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Nearly one-in-five teens can't always finish their homework because of the digital divide

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Katrina Archuleta, 17, helps her sister, Amani Gonzalez, 5, with math homework at their home in Denver in January. Their family of eight has been living in a three-bedroom apartment as soaring home prices and rents have made it difficult for entry-level and low-income buyers to find larger homes. (AAron Ontiveroz/The Denver Post via Getty Images)

Some 15% of U.S. households with school-age children do not have a high-speed internet connection at home, according to a new Pew Research Center analysis of 2015 U.S. Census Bureau data. New survey findings from the Center also show that some teens are more likely to face digital hurdles when trying to complete their homework.

School-age children in lowerincome households are especially likely to lack broadband access. Roughly onethird of households with children ages 6 to 17 and whose annual income falls below \$30,000 a year do not have a high-speed internet connection at home, compared with just 6% of such households earning \$75,000 or more a year. These broadband disparities are particularly pronounced for black and Hispanic households with school-age children especially those with low household incomes. (The overall share of households with

Many school-age children live in households without high-speed internet

% of U.S. households with children ages 6 to 17 who **do not** have a high-speed internet connection

	All	White	Black	Hispanic	Asian
All households with school-age children	15%	10	25	23	5
BY ANNUAL HOUSEHOLD INCOME					
Less than \$30K	35%	28	41	38	14
\$30K-\$74,999	17%	13	21	22	7
\$75K or more	6%	4	9	9	2

Note: Race and ethnicity are based upon the race and ethnicity of the head of household. Whites, blacks and Asians include only those who reported a single race and are only non-Hispanics. Hispanics are of any race. Household income data reported for the calendar year prior to the survey year.

Source: Pew Research Center analysis of 2015 American Community Survey (IPUMS).

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school-age children lacking a high-speed internet connection in 2015 is comparable to what the Center found (http://www.pewresearch.org/fact-tank/2015/04/20/the-numbers-behind-the-broadband-homework-gap/) in an analysis of 2013 Census data.)

This aspect of the digital divide – often referred to as the "homework gap" – can be an academic burden **Z**cf **HYb**gwho lack access to digital technologies at home. **HYb**gfrom lower-income `\ci gY\c Xg are especially likely to face these school-related challenges as a result, according to the new Center survey of 743 U.S. teens ages 13 to 17 conducted March 7–April 10, 2018.

At its most extreme, the homework gap can mean that teens have trouble even finishing their homework. Overall, 17% of teens say they are often or sometimes unable to complete homework assignments because they do not have reliable access to a computer or internet connection.

Teens from lower-income households are especially likely to be impacted by the digital 'homework gap'



% of U.S. teens, by race and ethnicity or annual family income, who say they often or sometimes ...

Note: Whites and blacks include only non-Hispanics; Hispanics are of any race. Those who gave other responses or who did not give an answer are not shown.

Source: Survey conducted March 7 to April 10, 2018.

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Teens also differ by income level when it comes to completing assignments: 24% of teens whose annual family income is less than \$30,000 say the lack of a dependable computer or internet connection often or sometimes prohibits them from finishing their homework, but that share drops to 9% among teens who live in households earning \$75,000 or more a year.

Other times, teens who lack reliable internet service at home say they seek out other locations to complete their schoolwork: 12% of teens say they at least sometimes use public Wi-Fi to complete assignments because they do not have an internet connection at home. Again, this problem is more prevalent for less affluent teens. Teens whose family income is below \$30,000 a year are far more likely than teens whose annual household income is \$30,000 or higher to say that they sometimes use public WiFi to complete their homework (21% vs. 9%).

Lastly, 35% of teens say they often or sometimes have to do their homework on their cellphone. Although it is not uncommon for young people in all circumstances to complete assignments in this way, it is especially prevalent among lower-income teens. Indeed, 45% of teens who live in households earning less than \$30,000 a year say they at least sometimes rely on their cellphone to finish their homework.

These findings reflect a broader discussion about the digital divide's impact

(http://www.govtech.com/education/Tackling-the-Homework-Gap-Maryland-County-FiberNet-Infrastructure-Public-Private-Partnerships.html) on America's youth. Numerous policymakers and advocates have expressed concern that students with less access to certain technologies may fall behind their more digitally connected

peers. There is some evidence

(https://onlinelibrary.wiley.com/doi/full/10.1111/j.1465-7295.2009.00218.x) that teens who have access to a home computer are more likely to graduate from high school when compared with those who don't.

The Center's survey of teens does show stark differences in teens' computer access based on their household income. A quarter of teens whose family income is less than \$30,000 a year *do not* have access to a home computer, compared with 4% of those whose annual family income is \$75,000 or more.

One-in-four lower-income teens don't have access to a home computer

% of U.S. teens who say they **do not** have or have access to a desktop/ laptop computer at home



Note: Whites and blacks include only non-Hispanics; Hispanics are of any race. Source: Survey conducted March 7 to April 10, 2018.

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Note: See full topline results and methodology here

(http://www.pewresearch.org/wpcontent/uploads/2018/10/FT_18.10.26_HomeworkGap_Methodology_Topline.pdf)