5 Ways the cloud can improve your school’s security

We’ve all seen the headlines:


“Education Sector Most at Risk for Cybersecurity Among 17 Industries” – Elearning Inside, December 2018

“Another Hack in the Education Sector: 40 Million Records Exposed” – Lexology, October 2018

Security breaches have become a fact of life for organizations worldwide — regardless of their size or industry. Sometimes a single mistake such as falling for a phishing scam or opening a virus-infected file is all it takes.

And while it may be tempting to bury your head in the sand, no school is immune from security risks. You may not even know your school is at risk, or has been compromised in some way, until it’s too late.

Risks by the numbers:

5% The education sector accounted for 5% of all the incidents and data breaches in 2018.1

60% Student data were included in more than 60% of K-12 data breaches in 2018.2
Of the data compromised in attacks on educational institutions, 55% was personal, 53% impacted credentials and 35% was internal. The question isn’t whether you are at risk, but how you will protect your school.

Are you able to find experts with the security experience necessary to build a secure communications infrastructure? Can you protect against hackers, denial-of-service attacks and other threats? Are you able to identify and manage unsecured mobile devices and apps that connect to your network—protecting calls, voicemail, passwords, and other sensitive data from theft?

The cloud is simple and secure.

The challenge of strengthening your school’s security may seem overwhelming, but there is a simple solution. Many schools are protecting themselves by replacing their local PBX with cloud-based communications services, such as those offered by Verizon.

Cloud communications services are built from the ground up with lock-tight protections. They are also supported by security pros who provide around-the-clock monitoring you might find difficult to replicate on your own.

Here are 5 specific ways your school can benefit by moving to the cloud:

1 | Encryption & confidentiality

Trusted cloud communication solutions incorporate sophisticated encryption standards and cryptographic algorithms, certificates, and protocols recommended by top security experts. That includes OpenSSL, Advanced Encryption Standard (AES), X.509 certificates, and RFC-compliant network communication protocols (TLS, OCSP).

Encryption is critical to protecting vital school data while it’s stored and while it travels over a network. Sophisticated cryptographic routines take those protections a step further by authenticating both users and devices before they connect to your communication solution.

2 | Preserving data integrity

“Data integrity” involves making your servers and software hard for hackers to break into. Top communication service providers like Verizon make data integrity a priority. They focus on secure software design and coding, proper configuration, and careful monitoring to help protect your confidential communications from intruders.

With data integrity measures in place, you can have operating system security, as well as network security governing your ports and protocols used. You can also have application security for your voice portal, including SIP access control lists, password policies and enforcement, device lockout, call processing policies and controls.

3 | Redundancy & business continuity

Communication outages are costly to both your budget and reputation. They impact your staffs’ ability to deliver lessons effectively and to stay connected with parents, staff and pupils.

Many factors can cause your communications network to go down. Human mistakes are common, like overloading an electrical circuit in an onsite server. You might be hit by a denial-of-service attack that ties up your network. You might also be affected by flooding and extreme weather conditions, or even a rogue digger that damages your lines.
With cloud communications from Verizon, you get an added level of protection against outages that is could be difficult to replicate on your own. That’s because top communication service providers establish geographically dispersed data centers with redundant service clusters, routers, and network paths so there is no single point of failure.

Verizon makes the investment in high-availability routers, switches, and firewalls and can scale to accommodate many millions of lines of simultaneous communications traffic. Verizon also adopts process protocols to support high availability — such as upgrades and patches that can be applied while systems and software remain live.

4 | Long-term system management & innovation

If you have a premises-based PBX, you know firsthand that manageability is a big deal. If your solution isn’t easy to manage, you’ll end up needing a costly team of experts to help with setup, security, and ongoing management.

With cloud communications, you’re not responsible for the underlying infrastructure, applications, and security features. You can rest easy knowing that seasoned experts are in charge. All you need to worry about is day-to-day administration, such as adding or deleting users and administering passwords.

5 | Standards compliance & the future

Every company will say its products and services have “great security.” But what assurance do you have of their claims?

Verizon has its security measures confirmed by independent, third-party organizations and standards bodies. Look for compliance with security certifications and quality assurance benchmarks including: TL 9000, ISO 9000, ISO 27001, FedRAMP, and NIST SP800-53, to name a few.

Mitigate your security challenges today.

Verizon’s Virtual Communications Express (VCE) offers secure cloud communication services that deliver the confidentiality, integrity, availability, manageability, and assurance your school needs. Our rock-solid delivery platform provides feature-rich services.

Contact Verizon today to find out more about Virtual Communications Express:

800.248.9685

verizon.com/business/solutions/k12

Sources: