



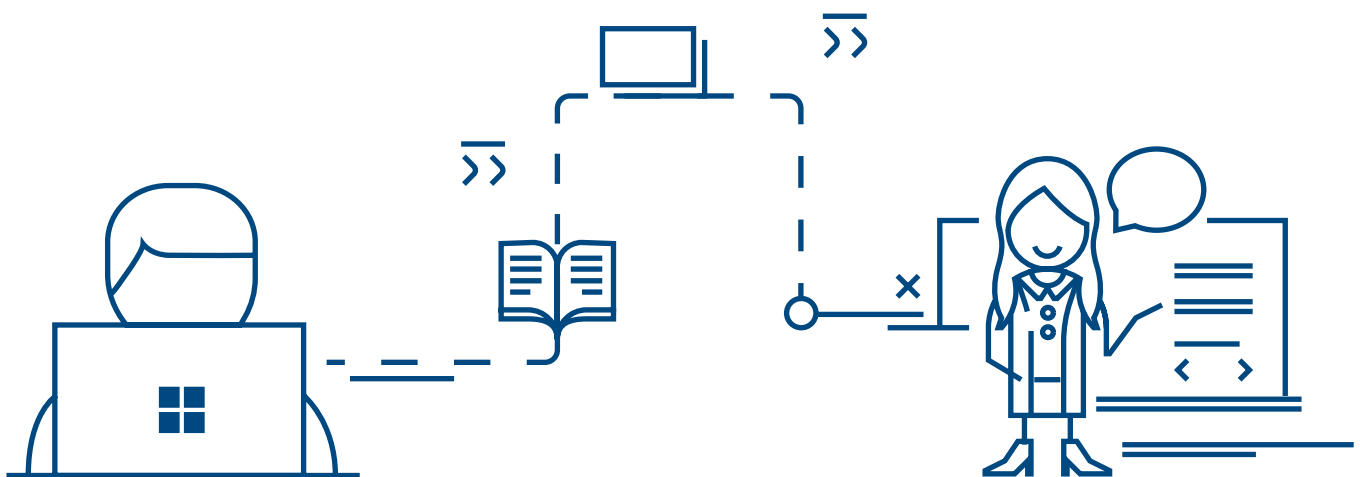
Modern teaching and
learning with technology:

A Blueprint

Global disruptions have thrown educational technology into the spotlight like never before.

Every school district in the country is wrestling with the realities and capabilities of technology in their schools and in their students' lives. But while technology can bring innovative learning experiences into students' hands more quickly and powerfully than ever before, technology alone isn't enough. It must be part and parcel of a holistic vision that begins with you. Wherever you are in your journey, Microsoft wants to help your students achieve more and help you build a resilient, personalized educational journey for the next school year and beyond.

This e-book demonstrates a blueprint for empowering students—and transforming their learning experiences—through technology. Whether you're a teacher, an administrator, or a district employee, systemic change can begin at your desk with a spark of inspiration and a plan to execute.



The keys to successful digital transformation are:



Focusing on the student experience.



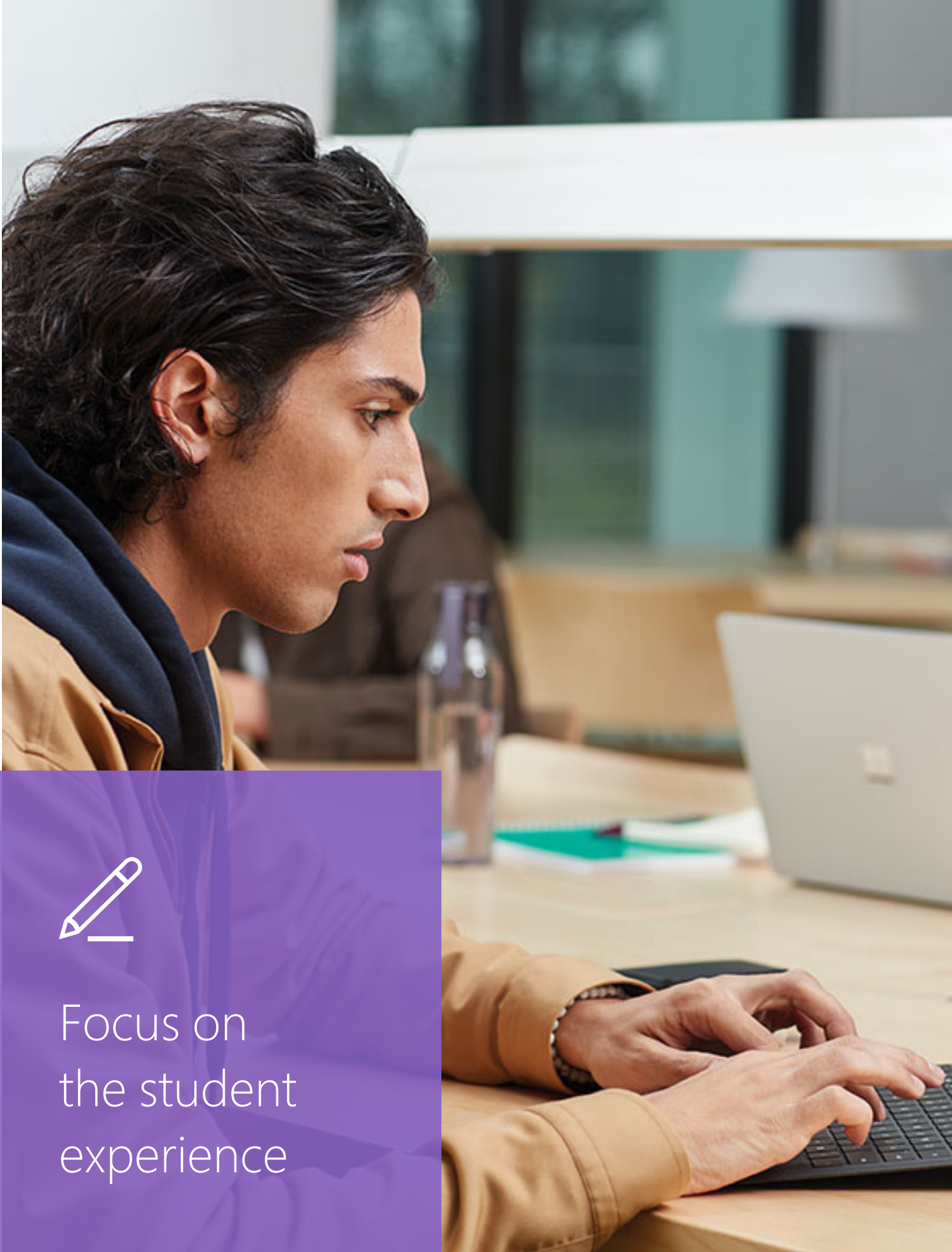
Developing teaching practices for long-term success.



Building infrastructure to support and empower all.



When all three are integrated, you'll have the right technology to support innovative teaching practices that achieve your learning objectives.



Focus on
the student
experience

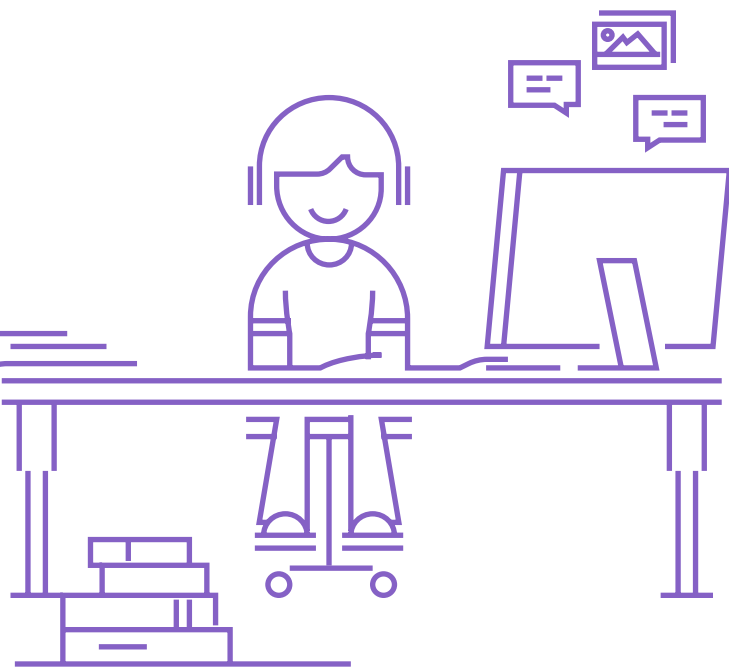


Technology can create incredible learning experiences when students are the focus.

Some students need additional accessibility. Some students need to be more consistently engaged or offered a self-guided path through learning. Many educators are targeting systemic changes that technology can assist with. What are you looking for?

When teacher Christine McKee, working in the Edmonton Catholic School District, saw Flipgrid for the first time, she immediately realized its potential for enhancing student-centered learning. Flipgrid is a website that allows teachers to create “grids” to facilitate video discussions. Each grid is like a message board where teachers can pose questions, called “topics,” and their students can post video responses that appear in a tiled grid display.

McKee has a five-year-old son with a severe speech delay who used an augmentative and alternative communication (AAC) device to help him communicate. With his tablet and an app that used pictures to represent words, he would select the images that illustrated what he wanted to say, and then the app would translate those images into words.





McKee created a Flipgrid grid for her son with topics she knew were of interest to him. Then she would interview him and ask him questions. At the beginning, he used a mix of his AAC device and his own vocabulary. By midway through the year, he was no longer using the device—at all. Since then, McKee has taken advantage of Flipgrid to enhance reading comprehension, speech development, and learning in her own classroom.¹

Many schools find that solving the needs of a single student, or a small group, quickly scales out to the entire community. Puyallup School District in Washington state began to transform its educational practices through technology in 2015, with the goal of making innovative learning experiences accessible to all. Today, the district has deployed 22,000 Windows devices for its students, with another 3,000 devices for its faculty and staff.

Inspired by an internally written white paper, Puyallup officials always kept their focus on improved pedagogy, selecting apps and devices based on whether they empowered students to seek learning for themselves rather than just passively watch videos. Students are now able to gather, assess, and analyze information on their own both inside and outside school walls.

Another key consideration for Puyallup was equity through accessibility. Functions like Braille support, zooming, and dictation tools are native to the tools Puyallup chose, which means that students who require accommodations are fundamentally receiving the same learning experience as their peers.

Articulating your vision for the student experience is the right place to start, but it's not yet time to put devices in the hands of students. **Next, focus on teachers.**



¹ Microsoft, “[Flipgrid, Learning Communities, and the Power of Personal Transformation](#),” August 15, 2019.



Develop teaching
practices for long-
term success



A survey found that one-third of teachers don't use technology products provided to them by their school or district.²

This disconnect highlights a major communication gap between administrations and their teachers, who know the needs of their classrooms. By bringing teachers into the process early on and communicating with them frequently, that gap can be closed. Schools that go directly to the source—the teachers—can identify key areas where solutions are needed and build a plan that addresses those needs. Bringing teachers along turns them into your biggest advocates, ensuring they have a voice and are properly trained on new solutions.

Fresno Unified School District wanted to deliver personalized learning to all its students. Every student has unique strengths, needs, and personal circumstances, and Fresno believed that thoughtful implementation of technology could create bespoke learning experiences.

As with any change to educational practices, buy-in from teachers was crucial to this transformation journey, which Fresno called the Personalized Learning Initiative (PLI). Fresno started small with a year-one cohort of 220 teachers (selected from 440 volunteers) and made sure that every school in the district was represented.



² David Feller, "Districts Often Out of Touch with Teachers' Biggest Tech Needs, Survey Finds," *Education Week*, April 26, 2019.



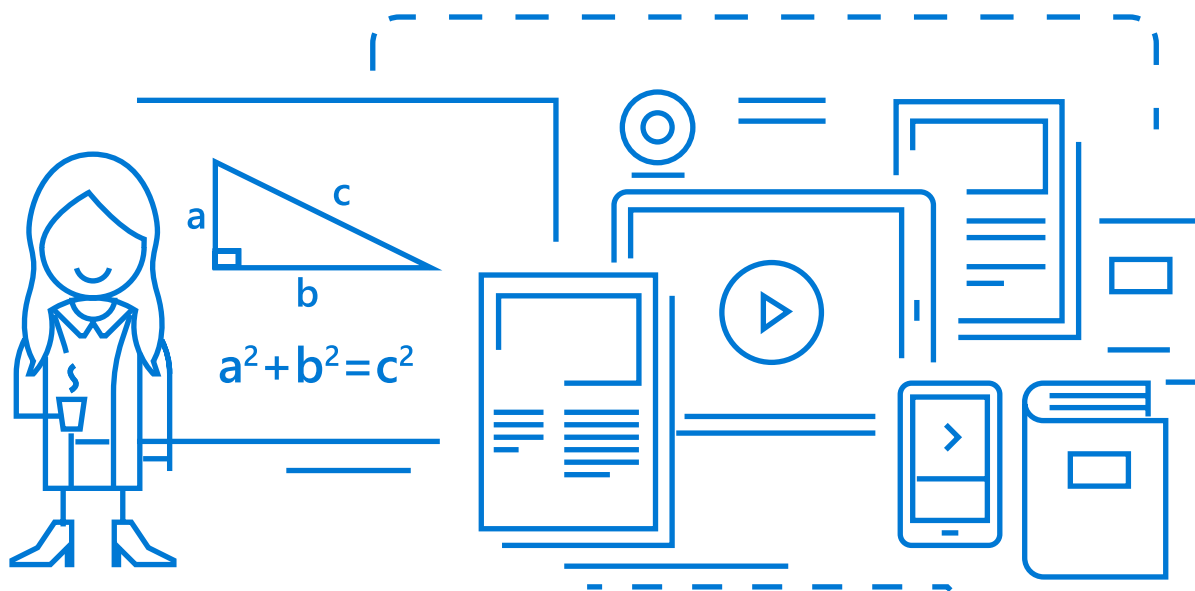
Experience has shown, time and time again, that communicating an inspired vision with faculty is the surest way to find a tight-knit group of individuals committed to its success. In Fresno, it was personalized learning. What’s your vision?

Start by having your cohort pilot innovative teaching practices at the classroom level to troubleshoot, design curriculum, and start break-room conversations. Then train them to train others—nothing creates buy-in across your school like training via peer groups.

Remember, don’t rush! Transformation is a journey best taken one school year at a time.

Fresno grew methodically from its core cohort in the 2016–2017 school year and now applies the PLI to every student in the district.

Teachers need technology that is useful, intuitive, and ready to support their needs immediately. Investment in technology cannot yield results if teachers aren’t trained to deliver a well-thought-out learning experience. Teachers will not use devices they don’t understand, and students will not embrace clumsy or impersonal classroom experiences. A holistic approach is the key to making your technology spend worthwhile.





Build infrastructure
to support and
empower all



The right technology, and IT infrastructure, will maximize your budget by delivering exactly what your schools need.

Teaching tools will be easier to access, teachers will feel comfortable and confident, students will enjoy better learning outcomes, and your whole school community will experience a technological environment that's "built in," not "bolted on."

Technology solutions that work in service of students and teachers also bring collateral benefits like IT efficiencies and cost savings. How are you measuring the sustainability of your technology investment? Some districts track cost per student. Others, like Puyallup, keep an eye on whether IT service tickets are increasing—or decreasing—on a per-capita basis or within certain populations. There are many ways to measure success, and your metrics should tie back to your original vision for a transformed learning experience.





Worldwide school closures meant that many educators had their first experiences implementing remote learning. For many, it was challenging. The way we work and live has changed. For districts like Fresno and Puyallup, with infrastructure already in place, the challenge was less daunting.

As you reflect on your rollout of remote learning, you may be considering the future of technology at your school. You

may be building a future-proof emergency plan or implementing a permanent shift in practices with an eye toward total agility. Either way, technology should be accessible, simple to activate and implement, and equipped with robust training resources and communications tools in service of your transformation journey.

“Free” isn’t free

The convenience of downloading a free app or browser extension must be balanced with security and compliance concerns. Apps with no upfront charge may be collecting and monetizing student data, which could put your school and students at risk. Ensure that student safety remains a top priority by only using apps within a finite and secure ecosystem.



You're at the end of your transformation journey.

You have a clear vision for personalized learning experiences. Your teachers have been trained, and have trained each other, to implement those experiences. Your technology infrastructure supports both students and teachers with bespoke, intuitive, and accessible solutions. You're finally ready to hand devices to students.

Technology in schools can't solve global disruptions, but it can help educators be ready when the unexpected arrives. You can empower your students to achieve more, with confidence and agility, by transforming teaching practices, learning experiences, and IT infrastructure together and holistically. Microsoft collaborates with educators around the world and would be proud to be part of your journey.

Ready to begin?

Get guidance that will help you reach your goals.

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