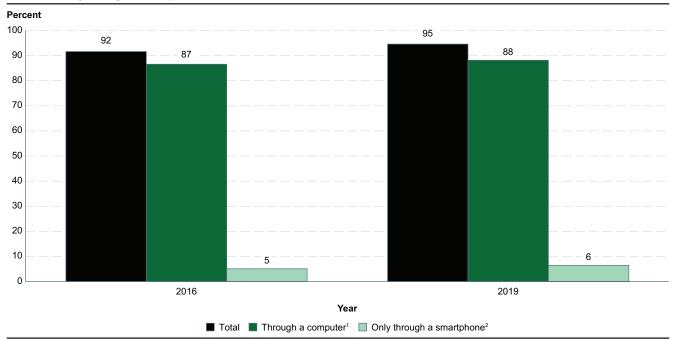
Children's Internet Access at Home

In 2019, the percentage of 3- to 18-year-olds who relied on a smartphone for their home internet access was highest for those whose parents had less than a high school credential (19 percent) and lowest for those whose parents had attained a bachelor's or higher degree (1 percent).

In 2019, some 95 percent of 3- to 18-year-olds had home internet access, according to the American Community Survey (ACS). Specifically, 88 percent had access through

a computer,² and 6 percent relied on a smartphone for home internet access.^{3,4}

Figure 1. Percentage of 3- to 18-year-olds who had home internet access, by whether they had access through a computer or only through a smartphone: 2016 and 2019



¹ Percentage of children in homes with both internet access and one or more of the following types of computer: desktop or laptop, tablet or other portable wireless computer, or "some other type of computer." Excludes homes having none of these types of computers. Includes homes having both smartphones and any of these types of computers.

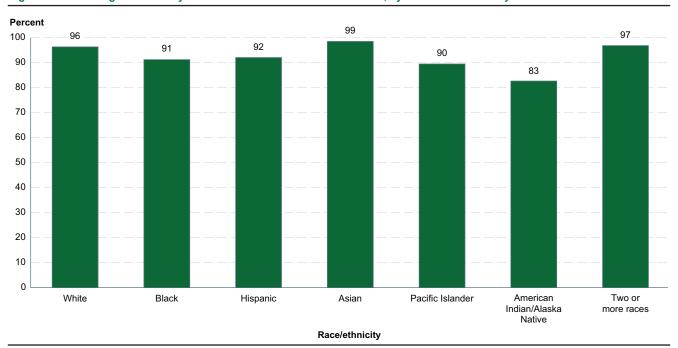
The percentages with home internet access in 2019, both through a computer and through a smartphone, were higher than in 2016 (87 and 5 percent, respectively),

the first year in which data on internet access through smartphones were collected by ACS.

² Percentage of children in homes with both internet access and smartphones, but with none of the computer types (desktop or laptop, tablet, or other) listed in footnote 1. NOTE: Includes only 3- to 18-year-olds living in households (respondents living in group quarters such as shelters, healthcare facilities, or correctional facilities were not asked about internet access).

SOURCE: U.S. Department of Commerce, Census Bureau, American Community Survey (ACS), 2016 and 2019. See Digest of Education Statistics 2020, table 702.12.

Figure 2. Percentage of 3- to 18-year-olds who had home internet access, by child's race/ethnicity: 2019



NOTE: Includes only 3- to 18-year-olds living in households (respondents living in group quarters such as shelters, healthcare facilities, or correctional facilities were not asked about internet access). Race categories exclude persons of Hispanic ethnicity.

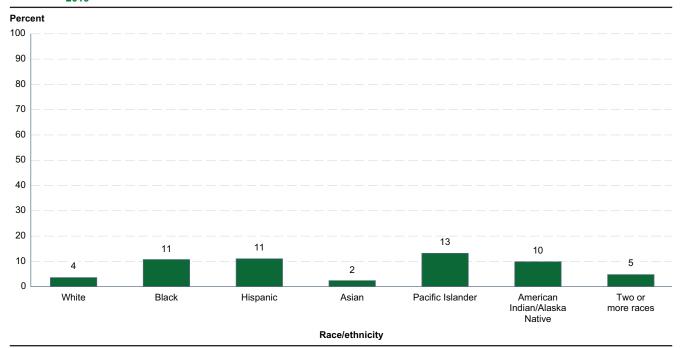
SOURCE: U.S. Department of Commerce, Census Bureau, American Community Survey (ACS), 2019. See *Digest of Education Statistics 2020*, table 702.12.

The percentage of 3- to 18-year-olds with home internet access varied across racial/ethnic groups. In 2019, the percentage with home internet access was highest for those who were Asian (99 percent) and lowest for those who were American Indian/Alaska Native (83 percent). The percentage for those who were of Two or more races (97 percent) was higher than for those who were White (96 percent), which was higher than for those who were Hispanic (92 percent), Black (91 percent), and Pacific Islander (90 percent). In addition, the percentage for those who were Hispanic was higher than for those who were Black.

Overall, the higher the level of parental educational attainment, the higher the percentage of 3- to 18-year-olds with home internet access. For instance, in 2019, the percentage with home internet access was highest for those whose parents had attained a bachelor's or higher degree (99 percent) and lowest for those whose parents had less than a high school credential (83 percent).

Similarly, the higher the level of family income, the higher the percentage of 3- to 18-year-olds with home internet access. Specifically, in 2019, the percentage with home internet access was highest for those in families in the highest income quarter (99 percent), followed by those in the middle-high quarter (98 percent), the middle-low quarter (95 percent), and the lowest quarter (89 percent).

Percentage of 3- to 18-year-olds who had home internet access only through a smartphone, by child's race/ethnicity:



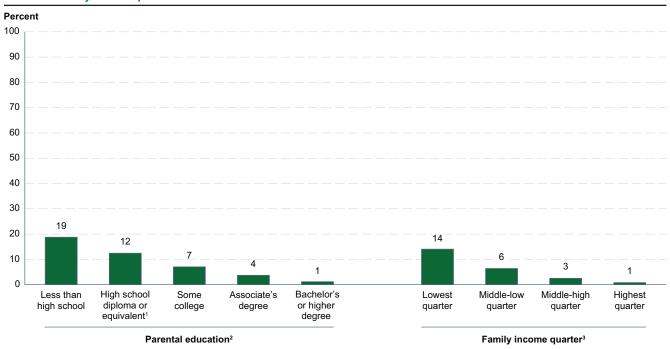
NOTE: Includes only 3- to 18-year-olds living in households (respondents living in group quarters such as shelters, healthcare facilities, or correctional facilities were not asked about internet access). Includes 3- to 18-year-olds who had home internet access only through a smartphone but did not have any of the following types of computers: desktop or laptop, tablet or other portable wireless computer, or "some other type of computer." Race categories exclude persons of Hispanic ethnicity. Although rounded numbers are displayed, the figures are based on unrounded data.

SOURCE: U.S. Department of Commerce, Census Bureau, American Community Survey (ACS), 2019. See Digest of Education Statistics 2020, table 702.12.

While rates of home internet access were relatively high in 2019, some of these families only had access to the internet through a smartphone. The percentage of 3- to 18-year-olds who relied on a smartphone for their home internet access also varied by race and ethnicity. In 2019, the percentage was lower for those who were Asian (2 percent) than for those who were White (4 percent) and of Two or more

races (5 percent), which in turn were lower than those who were American Indian/Alaska Native (10 percent), Black (11 percent), Hispanic (11 percent), and Pacific Islander (13 percent). In addition, the percentage for those who were White was lower than for those who were of Two or more races.

Percentage of 3- to 18-year-olds who had home internet access only through a smartphone, by parental education and family income quarter: 2019



¹ Includes those who completed high school through equivalency credentials, such as the GED

SOURCE: U.S. Department of Commerce, Census Bureau, American Community Survey (ACS), 2019. See Digest of Education Statistics 2020, table 702.12.

In addition, the higher the level of parental educational attainment, the lower the percentage of 3- to 18-yearolds who relied on a smartphone for their home internet access. For instance, in 2019, the percentage who relied on a smartphone for their home internet access was highest for those whose parents had less than a high school credential (19 percent) and lowest for those whose parents had attained a bachelor's or higher degree (1 percent).

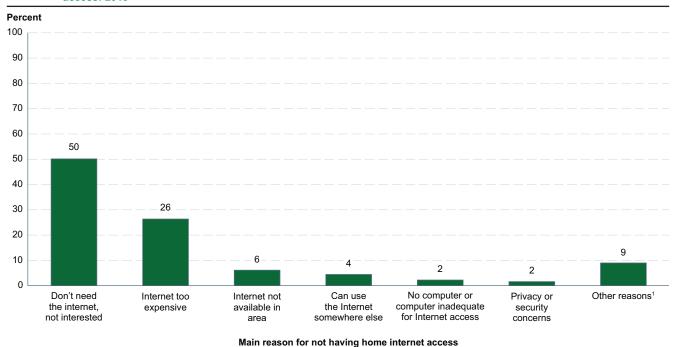
Similarly, the higher the level of family income, the lower the percentage of 3- to 18-year-olds who relied on a smartphone for their home internet access. Specifically, in 2019, the percentage who relied on a smartphone for their home internet access was lowest for those in families in the highest income quarter (1 percent), followed by those in the middle-high quarter (3 percent), the middle-low quarter (6 percent), and the lowest quarter (14 percent).

Taken together with the patterns for overall home internet access, these findings reveal that access only through a smartphone is generally more common for groups with lower rates of internet access overall.

² Highest education level of any parent residing with the 3- to 18-year-olds (including an adoptive or stepparent). Includes only 3- to 18-year-olds who resided with at least one of their parents

³ The lowest quarter refers to the bottom 25 percent of all family incomes; the middle-low quarter refers to the 26th through the 50th percentile of all family incomes; the middle-high guarter refers to the 51st through the 75th percentile of all family incomes; and the highest guarter refers to the top 25 percent of all family incomes NOTE: Includes only 3- to 18-year-olds living in households (respondents living in group quarters such as shelters, healthcare facilities, or correctional facilities were not asked about internet access). Includes 3- to 18-year-olds who had home internet access only through a smartphone but did not have any of the following types of computers: desktop or laptop, tablet or other portable wireless computer, or "some other type of computer." Although rounded numbers are displayed, the figures are based on unrounded data

Percentage distribution of 3- to 18-year-olds who had no internet access at home, by main reason for not having access: 2019



Respondents could specify "other" reasons. Examples of other reasons were not provided to respondents NOTE: Includes only 3- to 18-year-olds living in homes with no internet access. Data are based on sample surveys of the civilian noninstitutionalized population, which excludes persons in the military and persons living in institutions (e.g., prisons or nursing facilities). The survey respondent usually is the person who either owns or rents the housing unit. Detail may not sum to totals because of rounding. Although rounded numbers are displayed, the figures are based on unrounded data SOURCE: U.S. Department of Commerce, Census Bureau, Current Population Survey (CPS), November 2019. See Digest of Education Statistics 2020, table 702.40.

To understand the barriers to more universal internet access, the Current Population Survey (CPS)⁶ asked families what their main reason was for not having access to the internet. In 2019, the two most commonly cited main reasons that 3- to 18-year-olds did not have home internet access were that the family did not need it or was not interested in having it (50 percent) and that it was too expensive (26 percent). Other main reasons cited for not having home internet access included the following: internet service was not available in the area (6 percent), the internet could be used somewhere else (4 percent), the home either had no computer or had a computer inadequate for internet use (2 percent), and the existence of privacy or security concerns (2 percent).

In 2019, a higher percentage of Hispanic 3- to 18-yearolds than of their White peers lived in families who reported that home internet access was too expensive (31 vs. 22 percent). In addition, the percentages whose main barrier to home internet access was that it was too expensive were higher for those whose parents had a high school credential (32 percent), some college (30 percent), and less than a high school credential (29 percent) than for those whose parents had attained a bachelor's or higher degree (20 percent). Similarly, the percentages whose main barrier to home internet access was that it was too expensive were higher for those with family income levels of less than \$40,000 (ranging from 37 to 43 percent)⁷ than for those with family income levels of \$40,000 or more (ranging from 12 to 17 percent).8

Chapter: 2/Preprimary, Elementary, and Secondary Education

Section: Technology

Endnotes:

¹ The American Community Survey (ACS) provides a large monthly sample of demographic, socioeconomic, and housing data comparable in content to the Long Forms of the Decennial Census. Aggregated over time, these data serve as a replacement for the Long Form of the Decennial Census. This indicator uses data from ACS to describe the percentage of 3- to 18-yearolds with home internet access and the percentage with home internet access only through a smartphone in 2019.

² Refers to the percentage of 3- to 18-year-olds with home internet access through one or more of the following types of computers: desktop or laptop, tablet or other portable wireless computer, or "some other type of computer." Includes homes having both smartphones and any of these types of computers.

³ Refers to the percentage of 3- to 18-year-olds who had home internet access only through a smartphone but did not have any of the types of computers listed in endnote 2.

⁴ Detail does not sum to totals because of rounding.

⁵ The highest quarter refers to the top 25 percent of all family incomes; the middle-high quarter refers to the 51st through the 75th percentile of all family incomes; the middle-low quarter refers to the 26th through the 50th percentile of all family incomes; and the lowest quarter refers to the bottom 25 percent of all family incomes.

⁶ Data from CPS differ from data from ACS because ACS asked respondents about internet access and explicitly indicated that having a cell phone service is considered having internet access, while CPS asked about internet use and made no explicit reference to having a cell phone service. Due to this survey difference, the two datasets reported different percentages of 3- to 18-year-olds who "did not have access to the Internet" (5 and 13 percent, respectively).

⁷ These income levels are "less than \$10,000," "\$10,000 to \$19,999," "\$20,000 to \$29,999," and "\$30,000 to \$39,999." ⁸ These income levels are "\$40,000 to \$49,999," "\$50,000 to \$74,999," "\$75,000 to \$99,999," and "\$100,000 or more."

Reference tables: Digest of Education Statistics 2020, tables 702.12 and 702.40

Related indicators and resources: Student Access to Digital Learning Resources Outside of the Classroom; Technology and Engineering Literacy [web-only]

Glossary: Bachelor's degree; College; Educational attainment; Educational attainment (Current Population Survey); Gap; High school completer; Racial/ethnic group