

# The Future of K-12: Your Guide to Embracing Document Management and Automation

Solving Education Record Management Challenges  
by Simplifying Document-Related Processes



# What to Expect from This Guide

This guide provides a detailed overview of how educational institutions can manage records more easily and operate more efficiently with an intelligent information management solution. It covers various topics, from record capture and retention to back-office process automation and integration with existing educational solutions.

Whether you're researching on behalf of a public district, private institution, charter school, or any other K-12 school system, this guide will serve as an ideal launching point for you to gain an overarching understanding of the challenges that can be solved, the solutions and features available to you, and the specific needs of your educational institution.



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# State of the Education Industry

Educational institutions are responsible for managing countless documents, many of which are subject to regulations such as mandatory retention rates and privacy standards like HIPAA and FERPA. These documents include:

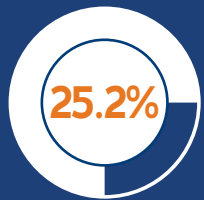
- Student Enrollment Records
- Attendance Records
- Budget and Financial Records
- Special Education Records
- Student Applications
- Accreditation Documents
- Faculty Employment Records
- And Many More

Educational institutions are currently undergoing a transformative shift towards the adoption of digital solutions that can help them manage, store, and retrieve these documents in a structured and organized manner.



With additional funding through legislation such as the CARES Act (a COVID relief fund that allows for spending on contactless processes), many educational institutions have already jump-started this transformation process and are continuing to invest.

The investments being made in these technologies by educational institutions are illustrated in several market research reports including one published on [Market.US](#)



The demand for educational technology is expected to expand by 25.2% between 2023 and 2032



By 2032, spending on technology in education is expected to reach \$132.4 billion



The leading product type for educational technology spending in 2022 was software





# Limitations of Student Information Systems (SIS)

While Student Information Systems (SIS) have eliminated most of the manual documentation in education, there are several key areas where document storage and automation are still needed:

## ✓ Cumulative Records

Portfolios and enrollment records often exist outside of student information systems, require privacy compliance, and frequently contain legacy records that must be retained, often initially in paper form.

## ✓ Health Records

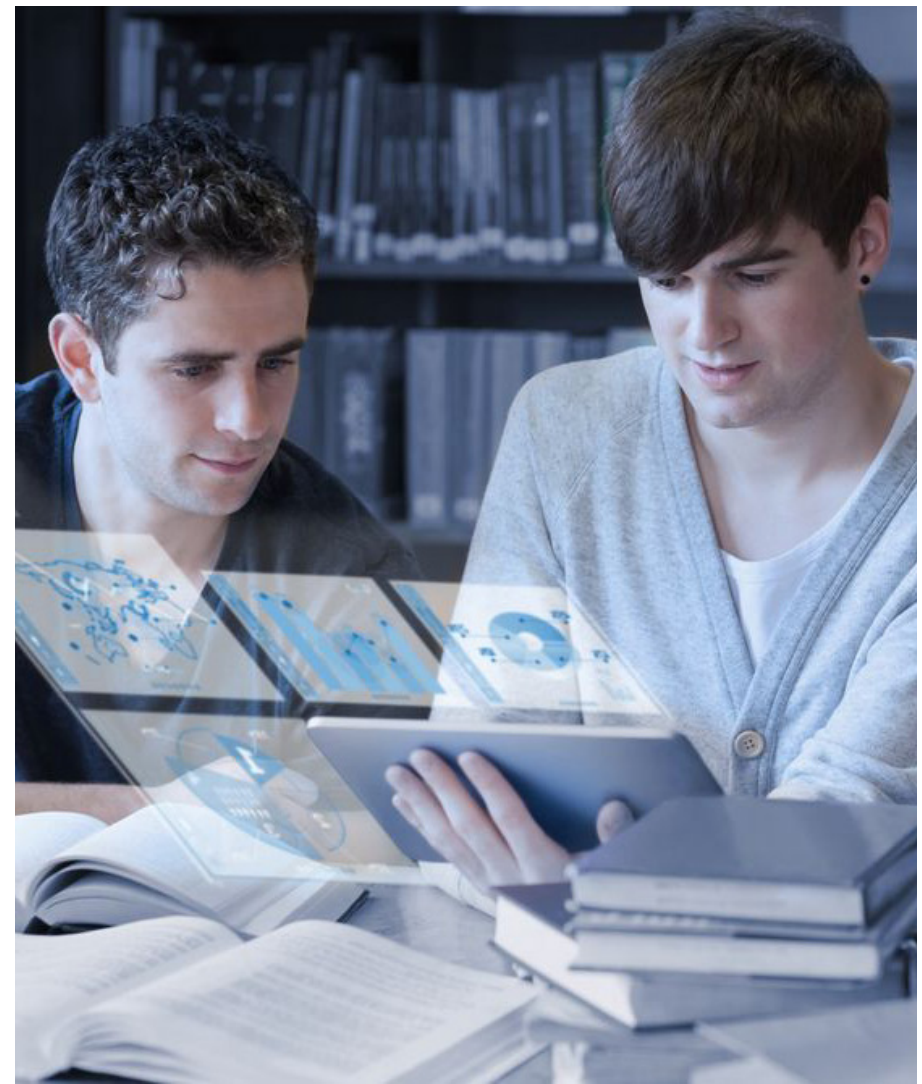
Vaccination records, allergy records, and other records of specific student health needs must be HIPAA-compliant and often need to be accessed by multiple faculty members throughout the school.

## ✓ Supplemental Records

Student IEP and 504 plans, PPT meeting notes, and countless other records are voluminous and must be easily accessible to prove that students receive the proper education and accommodations to meet their needs.

## ✓ Administrative Record

Supply invoices, teacher certification records, and expense reports often have mandated retention schedules and involve monotonous processes that can be simplified with document automation.





# Records Retention Requirements

Mandates for retaining student records vary from state to state but are relatively uniform in their efforts to protect the legacy of a student while protecting the district against potential litigation.

Retention schedules for grade books and curriculum, for example, have minimal retention requirements, but immunization, academic achievement, attendance records, and even basic biographical information may need to be saved for 50 years or more after the student has left the district. Even simple records like permission slips must be retained for up to 6 years.

Every district needs to be aware of its state record retention requirements, but it's safe to say that these mandates can lead to long-term storage issues, failed audits, and legal challenges if the information needs to be referenced. A strong plan for digitizing your records, both legacy and current, can free up resources while putting information at the tips of your fingers.





# Getting Started with Transforming Student Records

## Transforming Legacy Student Records

Even schools now leveraging the power of an SIS have a paper challenge to manage. What do you do with all those student records from years gone by?

These files often contain valuable information relevant to services provided, achievements earned, and a profile of the student's educational career. They may be stored in a vault or even in a spare classroom that could be better used for educational purposes. Fortunately, there are strategies for quickly converting these records into a digital format.

## Capturing Student Records with QR Cover Pages

Most K-12 schools looking to convert their paper files are looking for the fastest and most economical solution to the problem. The best means of achieving this is to minimize document preparation and indexing (filing) time.

The most common approach is to scan each student's records as a single file rather than breaking them down into individual files.

While this approach makes retrieving a specific file within the student record more cumbersome, it eliminates the need for a knowledge worker to identify and index each record within the document management system.

Best practices for the single record approach include prepping the document by removing any staples or paperclips, creating a simple QR code cover sheet, and scanning it as a single record into the document management system.

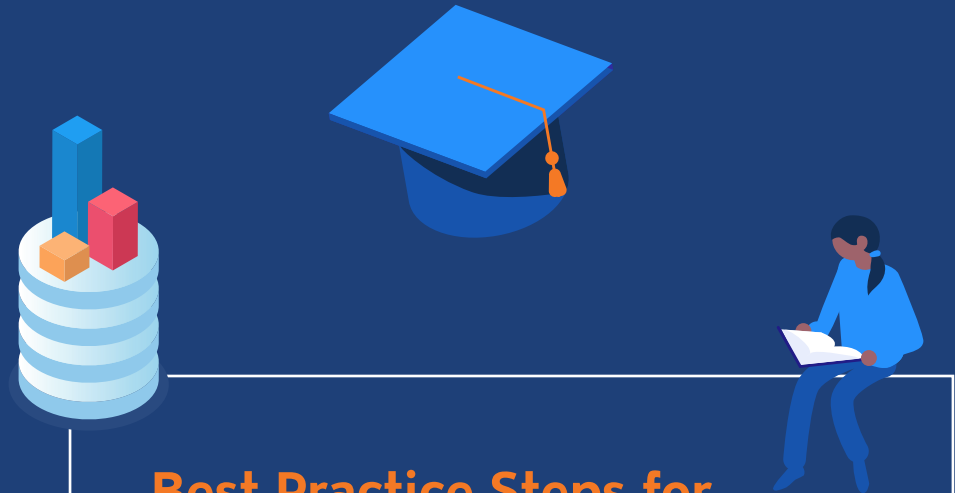




## Best Practice Steps for Single Student Record Digitization

- The removal of any fasteners that might jam the scanner is essential for a smooth scanning operation.
- The cover sheet helps identify the record and acts as a document separator. Using any free QR code generator, those preparing the records can enter information such as the student's name, date of birth, and date of graduation to file the record.
- As the document is captured, the QR code is read and the data within it is used to file the student record automatically.

Another common approach is to break the document into subsections, usually the Academic Records, Health Records, and Supplemental Records. This approach allows those searching for specific sections to find them quickly and is especially useful when the student has received special education services as this documentation can be voluminous.



## Best Practice Steps for Compartmentalized Student Record Digitization

- Once again, document preparation begins with the removal of any fasteners.
- A separate QR code is generated for each section, but this time, an index field identifying the section is included.
- The documents may be stacked together in the scanner's feeder. Each time the software sees a new barcode page, it will automatically recognize the end of one document and the beginning of another.



## Full Page Text Conversion

A powerful tool for scanning student records by section or altogether is full page text conversion. This feature converts the image or picture of a page and transforms it into searchable data.

By enabling this feature, the user can perform searches that go beyond just the values of the index field on the cover page. For example, if someone were looking for just the 504 plans within their supplemental records, they would enter 504 in the full-text search, and each instance of this value in a returned document would immediately be highlighted. The user could quickly navigate to the next instance by tabbing through the document.

In the case of bulk scanning large file sets, full page text conversion and full text searching can be invaluable for rapidly locating information within the student record.

## Advanced Techniques for Content-Based Searching

As described in the previous section, full-text searching is a highly effective means for improving search capabilities. It can be used, however, to do much more than search for a keyword and can be easily combined with index-based searches:

- When performing a content search, there will typically be a text box to enter keywords. content searches function the same way as other searches, with the addition of the keyword text box where users enter words or phrases to search within the document's text.

- Users can create their own, more complex queries using searches with boolean logic (logic that uses the terms and, or, and not and can broaden or narrow search results), phrase-based searching, and proximity searching.
- Content Search also enables keyword searches, fuzzy searches (likely relevance), stemming searches (words with the same root), phrase searches, and wildcard searches (related spellings, etc.) within the contents of a text-searchable document and highlights any matching instances.

## Outsourcing your Scanning Project

If a district does not have the resources to scan its records internally but has the available budget, there are organizations that will securely manage the digitization of your records for you.

Cost considerations for this approach are based on the effort required to transform your files so the same rules apply. To keep costs down, you should minimize the effort to prep the documents and limit the amount of indexing. Most organizations performing this service will charge by the number of pages to be scanned and the number of characters or fields needed to index them.

To get a rough estimate of the number of pages you have, here are some useful guidelines:

- 2,000 - 2,500 pages in an average banker box
- 4,500 - 5,000 pages in an average long bankers box
- 7,000 - 7,500 pages in an average lateral file cabinet
- 10,000 - 12,500 pages in an average vertical file cabinet

# Capturing Day Forward Records

## Keeping it Digital

The first rule of thumb for a successful digital transformation is that any digital record should stay digital. That means capturing documents in their native format rather than printing them only to be scanned later. Fortunately, most full-featured document management solutions include these capabilities as standard offerings.



### Save as PDF

If viewing a Word file, web page, or any digital record, the ability to “print” it directly to a PDF and save it to your document management solution is an incredibly easy way to eliminate paper files.



### OCR-Assisted Indexing

A helpful tool for eliminating data entry is OCR-assisted Indexing. This “key-free” indexing approach allows users to simply click on data to file their records quickly and accurately.



### Drag and Drop Functionality

Most document management providers will allow you to simply drag records into their system and initiate the filing process. This is another easy way for users to render digital files without printing.



### Data Linking

One of the most popular ways for educators to simplify the filing process is to use information already captured in the system to minimize indexing. For example, a teacher could file a report by entering just the Student ID. The system would then look up the student based on this entry and automatically populate their name, date of birth, date of graduation, and more.



### Windows Integration

Many document management systems can integrate with the Windows file system. With this approach, the student record archives would present when saving documents and even allow searching for files in Windows Explorer without opening the document management application.



# Securing Your School's Information

Both HIPAA and FERPA require your school to implement reasonable best practices to secure student information. Even when these practices are followed, breaches can damage the public perception of your district or institution.

With cyber security attacks in the education sector on the rise, and a 300% increase in attacks between 2018 and 2019 with rates continuing to climb (impact), it's crucial that school districts know what to look for in solutions to optimize security and combat this threat.

## Account-Based Access Controls

By ensuring each user's account for your solution only allows access to the information they need to do their job, you not only enforce privacy compliance within your organization you also limit potential breaches of sensitive information should that account be compromised.

## 2 Factor Authentication

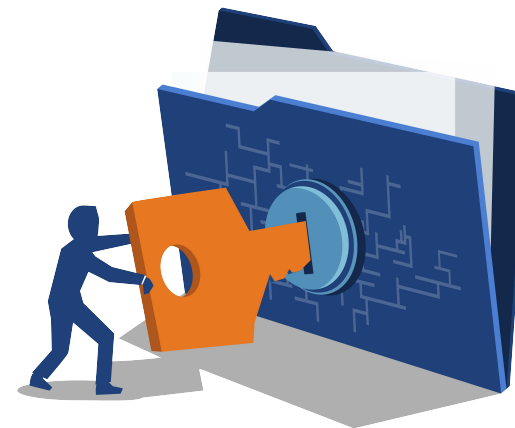
Well-designed two-factor authentication systems can reduce the risk of an account being compromised by 40-50% (cybercrime magazine). By requiring users to verify when they've attempted a log-in, hackers are often stalled and account owners are alerted, providing ample time to adjust login information, cancel an account, or take other preventative measures.

## Single Sign On

Tying employee accounts together and tracking login activity under one domain gives system administrators crucial oversight to track suspicious activity and catch breaches before any damage is done.

## Compliance Certifications

Cloud solution providers with certifications in system and organization controls (SOC) compliance have been proven to work according to a high standard of information security, ensuring your school's data is in safe hands. HIPAA compliance also requires highly secure handling of information to protect identifying and medical information.



# Other Use Cases

## Financial Reports

Many school districts must report their financial records to state agencies and undergo regular audits to ensure all budget money is being spent on its proper allocations. This process is rigorous and involves countless documents that must be located and provided.

Intelligent Information Management solutions allow school districts to run instant, detailed searches for the required documents, select them, and export them for audit to state regulators.

## Accounts Payable Automation

Educational institutions need regular supplies, including lab equipment, art supplies, pens and pencils, calculators, cleaning supplies, apparel, and more. These supplies often come from multiple vendors and are frequently paid on credit. By automating the accounts payable process, educational institutions can increase the efficiency of paying their vendors, reduce operational costs, and take advantage of early payment discounts.

### Steps to Accounts Payable Automation:

- Invoices are scanned, and data is extracted using OCR
- Extracted data is validated for accuracy and quality
- Invoices are routed to approvers where they can be confirmed or denied

- A payable invoice is created in the ERP or accounting system of your choice
- The invoice is archived in an ECM system to meet regulatory standards.

## Human Resources Documentation

All schools must maintain employment records for their staff and educators, including teacher certifications, background check confirmations, I-9 forms, W-4 tax forms, and more.

Forms such as the I-9 and W-4 can be captured much more simply with web forms, taking users through the process step by step, presenting them with only the questions relevant to them, and calculating additional fields with the information provided.

These forms are also subject to audit from federal regulators, and retaining background checks and teacher certifications protects districts from potential litigation.

By archiving these documents in a secure, easily searchable repository, school districts ensure these documents can be located at any time, allowing them to better comply with federal regulations and legal mandates.

# Benefits of Intelligent Information Management

Intelligent Information Management (IIM) solutions can help manage documents and records outside of your SIS and integrate with it for a complete end-to-end solution for your institution's document automation needs.

## ✓ HIPAA and FERPA Compliance

With account-based access permissions, automated retention scheduling, and adherence to security best practices, IIM solutions can ensure educational institutions comply with regulatory standards.

## ✓ Easy Digitization of Legacy Records

Using optical character recognition, legacy records can be easily digitized, pulling indexing data from these documents for convenient retrieval.

## ✓ Increased Faculty Collaboration

Anywhere, anytime cloud access provides educational faculty instant access to the latest versions of any documents they need to perform their job.

## ✓ Increased Staff Efficiency

By taking advantage of automated workflows for convenient routing and approval of documents, back-office processes can be streamlined for increased efficiency.

## ✓ Reduced Operational Costs

With savings on faculty time, printing costs, and storage space, educational institutions can benefit from cost savings and a financial return on investment.



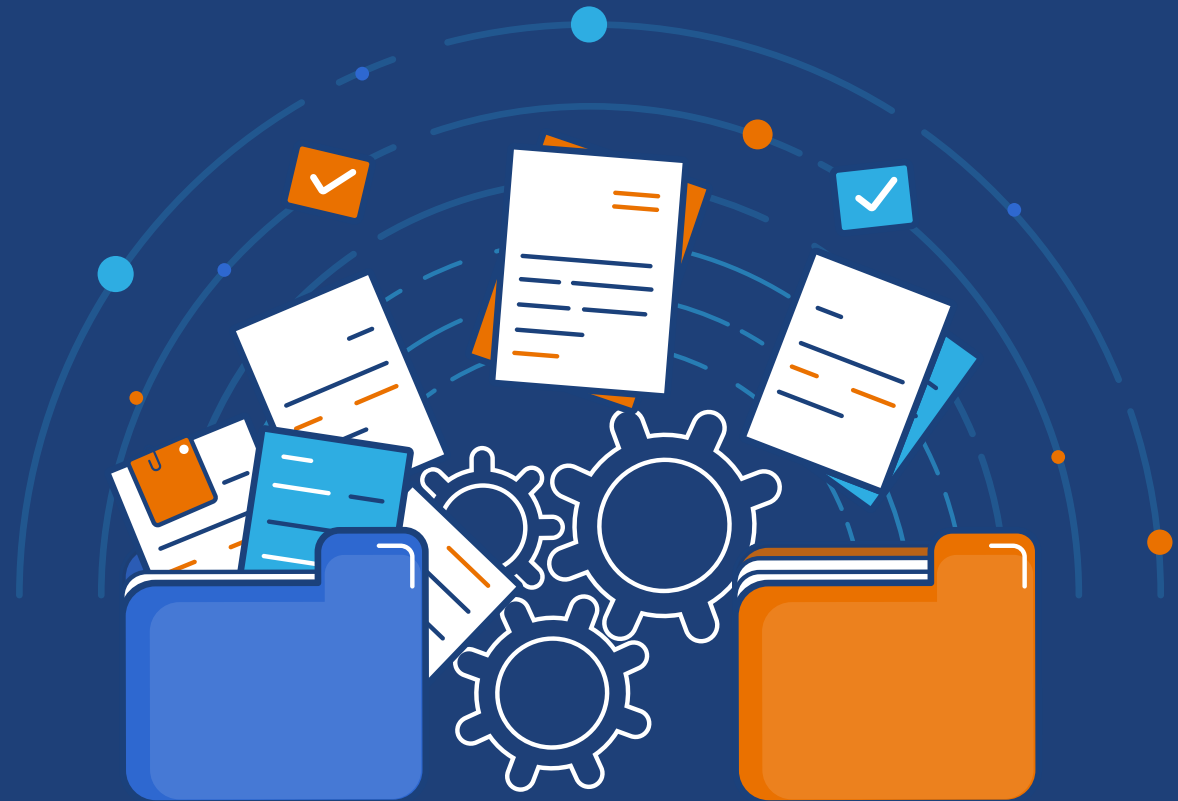


# Bringing Student Records and Your Student Information System Together

Given that your SIS is your primary source for student information, how can you access critical information stored in another system quickly without opening and closing multiple applications?

Some solutions offer a highly effective tool that allows users to click on a key piece of information, like a student ID, and run a search for records within your document management system without ever leaving your SIS. The results, including cumulative, health, and supplemental records, can all be made available depending on the access permissions of the user.

This approach brings both systems together as a single source of information and works with virtually any student information system, including PowerSchool, Infinite Campus, Blackbaud, and more.



# When is it Time to Automate?

- ✓ **What is your primary goal?** While many districts share similarities, their initial digital transformation goals may differ.
  - Is it to convert legacy student records?
  - To augment your SIS with added records management capabilities?
  - Or to improve back office efficiency in areas like accounts payable using automation?
- ✓ **Who will have access to these records?** Understanding your records and who will need access to them is an important consideration when implementing document management. Which records can and should be shared between teachers, administrators, and paraprofessionals, and which should be protected, such as health records, is of critical importance?
- ✓ **Is there a need for advanced automation?** Does your district need process automation that triggers approvals, notifications, or other actions throughout the course of the document lifecycle?
- ✓ **What is your long-term strategy?** Is it enough to eliminate the legacy records on hand, or do you envision a more comprehensive approach that might require multiple steps?



# Finding the Right Solution

## The Right Options for Capturing and Accessing Information

It's often said that the success of any digital transformation project depends on its capture strategy. Unless your solution provides a diverse set of tools for digitizing your records in a way that allows for searching and automation, the transition may be a struggle. Look for a product that has scanning, OCR (structured and unstructured), bar code, and full-text conversion capabilities at a minimum. With artificial intelligence now greatly reducing the costs of document capture, this should be strongly considered as well.

## Protecting Sensitive Student Information

The system you select needs to protect both the student and the district from an information breach. Make sure your vendor has verified and audited processes in place. Certifications to consider include SOC 2, HIPAA, and FERPA compliance. Encryption of information both in storage and transit is also highly recommended, as any information obtained without an authorized account for your solution will be rendered useless.

## The Right Blend of Price and Performance

One's initial investment in an intelligent information management solution can vary from product to product, but migrating to a different solution at a later date can be incredibly costly. This is why ensuring the solution you select will meet your needs for an affordable price is important. Selecting a solution based on price alone can deprive you of the functionality you require and may cost you much more in the long run.





# Incorporating Forms into your IIM Strategy

A recent trend in K-12 education has been to move away from paper-based forms.

Many school systems have dedicated solutions such as PowerSchool that allow educators to assign and complete bus forms, permission slips, enrollment forms, health information forms, special services applications, and more. However for school districts with solutions that lack that functionality, adding web forms to your intelligent information management strategy can yield identical, if not better, results and offer benefits such as:

- ✓ **Ease of Use and Convenience:** With a guided interface and available from any web browser, students, parents, and staff can complete forms easily from anywhere.
- ✓ **Control of Information Format:** Conditional formatting helps ensure the correct information is filled in the right sections and can secure certain sections for groups such as parents or administrators.
- ✓ **Automatic Indexing and Storage of Forms:** Once completed, these forms can use the filled information to automatically index themselves in an ECM solution for easy access when needed.
- ✓ **Easy Translation into Multiple Languages:** By using digital forms, the prompts and workflows can support translations from multiple languages relevant to the families in your district.



# User Adoption

Nobody likes change, and it can be difficult for a teacher or faculty member who has worked the same way for 20 years to adopt a new approach. Despite this, there are a few key ways to help your school embrace change and take advantage of the newfound benefits.

- ✓ **Help your Staff Feel Vested:** by involving them in the solution selection process. Hear their concerns and input and explain the factors that led to the final decision. This will help ease concerns about the suddenness of the change and show them that you are working with their best interests in mind.
- ✓ **Assign Someone to Manage the Transition:** A primary point of contact for any questions or concerns can help ensure a smooth transition and act as a liaison between your staff and your solution provider for any additional assistance.
- ✓ **Provide Tools for Success:** Solution education, customer support, and self-help resources such as a knowledge base all ensure your solution kicks off without a hitch and your faculty and staff can hit the ground running.





# Success Story

## Saint John Paul Catholic High School

### Saved 200 Hours in One Year with Capture Automation

Saint John Paul the Great Catholic High School is a college prep school in the Diocese of Arlington with three levels of courses, including academic, advanced, and honors/AP, to ensure students are truly ready for college-level learning.

As the newest school in the district, Saint John Paul took an innovative approach to records management, storing all documents a student must provide to attend, including applications, medical records, birth certificates, transcripts, and more.

With so many records to manage, Saint John Paul realized they needed a flexible solution in terms of integration with the desktop and the applications they currently use, including PowerSchool.

After implementing a solution from Square 9, Saint John Paul School successfully saved more than 200 hours in its administrative, admissions, and registration departments in the first year. The school nurse and athletic trainer also both had equally convenient access to student health records that were initially only available in one location.



*A lot of administrative time has been saved between filing, storing, and accessing documents. We're still trying to get our gears together, so we're not taking the full benefit yet, but I would say a couple hundred hours have been saved already.*

**- David Morales**

Director of Technology at Saint John Paul High School







**square9**  
Taking the Paper Out of Work

# How Square 9 Can Help

Square 9 is an industry trailblazer in the field of intelligent information management, taking the paper out of work and ensuring a productive, hindrance-free environment where information can flow freely. Easy to learn, highly supported, and backed by world-class service and extensive education. Square 9 solutions are designed to help you take your organization to the next level.

**Square 9's Education Essentials is a complete and comprehensive solution for K-12 schooling, managing both legacy and current records in a HIPAA and FERPA-compliant environment while providing the tools for administrative success.**

**Contact Square 9 to get a no-obligation discovery session and see how transforming your K-12 institution can lead to easier access to information, improved collaboration, and heightened efficiency.**

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