Executive Summary

Digital equity is achieved when all individuals and communities have the information technology capacity that is needed for full participation in the society and economy of the United States (U.S.). Reaching this goal for all learners is a challenge that has been highlighted and exacerbated by the digital opportunity and equity gaps exposed due to the COVID-19 pandemic. The federal government, states and territories, localities, Tribes, nonprofit and community-based organizations, community anchor institutions, districts, schools, institutions of higher education, and many others have each contributed to the ongoing progress toward digital equity. By the spring of 2021, 94 percent of adults with children under 18 in their household reported having internet and computers always or usually available for learning, an increase from the spring of 2020.[4]

Despite significant growth in technology use, much work remains to ensure all learners, families/caregivers, and communities have access to reliable, high-speed broadband and technology tools for learning. In the U.S., more than 18 million households continue to face challenges with gaining access to high-speed broadband, and households earning less than $30,000 per year are significantly less likely to have a computer than households making over $100,000.[5] While 40 percent of K-12 learners identify as Black, Hispanic, or Native American, a disproportionately greater percentage of unconnected learners (54 percent) identify as Black, Hispanic, or Native American. Furthermore, Black and Hispanic learners are less likely to have a computer at home compared to white peers.[6] Overall an estimated 15–16 million K-12 learners do not have sufficient access to reliable, high-speed broadband and/or technology tools for learning.[7]

To ensure all learners have equitable access to reliable, high-speed broadband and technology tools for learning, we must consider the three components of access—availability, affordability, and adoption. While availability and affordability are often the focus of discussions around digital equity, adoption barriers—including, but not limited to, the lack of information, support, and skills necessary to obtain regular, adequate access to reliable, high-speed broadband and technology tools—currently impact 6 million learners.[8] Additionally, 32 million Americans have limited or no digital literacy skills, including half of Black and Hispanic workers.[9] While leaders should certainly address availability and affordability challenges as they advance digital equity, they must simultaneously put forth solutions to overcome human-level adoption barriers that currently reinforce the digital divide.

The U.S. Department of Education's Office of Educational Technology (OET) is well-positioned to support efforts to advance digital equity, particularly with regard to human-level adoption barriers. In developing this guidance resource, OET leveraged its experience in setting the national vision for the effective use of technology for learning, strong relationships with educators and education ecosystems, and commitment

[4] Hemphill, C., Wang, Y., Forster, D., Scott, C., & Wilburn, G. (2021, June 9). *Students' access to the internet and digital devices at home.* National Center for Education Statistics Blog. https://nces.ed.gov/blogs/nces/post/students-access-to-the-internet-and-digital-devices-at-home

[5] DigitalUS Coalition. (2020). *Building a digitally resilient workforce: Creating on-ramps to opportunity.* https://digitalus.org/wp-content/uploads/2020/06/DigitalUS-Report-pages-20200602.pdf

[6] Rideout, V.J. & Robb, M.B. (2021). *The Common Sense Census presents: Research brief. Remote learning and digital equity during the pandemic.* San Francisco, CA: Common Sense. https://www.commonsensemedia.org/sites/default/files/featured-content/files/final_release_digital_equity_research_brief_fact_sheet.pdf

[7,8] Ali, T., Chandra, S., Cherukumilli, S., Fazlullah, A., Galicia, E., Hill, H., McAlpine, N., McBride, L., Vaduganathan, N., Weiss, D., & Wu, M. (2021). Looking back, looking forward: What it will take to permanently close the K-12 digital divide. San Francisco, CA: Common Sense Media. https://www.commonsensemedia.org/sites/default/files/featured-content/files/final_-_what_it_will_take_to_permanently_close_the_k-12_digital_divide_vfeb3.pdf

[9] DigitalUS Coalition, 2020

to co-creating solutions with communities to drive national dialogue on the adoption of reliable, high-speed broadband and technology for learning. This guidance resource helps catalyze collective action to remove barriers for learners, families/caregivers, and communities, creating more equitable access to technology-enabled learning experiences for learners in both in-school and out-of-school learning environments and further enabling access and adoption among their families/caregivers and communities. When learners and their broader ecosystem are connected, they are also better able to access vital online services, such as tele-health, counseling, social services, remote employment opportunities, and job training.

The Infrastructure Investment and Jobs Act provides leaders with a historic opportunity to develop strategic plans to use the various recently authorized broadband funds. The purpose of this guidance resource is to support leaders in developing effective digital equity plans in these ways:

- Exploring the three components of access—availability, affordability, adoption
- Highlighting existing barriers to achieving digital equity
- Providing promising strategies to overcome these barriers
- Identifying key action steps for leaders

This guidance resource was informed by conversations with community leaders and members who participated in a series of listening sessions hosted through OET's Digital Equity Education Roundtable Initiative. These sessions provided valuable insights into the opportunities and challenges related to digital equity across different communities. These learnings may inform decision making for leaders in their path to achieving digital equity.

While each community will need to design and implement strategies that are aligned to their unique circumstances, several common themes were identified, which provide a foundational understanding for leaders and communities as they work together to co-develop strategies to advance digital equity.

	Availability	Affordability	Adoption
Barriers	• Lack of continuous internet and device availability for highly mobile learners • Lack of large-scale infrastructure due to digital redlining • Lack of reliable, high-speed broadband connection • Limitations of building-level infrastructure • Limited or lack of ownership of personal devices capable of running learning programs	• High cost of broadband and technology tools for learning • Lack of sustained funding for affordable internet programs	• Distrust between communities and government and/or private companies • Lack of access to technical support for learners and families/caregivers • Lack of collaboration between government agencies, community-based organizations, Tribes, and private companies • Lack of community buy-in due to the exclusion of communities most impacted by the digital divide from conversations about digital equity • Lack of inclusive strategies for communicating with families/caregivers • Lack of reliable, disaggregated data to guide investments in targeted communications and supports • Lack of resources and support in learners' and families'/caregivers' home languages • Lack of support to complete applications for affordable broadband programs • Limited access to digital literacy skills training for caregivers/families, learners, and educators • Limited access to professional learning for educators • Limited institution- and organization-level capacity
Strategies	• Distribution of hotspots and devices to learners and educators • Partnerships with internet service providers (ISPs) to increase equitable infrastructure • Use of public spaces and community partnerships to establish internet access	• Community partnerships with ISPs to lower costs • Ongoing federal, state or territory, and local funding for districts to purchase equipment and fund affordable internet and digital literacy programs • Programs offering subsidies to learners and families/caregivers	• Co-creation of solutions with community members and community-based organizations • Digital literacy opportunities for learners, families/caregivers, and educators • Multilingual technical support for learners and families/caregivers • Provision of human-level support through partnerships with community-based organizations and/or trusted advocates rooted in communities • Regular conversations soliciting feedback and needs from learners and families/caregivers

Key Steps for Leaders to Ensure Access for All Learners

OET further identified key steps leaders can take in their digital equity planning efforts to ensure access for all learners:

1. Develop and earn public trust through partnerships.

2. Learn from those impacted by inequitable access and provide opportunities for feedback.

3. Co-develop clear goals and strategies with communities to craft a comprehensive digital equity plan.

4. Raise public awareness and provide ongoing support for low- or no-cost broadband programs.

5. Provide digital literacy training and professional learning opportunities.

These steps are described further in the full report on .

Please note that this guidance resource is NOT intended to provide guidance regarding the allowable uses of various broadband funds included in the Infrastructure Investment and Jobs Act. For information regarding allowable uses and other specific information about broadband programs in the legislation, please visit internetforall.gov.