Broadband Fact Sheet Broadband & Education



Frequently Asked Questions

What is the Digital Divide?

The 'gap' or difference between demographic groups and/or geographic regions regarding their ability to access modern information and communication technology.

The digital equity gap is often greater in rural areas that lack access to broadband as well as among low-income households where affordability can be a barrier to adoption.

What broadband speed do I need for remote learning?

A wired connection with 30 Mbps down/15Mbps up with 60ms or less latency would be excellent for most remote learning. Higher speeds may be needed for virtual reality simulation or if your home has additional internet connected devices in use at the same time. Data caps on cell plans can also be a barrier to remote learning.

Does internet access improve education?

According to a 2021 study from Rice University on Texas public schools, not only did graduation rates improve with increased internet access, but there were also higher numbers of students meeting SAT/ ACT criterion and completing advanced courses.



"The Internet is the first technology since the printing press which could lower the cost of a great education and, in doing so, make that cost-benefit analysis much easier for most students"

> -John Katzman, Educational Technology pioneer



The Importance of Broadband in Schools: The COVID-19

pandemic exposed the digital divide within our society, highlighting many students' inability to access one of their basic rights - the right to an education. Improved access to broadband allows students and teachers to expand learning beyond the confines of their physical classrooms. Learning can be highly personalized and interactive, often at a lower cost.

Aspects of Broadband in Education



Homework

Educators are increasingly posting assignments, classwork, and additional learning content online using various education platforms or applications. This not only improves communication between parents, students and teachers, but also helps students with different learning styles identify opportunities for increased academic success.

In-Person Learning



Technology's role in the classroom is growing. 92% of secondary school teachers in a Pew Research Center survey stated that the internet is having a major classroom impact by increasing access to educational materials. A Michigan State University study found that broadband access to learning resources positively correlates with better school outcomes for students. Broadband also saves time for teachers and lowers costs for schools.





Distance Learning

Remote or distance learning is increasing at all levels of education, including for workforce training and professional credentialing. School closures during the COVID-19 pandemic forced many educators to adapt to fully remotelearning environments, and many of these tools are continuing as classrooms reopen. Ensuring broadband availability makes our communities more resilient should classrooms close again, regardless of the circumstances.

Sports/Arts

During the height of the COVID-19 pandemic, some sporting, music, arts, graduations, and other events continued, though spectators were sometimes limited or not allowed. Institutions turned to live streaming so family, fans, and alumni could virtually attend these events. With broadband infrastructure in place, this option can continue.



WISCONSIN DEPARTMENT OF Public Instruction

ImprovingDigitalEquityinWisconsin:Closing the digital equity gap is a priority

to ensure high-quality learning for all children in Wisconsin through access to robust broadband and digital learning resources, especially in rural areas and households lacking internet

the internet.

access. The Wisconsin Department of Public Instruction (DPI) is leading a variety of initiatives to help bridge the gap in digital learning access faced by many children and families in Wisconsin and provides leadership as a member of the Governor's Task Force on Broadband Access.

2021-2022 Digital Equity Data for Wisconsin Students:



or **480,881** enrolled students counted



or **14,973** students confirmed no internet access



Of students who confirmed access to



By School District

Tribal Lands

No Data

Less reliable

(worse)

or **106,160** students reported they can't stream video on their primary learning device without interruption

Data Source: Wisconsin Department of Public Instruction, WISEdash Public Portal.

Additional Tools & Resources

Learning from Digital Equity Data

DPI is helping school districts collect and use their data on broadband speed and availability to better target initiatives to help get access to those who need it.

Wisconsin Digital Learning Bridge

This program that allows school districts to purchase discounted hardware, software, and internet access for families to support blended learning.

Broadband Discounts for Families

The DPI website includes a Funding Quick Reference Guide with a list of discounts available to families to assist with broadband (and other) costs as well as broadband-related and other funding available to public school districts. These assistance programs change over time, so please visit the DPI website to view the most recent list of discount programs: <u>https://dpi.wi.gov/broadband/funding-quick-reference-guide</u> The Wisconsin Public Service Commission (PSC) offers an Internet & Phone

Helpline at (608)267-3595. Wisconsin consumers can contact the Helpline to speak with dedicated PSC staff members who will help connect consumers with discount options.

Broadband Speed Testing

DPI is partnering with Measurement Lab (M-Lab) to collect data on broadband speeds across Wisconsin. M-Lab provides detailed public reports on broadband speeds in schools. Districts, researchers, broadband advocacy groups, and the general public can use this data to understand the state of internet connectivity and advocate for initiatives to improve broadband access across the state.

Map Data Source: Wisconsin Department of Public Instruction as of 4/15/2022.



Visit the West Central Wisconsin Regional Planning Commission website for more information and fact sheets at: **www.wcwrpc.org/Broadband.html**

Map of Internet Reliability in Student's Homes 2021-2022 School Year

(better)

Vilas

More reliable