

INTRODUCTION

Education's digital transformation

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INTRODUCTION

Education's digital transformation

Digital tools are allowing teachers to engage students in more robust ways than ever before.

The rise in popularity of technology and the way society at large has embraced it has created a digital imperative, making it absolutely necessary for schools to integrate tech into their learning curriculum.

With more K-12 teachers feeling¹ overworked, underpaid, and having little time for professional development, they're finding it more difficult to devote time to researching and learning how to master teaching with these new tools.

With education costs being cut as well, there aren't always dedicated IT support or technology officers working in school districts who can take on supporting the software or hardware either.

Technology companies and IT professionals are in a unique position to assist schools, districts, and regional offices of education.

Partnering together, they can answer some questions on a micro, or classroom, level and continue thinking about them on a macro, or for all of education, level.

Questions like:

- 1. How can this piece of technology create the most impact for student learning?
- 2. How can technology change the shape of the classroom to create learning continuity between school and home?
- **3.** How can IT administrators ensure student data remains safe and secure?

The following eBook will develop an in-depth discussion of each of these questions and provide useful, actionable insights into how IT professionals can partner with schools to integrate technology to produce optimal learning outcomes for students.





Technology: A brighter path to student engagement

Technology has major implications for the classroom for both teachers and students.

Each group approaches learning in their own way. Educators have clear goals and standards set forth by their curriculum that need to be met; if the lesson plans can be fun, that's a bonus. Students need to be engaged with lessons that are enjoyable or they can lose interest quickly.

IT leaders are tasked with helping educators choose the right technology to shape the student experience and reimagine the way a classroom is brought to life.

IT professionals need to identify what teachers need, what students want, and which pieces of technology can help everyone succeed.

One could argue that in the modern classroom, IT professionals may have the hardest job.

What K-12 educators want



technology students can use daily for everything, like a tablet or laptop



to keep students connected, focused, and learning



tools that help them streamline or enhance other parts of their day, i.e. classroom management, 1:1 interaction with students, reduction in grading time, etc.

What K-12 students want to be kids.

They want a laptop or tablet that



they don't have to be gentle with



has fun apps (even if they're educational)



is fast



Technology: A brighter path to student engagement

When consulting with educators, school boards, or administrative teams, IT professionals can have a unique opportunity to build a school or classroom's digital solutions from the ground up.

Taking the time to ask questions about which software and hardware and how they will be used creates the foundation for a lasting, collaborative relationship with schools. As technology transforms the classroom, it is developing learning in profound ways. When IT professionals leverage an existing relationship in a school district as well, they can help keep teachers on top of trends as they emerge.





OUTSIDE THE CLASSROOM

Building student learning opportunities outside the classroom

Learning shouldn't stop outside the classroom, but sadly, sometimes it does.

Problems occur when students get home. They might sit down to do homework and realize they forgot, or are unclear on, the materials that were presented that day.

When IT leaders are having crucial discussions with faculty, having the end customer—the student—in mind is important.

Thinking about how students will use software, hardware, and apps both at school and remotely plays a pivotal role in remedying the problems students currently face when it comes to doing homework on paper.

IT professionals are the gatekeepers to finding the right solutions that will help bridge the school-home gap for students.

Tech at home: benefits to students

Access to online learning platforms:



displays missing assignments



tracks progress toward goals



creates channels for communication with mentors, teachers, or other students



allows students to receive near-instant feedback on assignment questions



gives them the opportunity to ask peers for help





Building student learning opportunities outside the classroom

Schools need a solution that can allow students to leverage applications in the classroom while having the same access at home.

But what is the right approach? Does it rest on the ability to access applications remotely? Is it about getting machines into the hands of each student? Ultimately, the solution will be customizable, based on a relationship with districts, teachers, or individual classrooms. What works for one classroom might not work for another.

Cities with a lot of snow may need a more powerful solution for students; their students may require a take-home option for cyber days², which could replace snow days in the near future. Classrooms with a specialty, i.e. fine art, photography, or vocational skill classes, are a unique situation that will require their own set of software and hardware if students are going to be successful working at home.

IT leaders need to take inventory of the needs of the classrooms within their learning partnerships and make choices on what they can leverage to drive student success.







Students and the security imperative

One of the biggest concerns with bringing new technology into the classroom is keeping students' data secure and ensuring their privacy.

Many students are taking the devices they use in the classroom home to continue their education. Before this happens, there are some security precautions IT professionals can take:

Train teachers on all new devices

Student training can be integrated into the curriculum when the technology is being introduced.

Before devices are handed over, consider doing the following:

- limit who has access to administrative rights on the hardware
- limit access to applications or websites, where applicable
- ensure all systems have the right security software installed
- flag key terms and phrases



When it comes to security, however, the best defense is education.

Instructing students on best practices when it comes to being responsible cyber citizens is the most efficient way to keep students safe and devices secure. What if educators aren't sure how to do this?

Luckily, there are resources³ and continuing education sites⁴ in place to help, and IT partners to help fill in the gaps.

Improving digital citizenship tips:

- On't bully or tolerate cyberbullying
- Charge your devices daily
- Do you know difference between real and fake news articles?
- Wever download a file without asking an adult first
- Protect your private information. Not sure what you can share? Ask!





The future of tech in the classroom

THE LENOVO SOLUTION



CONCLUSION

The future of tech in the classroom: The Lenovo Solution

Classroom technology is evolving at an incredible rate.

Whether it's virtual reality, laptops and tablets, workstations, or a new way to store and share data, there are several solutions schools can use to drive better education outcomes. Lowbudget Baltimore Public Schools⁵ use a whole host of technology resources to solve 21st-century problems. These students are digital natives, so using laptops, VR, Lenovo cameras to put together presentations is second nature. Taking these tools to the next level with software and design capability is something new and exciting.

Confidence abounds and teachers are loving the results they're seeing from students.

Through a partnership with Lenovo and private donors, students at Greensboro Day School⁶ in North Carolina have a 1:1 technology program with Lenovo products. IT leaders worked with faculty to replace antiquated technology with a series of different technologies ranging from tablets for grades K-3 through full-powered

ThinkPad® Yoga™ 380 Windows laptops for grades 9-12. Older kids can help the younger ones because they understand the technology, everyone has Lenovo Accidental Damage Protection on their machines, and teachers and students alike are seeing an increase in productivity from the enhanced mobility.

These stories are just a couple studies from existing classrooms of the future who embrace smarter technology. Lenovo can, and does, so much more. We offer comprehensive training on using technology for classroom management and educational tools, assistance should anything go wrong or be misunderstood, and we've created a whole suite of products beyond what's mentioned in these studies.

Need desktops for administration, libraries, or computer labs? What about high-powered workstations for STEM use? Data center and storage? Lenovo has solutions for these, too.



CONCLUSION

The future of tech in the classroom: The Lenovo Solution

Looking forward, the classroom will continue to change.

IT professionals who partner with smart companies like Lenovo and educators are setting up students for successful lives full of learning, technological aptitude, and the ability to think critically. These IT leaders aren't just building digital from the ground up, they're building the future.

They're providing smarter technology for all.

Learn more at lenovo.com/education ()







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- 2. https://philadelphia.cbslocal.com/2019/07/08/snow-days-may-become-school-days-under-pennsylvania-law/
- 3. https://studentprivacy.ed.gov/audience/school-officials-k-12
- 4. https://www.commonsense.org/education/digital-citizenship
- 5. https://solutions.lenovo.com/vertical-solutions/k-12-education/#in-k-12-pcs-face-a-demanding-life
- 6. https://p.widencdn.net/mlyuuo/Lenovo-Greensboro-Day-School-Case-Study_Final