MOVING AWAY FROM THE 'FRONT OF CLASS':

How today's educators are **leveraging educational technology to design flexible, personalized learning experiences** for all learners

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For many educators, the past few years have been nothing short of a whirlwind.

Between the abrupt transition to remote teaching and learning in the early days of the pandemic, to the rapid adoption of digital learning tools in the classroom, to shifting expectations and pedagogies rising to meet the new demands of a knowledge-based society, the modern learning environment looks very different from the desks in the row with a chalkboard at the front of the classroom that we all remember from our youth.

At the height of the pandemic, more than 1.5 billion learners were engaged in virtual learning across the globe, setting an unprecedented scale of educational disruption. With the transition to remote instruction, educators and students were forced to adapt, leaving both parties struggling to learn the skills necessary for self-directed learning. When the dust settled and schools returned to in-person learning nearly two years later, it was clear: classroom instruction was changed forever.

It comes as little surprise that following years of virtual instruction many schools have struggled to maintain student engagement. According to EdWeek Research Center, more than half of students in the 2020-2021 school year self-reported less motivation at school, while teachers felt upwards of 87 percent of students were less motivated. Accompanying lower engagement levels are the pandemic-learning gaps — an average of five months of reading and math learning, for example — though academic recovery gains appear to be rebounding since then.

No doubt these gains have sprung from a return to the classroom.

A new era of education

The impact of the pandemic and the shift to digital learning, including blended, hybrid, distance learning, and everything in between, has forced school systems to use courage, creativity, and determination in order to rethink student engagement. In short, it's completely transformed the ways in which teachers instruct and connect with students in the classroom. To combat low student engagement levels, for example, many districts have ditched their outdated, "one-size-fits-all," front-of-class approach to learning in favor of empowering students through small group instruction, personalized learning, and increased opportunities for peer and teacher collaboration — all of which has been made possible by leveraging educational technology. Nowhere is this more apparent in K-12 education than through the acceleration of 1:1 computing.

A survey from EdWeek Research Center revealed nearly 90 percent of educators reported having at least one device for every middle and high schooler by March of 2021, and an additional 84 percent said the same was true for elementary school students. In the same survey, nearly half of teachers, principals, and district leaders said the expanded use of school-issued digital devices significantly "changed teaching and learning in their schools."

These sweeping educational changes haven't come without their challenges, however. Educators and districts alike face mounting pressures in the learning environment, including navigating the complexities of digital transformation, stemming the impending teacher shortage, and strengthening whole-child support for the next generation of learners — all at once.

Advances in educational technology have offered educators new opportunities to create meaningful, personalized learning experiences. Not only can technology build teacher capacity and confidence to address instructional challenges, but it can also give teachers the freedom to create interactive, multimodal lessons thus fueling students' ability to build critical skills around their own self-directed learning.

When used strategically, educational tools enable teachers to:

- ✅ Leverage all spaces as learning spaces
- ✅ Promote meaningful student collaboration
- ✅ Fill learning gaps through data-driven instruction
- ✅ Support flexible, student-led learning environments
- ✅ Maximize 1:1 device usage

Technology has been shown to expand access to information, promote collaboration, inspire deeper learning, and reflect real-world experiences, improving overall active engagement academic performance. But none of this is possible if educators can't leverage the promise of digital learning.

How can teachers harness the power of educational technology to ensure they don't miss this crucial moment?

In the rush to adopt online learning tools during the pandemic, many school districts invested in educational technology without a solid integration plan. With teachers already overwhelmed by the onslaught of new technologies, it's become imperative to streamline system-driven innovations to scale their impact in the classroom. Technology alone cannot create the classroom of the future; teachers must fully embrace digital solutions strategically, through a student-centered lens.

With increased experience, educational technology can strengthen teacher capacity so teachers can continue to do what they do best: provide students with access to a quality education. When used to its full power, edtech should enable teachers to embed new tools in their pedagogy, expand their instructional toolkit, and save valuable time. It allows teachers to use the content they already know and love and bring it to life in new and interesting ways.

> "[Educational technology] allows teachers to use the content they already know and love and bring it to life in new and interesting ways."

Setting the stage for students to build social connectedness

Throughout the pandemic, there has been a renewed focus on the **effectiveness of collaborative learning and the role of social connectedness in the classroom**. In the past, most teachers were constrained to delivering lessons from the front of the classroom. With new technologies, teachers can move freely throughout the classroom to interact with and support students in a more flexible way.

When students feel socially connected to their teachers and peers they are able to engage with content and each other in impactful ways. This deepened commitment encourages students to co-create with peers and hold each other accountable, strengthens active engagement, and empowers students as they embark on their learning journey.

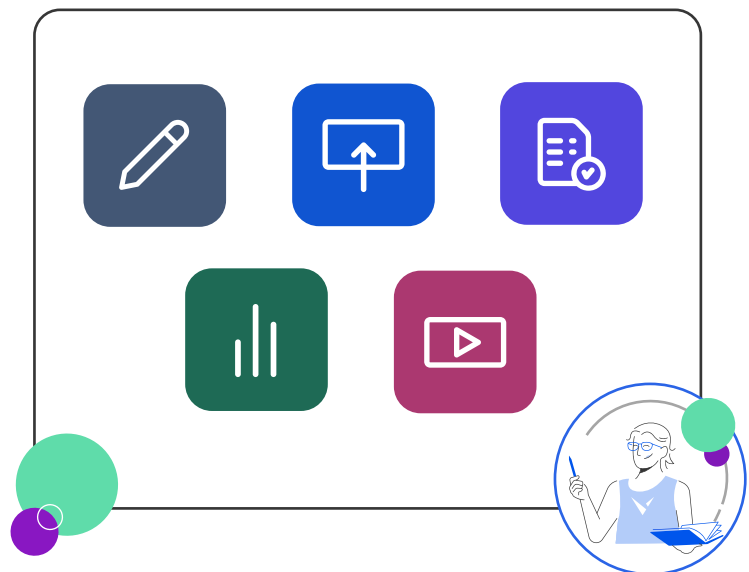## Offering opportunities for not just engagement but active engagement

There is a strong correlation between student engagement and academic achievement. According to a 2019 Gallup study, schools in the top quartile of student engagement had significantly more students exceeding and meeting proficiency requirements than schools in the bottom quartile of engagement.

While the definitions of student engagement vary among experts, we generally refer to a student who shows attention to the area of focus, participates actively in learning, and spends the right amount of time on the task at hand.

In a study examining the relationships between student engagement and academic achievement, researchers Hao Lei, Yunhuo Cui, and Wenye Zhou found that the more attentive students are in class and the more time they spend focused on the task at hand, the better they tend to perform. Research has also shown that when students are engaged in the learning process, it increases their focus and attention and pushes them to adopt higher-level critical thinking skills.

The days of giving one-sided lectures while students sit back and listen passively are gone. Today, we know students learn best when they discover facts and perspectives on their own — a possibility propelled by the observations of dedicated educators and the advances in educational technology.

Reimagining the classroom with EdTech

A powerful expansion of educational technology is reshaping the classroom, offering schools an incredible array of options to tailor education and meet the evolving needs of today's diverse learners. In the K–12 sector, public schools spent more than **$35.8 billion on educational technology**, including hardware, software, and digital curriculum in 2020, according to a survey of more than 32,827 education professionals from the Learning Counsel.

Combined with blended and personalized learning implementation, technology-led instruction has continued to gain momentum. But what does educational technology look like? In what ways can teachers use technology to inspire active student engagement? And how can leveraging edtech support educators' overall vision and goals?

As education shifts away from the "front of the room" model, it's imperative that teachers are able to move seamlessly from class to class and provide a variety of learning experiences. While the types of educational technology certainly run the gamut, there are a few particularly innovative tools Vivi offers that effectively create an engaging, collaborative, and impactful learning experience for all students.

Personalizing learning by offering choice and meeting students "where they are"

Today, educators are reshaping the classroom to embrace student-centered learning through targeted and relevant content. **Student-centered learning refers to a variety of educational programs, learning experiences, instructional approaches, and academic-support strategies that are intended to address the distinct learning needs, interests, aspirations, or cultural backgrounds of students**.
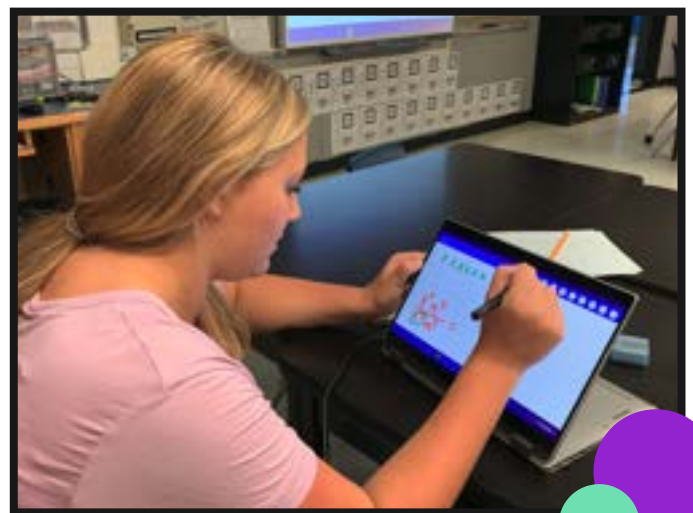
These factors are further influenced by a student's behavioral, emotional, and cognitive engagement. While all of these dimensions showed a positive correlation with students' academic achievement, studies have shown that behavioral engagement is the most likely to impact results.

For example, active student engagement requires educators and teachers to identify and build upon a student's talents and strengths. This is also why teachers and educators are embracing **personalized learning, an educational approach that aims to customize learning experiences for each student, or group of students**.

In a personalized learning environment, educators don't teach students as a collective in the traditional way. Instead, educational technology enables teachers to bring in data-driven instruction, allowing them to adjust instructional content to suit each student's skill level or group students with similar abilities together. Not only does this bring students up to speed more quickly, but it also provides an opportunity to extend to them.

When a class is segmented, each student can receive relevant and focused attention, right when they need it. Many educational experts and influencers see personalized learning as an opportunity to give students greater agency when selecting projects or presenting the work they've completed during class. For example, **educators can offer students choices around how they learn, what they learn, where they learn, or how they want to show their mastery of the content at hand**.

However a school chooses to offer these differentiated pathways, personalized learning ensures students are able to learn in different ways and at a pace that suits their learning style. Those who advocate for personalized learning cite a number of benefits contributing to **student empowerment, engagement, and achievement**:

Benefits attributed to personalized learning

Empowerment

With personalized learning, students have a far greater say in their learning than they have ever had before. In student-centered classrooms, **young people can learn at a speed they are comfortable with and in a way that suits their needs** — boosting their confidence, self-esteem, and overall well-being.

Engagement

In today's consumer-focused world, the public has become accustomed to personalized recommendations and greater choice. In the classroom, personalized learning offers the same for student engagement. This is due to **the autonomy, relatedness, relevance, and growth mindset it instills in students**. Thanks to the ability to make choices and be involved in planning their own learning, students are more invested in their learning journey.

Achievement

There is evidence that personalized learning makes a difference in student achievement. For example, the research corporation, RAND, reports that **personalized learning equates to a performance lift of around 3 percentile points above the median in mathematics**. It also claims that in both mathematics and reading there is evidence of cumulative growth in students over two years of personalized learning.

The benefits of personalized learning are well documented, but educators and teachers often remain unsure about how to deliver the concept in their classrooms. In Australia, the approach to personalized learning is embodied in what is known as CASE Steps, which assist teachers in planning teaching and learning strategies to meet a diverse range of needs.

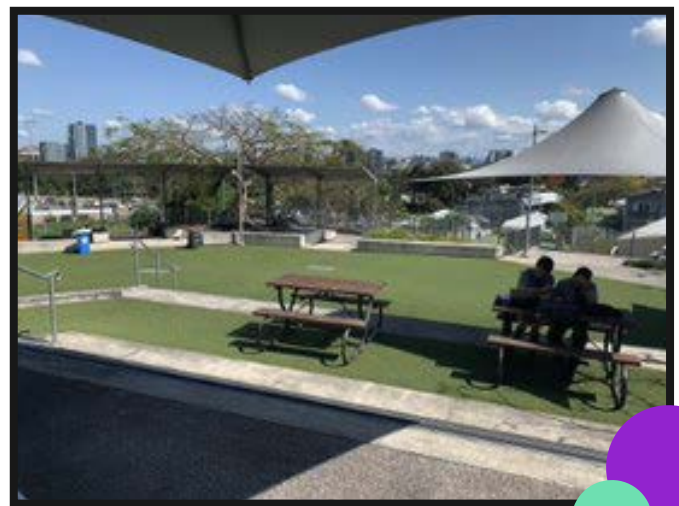Here are a few ways CASE Steps to personalized learning can be applied:

- **Content:** Use content to identify key concepts that align with the students' age or year level.

- **Abilities:** Take into account the range of students' abilities, current levels of learning, strengths, goals, and interests. Provide adjustments to support the needs that have been identified.

- **Standards:** Assess students' progress in relation to achievement standards. Monitor and review the impact of the approach that has been adopted. This ensures delivery methods can be adjusted where necessary to ensure the needs of students are met.

- **Standards:** Evaluation: Evaluate actions taken to personalize learning. This requires consultation and collaboration between teachers, parents, support staff, and other professionals, where required.

While the concept of personalized learning is far from new, the rise of educational technology provides scaffolded support to use these instructional approaches at scale. Combined with flexible learning spaces, embracing personalized learning can unlock new ways for students to engage in learning and practice at their own pace.

Building mastery by engaging students in self-directed learning

According to research conducted by Education Week, more than half of US school principals felt personalized learning either showed promise or was a transformational way to improve education.

In order to be successful in multimodal learning environments, it is critical that students build strong skills around **self-directed learning**, a process wherein individuals take primary charge of the planning, help-seeking, and evaluation of their learning experiences. This concept moves students away from simply acquiring knowledge, i.e. memorization strategies, to developing knowledge, ultimately shifting the responsibility to learn from the teacher to the student.

With educational technology now firmly in play and the growing ways in which accessing and using information are ever-evolving, **"the nature of knowledge and learning has changed and learning how to learn [has] gained ground,"** according to an [investigation of self-directed learning](#) by İlkay Aşkin Tekkol and Melek Demirel. A study conducted by the pair of researchers, which explored the relationship between university students' self-directed learning skills and their lifelong learning tendencies, found that students' self-directed learning scores were moderately higher than the median score of scale. As the study cited:

According to Tekkol and Demirel, self-directed learners demonstrate the following characteristics:

- ✅ They set clear goals for themselves
- ✅ They shape their learning process in line with goals and plans
- ✅ They monitor their own learning process
- ✅ They evaluate the outcomes of their own learning
- ✅ They are autonomous
- ✅ They have self-motivation
- ✅ They are open to learning
- ✅ They are curious
- ✅ They are willing to learn
- ✅ They value learning
- ✅ They have self-control
- ✅ They take the initiative to learn

For many learners, existing modalities of learning have often felt like a "one-size-fits-all" experience featuring the educator in the driving role as "sage on the stage." **Instead, giving students "voice and choice," to allow them to make connections between learning and their daily lives, is more effective**.

Strategies that get students actively engaged and set them up for continued participation in their learning — such as small groups, varied learning experiences, choice around activity, and brain breaks — are all starting points that can promote self-directed learning and engagement in the classroom.

> "Teachers love the ability to show different ways of thinking about the same problem [and] that each student can be held accountable for their thinking."
>
> **– Coordinator of Instructional Technology, Forney Independent School District**

Creating growth-oriented learning experiences

Self-directed learning doesn't negate the guidance of the teacher; it requires their expertise to create learning experiences that build intentionally toward mastery. Students should have a clear understanding of where they are and where they are going, with multiple opportunities and ways to set goals, get feedback, demonstrate competency, and plan next steps.

For decades, many educators and school districts believed in a fixed mindset: the belief that intelligence is static. But over the years, educational experts have raised questions about the efficacy of such an approach.

Instead, more educators are looking to implement learning strategies focused on developing a **growth mindset, which adheres to the belief that intelligence can be developed through effort**.

According to a 2016 report from the Education Week Research Center, nearly 98 percent of educators believed that using a growth mindset in the classroom led to improved student learning and improved the quality of their instruction. Roughly 90 percent of teachers saw a strong link between a growth mindset and a range of positive student outcomes and behaviors, **including excitement about learning, persistence, high levels of effort, and participation in class**. Yet, only 20 percent of teachers felt they were good at fostering a growth mindset in their own students.

The ability of teachers to create deliberate and sustained opportunities for practice by ensuring they have everything they need at their fingertips to pivot lessons quickly and deliver aligned practice opportunities can lay the foundation for students to develop a growth mindset.

In the modern classroom, educational technology can be the rocketship that delivers the full potential of these learning opportunities. **With screen mirroring, for example, students can share their screens, experiment with material, and gradually build confidence in their abilities; even if they "get it wrong" on their first attempt at a project, they still understand that learning is a process**.

Along the way, teachers can continuously check for understanding by collecting data around mastery, such as by sharing a poll with the class or by gathering real-time feedback via a real-time assessment — without interruptive hand-raising or by passing out old-school paper exit tickets. For example, a teacher might ask students to create a story from a picture, build a diagram, or design a presentation to reflect on their learning.

Introducing Vivi — an innovative instructional tool connecting teachers, students, and content in impactful ways

The rise of flexible learning spaces is unlocking new ways for students to actively engage with content as well as each other. With instruction now aptly focused on student-led learning and collaborative work opportunities, it has become **crucial for educators and systems to embrace the strategic use of educational technology in the modern classroom**.

At Vivi, we believe the right mix of technology, innovative instruction, and strategic support can transform the teacher experience as well as introduce exciting new opportunities for student engagement and success.

As a leading edtech company, our innovative communication and collaboration tools make it easy for **teachers to build their capacity and impact student learning by designing instruction that inspires and empowers today's digital learners**. In a Vivi classroom, teachers can roam and engage with the display and interact with the students from anywhere, enhancing student engagement. Students can also share and compare their work, learn from each other, and drive their own learning while the teacher can gain meaningful real-time feedback with the click of a button.

If you're looking to **create a more dynamic and connected learning space, actively engage your students, and build teacher capacity in the process**, give Vivi a try.

[Book a demo]

"Our instruction has been fundamentally changed by Vivi. It has been a welcome light at the end of what has been a dark tunnel during the pandemic. It has made learning more accessible for our students and pushed our teachers out of their comfort zones. As a result of Vivi's presence in our buildings, instructors are able to be mobile, flexible, and more intentional in their instruction. It has been a pleasure working with Vivi and establishing new opportunities for our teachers and students."

– Katelin King District Digital Learning Coach & KYLC Grant Coordinator for Monroe County