



LEADING EDUCATION INNOVATION

Defining Digital Equity

The digital divide has long existed, but as our world faces a global pandemic, this divide has been highlighted as schools grapple with the digital inequities that their students and families are facing. The digital divide between students who have home Internet access and those who do not impacts low-income and rural students especially hard. It can also exacerbate other pre-existing inequalities by making it difficult for students to complete assignments or connect with their teacher, thus creating digital inequity. As districts tackle the digital equity problem head-on and address the digital divide, we must first be clear on what we aim to achieve when referring to digital equity. To understand what digital equity is and how digital inclusion comes into play, we look to The Digital Equity Act of 2021 that defines digital equity and inclusion in the following ways;

- **Digital Equity:** The conditions in which individuals and communities have the information technology capacity needed to participate in American society fully and the economy.
- **Digital Inclusion:** The activities necessary to ensure that individuals have full access to and use of affordable information and communication technologies, including reliable broadband internet service; internet-enabled devices that meet the individual needs of the user; access to digital literacy training; and the applications and online content that enable and encourage self-sufficiency, participation, and collaboration.

Through examining these two definitions, it is essential that educators consider the context of school and how these two definitions apply within our context. As a district sets its vision for student success, digital equity and digital inclusion must be integrated into that vision to fully realize an equitable education for all students. A digital divide is formed when there are gaps in either of these areas. This divide exists across the country for many students and their families. The recent pandemic highlights the growing problem and the need for flexible, virtual and hybrid schooling models. Across many fields, researchers, policymakers and advocates have discussed this divide and have offered data and potential solutions for closing the divide. As school districts work towards realizing digital equity, several key areas need to be addressed. These five key areas include; **connectivity, hardware, teaching and learning, digital citizenship and tech support.**



CONNECTIVITY & DEVICES

For many districts, the pandemic has allowed them to acquire more devices and forced them to take a serious look at students' internet access in their homes. CoSN has long been a source of information and advocate for schools in their quest towards digital equity. Reports like the [Student Home Connectivity Study](#) that takes an in-depth look at ten different school systems from across the county have helped districts better understand the hardware and connectivity needs that students have.

CONNECTIVITY

Being able to connect to the internet is essential for today's students. The pandemic has forced us to think about having connectivity at school and wherever students engage in learning. Thinking about the need for connectivity in this way expands the demands of our infrastructure. It forces us to think more broadly about supporting students to access the internet. The [CoSN Student Home Connectivity Study](#) found that students are mobile and rely on Wi-Fi. Many students participate in online learning activities outside their own homes, with 92 percent using Wi-Fi. Students often use district-provided devices and personal devices concurrently, increasing Wi-Fi bandwidth needs. Finding ways to address the need to provide sufficient high-speed Wi-Fi to students beyond the school building is essential to realizing digital equity in our districts.

DEVICES

Connectivity is only the beginning piece of the puzzle in achieving digital equity. The type of device that students are given is equally as important as their access to broadband. Strategic long-term planning is essential as districts look to purchase new equipment. Access to a device that is sufficient and meets the needs of current learning trends is vital.

Schools cannot overlook current learning trends outlined in The [CoSN Student Home Connectivity Study](#). These learning trends included two significant findings:

- ***Learning with Video is Essential for Education.*** Over 85 percent of network traffic in remote learning is used for video, which requires sufficient upload and download speeds. This increasingly popular learning trend is expected to continue for the foreseeable future.
- ***The Remote Learning Experience is Significantly Impacted by Device Quality.*** The quality of a student's experience can be impacted by the age, type, quality and configuration of the device they're using. Routinely collecting data sets that provide insight into student use of district-provided devices can enhance their experiences.

Ensuring that every student has a device that is adequate for the instructional rigor needed is essential. This requires the CTO's leadership to discuss the curriculum needs with other district leaders to understand the pedagogical needs better and align them with the procurement of devices. District leadership must have the conversations in conjunction with their vision for teaching and learning to avoid digital equity gaps.

TEACHING AND LEARNING

Digital Equity is a complex and nuanced topic. It encompasses more than equitable access to high-speed internet and powerful computing devices both inside and outside school. While it can be easy to confuse digital access with Digital Equity, the latter requires careful consideration that students not only have access to robust internet connectivity and devices that are adequate for their instructional needs but also accessible content and platforms, opportunities to leverage digital tools as creators of their own knowledge and understanding, as well as experiences that value and

empower them as learners. Ensuring that digital access is available, leaders must also communicate a shared understanding around the possibilities for student learning. A clearly defined vision for how devices and expanded broadband access intend to augment and broaden students' learning opportunities will help district leadership teams to gain buy-in and support from stakeholders, including teachers, families, students, local officials, and the broader community.

TEACHING

As we work to get devices in the hands of students and ensure that there is adequate broadband coverage for them to participate in learning meaningfully, we must go beyond the devices and connectivity and look towards our instructional practices. Closing the digital equity gap isn't just about devices or connectivity; it is as much about teaching as it is about technology.

Educators skilled in technology integration are essential because technology can help teachers personalize instruction and engage students more effectively. In addition, district leaders must understand and value the digital integration and acknowledge the following as they craft their vision:

- Training is often needed to support the ongoing development of technology integration. Allowing teachers time to explore the available technology resources and planning how they might best utilize these tools with other educators plays an essential role in digital inclusion. In addition, all teachers should be equipped and trained to deliver instruction using digital tools when appropriate.
- Teachers should be trained and skilled at figuring out when technology will aid learning and when technology is not needed for a learning goal.

On its own, access to connectivity and devices does not guarantee access to engaging educational experiences or quality education. Without thoughtful intervention and attention to the way technology is used for learning, the digital use divide could grow even as access to technology in schools increases.
(USDE Office of Ed Tech,
<https://tech.ed.gov/netp/learning/>)

The ISTE Standards for teachers also provide good support for leaders who want to identify the teachers' skills needed to engage students in meaningful ways with technology.

LEARNING

Closing the digital divide doesn't stop with access, robust devices and teachers who can effectively integrate technology into their instruction. Students should experience curriculum-rich opportunities that are meaningful and offer options that empower them as learners.

- **Accessibility:** We must also ensure that all members of school communities, including those that need additional support, can access key learning experiences. This access includes but is not limited to students with disabilities and those who might need more help accessing and fully utilizing digital tools and software available to them.

- **Digital Literacy:** Students must be given the opportunity to develop the digital literacy skills to navigate virtual learning environments.

Digital equity and inclusion ensure that students; have the knowledge and skills to use technology for learning, frequently interact with robust and accessible content and programs, see their identities represented in and by the technologies they use and experience meaningful opportunities that empower them as learners.

The ISTE Standards for Students can also help educators understand and articulate the skills students need and the types of learning opportunities they need to experience to close the digital divide. Finally, school leaders must consider how these standards are incorporated into their vision for teaching and learning or their portrait of a graduate profile.

ONGOING TECH SUPPORT

Ongoing support is necessary for both teachers, students and their families. Pre-pandemic, much of our efforts with tech support focused on supporting the teachers and students while in school. But in today's world, schools must now focus on providing support to those within the school building and families who are supporting their students while they are at home. Schools need to be flexible in their thinking to offer multiple opportunities and modalities in their tech support for families and teachers' growing need for tech support.

Closing the digital divide is not an easy task. Still, school districts across the country are making good strides to ensure that all students have equal access to learning opportunities by focusing on digital equity and digital inclusion. CoSN will continue to provide resources for school leaders to support them with these efforts. Visit our [Digital Equity resource page](#), where you will find more information and resources to support school leaders.

Thank you to our Digital Equity Advisory Committee for their guidance and work on this document.

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