

# Education Success Stories: **Six Ways to Achieve Complete Backup and Continuity on a School Budget**



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## Introduction

Education is a unique industry. There are many factors that make kindergarten through 12 (K-12) and universities different from other businesses. From constricted budgets to needing to protect large numbers of devices and users, educational institutions face a unique set requirements for data protection and business continuity.

Unitrends has a long history of protecting the IT assets of the education industry, with institutions ranging from small local school districts to major universities using thousands of Unitrends products daily. This white paper will discuss the unique challenges of the education industry and demonstrate how Unitrends meets those needs with our product features. Also included are excerpts and links to Customer Success Stories from a few of our education customers.

## Do More with Less with Unitrends Backup and Continuity

Unitrends approach to the education market is different from other backup and recovery vendors. Unitrends products are designed to increase uptime and confidence in a world in which education IT professionals must do more with less. Unitrends all-in-one backup appliances deliver easy-to-use, easy to support products that provide everything needed for enterprise-grade backup and continuity. The result is a complete portfolio

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**“***Data security and compliance are always major concerns for K12 but loss of data can be catastrophic.*

Ross Randall  
Director of Technology  
Lamar County Schools  
Hattiesburg, MS

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and a “one throat to choke” approach to support that allows our education customers to focus on their primary business rather than data backup.

## Education’s Unique Challenges

### Stretched IT departments

There is perhaps no industry with more budget restraints than education. Most school districts have few IT resources with little time that can be spent managing backups and recovering lost files. If ever there was an industry that is required to do more with less, it is education. Every moment spent managing and troubleshooting backup issues is time not available for IT’s real job, working with the administration to improve student education.

*“We have a small IT administrative staff with very little cross-training/*

*overlap in responsibilities. Our budget isn't big compared to larger schools, but demands on IT are still high due to the nature of the work done here." – Carl Jaspersohn, Associate Director of Infrastructure, Boston Architectural College.*

**Unitrends Response** - Unitrends knows that the education IT administrator is constantly in demand. That's why we developed a solution that is straightforward, flexible, scalable, and grows with you. Our "Rack, Connect, Go" all-in-one backup appliances come pre-loaded with powerful data protection and recovery software. Our incredibly intuitive user interface is proven to reduce setup and management time by up to 64%, with software designed to deliver more automation and reporting, all from a single pane of glass. Unitrends' products are designed for a set-it-and-forget-it style of use with emails that report backup results so you always know things are working properly. Simply scan the emails to see green dots indicating successful backups or red dots that describe why backups failed. Many users report spending less than an hour per week monitoring and managing their backups. Unitrends also offers Recovery Assurance so that customers are sure that recovery can and will take place as planned in case of a business interruption.

## **Legacy of Multiple Applications and Operating Systems**

As a result of tight budgets, older products and applications are kept functioning well beyond their advertised useful life. Most education institutions have a broad and diverse number of operating systems and applications that need protection. This creates the need for multiple backup and recovery processes, each supporting a limited number of IT assets. Backup and recovery becomes a complex process as the IT staff have to juggle multiple applications and ensure that they can interoperate with no gaps in coverage.

*"The district is VMware centric, with servers that include Windows (2003 to 2012R2), Linux, Red Hat, and SUSE. We have SQL, Oracle and Exchange databases and servers that are each critical to our operations." – Michael Shellito, Server Administrator, Enid, Oklahoma Public Schools*

**Unitrends Response** - Unitrends backup and recovery appliances can protect a very wide range of operating environments including both virtual and physical, local or remote, on-site or in the cloud. The Unitrends Support

Matrix lists over 250 different hypervisors, operations systems and applications that can be natively protected. Coverage for new servers or applications are easy to add. Also by purchasing a Unitrends Pledge agreement for your Unitrends Recovery Series, you will be entitled to a new hardware replacement appliance after year 4 at no cost!

## **Highly Dependent on Tape Backups**

Another result from being required to extend the life of existing technology is the continued dependence on tape as a backup technology. As data volumes have grown since the initial acquisition, the time required to perform backups extends. Slow backups are likely to miss their backup windows, cause application slowdowns, and create unusable backup files. In addition, most tape deployments require a media management process to mount new tapes, get the backups off site and physically travel to get needed recovery tapes. This creates a manual burden on IT departments already understaffed.

*"The Symantec tape solution was slow and required a lot of management. More importantly, restores were awkward and time consuming, difficult to perform and sometimes the tape was defective or didn't have the data it should." – Gary Halbedel, Network Administrator, Bethlehem, NY Central School District..*



**Unitrends Response** - A decade ago tape was the standard way to protect and recover data. However, disk-based backup has advanced to become the new standard. Unitrends physical appliances and virtual appliance create fast backups with no degradation of system performance, and are easy to schedule. Automated file management can move replicated files to off-site locations, utilize in-line data deduplication to reduce the overall size of files, and even encrypt critical data when needed. If you absolutely require tape as part of your backup solution, Unitrends can support that, but we also support an integrated cloud solution where no extra manual process is needed.

## Education Protection Requirements

The protection requirements of educational institutions are different from other industries as well. Education is unique in that there are large numbers of fairly unsophisticated users who are prone to making mistakes. They are quick to click on dangerous links or delete and lose files that they may need in the future.

*"The school district consists of an enrollment of about 2,600 students with more than 3000 user accounts, 2000 devices, and 50 servers as well as a Network that spans across six locations." - Bryan Young, Network Administrator, Rocky Hill, CN Public Schools.*

## Recovery of Deleted Files

In a 2016 study by COSN, nearly 90% of education respondents expect their instructional materials to be at least 50% digital within the next three years. The volume of data is growing quickly. Far and away the most requested data recovery service in educational institutions is to restore files or folders that have been mistakenly deleted. Especially in the K12 market, but even at the university level, users can be mistaken about deleting files they believe they will no longer need.

*"I was impressed with Unitrends ability and speed for backing up, but I was blown away by the ease of use and speed of recovery." - Bryan Young Network Administrator Rocky Hill Public Schools*

**Unitrends Response** - The rapid recovery of lost files is where Unitrends' disk-based backup really shines. With a

common and intuitive user interface across all products, even untrained IT staff can easily find individual files in backups. A few clicks and the entire recovery process, from login to file restoration usually takes less than 5 minutes. This process and speed is the same whether recovering individual files, folders or full data sets.

## Ransomware Attacks

Cryptolocker, Cerber, CryptoWall, Crysis, etc., are all variants of ransomware, a problem that has reached epidemic levels. It is a billion dollar criminal enterprise with up to 60% of US enterprises reporting that they have been attacked. Education supports very large numbers of users that easily fall for "click-bait". Adolescents are heavy users of social media, a ripe media used by ransomware pirates. Most educational institutions have already experienced a ransomware attack.

*"We've had two separate ransomware incidents where users informed me that their files were encrypted with a message about paying a ransom. It was trivial and quick for me to restore the data from the Unitrends backup." - Gary Halbedel, Network Administrator, Bethlehem, NY Central School District.*

**Unitrends Response** - Virus scanners provide protection against only well-known ransomware versions but are useless against new or slightly modified variants. The only real protection is to have a data backup and recovery program so that you can roll your system back to a recovery point before the infection occurred. Unitrends products have Recovery Assurance that will automatically do security scans against your production applications - but using your backup data instead. It can spin up your applications in a specific order, isolate them from production, execute security tests, and automate reports and alerts immediately upon detection of ransomware.

## Privacy of Data

Most educational institutions must manage and protect TBs of data. Since much of it is about minors, data elements such as student information, social security numbers, financial records, and addresses need special protection. There are federally mandated requirement around data retention and privacy outline by laws like Family Educational Rights and Privacy Act Regulations (FERPA). Additionally each state has individual laws that may be relevant such as California's

Student Online Personal Information Protection Act (SOPIPA). Additionally student health records must comply with the Health Insurance Portability and Accountability Act of 1996 (HIPAA).

*“Few industries match K12 education’s massive amounts of data and users accessing the data. When access to that data fails, I fail.”* – Ross Randall, Director of IT, Lamar County Schools, MS

**Unitrends Response** – Unitrends offers a portfolio of 12 all-in-one enterprise physical appliances that are pre-loaded and pre-tuned with powerful software that not only covers on-premises backup but also long-term retention and disaster recovery in the HIPAA compliant Unitrends Cloud. Our Recovery Series Appliances range in size from 2 TB to 180 TB of raw storage capable of protecting about 118TB of files and data. In addition, Unitrends appliances include the ability to encrypt targeted files so that they cannot be accessed illegally. Unitrends has built-in AES 256-bit encryption to protect data both at-rest and / or in-flight.

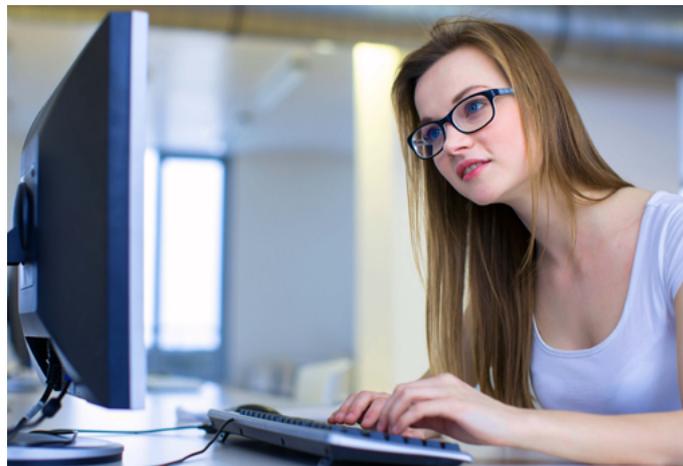
## Education Advantage

### Remote Replication

There is one advantage that the education industry has over others, the geographic dispersion of their locations. Most small to medium enterprises conduct business out of a single location, so finding a remote location for storing and securing secondary backups becomes a challenge. Not so for the education industry as school departments are spread across town to serve students in all locations. This makes adding remote data protection easier and cost effective.

*“I have dual Recovery 814S appliances. One sits in the data center as the primary and the other is secured in a school site about 30 miles north. The secondary syncs with the primary to ensure a redundant backup solution.”* – Ross Randall, Lamar, MS County Schools

**Unitrends Response** – Take advantage of remote sites to provide low cost secondary DR and data retention location by adding a second recovery appliance. Unitrends Recovery Series hardware appliances and Unitrends Backup software can replicate between each other for maximum flexibility and the best Total Cost of Ownership (TCO). Not only is the data



protected but it can support automated failover, DR testing and compliance reporting at the second site; all designed to reduce downtime and keep faculty productive and students learning.

## Conclusion

Unitrends is uniquely qualified to support the education industry. Unitrends offers a simple, fully-integrated backup and recovery suite of products. By deploying a Unitrends all-in-one enterprise backup and continuity solution in your education data center you can oversee your entire environment through Unitrends intuitive UI using a single-pane of glass.

The Unitrends portfolio of all-in-one, cloud-empowered, backup and continuity solutions provide education IT departments with the ultimate portfolio of security protection while having the ability to offer unmatched flexibility as your needs evolve. Plus, you have our promise that you can recover virtual, physical, and cloud-based data, systems, and applications with 100 percent confidence.

Our local partners can work with each school to learn their unique needs and suggest the right Unitrends product to match.

For more information, please visit [unitrends.com](https://unitrends.com) or talk to a Unitrends Partner.