

Digital Equity Concerns for Rural Schools

When confronting Digital Equity, rural schools and systems face unique challenges due to their geography, culture, and available human expertise. Across the United States, *rural* can refer to an area in the mountains of Appalachia, the wetlands of central Florida, the north woods of Wisconsin, an indigenous community on a remote Western reservation, a subsistence village in Alaska, or even within an hour of a major metropolitan community. Efforts at addressing Digital Equity – especially ensuring access to high-speed Internet – may be stymied by canyons, rivers, mountains, or a ground of solid granite, not to mention the financial hurdles. Telecom companies and local Internet Service Providers (ISPs) may find it physically difficult and/or cost prohibitive to connect communities that are not as densely populated as more urban or suburban neighborhoods.

However, regardless of whether a rural school can only be accessed by seaplane or is adjacent to a major highway, the need to ensure that ALL students have access to devices, broadband, and meaningful learning opportunities remains the same. This resource addresses four Digital Equity challenges facing many rural schools or systems and offers suggestions for how to tackle each one.

Challenge #1 – Access to Devices

While it is not uncommon for more affluent students to have access to their own tablet, laptop, or desktop, a [2019 Mobile Technology and Broadband report](#) indicated that in households where families earn less than \$30,000 per year, 26% report having access to ONLY a smartphone and another 29% do NOT have a smartphone at all. Further, 46% of individuals in this income group do NOT have a laptop or traditional computer. With the shift to remote learning in response to the novel Coronavirus crisis, the [Pew Research Center interviewed parents](#) of children whose schools had closed. Thirty-three percent of rural residents reported that their children would have to do schoolwork on a cellphone.

To address disparity in access to devices, many schools and districts have adopted 1:1 programs. While this may be an ideal, it may not be *financially sustainable*. However, programs such as [PCs for People](#) and [Technology for the Future](#) do make low-cost/no-cost devices available for students. Additionally, under new guidelines surrounding the Community Reinvestment Act (CRA), banks can now donate old computers to schools or students in low to moderate income and rural communities as a component of their CRA obligation.

Challenge #2 – Access to Broadband

According to a [2019 report by The Rural School and Community Trust](#), over 9.3 million students attend rural schools, and approximately 17% of those students live in households with incomes below the poverty line. In some states, such as New Mexico, the majority of rural schools reside in high-poverty communities. Given this reality, home access to broadband is not always a financial reality. Further, due to challenges of geography, some rural areas exist outside of any broadband or cellular service.

Depending on geography and cost, several potential solutions exist to expand student access to Wi-Fi and high-speed internet. First, schools can look to expand their own physical access through extended hours – particularly in libraries, cafeterias, and other common spaces. Next, schools might expand their existing networks to outdoor spaces such as parking lots and courtyards. This way, students and their families can gain access regardless of whether the building may be open. Additionally, many schools have started to implement Wi-Fi on school busses to provide extended access while traveling to and from school or school sponsored events. These busses can also be parked in different neighborhoods to extend access to their communities. Finally, schools and systems can explore options to build their own cellular or Wi-Fi networks across their community. For example, in the Madrid-Waddington Central School District in Northern New York, the schools partnered with families, a local internet provider, and their regional cooperative educational services to create a “neighbor to neighbor” network that connects homes that do have access to those who do not.

Another avenue might be to partner with local businesses and anchor institutions such as libraries or medical centers to allow students to use their Wi-Fi. However, given the terrain of the area as well as the proximity of students to town, this may or may not be feasible. Finally, many schools have implemented mobile hotspot programs to expand access outside of school. This could either be in the form of loaner programs such as when students check a hotspot out from the library or by providing a device to each student. Multiple entities such as [Kajeet](#), [Mobile Beacon](#), and [The 1Million Project](#) support mobile hotspot programs that can be deployed to students’ homes or via busses.

Challenge #3 – Creative Learning Opportunities

The 2016 National Education Technology Plan (NETP) first documented the existence of a *Digital Use Divide*. It argued that not only do students need access to devices and high-speed Internet, but they also need the opportunity to develop as creators with technology and not just passive consumers. Too often, particularly in under-resourced schools, students use technology for remediation, drill and practice, or test-prep rather than more creative endeavors. A 2019 report conducted by Gallup corroborated this finding. In measuring the [State of Creativity in Learning](#), the report found that while few discrepancies existed across geography, students in Title I schools had fewer opportunities to engage in creative learning experiences supported by transformative uses of technology.

However, by leveraging technology, students can connect with others beyond their community as well as take different or more advanced courses online. In addition to creating expanded opportunities, students can engage in different types of creative experiences to develop critical thinking skills. Finally, when students have access to technology, they gain a new suite of tools to support their learning. From text-to-speech and closed-captioning to language translators and dictation, devices offer a variety of tools to support diverse learners who may not otherwise have the learning support that they need.

Challenge #4 - Digital Equity vs Digital Equality

Given the diversity of rural schools and districts, it is critical to keep in mind that the goal in addressing these challenges is Digital Equity – which is far beyond *digital equality*. With the

former, schools strive to meet the individual needs of the students in their community. This could mean providing hotspots for *some* students or installing different applications for others. At a macro level, it is critical to remember that Digital Equity looks different in a remote Alaskan village or a rural/urban municipality in Tennessee. These ideas, and the greater purpose for a school or district's Digital Equity initiative will need to be communicated not only to teachers and students but also to families and community stakeholders who may not understand the technology or its influence on learning in the classroom.

To address this fourth challenge, CoSN recommends that school and district leaders consider taking these four steps:

1. **Notice** – identify what your specific community *needs*. Make detailed observations and conduct community listening sessions so that you can hear different concerns.
2. **Reflect** – make sure to check your own opinions and experiences with technology (which may be more robust than those of members of your community) so that you can objectively analyze your observations.
3. **Define YOUR Problem of Practice** – if Digital Equity is the solution, what is the problem that you are trying to solve? Is it home/school access? Is it opportunities for expanded curriculum? Is it meeting the needs of diverse learners? Be clear on your greater purpose.
4. **Iteratively Implement** – rather than try to make large-scale investments from the beginning, consider ways to engage in shorter cycles of iteration. This will allow you to more easily adjust plans and also gain stakeholder buy-in.

The 2020 Coronavirus Crisis has revealed vast inequities in rural communities and highlighted the need to ensure that EVERY student has both broadband access and a sufficient mobile device. As district leaders consider how they will best manage their digital transformation, ensuring digital equity needs to be a top priority.