survey, Census, 2020.

Notes: Low-income households have income less than \$50,000 and high-income households have income above \$100,000. \*\*: p<0.05.

Sources: Household PULSE Survey; PPIC Statewide Survey, April 2020; K. Weir, "Safeguarding Student Mental Health," *Monitor on Psychology* (Sept. 2020); National Center for Education Statistics, *Digest of Education Statistics 2019*. H. Schwartz et al., *Remote Learning Is Here to Stay: Results from the First American School District Panel Survey* (RAND, 2020).

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