

K-12 Education Landscape

55.9M Students

In fall 2017, about 55.9 million students will attend elementary and secondary schools. Of these, 39.4 million will be in prekindergarten through grade 8 and 16.4 million will be in grades 9 through 12.¹



\$252B EdTech Spend

According to a recent study, EdTech spend is projected to reach \$252B by 2020.² K-12 school districts are gearing up for the expected demand for new classroom technology initiatives by looking for ways to improve IT maturity and streamline internal processes.



ARE YOU READY FOR THE EDTECH EXPLOSION?

In order to optimize resources, there needs to be a systematic process and workflow in place. In addition, to save precious resource time, non-value added tasks—like manual processing, ad hoc reporting requests, gaps in hand-offs, and poorly defined workflows—need to be identified and removed.

By implementing tools and strategies that optimize resources, district IT can focus on delivering new technologies and services to those who can benefit from them the most.

K-12 EDTECH SPEND IS ON THE RISE

Without a doubt, IT professionals in K-12 districts are strained and the pressure continues to mount as new EdTech trends and initiatives are embraced, including:

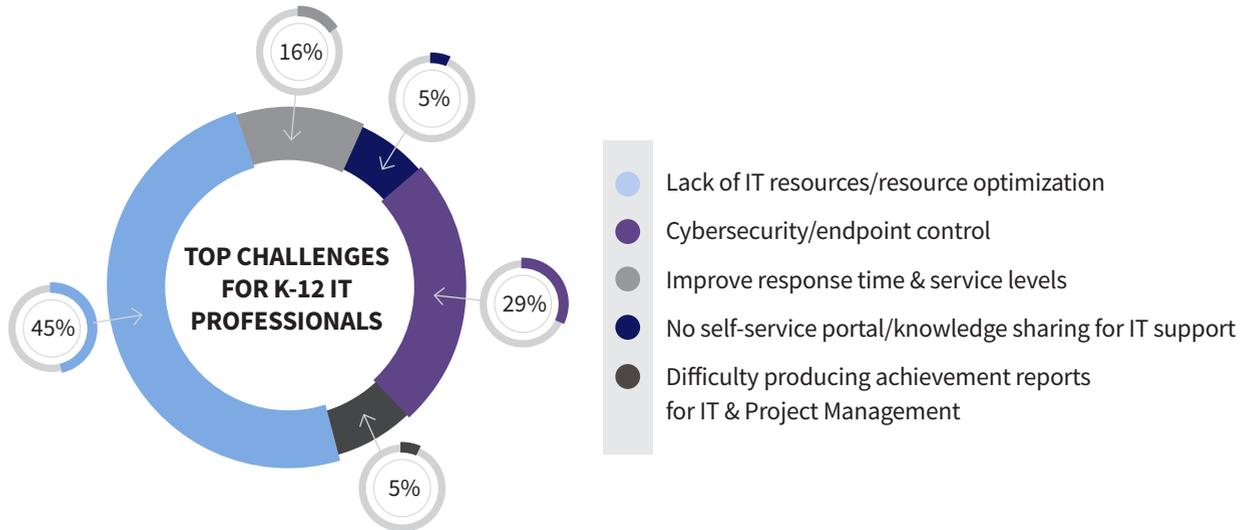
- **1:1 Classrooms:** A recent survey of over 2,500 teachers and administrators across the U.S. shows 80% believe their schools offer good or great access to technology, and over 50% say they have a 1:1 student-to-device ratio, which is up nearly 10% over the previous year.³
- **Blended Learning Environments:** This strategy combines technology-based instruction with traditional, teacher-to-student lessons. Many schools find there's a gap between what they want to accomplish with technology and what they can actually achieve.⁴
- **Virtual, Augmented, and Mixed Reality:** In the K-12 market, Futuresource expects the number of students in K-12 schools accessing VR/MR/AR-based content via head-mounted displays (HMDs) to grow from 2.1 million in 2016 to 82.7 million in 2021.⁵
- **Makerspaces (STEM):** Makerspaces help prepare those who need critical 21st century skills in the fields of science, technology, engineering and math (STEM). They provide hands-on learning, help with critical-thinking skills, and even boost self-confidence.⁶

Each of these initiatives promises to enrich and enhance the learning process, but the additional pressure they can place on IT staffs and budgets is undeniable.

RESOURCE CONSTRAINTS & CONCERNS OVER CYBERSECURITY

STUDY PURPOSE

In an effort to understand the emerging challenges facing IT in K-12 school districts, TeamDynamix conducted a pulse study, in conjunction with Kaseya, to evaluate IT organizational maturity. The study included 103 participants from districts ranging in size from under 5,000 students to well over 50,000. The purpose of the study is to understand the unique and specific opportunities, requirements, and obstacles facing IT in K-12 education.



Evaluating IT Maturity in K-12 Districts

59% of the participants ranked their self-service abilities at the low end of the IT maturity scale. While districts typically ranked themselves on the higher end for areas such as the ability to deploy mobile learning devices, the areas in which we saw the lowest marks were also the areas that tend to drain resources when not implemented.

By focusing on these five areas, districts can reduce the resource constraints that inhibit their ability to address other key challenges and take on new initiatives.



1. Self-Service Portal
2. Knowledge Centered Support
3. Endpoint Control / Security Standards
4. Use of the ITIL Framework
5. Change Management

“With an integrated IT and systems management platform, when someone says they can fix something on Thursday, it actually means Thursday. And when education or business leaders say a new tool will be up and running in 90 days, they are not guessing if the work can actually be completed.”

LYNNE LY

*Business Information Systems
Program Manager*

Denver Public Schools

DRIVING SELF-SERVICE ADOPTION

Imagine having a hub where students, parents, teachers, and staff can access service catalogs, knowledge base articles, and online request forms for all types of IT services from a single, convenient location. Now imagine what can happen if that same hub is expanded beyond IT to provide the same benefits to departments throughout the school district.



68% of participants give themselves a rank of **three stars** or fewer for their ability to provide centralized information and self-service



A Focus on Self-Service

Increased demand for self-service has K-12 leadership looking for ways to build a knowledge base and online service catalog for IT, Human Resources, Facilities, Media Services, and more.



*average cost
of a level 1
support call*



*average cost
of self-service?*



Building a Knowledge Base

WHAT IS KNOWLEDGE CENTERED SUPPORT?

Knowledge centered support (KCS) leverages participation from an engaged user community (i.e., crowdsourcing) to expand both the breadth and depth of information available. While KCS was initially developed for use in customer support environments, it can work equally well across other organizational areas.

30-50%

Increase in first contact resolution

50%

Decrease in incoming load due to online self-service

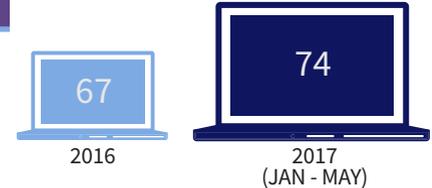


KCS is based on four main principles⁸

1. New content is created as a byproduct of problem solving.
2. Popular content is reviewed and expanded.
3. Up-to-date collective experience is collected in a knowledge base.
4. Learning, cooperation, and knowledge sharing are incentivized.

CYBERSECURITY & ENDPOINT CONTROL

PUBLICLY DISCLOSED CYBER INCIDENTS IN K-12 SCHOOLS⁹



CYBERSECURITY AND WHY IT'S A CHALLENGE

The growth of the ransomware/malware trend shows no sign of abating. The consequences of a successful attack are truly devastating and K-12 schools are under particular duress, since not-for-profit institutions contain a wealth of valuable data including payroll information, student records, health data—even student work.

Add to that an increasing number of difficult-to-manage/patch devices and large numbers of individuals to onboard and offboard regularly, and you end up with an environment that's a prime target for a hacker.



Solutions must start with protecting users from themselves through multi-factor authentication (MFA) and single sign-on (SSO), and include ways to discover the complete network for endpoint management purposes.

ENDPOINT CONTROL

Schools are often laden with old machines and system interoperability issues. Without having the basics like asset reporting and software management in place, it's nearly impossible to achieve key initiatives such as 1:1 classrooms.

IT must completely manage a growing number and variety of devices, both on- and off-network, so they can see everything and reduce labor-intensive redundant work, allowing for more time to be spent on high-priority projects. And all this done while providing top-notch service levels and never disrupting the classroom.

Implementing Endpoint Management

Ransomware poses a serious threat to K-12 schools, but its most harmful effects can be avoided by implementing three basic steps to protecting your operations.¹⁰

- **Patch your computers.** Patching is 100% essential, but you cannot rely on end-user vigilance or manual IT means. By implementing an automated solution, patches are installed when they become available—on all endpoints and servers.
- **Maintain an antivirus and anti-malware solution.** With proper security protection across all of your systems, incursions such as WannaCry will be spotted, blocked, and purged. Like patching, an automated solution that installs and updates security across all of your systems is essential.
- **Be smart about backup.** Ransomware works by holding your data hostage. For those with no backup, an encrypted and locked hard drive is a disaster. If you have a current backup, it is only a nuisance. The best solution is an automated tool that backs up data from all of your systems to the cloud, where it remains safe until you need that data back.

With solutions like Kaseya, these basic steps can be accomplished with ease. Kaseya provides unified visibility for on-network and off-network devices and users. Its unique agent architecture enables full management capabilities of all features without requiring devices to be on the network, which enables support for your entire environment without limitations.

Administration of Kaseya is simple. Endpoints, including Macs, can be patched automatically and completely. With Kaseya, other functions, including software management, backup, antivirus, anti-malware, and policy management can be accomplished.



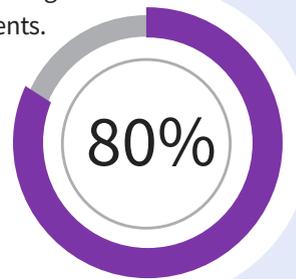
FOLLOWING A FRAMEWORK: ITIL STANDARDS

Build a Solid Foundation

1. Categorize incidents and service requests by differentiating one from the other.
2. Establish clear criteria for triaging incoming requests to determine their urgency, set reasonable resolution targets, and determine appropriate escalation protocols.
3. Provide outstanding customer service by promoting a culture of courteous service, which fosters better relationships and congruent expectations.
4. Hold IT accountable by using data to guide improvement strategies, spending time on projects rather than fighting fires, and fulfilling more service requests than incidents.

Proper Change Management Will Alleviate Ongoing Drain on the IT Department Due to Unforeseen Issues & Problems

Implementing ITIL's change management process helps mitigate unforeseen consequences and downtime that stem from improper (or non-existent) planning and controls. By managing and documenting changes, districts can stop the onslaught of major—and often avoidable—issues.¹¹



Unplanned Downtime
Caused by IT Itself

Vision for the Future

As the needs and expectations of students, parents, and teachers evolve with each school year, districts must continually work to improve and operate efficiently across various departments.

With growing complexities in managing school operations, many districts are realizing the limitations of legacy solutions. Manual processes, duplicated efforts, and communication barriers take up too much time, making it difficult to focus on meeting the needs of students, parents, teachers, and even fellow staff members.

TeamDynamix provides the tools K-12 schools need to manage processes throughout their institutions and bridge divides between classrooms, administrators, facilities, and more—all with a single cloud-based platform that combines service management and project planning.



About

TeamDynamix TeamDynamix cloud-based work management software gives organizations the ability to align, work together, and simplify their work management processes across their organization. Higher Education, K-12 districts, state and local governments, and nonprofits use the TeamDynamix project portfolio and service management platform to work together faster, smarter, and better to fulfill service requests.



Kaseya® is the leading provider of complete IT management solutions for Managed Service Providers and small- to mid-sized businesses. Kaseya allows organizations to efficiently manage and secure IT in order to drive IT service and business success. Offered as both an industry-leading cloud solution and on-premises software, Kaseya solutions empower businesses to command all of IT centrally, manage remote and distributed environments with ease, and automate across IT management functions.

REFERENCES

1. <https://nces.ed.gov/fastfacts/display.asp?id=372>
2. <https://www.prnewswire.com/news-releases/global-report-predicts-edtech-spend-to-reach-252bn-by-2020-580765301.html>
3. <http://blog.frontrowed.com/2016/11/17/2017-technology-in-the-classroom-survey-results>
4. <https://www.edweek.org/ew/articles/2015/04/13/report-summary-breaking-down-barriers-to-blended.html>
5. <https://www.futuresource-consulting.com/Press-Immersive-Tech-0617.html>
6. <https://www.edweek.org/ew/articles/2016/06/09/the-maker-movement-is-coming-to-k-12.html>
7. HDI "Support Center Practices & Salary report" 2014
8. <https://elearningindustry.com/knowledge-centered-support-methodology-getting-started>
9. <https://thejournal.com/articles/2017/06/08/k12-cyber-incidents-have-been-increasing-in-2017.aspx>
10. <https://www.teamdynamix.com/why-universities-should-be-very-worried-about-petya-and-other-ransomware-attacks/>
11. <https://edtechmagazine.com/k12/article/2014/06/5-ways-make-til-work-your-district>

