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THE HOMEWORK GAP:

Teacher Perspectives on
Closing the Digital Divide

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Common Sense is the nation's leading nonprofit organization dedicated to improving the lives of kids and families by providing the trustworthy information, education, and independent voice they need to thrive in the 21st century.



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A LETTER FROM OUR FOUNDER

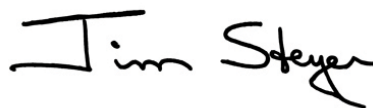
Friends,

It should go without saying that all kids need access to computers and broadband—at school and at home—to thrive in our rapidly changing digital world. And given that 95% of kids in the United States own a mobile device, some people assume that the “digital divide”—the gulf between those who have ready access to computers and the internet and those who do not—has closed. Not so fast.

Access to a mobile device and access to internet-enabled computers capable of research, reporting, creating, and connecting are two entirely different issues, and unfortunately, when it comes to digital tools that will prepare the students of today for the jobs of tomorrow, we are short-changing lower-income students and students of color. To really understand the challenge of digital equity among students, Common Sense conducted a nationwide survey to hear from teachers themselves. What we found is evidence of the troubling divide known as the “homework gap.”

The homework gap refers to the divide between students who have home broadband access and those who do not. Commissioner Jessica Rosenworcel of the Federal Communications Commission, who coined the term “homework gap,” has described this as the “cruellest part of the digital divide,” because if students don’t have access to broadband at home, teachers in lower-income schools are less likely to assign homework requiring digital tools. Put simply: Students are losing out because their teachers are not able to assign homework that can help them succeed.

For 15 years, Common Sense has been a strong advocate for kids and families, and we have long fought for digital equity. We hope this important data will act as a clarion call for stakeholders who have the power and the responsibility to ensure every student is equipped with the access and tools needed for academic and professional success.



James P. Steyer,
founder and CEO

INTRODUCTION

What is the homework gap?

The homework gap refers to the divide between students who have home access to broadband internet and the digital tools needed to be academically successful and those who do not. Nearly 12 million children nationwide live in homes without a broadband connection.¹ To get homework done in the evenings, these students, who are most likely to come from African American, Latinx, and Native American families,² need to find ways to connect: They use library or store Wi-Fi (for free or with purchase) or they miss assignments.³ Student outcomes should not be reliant on access to either Starbucks or a library parking lot.

Lack of access to computers and the internet limits learning, making it more difficult for children to keep up or develop the skills that are necessary for academic and professional success. It is even more troubling as children enter high school, where much more of the work requires online access to complete assignments or tasks. As this research shows,

teachers in Title I schools, cognizant of connectivity gaps at home, are less likely to assign homework that requires access to the internet.

Students without broadband access are disadvantaged when their teachers are not able to assign homework that's most relevant to or useful for them.

Cost is a leading concern for many parents seeking access to the internet; devices and monthly subscriptions are expensive. While public efforts like the FCC's Lifeline program and private initiatives help support home internet for lower-income families, there is more that needs to be done. In 2018, the Pew Research Center released an analysis of the 2015 Census Bureau data that showed that one-third of households with children 6 to 17 and whose annual income fell below \$30,000 a year did not have a high-speed internet connection at home, compared with just 6% of households earning \$75,000 or more a year.

“There are 12 million students in this country who fall into the homework gap and lack the regular broadband access they need to just do nightly schoolwork. From my perspective, this is the cruelest part of the digital divide, and it’s a divide we’re going to have to address, and a gap we’re going to have to fix.”

—Jessica Rosenworcel, FCC commissioner

1, 2. U.S. Congress Joint Economic Committee. (2017, September). *America's digital divide*. Retrieved from https://www.jec.senate.gov/public/_cache/files/ff7b3d0b-bc00-4498-9f9d-3e56ef95088f/the-digital-divide-.pdf

3. Kang, C. (2016, February 22). Bridging a digital divide that leaves schoolchildren behind. *The New York Times*. Retrieved from <https://www.nytimes.com/2016/02/23/technology/fcc-internet-access-school.html>

What are the challenges?

Understanding the gaps

Policymakers are often relying on poor data to understand the gaps in connectivity. Funding for comprehensive broadband maps and research is needed to understand where the gaps in access exist (i.e., we need granular data on types of access, cost, speed, and quality) to help policymakers understand why these gaps persist.

Infrastructure

Many rural and urban underserved communities lack adequate access to broadband infrastructure, creating a constant struggle for students to find access to broadband resources. If private companies are unable to serve a rural or urban community with quality broadband access, it's critical that government help support communities to build the networks they need. For many families in communities lacking quality broadband access, anchor institutions such as schools, libraries, and community organizations (e.g., after-school programs) step in and provide students with a safe place for access to the internet. Government must also provide robust support to innovative anchor institutions seeking to end the homework gap.

Broadband competition

Even in communities with broadband access, there is often only one or maybe two broadband providers. When there are no or only a few choices for broadband, prices are higher, quality of service can lag, and customer service can be limited or poor. Competition drives providers to offer customers better service at lower prices. Affordability is known to be a key barrier to adoption of home broadband. For lower-income families who are struggling to pay for broadband, a competitive broadband marketplace drives down the monthly cost of broadband service.

Cost

Even with adequate competition and lower prices, many lower-income families may still be unable to afford home broadband service. Families unable to afford home access to broadband rely on anchor institutions such as schools, libraries, community organizations, and even major retail stores and fast-food restaurants to get online after school.

Policymakers should support programs that offset the costs of access, through discounts for families or by supporting innovative programs that help extend free access from anchor institutions. In addition to supporting home access, policymakers should ensure that all anchor institutions have robust broadband connectivity so that families have a safe place to access the internet.

4. Tomer, A. (2018, May 9). *Can people afford American infrastructure?* Retrieved from The Brookings Institution website: <https://www.brookings.edu/blog/the-avenue/2018/05/09/can-people-afford-american-infrastructure/>

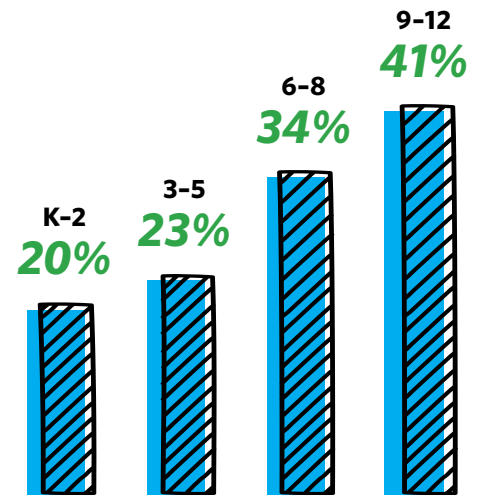
The digital divide is far from closed.

Broadband internet access is essential for students to do schoolwork at home.

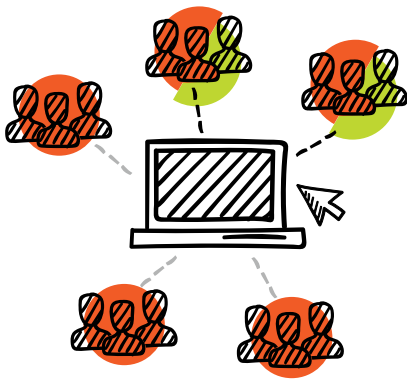
As grade levels increase, so does the need for access to digital devices and/or broadband internet outside of school.



Percent of teachers who assign homework at least once a week that requires access to digital devices and/or the internet



Teachers are in a difficult spot because not all students have access to the internet or a computer at home.



Twelve percent of teachers say that the majority of their students (over 60%) lack home access to the internet or a computer to do schoolwork at home.

Teachers in Title I schools or in schools with more than three-quarters of students being students of color are more likely to say that over 60% of their students do not have home access to the internet or a computer.

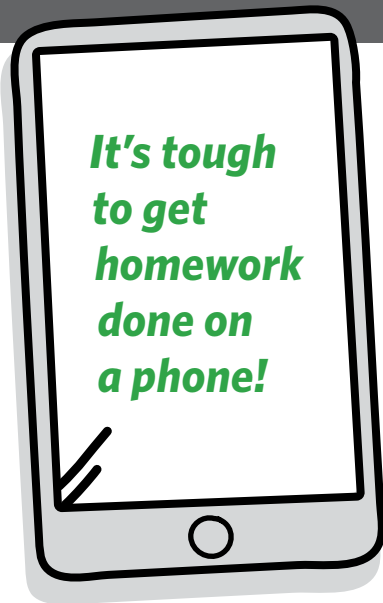


Students without internet access at home have to use library or store Wi-Fi (which they sometimes have to pay for).



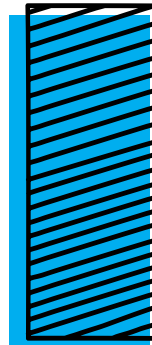
Closing the homework gap is key to achieving equity in schools. State and federal policymakers must push for critical changes so all kids can succeed. It starts with:

Teacher perspectives on digital equity

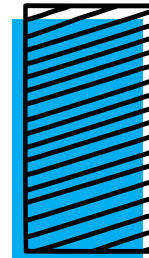


Percentage of teachers who “never” assign homework that requires digital access outside of school

Title I schools
42%



Non-Title I schools
31%



Students of color are losing out on critical learning opportunities because teachers are not assigning homework that requires broadband internet access.

Percent of teachers who say that limited access to the internet or a computer at home would limit their students' learning



Schools with predominantly students of color



34%

Schools with predominantly white students



27%

Schools with mixed populations



26%

★ A commitment to provide affordable broadband access to every student.

★ An understanding of gaps in connectivity, affordability, infrastructure, and broadband competition.

★ Support for schools, libraries, and community broadband organizations in their efforts to close the homework gap.

Methodology: This report is based on a survey of a nationally representative sample of 1,208 K-12 teachers done in May 2018 by Rockman et al and VeraQuest Inc. Random-probability sampling of a national teacher database was used with sampling quotas to provide an even distribution of teachers from four grade-band levels and to reflect trends in the national teacher population. The margin of error was plus or minus 3 percent (95 percent confidence interval).



KEY FINDINGS

Home access to technology is a challenge for teachers and students in schools serving lower-income students. In 2018, Common Sense conducted a national survey and focus groups to understand the challenges and promise of technology use in the classroom for learning. Teachers across the United States were asked about the use of educational technology with students in their classrooms, and issues of access emerged:

1

Approximately one out of 10 teachers (12%) reported that the majority of their students (61% to 100%) do not have home access to the internet or a computer.

Approximately four out of 10 teachers said that many of their students do not have adequate home access to the internet or a computer to do schoolwork at home.

2

Teachers in Title I schools or in schools with more than three-quarters of students being students of color are more likely to say that over 60% of their students do not have home access to the internet or a computer.

WHAT ARE TITLE I SCHOOLS?

Title I is a federally funded educational program that provides supplemental funds to school districts with the highest student concentrations of poverty. Survey respondents teaching in rural and urban settings were more likely to report that their schools had Title I status than respondents teaching in suburban settings (70% and 69% vs. 46%, respectively).

Respondents teaching in schools serving predominantly students of color were more likely to report having Title I status than those in schools serving predominantly white students or in schools serving students of color and white students (75% with Title I status vs. 45% or 55%, respectively).

FIGURE 1. Teachers who say at least 61 percent of students do not have adequate access to broadband internet and/or digital devices to do schoolwork at home, by demographic group

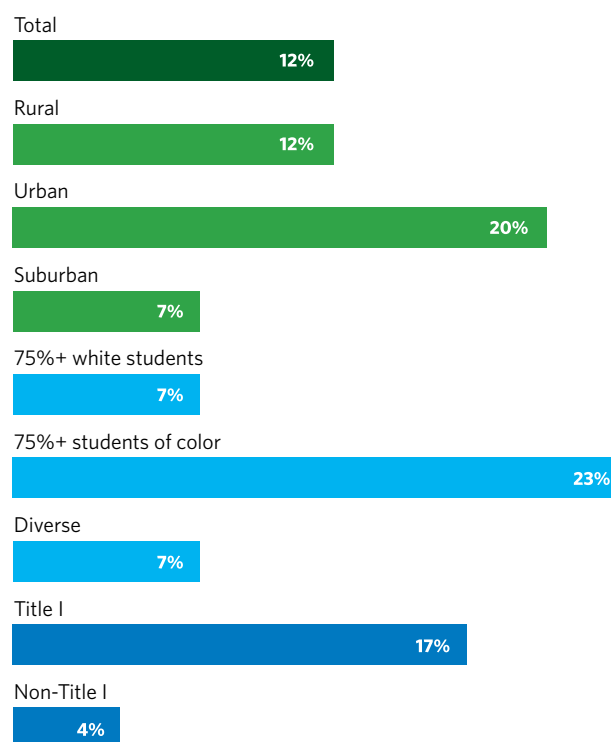
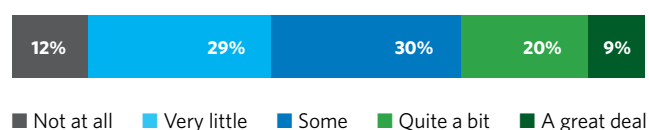


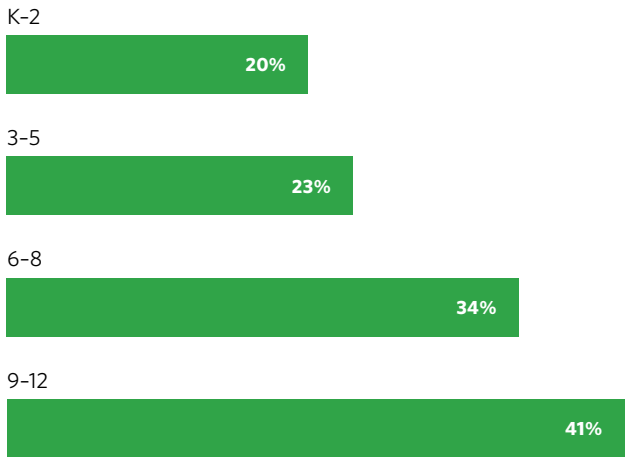
FIGURE 2. Teachers' perceptions of whether students' home access to broadband internet and computing devices limits classroom learning



3

As grade levels increase, teachers are more likely to assign homework that requires access to digital devices and/or broadband internet outside of schools.

FIGURE 3. Teachers who assign homework that requires access to digital devices and/or broadband internet outside of school, by grade band



4

Teachers who assign homework that requires access to digital devices and/or broadband internet outside of school are more likely to teach in affluent, non-Title I schools than in Title I schools.

Approximately four out of 10 teachers (42%) in Title I schools “never” assign homework that requires digital access outside of school, as compared to three out of 10 (31%) of teachers in non-Title I schools who “never” do so.

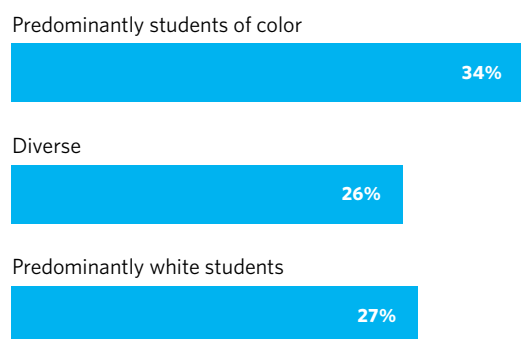
FIGURE 4. Teachers who “never” assign homework that requires digital access outside of school, by Title I status



5

Teachers in schools with student populations of predominantly students of color are more likely to say that it would limit their students' learning if their students did not have adequate access to broadband internet or a computing device at home to do homework (34%), as compared to teachers in schools with mixed populations or teachers in schools with predominantly white students (26% and 27%, respectively).

FIGURE 5. Teachers who say it would limit their students' learning if their students did not have adequate access to broadband internet or a computing device at home to do homework, by school racial/ethnic diversity



“Rural communities are often very impacted by spotty connectivity, and quite frankly, [on] long bus rides—in terms of going back and forth to school in urban districts—connectivity can also be very incomplete.”

—Rachel Barr, director, Georgetown Early Learning Project



Closing the homework gap

To close the homework gap, all students need robust broadband access.

Every child deserves access to a quality education. To fully enjoy the benefits of educational access, it's critical that every student is provided with the tools to succeed. Common Sense urges policymakers at the local, state, and federal levels to consider broadband access issues through the lens of digital equity. With careful planning and thoughtful policy solutions, the homework gap can be addressed so all kids are set up for academic and professional success.

Solutions

Affordable broadband access for every student.

- Spur local efforts to build and extend the use of community broadband infrastructure.⁵
- Develop institutional networks that connect municipal facilities that include schools, first responders, utility locations, city halls, libraries, and more with a fiber network.⁶
- Allow for open access use of broadband infrastructure.⁷
- Support Dig Once policies that speed up internet deployment by allowing broadband fiber and conduits to be installed during road construction projects.⁸
- Fund statewide and nationwide broadband mapping that tracks data important to homework gap policies (school access, home access, cost, speeds, quality, equipment, and uses).⁹
- Ensure that state and federal Lifeline programs include broadband as a supported service and increase the level of subsidy for participants.

5. Orange County public schools launching rural broadband initiative. (2017, July 17-31). *NBC29*. Retrieved from <http://www.nbc29.com/story/35904332/orange-county-public-schools-launching-rural-broadband-initiative>

6. Institute for Local Self-Reliance (ILSR). (n.d.). *Institutional networks*. Retrieved from <https://muninetworks.org/content/institutional-networks>

7. Benkler, Y., Faris, R., Gasser, U., Miyakawa, L., & Schultze, S. (2010, February). *Next generation connectivity: A review of broadband internet transitions and policy from around the world*. Retrieved from the Berkman Center for Internet & Society website: https://cyber.harvard.edu/sites/cyber.law.harvard.edu/files/Berkman_Center_Broadband_Final_Report_15Feb2010.pdf

8. Mitchell, C. (Producer). (2014, September 23). *Dakota County is fiber rich thanks to Dig Once approach* [Audio podcast]. Retrieved from <https://muninetworks.org/>

9. Schools, Health & Libraries Broadband Coalition (SHLB). (2018, April). *Policy roadmap 2018*. Retrieved from <https://www.shlb.org/uploads/Policy/2018PolicyRoadMap.pdf>

Allow schools, libraries, and community broadband organizations to help solve the homework gap.

- Clarify or add language to state and federal E-rate programs that allow for innovative off-campus and after-hours use of broadband capacity for students.¹⁰
- Encourage collaborative efforts to connect schools with community networks and public housing.
- Create or add programs to state and federal E-rate programs that provide anchor institutions with funding for equipment, administrative implementation, and infrastructure for innovative off-campus or after-hours broadband use.¹¹
- Support the expansion of state and federal E-rate programs to ensure more schools and libraries have access to funds for broadband infrastructure.
- Economic development plans at the state and federal level should include digital equity planning: programs for broadband mapping, for deployment of open-access infrastructure, for broadband subscription subsidies, for low-cost or free equipment, and for funds for institutions that provide training and support.¹²

“Students who could not afford the access were being punished not because they didn’t know the material but because they didn’t have access to the internet. How can a responsible professional educator penalize students? Fortunately for our district, the answer has been found by acquiring broadband access for our high school students through a corporate sponsorship.”

**—Ivey Powell, instructional coach,
Nash-Rocky Mount Public Schools, North Carolina**

10. Petition for waiver on behalf of Boulder Valley School District & Samuelson-Glushko Technology Law & Policy Clinic (TLPC). (2016, May 16). Retrieved from <https://ecfsapi.fcc.gov/file/60001843683.pdf>

11. Wait, P. (2018, May 30). Senators propose E-rate eligibility for school bus wi-fi. *EdScoop*. Retrieved from <https://edscoop.com/>

12. City of Seattle. (2016). *Digital equity initiative action plan: Phase 2: From vision to action*. Retrieved from http://www.seattle.gov/Documents/Departments/Tech/DigitalEquity_PhaseII.pdf



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