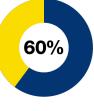


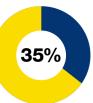
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Digital Inclusion for Blind and Low Vision Students

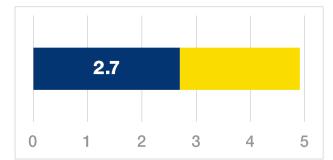




Nearly **60%** of educators reported that their blind and low vision students **could not access at least one classroom digital learning tool.**



35% of educators reported their students **could not access at least two tools.**



Families reported their children used an average of **4.9 different digital tools or programs** during the pandemic. On average, **2.7 were said to be inaccessible.**

What are the consequences of digital learning tools that are not fully accessible?

- Students are unable to complete required assignments.
- Students need continuous support from a family member to complete work.
- Students feel frustrated, discouraged, or excluded because they cannot participate and access lessons like their peers.
- Blind parents cannot fully support their children.
- Teachers have to invest extra resources in creating alternatives.

Data Source: *Three Access and Engagement* studies conducted by the American Foundation for the Blind in Spring 2020, Fall 2020, and Summer/Fall 2021. See www.afb.org/AccessEngagement

www.AFB.org/AccessEngagement

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In Their Own Words: Experiences of Teachers and Parents

"I've become an advocate, it's my job to make the world accessible until he can do it himself. I've developed a great deal of anger, I'm just done. The ADA's been law for 30 years and some people don't care."—*Family member of a 12-year-old blind child with other disabilities*

"Tech sucks. Nearly all of the platforms districts and teachers are using to provide instruction are inaccessible. I've reached out to [2 companies], to make them aware of this issue, but all I ever get is an apology and that they are working to make their sites inclusive to everyone. I don't think they have the slightest clue of where to begin."—*Educator*

"[One Program] was not set up for a screen reader, had videos that were not audio described. We spoke with their OIT department about accessibility issues but were told they couldn't implement them."—*Family member of a 16-18 year-old blind child*

"My son has really struggled with [his learning management system]. I know there are some accessibility features built into [it], but it is not user friendly for children with VI." *—Family member of a child with low vision, 13-15 years old*

"It was difficult for me to view my son's online portal from his school. I struggled with assisting my son and in turn that stressed him out. [...] When he had school through online methods, I had trouble seeing, but his teacher did help me through emails."—*A parent with a visual impairment*

"My biggest frustration is overall accessibility. Example, the class is assigned an online science simulation on creating circuits that is produced by a curriculum company. The science simulation is visual with no auditory information and the only way to connect the pieces is by using finger gestures. My child can't see the parts so can't do the assignment. The common answer for this situation is to exempt my child because it is too visual. Why? [...] Why does my child not have the opportunity to learn ideas and concepts because companies don't make things accessible, schools buy those inaccessible programs and then don't provide an alternative way to learn the same information?"—*Family member of a 16–18 year-old child with low vision*

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Pandemic Impacts for Vision Professionals to Consider

Teachers and students alike were met with a barrage of distance education technologies to learn on the fly. Lack of access to braille and assistive technologies slowed down academic progress. Virtual learning limited hands on instruction, and was especially challenging for orientation and mobility instructions. While the schedule inconsistencies and accessibility barriers of the pandemic were grueling, the next challenge awaits: catching up on all the learning loss unique to students with visual impairments.

As the vision professional, you are uniquely suited to advocate to administrators, families, and teams about the gaps that developed for students during remote instruction, and how the team can set instructional targets for the coming years to get students back on track. Data from the Access and Engagement reports may be useful in supporting your advocacy, and showing the common themes uncovered through online instruction in recent years.

Students were unevenly impacted by the pandemic

Protective Factors

Lots of home support for education during virtual instruction

Technology skills and resource in place prior to shifting to virtual

Teachers had lots of time for individualized student attention

Limited in-home support

Less educator support

Children with multiple disabilities or complex learning needs

Key developmental stages occurred during lockdowns, especially young children and transition aged youth.





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Special Impacts on Orientation and Mobility (O&M)

Students and professionals made admirable efforts to be flexible and resilient throughout the pandemic. However, the very nature of lockdowns kept children in their houses, and limited use and learning of O&M skills. People made fewer trips outside the home, mass transit was shut down or restricted, the need to avoid other people, and virtual instruction all had limiting effects on O&M skill development. Most students will require extra O&M instruction to catch up after these lost learning opportunities. Some of the key areas where deficits in pandemic instruction were identified include:

- Concept development
- Motor patterns, such as cane positioning
- Street Crossings
- Transit system skills

Technology Education

"I would wonder why I didn't ever think of telling her teachers, 'We should give her a laptop, we should give her tools or equipment that can help her learn and have the same knowledge about technology as her peers.' My son and daughter are around the same age. They only have a 13-month age difference, and my son uses the computer with ease. My daughter, on the other hand, doesn't because no one took the time to say we should teach her how to use technology during school." *—Spanish-speaking parent of an 8-year-old who is blind*

- ✓ Begin technology instruction early
- Aim for students to acquire proficiency in mainstream technologies at the same time as sighted peers.
- ✓ Teach assistive technologies needed to access digital or physical content.
- Choose assistive technologies based on a thorough AT assessment. Assessments may be conducted by a knowledgeable, an AT specialist, a professional specifically training in AT for individuals who are blind or visually impaired.
- ✓ Consider technology needs for O&M, vocational needs, communication, and household management early, so that cohesive technology systems can be developed.
- Support families in learning technology, including Assistive Technologies, alongside their student.

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Digital Access in the In-Person Environment

As activities transition back to in person, it's important that the lessons learned in the pandemic inform the next steps. Having many activities take place virtually illuminated the need for information to be accessible. However, information, documents, and resources need to continue to be accessible throughout in-person settings as well, so that students who are blind or have low vision will have access to the curriculum.

- Set high expectations for students.
- Provide students early access to accessible materials.
 - Projections may need to be previewed in advance, as well as followed on a personal device.
 - At-A-Glance style information takes much longer to perceive and interpret tactually or auditorily.
 - Videos need audio description & captioning. Live presentations, demonstrations, or teacher-led modelling often benefit from audio description as well.
- Provide vision professionals materials with enough lead time to prepare braille, large print, or alternative accessible media, usually weeks.
- Leverage universal design for learning principles, such as multiple modes of engagement, representation, and expression, to make sure all students can be active in the learning process.
 - Have a plan for making information produced by students accessible to their peers in real time.

Excusing a child from an assignment may give them access to the same grade in the class, but it doesn't give them access to the same learning. Providing paths for participation, engagement, and inclusion should always be part of the plan.

Find resource links at www.AFB.org/ToolkitResources

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Individualized Education Programs (IEP): Plan for Digital Inclusion

Digital access is a fundamental step to curricular access in all 21st century schools. Blindness and low vision often directly impact access to the curriculum. It might help to think of accessing content as a chain linking the student to their curriculum.

Accessible materials – Technology – Learner technology skills.

The IEP is the educational team's cohesive plan of a student's goals and the services and accommodations the school will provide to reach them. The chain is only as strong as its weakest link.

Be informed of parents' rights during the IEP process.

You can request a meeting at any time

You can sign that you were "in attendance only" without agreeing to the contents right away. That way you can take the IEP home to review prior to signing your agreement.



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Include Digital Access Throughout the IEP

The following suggestions are ways to include digital access in each of the different parts of the IEP:

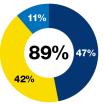
- Present level of academic achievement and functional performance (PLAAFP): Document what has worked well for access, what technology skills are mastered, and points of frequent frustration with digital inclusion.
- Annual goals: plan for technology and assistive technology instruction, state clearly what assistive technologies will be used while meeting other goals.
- Program modifications & supports: state who will train or support educators in preparing accessible materials. Document the time staff will be given to make necessary modifications.
- Accommodations: be clear about what formats are accessible, how long in advance they need to be provided to access them appropriately, what back up technology will be in place in case there is a disruption to the primary AT, etc.
- Align accommodations during instruction, during assessment, and across school environments so there is a consistent system. Include plans for access if teaching switches to virtual or hybrid learning.
- Accommodations may also be needed to access school engagement such as the check out in the lunch line, online grade portals, school email, activity schedules, etc. Blind and low vision students should have access to the same information as their sighted peers, at the same time.



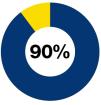
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Social and Emotional Resilience



47% of the educators indicated that 1%–25% of their students experienced social or emotional challenges, and **42% reported challenges for more than 25% of their students.**



90% of the educators surveyed agreed or strongly agreed that the 2020–2021 school year was more emotionally challenging for them than previous years.

Emotional Impacts of the COVID-19 Pandemic

- Loneliness and isolation resulted from cancellation of scheduled in-person activities.
- Fear and anxiety around COVID were common in children and families.
- Social reluctance increased for some children, especially those who were in key developmental stages.
- Familial stress increased, due to uncertainty in schedules, resources, education, economic situations, etc. This may be more pronounced for families with children with multiple disabilities or complex needs.
- Some children found social groups in virtual spaces as a result of exploring their interests during the pandemic.
- Some online environments eliminated typical barriers associated with blindness, such as transportation issues and social stigma.

Ways to support post-pandemic adjustment

- Acknowledge and validate the stresses
- Ensure collaboration to provide holistic support to students and families now and moving forward
- ✓ Social groups
- Access to counselors



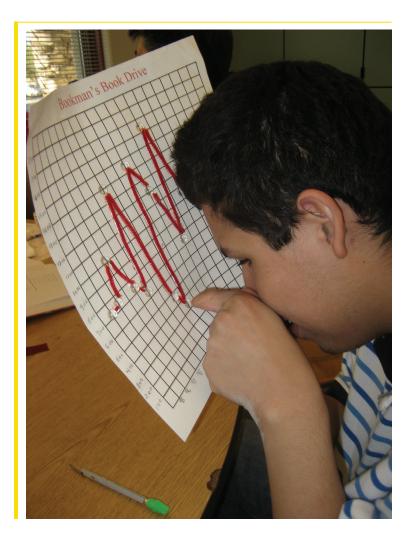
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Resources for social and emotional connection post pandemic

Each of the following organizations offers a way to connect with other youth who are blind or have low vision, their parents, and adults who are blind or have low vision. Find resource links at **www.AFB.org/ToolkitResources**

Crisis Lines Available

Call 988 if you, or someone you care about, is experiencing a mental health crisis. You can also text 988, or chat using an online service at 988lifeline.org/chat.



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Tips for Teachers: Inclusive Digital Classrooms for Blind and Low Vision Students

- ✓ Check with your technology coordinator to confirm that all of the technology you are using is accessible to and usable by students with disabilities.
- ✓ Seek out professional development on inclusive and accessible classroom practices, including creating accessible emails, videos, worksheets, and presentations.
- ✓ Set high expectations for achievement and participation. If a digital tool isn't |accessible, students should have timely access to a remediated or alternative version, rather than being excused from the activity.
- ✓ Help young students who are blind, have low vision, or are deafblind get early exposure to using computers alongside their peers.
- Learn about students' experiences with digital learning during the pandemic: www.AFB.org/AccessEngagement

Resources for Teachers

Links to resources are available at www.AFB.org/ToolkitResources

Accessibility with Google Docs and Slides

Accessibility with Microsoft Office

Color Contrast Checker

Basic Accessibility Testing for Websites

And more!

Email AFB: research@afb.org

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Getting Started with Digital Accessibility in the Classroom

1. Check accessibility before assigning any materials or technology.

2. Add image descriptions to all images and graphics.

- Use built-in alt text tools to convey the meaning or content.
- Avoid images with lots of text.
- If a graphic is complex, provide a textual version.
- If an image is purely decorative, mark it as such.

3. Make sure videos have audio descriptions and captions.

- Have speakers in a video describe key visual information.
- Add descriptions to YouTube videos with YouDescribe.org
- Use accessible videos from the Described and Captioned Media Program: dcmp.org
- 4. Give documents and files meaningful titles and file names.
- 5. Use built-in headers, styles, and lists to create structure in documents.
- 6. Use descriptive links. Avoid "click here."
- 7. Ensure tables have headings and labels.
- 8. Make sure forms have proper labels and can be used with a keyboard.
- 9. Avoid using only color to convey information. Use high color contrast.
- 10. Use good meeting practices during online calls.
 - Have everyone identify themselves before speakers.
 - Limit cross-talk.
 - Avoid overusing the chat function. Screen reader software can announce anything put in chat, making it hard to hear the speaker.

11. Share materials and slides in advance, so students can follow along.

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Advocacy in the Community

In addition to advocating with teachers and IEP teams, sometimes people encounter accessibility issues that motivate them to advocate on a larger scale. Determine the root: **what is causing the barrier?** Brainstorm possible solutions. Choose the right audience: *someone with the power to influence the specific policies or implementation causing the problem.* Use the best method to communicate your thoughts, whether in person, a phone call, a letter, a public comment, etc. While the following do not cover every case, they may help you approach crafting your advocacy plan.

Examples of issues that may be beyond the control of your IEP:

- the science curriculum that is used across the district is inaccessible. Your school district or state has a policy that prevents students from taking full advantage of their O&M services in the community. (department chair, curriculum director, or school board)
- Statewide standardized testing uses software that is not accessible to you (statewide department of public instruction, state representatives)

Lawmakers want to hear from you, and often they don't know much about the needs of blind and low vision students. There are lots of people who influence education in your community. These people may include:

Your school board member, the local school superintendent, your mayor, your state legislature, your state department of education.

Each administrator and lawmaker may have a different way for you to make your voice heard. For example, you may testify in front of a committee or call an individual office. You can send a letter or email to just about everyone.



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Tips for reaching out.

- Tell your or your child's story. What is the problem, what solutions have been tried, and what change would you like to see?
- If you can, bring examples of policies or practices that other schools or districts have adopted that you would like to see your school adopt.
- Try to be polite but vocal and provide a way for people to contact you.

Find out more about what to expect when speaking to elected officials.

Find your elected official: https://www.usa.gov/elected-officials

What Vision Professionals Can Do Now

- ✓ Provide additional instruction in areas affected by learning loss.
- ✓ Continue increased communication and collaboration with families.
- ✓ Resume in-person services to meet learner needs learning loss shows that doing 100% virtual instruction was not effective in all areas.
- ✓ Collaborate among TVIs, O&Ms, CATIS, Parents, Teachers, Allied Health Professionals (such as OTs, SLPs, and PTs), paraprofessionals, and students to develop comprehensive plans for the coming year.

Self-Care: You can't set yourself on fire to keep other people warm

- Identify ways to improve a healthy work-life balance
- Communicate your needs with your supervisor
- Build collaborative teams at work
- Don't be afraid to ask for help
- "Metabolize" trauma
- Process and work through it.
- Talk with a trusted professional, friend, or family member.
- Practice gratitude for learning from tough experiences.
- Forgive your past-self or past-others for mistakes made.
- Give grace.

Just like you'd call 911 for an emergency related to your physical health or safety, you can call 988 if you are experience an emergency related to your mental health and safety. Call or text for crisis support!