

What technology lessons did educators learn during the pandemic that continue to be valuable for meeting students' educational needs?

After more than a year of pandemic disruptions, educators and families are re-envisioning how teaching and learning happen, maintaining what is practical from the past while evaluating recent lessons learned. Many educators are [embracing instructional technology and technology solutions that increase student engagement](#). School districts are looking at new, tech-forward ways of delivering instruction while meeting 21st-century needs (e.g., for teenagers who have jobs, children with certain medical conditions, kids and families who prefer learning virtually, etc).

The information in this brief was developed to provide educators practical ways to integrate technological tools and innovation into student learning.

THINGS TO CONSIDER

Now and for the foreseeable future, [successful technology integration](#) is essential to the education system and its teaching staff, students and schools. Educationally embedded technology provides opportunities for personalized instruction, collaborative learning, development of digital literacy skills, extension of learning beyond classroom walls and convenient access to information.

In Oklahoma, access to [high-speed broadband](#), reliable mobile service, modern technology and hardware are no longer optional – they are core infrastructure needs for schools and homes. Discussions are ongoing at the federal level to determine how to best address persistent [issues of digital equity](#) and the technology and infrastructure gaps that characterize them. Educators must also address the “digital

divide” – which tends to be [most pronounced in rural communities](#) – to determine where a lack of internet infrastructure limits technology access and reliability for students, families and the school itself.

Pandemic-related school closures and disruptions have amplified the importance of families and caregivers supporting their children's education at home. Students are digital natives who are comfortable trying out new technologies, and it can be difficult for adults to keep pace. It is increasingly important that educators have the ability to leverage technology to help students meet learning goals and be equipped to support families and caregivers with the technology skills to [assist in their children's learning at home](#).

KEY INSIGHTS

- Successful technology integration is essential to equitable educational experiences for students at school and at home.
- Ensuring staff have [adequate technology professional development and ongoing support](#) is key to positive student outcomes.
- Communities must address issues of digital equity, particularly in rural areas, to ensure that technology infrastructure supports learning needs.
- Widespread educational innovation is needed to close equity gaps and provide a 21st-century education to all students.

SEE ALSO

- [How can instructional coaching be used to support teachers?](#)
- [How can student learning be supported at home during the summer?](#)
- [Return to Learn: Launching Instruction with Digital Tools](#)

Schools can provide a foundation for faculty to stay abreast of technological advances by setting aside time and resources for ongoing, embedded professional development. [Successful professional development strategies](#) around technology integration and use include harnessing the power of instructional technology coaches, leveraging the expertise of teacher leaders and providing opportunities for peer-led professional learning.

ATTENDING TO EQUITY

The effects of pandemic school disruptions on learning are significant and likely to have persistent adverse impacts across a number of topics related to teaching and learning. While virtual instruction poses challenges to all students, it disproportionately impacts the most [disadvantaged students](#), further exacerbating existing [inequalities, inequities and achievement gaps](#).

With appropriate integration of technology tools and practices, some persistent inequities can be dismantled. Educators can [spend time talking to children and families](#) about their experiences, challenges and expectations, including those related to access to technology, how to use tools and troubleshooting tips.

Districts must prioritize sufficient and sustainable funding for meaningful educational opportunities for all students that are [calibrated to indicators of educational equity](#). Additionally, school leaders should ensure all school-issued devices have the capacity and speed to handle the coursework, applications and resources students need at different grades and subjects.

RECOMMENDED ACTION STEPS

- Develop a [district-wide plan](#) to identify students who lack access to devices and WiFi outside of school and utilize federal and state funds to ensure all students have the access needed to be successful.
- Follow [inclusive technology practices](#) when determining which technologies to purchase and implement into classroom instruction.
- Leverage guidance from the Oklahoma State Department of Education on [Launching Instruction with Digital Tools](#) and [Distance Learning](#) for various grade and subject areas and explore strategies for integrating technology into in-person or remote learning experiences.
- Review lessons learned from the [research collected on remote and distance learning](#) during the pandemic to provide technology-integrated learning experiences that are engaging, equitable and effective.
- Learn more about effective [research-based strategies](#) for remote learning with an emphasis on [student engagement](#).
- Ensure students have access to [tiered systems of support](#) in virtual and hybrid learning environments.