EdTech - Where Do I Start?

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When we think about educational technology (edtech), we may picture in our minds a teacher using PowerPoint during a lesson, or a room of computers with students huddled around screens, or individual students working on laptops that are perched on desks. We may visualize iPads with educational games located at student learning centers, or clicker systems used in the classroom for both engagement and assessment, or particular software that students participate when home. Certainly, these are all examples of educational technology tools; however, before implementing any technology with students, the first step is for teachers to ask, “What is the purpose of educational technology and where do I begin?”

Technology demonstrates many functions in education. For example, to support teachers it can be used to streamline tasks, such as lesson planning, communicating, tracking tasks and maintaining grades, managing student profiles, and organizing and presenting instructional content. Technology can also be used to increase student engagement. For example, students practice skills learned on various software platforms, such as educational games. Using technology, they create graphs, flyers, posters, drawings, and even their own apps. Students work collaboratively, engage in innovative and design thinking, and demonstrate mastery in multiple ways. There are so many possibilities that teachers and students can do with the appropriate educational tools.

There are multiple pieces of the puzzle to consider when using edtech in the classroom. Teachers take into account student interests and needs, accessibility, costs, needed system supports, maintenance, and the time it takes to learn these new technologies. For many teachers, this last
consideration regarding time and the learning curve, becomes the initial and overwhelming thought and frequently diminishes the process of using edtech in the classroom. “It is just too daunting, too time consuming, and too risky.” Educators know technology is an integral part of our society. Classroom teachers acknowledge the responsibility to prepare our students for their future; a future of learning, a future of change, and a future with jobs that do not even yet exist. For these reasons, teachers become technically proactive in students’ futures, not with all of the answers, but with the skills and mindset to tackle problems as they arise and the commitment to prepare students to the best of their ability.

The first step to initiate on the journey of integrating edtech is to do a self-check, a sort of personal inventory describing your own personal beliefs about how you learn as well as reflecting on how your students’ learn. If you believe learning is an exciting and time consuming process; that making mistakes is part of that process; and that you can learn new things with time and effort; then chances are you believe the same thing about your students. It is significant for teachers to exhibit a growth mindset as well as promote a growth mindset in their students. This growth mind-set is integral in order to ensure students explore different alternatives and become life-long learners.

Importantly, it is not necessary for teachers to “go it alone to figure out the complex world of edtech.” There exist many available resources to help navigate the deep and seemingly treacherous waters of using educational technology in classrooms. Professional organizations, professional learning networks (PLNs), webinars, blogs, chats, and even people in your own building who serve as a resource for support. See below criteria to consider when integrating edtech into classroom life.

The International Society of Technology in Education (ISTE) is a global network of educators who believes in the power of technology to transform teaching and learning. ISTE is worth the time and effort to become familiar. ISTE publishes two peer-reviewed journals, numerous books, hosts an annual conference, offers professional learning, and evidences a community of educators to connect with and learn. They also have standards (for educators, students, administrators, coaches, and computer science teachers) that serve as a framework for creating innovative learning environments. The seven standards for educators represent an initial place for teachers to begin considering how to approach educational technology. These standards can be found at https://www.iste.org/standards/for-educators. The seven ISTE Standards for Educators include:

1. Learner – Educators continually improve their practice by learning from and with others and exploring proven and promising practices that leverage technology to improve student learning.

2. Leader - Educators seek out opportunities for leadership to support student empowerment and success and to improve teaching and learning.

3. Citizen – Educators inspire students to positively contribute to and responsibly participate in the digital world.
4. **Collaborator** – Educators dedicate time to collaborate with both colleagues and students to improve practices, discover and share resources and ideas, and solve problems.

5. **Designer** – Educators design authentic, learner-driven activities and environments that recognize and accommodate learner variability.

6. **Facilitator** - Educators facilitate learning with technology to support student achievement of the ISTE Standards for Students.

7. **Analyst** - Educators understand and use data to drive their instruction and support students in achieving their learning goals.

These standards set the bar for educators to strive for in considering implementing educational technology tool use in classrooms. Remember, it is not critical teachers demonstrate proficiency in any of the ISTE Standards; rather, to begin the journey, teachers just remain willing to use them as a framework.

Teachers can also use resources to help learn more about and vet educational technology options. Common Sense Education (https://www.commonsense.org/education) is an independent, non-profit organization whose mission is to improve the lives of students and families by providing information about media and technology. This is a go-to place to read a short synopsis of the edtech tool under consideration and perhaps find a short tutorial video of the edtech tool.

Another step to take on the journey of integrating edtech is to become a member of an online professional learning network (PLN) or maybe two, or even three. Twitter is an opportunity to follow people or groups and just read; then, when you are ready, enter into chats by asking questions and responding to posts. You can search for an organization like @ISTE and @commonsenseed, or a journal such as @EdTech_K12, or even search for an individual you know, an author or presenter, or the technology coach at your own or a nearby school. An additional resource is The Educator’s PLN (http://edupln.ning.com/) which is a social networking site for teachers with over 11,000 members and more than 100 different specialty groups (i.e. fifth grade teachers, game based learning, Web 2.0 Emerging Technology). Educators PLN’s include tutorials, blogs, videos, chats, and instructions on how to get started.

In the process of discovering your particular PLNs, become a “lurker” (someone who reads others’ posts without posting themselves). Take a few minutes each day to check your twitter feed and read what’s new. Then start retweeting and asking questions. Read what Commonsense Education reports about an edtech tool in which you are interested. Download the app Pocket and place articles that you do not have time to read now, but will read later.

Next, just try out something new. Be bold, be brave, and be empowered. Start somewhere. Allow students to introduce themselves on a Flipgrid, pre-assess students on a Kahoot!, communicate with parents and guardians with Remind.com, solicit student thinking in a Padlet, convert a PowerPoint into an interactive Nearpod presentation, or support students demonstrating their understanding on a Canva flyer.
Finally and importantly, reflect on the process. Identify which edtech tool works well, which tool usage requires tweaking, and which tech implementation warrants re-thinking. Critically, solicit feedback from your students. Ask students their thinking on what edtech tools you try to use, how they feel about the different edtech tools, and how the lesson might be improved. Remember that edtech is a tool whose purpose is to suit the task. Think about how to use edtech to get more student engagement, promote deeper learning, and more easily collect and analyze data to inform instruction. Continue to work on improving. And, with your students, you will discover how much fun edtech can be!