ConnectSafely

THE PARENT'S GUIDE TO

EDUCATIONAL TECHNOLOGY

By Kerry Gallagher, J.D. & Larry Magid, Ed.D.

WE ALL KNOW CHILDREN USE DEVICES LIKE SMARTPHONES, TABLETS, CHROMEBOOKS, AND LAPTOPS AT SCHOOL AND THEY ALSO OFTEN USE A VOCABULARY FULL OF TECHNOLOGY JARGON THAT MAY SEEM COMPLETELY FOREIGN.

One reason is that both tech-savvy and tech-hesitant parents are not always familiar with the world of education technology, or "edtech." The truth is that education technology is an important part of education today and parents should feel excited—not intimidated—by what their children are able to learn and do.

This guide provides an overview of edtech for parents. Our goal isn't to make you a tech expert—that's not necessary—but to help you understand how your children and their teachers are likely using technology and how you can support that use both at school and at home.

WHY ARE SCHOOLS AND TEACHERS EAGER TO USE EDTECH WITH STUDENTS?

Many adults use technology tools and programs as an integral part of both their personal and professional lives. They get their news, share ideas, and connect and collaborate with friends and co-workers using devices and apps every day. Our children are also using technology in both their personal and educational lives. They need to learn how to properly and responsibly communicate via text, audio, video, and digital image creation because the careers of today and of the future demand it. The same is true for college. More than a quarter of college students are enrolled in at least one online course and K-12 schools must prepare

their students to be successful in that hybrid virtual/in-person environment. A very high percentage of today's jobs require technology skills and that's only going to increase.

Children are also using technology for fun and to socialize with their friends and they need to learn how those same tools are just as useful in academics. They may be experts at using apps, accessing websites, and navigating streaming services in their personal lives. They should be just as skilled at navigating those platforms and the broader internet for the information they need to be successful students and become well-informed and productive adults.

EVEN THE MOST TECH SAVVY TEENS NEED ADULT GUIDANCE

There is a common assumption that because children and teens are "digital natives" they are more knowledgeable about how to best use that technology than adults. But that's not necessarily true. Even children who are very comfortable trying out new devices and apps need the guidance of their parents and teachers on how to use those tools in a positive, safe and productive manner. Parents and teachers, even those who may not be all that tech savvy, have something to offer young people in terms of how to appropriately use technology. Beyond just technical skills, healthy technology use also requires media literacy; an understanding of how to protect privacy, security, safety; and even when to put down the device to engage in other activities and face-to-face conversations. Children need guidance from their parents and teachers to learn these skills. A bit of adult wisdom and common sense also come in handy.

HOW STUDENTS ARE USING TECHNOLOGY

The influx of education technology in schools is not just about replacing printed textbooks with ebooks. While ebooks can be more interactive for students and help lighten their backpacks, they are just the tip of the proverbial edtech iceberg. Here are a few examples of how edtech is changing the way students learn:

Find and analyze resources and materials: An online search is a good start, but learning how to create accurate search terms and how to comb through the results is a skill that all

EDTECH DEFINED

Education technology, or "edtech," is the study and practice of teaching and learning processes and strategies that incorporate devices, apps, programs, and media. Edtech can be used in traditional classrooms, at home, and as part of learning in almost any setting.

internet users should strive to master. Perhaps even more important, learners need to find out how to do research using scholarly databases, research studies, and reliable news sources. Once they have discovered a resource that they determine to be authentic and reliable, students should learn how to effectively analyze and report their findings.

Keep learning organized: Many students struggle with organization and it shows when their binders and lockers are bursting with crumpled papers that are out of order. With some help from adults, digital notetaking programs can allow these students to learn to color code, tag, and file their school work in a way that will build organization skills they need to be successful students and productive adults. And it is usually a lot easier to find a digital file than a crumpled piece of paper or that book you misplaced.

Communicate with the world beyond the classroom: Human beings are learning all the time and learning is not limited to the classroom. While nothing can replace a high-quality teacher, students are now able to use email, social media and video chat platforms to communicate with experts and peers beyond their school walls. For instance, while learning about dinosaurs students can have a video call with a paleontologist and even virtually dissect these extinct creatures. While researching weather, students can email their questions to a meteorologist and study weather maps and radar to get firsthand expertise.

Collaborate: One of the most important workplace skills is collaboration, and it is true at school as well. Often students want to or are assigned to work together as they learn. Collaborative digital tools allow them to keep shared notes, edit digital creations at the same time, and work with their classmates from the comfort of home if they run out of class time. It is even possible for students from schools that are miles (or even continents) away to work together thanks to digital collaboration tools.

Create: According to the Partnership for 21st Century Learning, creativity is "the premier skill" that innovative companies are looking for. Thanks to the powerful tools available to students in school, they can create and edit music, video, infographics, and more to demonstrate what they have learned and hone those creativity skills. While quizzes and tests still have their place, encouraging students to create helps them build the confidence and the skills they need to be creative professionals in the future.

Code and program: Students are also able to create their own technology thanks to the tools and skills taught in schools. In classes that teach coding, students are learning to program, build and test their own robots, apps and algorithms. These early simple creations help them learn the skills they will need to design technologies that will solve problems in the future.

Share: Digital communication tools allow students to share their creations—whether they are essays, videos, podcasts, or infographics—with people besides their teacher. Learners who know their final product will be viewed by a broader audience tend to produce better quality work. Students feel more of a sense of purpose when creating something that can have impact on other people. Edtech allows students to create and share in this way and get valuable feedback from fellow students, experts, and others who may be interested in their work.

Digital storage: Saving notes and digital projects on a hard drive or in the cloud can enable your student to maintain and find their work as needed. That can be very handy if they need to unearth examples of their work as they apply for college, seek financial aid, and apply for jobs.

Digital citizenship: Just as with citizenship in the traditional sense, students need to learn their rights and responsibilities as participants in the digital world. As they are researching, collaborating, communicating, and sharing they are learning how to exercise their rights and fulfill their responsibilities to make the internet a more positive and productive place for all of us in the future. This includes understanding copyright and citations, speaking out when they see something hurtful or unjust, and expressing themselves in a way that is helpful and appropriate.

HOW TEACHERS ARE USING TECHNOLOGY

Besides the exciting opportunities that edtech provides for students, teachers are able to better serve children and families thanks to edtech. Here are some examples of how teachers' work has changed for the better:

Home-school communication: Teachers can now send out group emails to parents with periodic updates about what the class is learning. Some teachers have websites with more details about curriculum, upcoming assignments, and even examples of student work. Thanks to these edtech tools, parents can know more about what their children are learning in school than ever before.

Better student feedback: Remember all the comments in red pen on the margins of your assignments? Now teachers can leave more detailed typed comments, voice recordings, and even video messages for their students. These modes of feedback are more personalized and teachers are able to provide them faster. Language teachers, for example, can use voice feedback to help students practice conversing with them in the language they are learning. Math teachers can hold virtual office hours on the evening before a test as students work through problems and prepare. Edtech enables students and teachers to develop better relationships and students know sooner whether they are on the right track or need more support.

Different resources for different learners: Thanks to the multimedia content available online, teachers are able to mix traditional printed resources with videos, high resolution photographs and artwork, podcasts, and music in their classrooms. A social studies lesson could have students read a research article about a historical figure, watch a clip from a documentary, and then listen to an audio recorded interview of that person so they can actually hear their voice. Students are now able to learn the skills and information they need with all of their senses.

Increase student engagement: Some edtech tools allow teachers to build simulations and video games to help students learn and practice new skills and content. Some teachers are now using augmented reality and virtual reality to help students see and experience things they would not otherwise have access to. There is a social studies teacher in Massachusetts who uses use "VR" to teach about refugees. His students feel as if they're "in" a camp, based on a VR movie created by a child their age who takes them on an immersive tour of the refugee camp where she lives on the other side of the world.

Professional growth: Today's teachers are not limited to learning from their colleagues across the hall or across town. Just as students can learn from experts anywhere in the world, teachers are also able to use digital communication tools—such as social media—to reach out to their colleagues who teach similar classes or education researchers and authors who they study and admire. Teachers can also create and share their own online "textbooks" and other resources to enhance their own careers and provide other teachers with valuable resources. It is an exciting time to be an educator and to be able to bring new and engaging ideas from around the world to classrooms.

Grading, attendance, and administration: Edtech is increasingly being used to help teachers dispatch all the "paperwork," freeing them up to spend more time interacting with their students. Teachers are able to quickly input attendance, grades, and notes about students. Then they can quickly and easily share this information with school administrators, students, and parents whenever it is requested.

HOW TO TALK TO YOUR CHILD ABOUT EDTECH

Having occasional conversations with your child about how he or she is using technology in the classroom will not only help you better understand today's learning environment, but also allow for a give and take between the two of you. Chances are that your child is excited by some aspects of edtech and would be happy to share that with you. Likewise, your child may have some concerns about how edtech is being used (or not being used) in the classroom and that, too, is important information for parents to know and act on. What's more, these conversations give your child an opportunity to "be the teacher," and share what they know with you, and that's good for them and good for you.

While understanding classroom apps and technology tools may be more complicated than flipping through a notebook or textbook, with your child's help, you can get a feel for how the tools are being used in school and stay informed. That involves:

- Regular in-person talks/demos of how your child is using technology in school. We recommend sitting down to do this about twice a month or whenever new technology is introduced.

- Honest conversations about strengths, struggles, and opportunities. Here are some conversation starters and tips:

Strengths:

- What is your favorite way to use your devices in school? What are you good at?
- Is there a cool website, app, or video you have seen and learned about in school lately? Why do you like it?
- TIP: If your child mentions an app or program they really like to use, go on YouTube and look for tutorials on how to use it. You'll develop a much deeper understanding of the tool and what is possible for your child to do with that tool.

Struggles:

- When do you tend to get distracted by technology? How can I help you avoid those distractions?
- Are there situations in school when the technology or apps are inadequate, boring, or just ineffective?
- What are some ways you see your classmates/friends misusing technology in school? What do you do/say when you see them doing that?
- TIP: Help your child develop the strategies and responses they need to cope with these situations. If they are prepared, they will be better able to face them.

Opportunities:

- How could tech be better used in the classroom?
- Are there devices or apps you do not yet use in school but feel could help enhance learning?
- TIP: Parents have a lot of influence over schools and, with this information, you can better serve as an advocate for your child.

WHAT TO ASK SCHOOL ADMINISTRATORS ABOUT EDTECH

Schools and districts usually have both academic and technology administrators that play a role in which devices and programs are available to students and teachers. They also play a role in how teachers and students use those devices and programs for teaching and learning. Parents can ask administrators how technology is benefiting their children and also how their children are staying safe while using it at school. Here are some questions to ask:

- What is the school's program/policy for protecting students information and data privacy? Are all apps and programs vetted before teachers and students use them in the classroom?

- Is there a firewall or filter in place at school to prevent students from coming into contact with inappropriate content? If a student does come across inappropriate content, how will the school respond? Do these filters "overprotect," by blocking content or services that might benefit your child? If so, how can they be adjusted to broaden the material available to students and teachers?

- What accounts do students have as part of their enrollment in the school?

  -Email
  -Google tools
  -Microsoft 365 tools
  -School portal logins
  -Other services and apps

- Does the school have an Acceptable Use Policy or a Responsible Use Policy so that students and parents understand how technology should and should not be used at school?

- What is the school policy/procedure when cyberbullying is discovered or reported? Are parents informed and involved? What about other inappropriate uses of technology?

- When a student asks to use an app, tool, or resource that the teacher does not recognize, how will the teacher respond? If the tool is not on an "approved list," how can it be vetted and possibly added to the list?

- How do you evaluate the quality of the digital resources you use with students? What are some examples of these resources?

DON'T JUST ASK WHAT TECHNOLOGY IS BEING USED. ASK HOW IT IS BEING USED.

When we think of education technology we often first think about the hardware: computers, tablets, interactive whiteboards, smartphones and the like. But hardware is just a vessel. It's also important to consider the applications that the students and teachers are using. They could be smartphone or tablet "apps," computer software programs, websites, videos, or interactive online experiences. They could be designed by education companies or publishers, larger commercial companies, or even created by the students or teachers themselves.

Teachers have a broad range of tools at their disposal and parents should consider asking both the teachers and their students which technologies are being used and how they are being used. Are the teachers being innovative in the way they are using technology by providing students with learning experiences and opportunities that were not possible before? Or are they simply replacing old tech (like blackboards, paper tests, and printed books) with new tech like interactive whiteboards, online quizzes and ebooks, without giving much thought to how this technology can empower students and make their classrooms more interactive and student-centered? Our job at ConnectSafely is not to tell teachers how to teach or students how to learn, but to encourage all stakeholders to think about how technology can be used to not just make education more efficient, but more engaging, more empowering, and more effective.

WHAT TO ASK YOUR CHILD'S CLASSROOM TEACHERS ABOUT EDTECH

Classroom teachers are the adults your child will be working on a regular basis at they use technology in school. Questions to consider asking teachers include:

- Do you integrate digital citizenship—information about the rights and responsibilities of technology users—into your teaching when my child is using technology in your class?

- What are your classroom guidelines and etiquette expectations when students are using technology?

- If a student asks to use an app, tool, or resource that you are not familiar with, how will you respond?

- How do you help students develop their media literacy skills as they explore resources and information online in your class?

- Has the school or district provided you with training or professional development on:

  -How to use school-issued devices like laptops and tablets with your students?
  -How to use new educational apps and programs with your students?
  -How to recognize safety and privacy risks when exploring new apps and programs?

- How will you use technology to communicate with students and with parents? Will you use email? Texting apps? How are grades and progress reports shared with parents?

- How can parents support what you are teaching about technology use at school?

- What is your policy about students use of their own devices such as smartphones, tablets or laptops that they bring to class?

HEALTHY USE OF EDTECH AT HOME

After school internet access

In addition to what your child does during school, there is often a need to go online before or after school and on weekends. While many families have internet access and devices at home, there are many for whom it may be too expensive.

There are broadband subsidizes available in many communities such as Comcast's Internet Essentials and AT&T's Access, Spectrum Internet Assist and Centurylink's Internet Basics.These programs, which are available to lower income households with children, provide high-speed broadband, typically for about $10 a month and may also include free or subsidized hardware, including computers, for use at home. Check with your local internet service providers and community social service agencies to see what's available in your community.

In addition, most public and school libraries provide free Wi-Fi access as well as device access and there may be other resources in your community such as Boys and Girls Clubs, YMCAs, houses of worship and other organizations that provide access for community members.

Devices at school and at home

In order to best support your child's use of edtech at home, it is important to know how they access devices and programs while at school. Most schools ascribe to one of three strategies:

Sign-out: In this system, teachers can make a reservation for their classes to visit the computer lab or stay in their classroom and bring in carts with laptops, tablets, cameras, or other devices. These devices are owned by the school and usually cannot be brought home by students.

Bring your own device (BYOD): Some districts permit student-owned phones, tablets, and laptops to access the Wi-Fi at the middle and high school levels. This option provides students with the opportunity to learn how their personal devices, which they often use to play games and socialize on their own time, can be used in pursuit of the academic goals. Of course, these student-owned devices go home with the students.

1-to-1 laptop or tablet programs: Increasingly, schools are seeing the need for all students to have access to devices throughout the school day. In most cases, the district chooses, purchases, secures,

maintains and distributes a device for each student. Often, but not always, each student may bring that device home nightly during the school year and usually returns it to the school before summer break. In some cases, the school or district may provide families with minimum device requirements and each family is expected to purchase the device so their child can bring it to school. Ask about programs to provide financial assistance for families in need. Of course, the student-owned devices can go home with the students.

Parents and students should be aware that devices owned or configured by the school are subject to acceptable use policies even while the student is using them from home and may contain software that restricts or monitors how the machine is used. Students should have no expectation of privacy on machines owned by the school.

No matter which program the school follows, you will likely want your teen to have their own device eventually. When you are ready to purchase a device for your child, the choices can be overwhelming. You do not have to spend a great deal of money for your child to have access to the programs and resources they need for school. Options include refurbished and used devices, machines from family members, Macs, Windows PCs, inexpensive Google Chromebooks and, in some cases, tablets equipped with keyboards. Seek out advice and feedback from parents of your child's peers as well as teachers and administrators before making your decision.

KEEPING YOUR CHILD SAFE WHEN THEY ARE USING EDTECH AT HOME

Once your child is using your family devices and home internet, there are approaches you can use to ensure that they are having a positive educational experience using edtech. Based on ConnectSafely's experience working with educators and parents, here are some ideas:

- Make it routine to have your younger child tell you which apps they plan to use and which websites they plan to visit. For teens, the routine could include a discussion about which apps they plan to download and which websites they visit regularly.

- If possible, set up a table and chair (even a folding table will do) in a part of the house that is sufficiently quiet for your child to get their homework done, but accessible to you and other family members who might want to check in with your child. It's likely they will use the same machine for homework, entertainment and socializing and that's OK, as long as they do a good job managing their time and prioritizing their school work.

- Help your child learn to use safe and precise search terms so they find the information they need online and are not exposed to potentially inappropriate images or websites.

- Maintain reasonable time limits for device use at home. It might help to have your child estimate how long it will take them to complete the homework they are going to do online before they actually get started. Setting up reasonable time expectations will prevent potential resistance when you tell your child it is time to put the device away.

- Your child's physical wellbeing is also worth considering. For instance, to encourage proper eye and posture development, they should take a break at least every 30 minutes to stand up, walk around, and use their bodies to be active for a few minutes before returning to their device if necessary.

- There are parental control tools that you can use to manage or monitor how your child uses the internet and mobile apps, but not all children need or benefit from these tools. If you do use such a tool, be sure to talk about it in advance with your child and explain why you're using it. For more ideas on how to best utilize monitoring tools, see "What parents should think about before using or considering parental controls" from ConnectSafely (ConnectSafely.org/parental-controls).

- Pay attention to how you use technology when your kids are watching. You are their most important role model so it's important for them to see you balance your home and work life as well as your use of technology.

CLOSING THOUGHTS

Educational technology can be incredibly useful but it's never a substitute for great teaching, engaged students, and supportive parents. And, just as there are great and not-so-great books, the same can be said for edtech tools. At the end of the day, the purpose of tech is to enhance—not replace—the interaction between the teacher and students as well as among the students and parents and fellow students. But just as technology has transformed (some would say "disrupted") a vast number of industries like taxis, hotels, banking and entertainment, it's also starting to transform our education system. All stakeholders—administrators, policy boards, teachers, vendors, parents, and students—will be required to re-think their role in the ecosystem we call education. Transitions can be stressful, but they can also be exhilarating and lead to new opportunities and great results.

The choice to reach and share beyond the classroom

Thanks to technology, students have an opportunity to learn from an almost infinite number of sources and delivery styles, ranging from ebooks and articles, to videos, podcasts, infographics and immersive virtual reality experiences. Likewise, students can now demonstrate their mastery of the material not just by doing well on tests or papers, but also by creating all forms of media to share with their teacher, their classmates or—with proper attention to privacy, security and intellectual property rights—the entire world.

Students can express themselves, take stands on important issues, and make a difference among the people in their school, family and community, and the larger communities that we're all part of.

But these are all choices—not requirements. Students should be encouraged to think about their own comfort zones when it comes to privacy and their own definition of community. No one should be required or pressured to share or publish their work if they're not comfortable doing so and it's important to always consider the privacy and safety of the student, before sharing their work outside of their school and family communities.

Using edtech for the right reasons

It's also important to be thoughtful about how we approach edtech. We should not be afraid of change but we should not accept change just for its own sake. A bad lesson enhanced with a computer is still a bad lesson. Out-of-date or inaccurate information is just as inappropriate when delivered electronically than when delivered in print or through a lecture. And tests or papers that fail to truly challenge your student or accurately evaluate their progress are just as inadequate when delivered via a screen and keyboard than they are with pencil and paper.

And it is also useful to think about the future. Someday, artificial intelligence may help educators design highly personalized lesson plans. Virtual reality is already starting to bring the world to our students and that—along with augmented reality which superimposes computer images on the real world—may someday become as commonplace as books and blackboards were for us.

And while it might not be possible to keep up with all the changes in technology, we all have the ability and the responsibility to guide our children in how to approach whatever tools are put in front of them in a healthy and positive way. Technology and even teaching styles change, but curiosity, thirst for knowledge, ethics, and personal responsibility are constants.

TOP 5 QUESTIONS

1. What are the advantages of edtech?

Just as technology has modernized the workplace, it's also brought schools into the 21st century with access to more information in formats beyond the traditional textbook, greater ability to collaborate with classmates and even experts in the field, more opportunities to be creative, and more efficient teaching and administrative tools. It's also helping to enable better communications between schools and parents.

2. Are there downsides or risks when using technology at school?

Every tool can be misused, overused or used inefficiently, and edtech is no exception. As we discuss in this booklet, it's not just a matter of whether technology is used, but how it's used. Schools need to pay attention to privacy and security. Educators need to make sure that the technology is being used to enhance learning, not just to automate less effective teaching methods. Students need to use the technology safely and appropriately.

3. What can parents do to help support their child's use of edtech?

Parents are essential partners in all aspects of education, including the use of technology. Start by talking with your child about his or her use of tech both in school and at home. You will learn about the positive and productive uses of tech your child enjoys at school and that you can encourage at home. You will also find out if there are any issues you need to address with the school so you can be an advocate for your child.

4. What questions should I ask teachers and administrators?

We cover this in detail below, but some of top questions include asking administrators how the school protects your child's privacy, data security and personal safety when using tech. Also inquire about what types of accounts students will need and what apps they are using and how edtech is being used to enrich your child's learning.

5. What do I need at home to support my child's use of tech?

If at all possible, make sure your student has whatever device (computer or tablet) needed to keep up with school assignments. It's also extremely helpful to have a high-speed broadband connection (scroll down for information about subsidies for lower-income families). A supportive environment is essential, including a quiet place for your student to work. If the home is not suitable, consider having your child use a local library or community center.

ABOUT THE AUTHORS

Kerry Gallagher is the Director of K-12 Education for ConnectSafely.org, in addition to her full-time role as Digital Learning Specialist at St. John's Prep in Danvers, Massachusetts, a 1:1 iPad school serving grades 6-12. For 13 years she taught middle school and high-school history where her classes collaborated, created and published their ideas in a paperless environment. Kerry is also a columnist for *Edsurge*, and has a Juris Doctor from Massachusetts School of Law.

Larry Magid is CEO and co-founder of ConnectSafely.org and a technology journalist with CBS News, *San Jose Mercury News* and other outlets. He was a syndicated columnist for the *Los Angeles Times* for 20 years and has written for the *New York Times*, *Washington Post* and numerous other publications. He has a Doctorate of Education (Ed.D.) from the University of Massachusetts, Amherst.

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