

WORKFLOW OPTIMIZATION IN EDUCATION:

*RECOGNIZING AND REALIZING
GREAT POTENTIAL*



INTRODUCTION

School district leaders have never been strangers to the confines of tight budgets and scarce resources, but the state of the economy has proven especially challenging for education decision-makers as they have had to do more with less again and again.

As leaders grapple with reduced funding and look for ways in which they can cut costs with little impact, they also face challenges in complying with federal and state accountability policies and providing proof that they are indeed succeeding in improving student achievement. They must also strive to be more sustainable, reducing environmental impact wherever possible, and be increasingly vigilant about security issues.

The most successful leaders in the past have sought innovative ways in which to solve seemingly complex problems and have often harnessed technological tools to achieve their goals. Innovative leaders look beyond how things have “always been done,” moving instead toward the most cost and time efficient way of operating and maximizing resources.

An unmanaged printing environment can be a black hole of time and money, a hotbed of lost productivity and waste. One area in which educational institutions can begin to gain efficiencies is by leveraging technology to better manage documents in an increasingly digital world and maximize the productivity of their workforce through workflow optimization.

WHAT IS WORKFLOW?

The Information Age comes with paper — lots of it. Schools in particular are swimming in it — from the paperwork that documents students’ education history to financial aid forms to class lecture material. The ability to manage these documents by routing them to the correct people quickly and efficiently is the foundation of workflow. Workflow is essentially the ways in which employees generate, store, use and disseminate documents.

Due to the abundance of paperwork in an education environment — including admittance forms, student records or other types of documents — workflow can have a strong impact on operating costs. Inefficient workflow can result in a significant waste of employee time and unnecessary printing costs. Schools that have control over their workflow processes can realize costs savings on fixing inefficiencies they

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may not have even known were there in the first place — a winning solution for leaders who are looking to save money without negatively impacting the school, students or staff.

Optimized workflow is within the grasp of all districts, but to realize it leaders need accurate analysis of the district’s current environment. Leaders must understand the district’s capacity, have a plan for practical upgrades, obtain a lifecycle analysis of a district’s content management, and develop the infrastructure to satisfy the district’s evolving needs.

Through the efforts of strong IT leadership, school districts can realize significant cost savings as they improve many aspects of their core workload and improve the quality of the services they provide.

MAKING THE MOVE — DIGITIZING DOCUMENTS

Improving workflow begins with better document management. Manual processes are outdated and have inefficiency written all over them; they simply cannot keep up with the proliferation of information in today’s educational environment. Other problems include the loss of employee time spent routing physical documents, the cost involved in storing these documents, and the risk of sensitive information being on paper where it can easily fall into the wrong hands.

Schools need a better solution; they can no longer operate on paper when they must function in a digital age. Digital documents are flexible and can be used in more ways than hard copy items. School districts must leverage advances in multi-function printing devices to not only reduce the number of printers and unnecessary printing, but to also capture hard copy documents and store them

as digital assets as they ready the district for improved workflow processes.

Highline Public Schools in Washington is emblematic of districts that have reinvented and revolutionized document use and, in turn, optimized workflow. In 2005, Director of Technology Services Mark Finstrom initiated a long-term transformation. In its initial phase, a culture of unmanaged printing and an over-reliance on hard copy materials came into focus as an important starting point for change. Within a few years the district went from owning hundreds of mismatched, disparate printers — a great many of which were dedicated to use in classrooms and offices to which few had access — to a streamlined, smart approach in which highly efficient, multi-function devices are made accessible in strategic locations to a variety of users.

Networked and managed on an authenticated permissions basis, the district controls access, monitors and manages printing by user, job and need type. This not only increases security and ensures documents are in the right hands, but also saves costs and allows for a far greater use of documents and information in digital form. Materials are printed on site only when their use is truly appropriate. The school leaders' vision to develop a digital environment has allowed the district to considerably refine its approach to workflow and adjust infrastructure accordingly.

“We are focused on building a system that allows us to accommodate accountability needs and that facilitates the ability of the full spectrum of the end users in the district to get the information they need,” says Finstrom. “I want less paper and to be more digital.”

As Finstrom notes, digitizing documents also helps schools improve student achievement and meet accountability standards. Observational notes taken as formative assessments are an example. ‘On-the-fly’ notes made by teachers as they observe student progress have traditionally been written on paper. If done in digital format, however, they may be updated with subsequent data, enhanced with anecdotes and suggestions for interventions and instructional strategies, and form an ongoing body of information to inform instruction. Furthermore, in digital form they may be shared among staff, from school-to-school, or even district-to-district — in the case of transient student populations. They may be made

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part of the student's permanent record that follows the student over the course of a school career.

Oak Hills Local Schools in Ohio is a district that is realizing many of these advantages. Much of the district's business functions are now handled through documents that live a primarily digital life.

Like many districts, Oak Hills gets much of its business done through the use of standardized forms. The district has now converted many of the most commonly used forms into digital format so they are accessible to all staff through the school's website. One example of a digital format that has made life easier and greatly improved the quality of information is the medical record form that is kept for every student in the district. Parents can access the medical form online at home, and can update information themselves to keep records current and accurate. The district is also working on creating digital absentee forms and leave requests as well as digitizing the paperwork to hire substitute teachers.

There can sometimes be a fear that hard copies of documents will not be available when needed in a world that is going digital, but this is not the case at Oak Hills. Mike

Cooper, technology director for Oak Hills, points out that although it is rare, there are instances when a student may need a form in hard copy format for a field trip or a sporting event. In cases such as these when digital access may not be possible, permission forms can be printed and carried.

SHARING DOCUMENTS IS KEY

Another benefit of a better managed print environment and increased workflow optimization is the ability to easily share documents. The sharing of documents is a function that previously resulted in the printing of an impractically large number of hard copies. New approaches to document management and the infrastructure now in place to support it encourages and supports far better options.

“If you have a document you want to share with students, for instance, you’ll use an MFD (multi-functional device) to

scan the document and send it up to a folder on the network — from there the document can be accessed and shared by a variety of people throughout the district over our network,” Finstrom says.

UNIVERSALITY OF DOCUMENTS AND DATA

Retaining permanent student records is an important requirement of all school districts, but keeping records up to date and accurate is becoming increasingly difficult for districts that serve transient student populations. Digital records help districts cope with this important and growing need.

“In a recent year, one of our schools actually served a population that was roughly 3/4 transient,” Finstrom says. “Much of the permanent records we receive from other districts are still in paper. However, we are moving to make it all digital. Currently, we digitize transcripts and class records. Consequently, any student who comes through the district now has a digital transcript, report card, etc. Most of the cumulative record folder is digitized, home contact info and other things. We are moving things from a paper-based system to a digital one.”

Highline Schools has found that there can be great advantages to maintaining these records digitally, and the pressure that the transient population represents makes that clear. Their system has made it possible for teachers to obtain the records of students within a few hours of students enrolling in the district. Access to records is a great advantage; digital records are easily searched, located and retrieved.

BREAKING THE “CULTURE” BOUNDARY

Often times in education, there can be a basic reticence to try new things. Utilizing more digital documents while better managing printing for the enterprise is no exception. Teachers have been printing documents freely for as long as they can remember and it is sometimes hard to fathom keeping documents in only a digital format.

However, when a district has a firm understanding of the end-to-end document lifecycle, stakeholders will be able to see how useful it can be to have documents in a digital format. For instance, items distributed to students (i.e. directions,

AN OPTIMIZED ENVIRONMENT

Below is a breakdown of benefits a district will find when workflow optimization is implemented. Through workflow optimization districts can:

- have increased flexibility with more options — documents can exist as either hard copy, digital content, or both as needed;
- have access to documents where and when they need them, and in the most effective form;
- be able to track personnel who modify documents — for things like student records, report cards, Individualized Education Plans (IEPs), and communications with parents;
- keep a snapshot of the document that must be printed so there is a record of it even if the hard copy is destroyed or lost; and
- print less, but print what they need — unnecessary printing of hard copies is a tremendous drain on resources and results in a highly inefficient, copy-burdened workflow.

UNDERSTANDING THE VARIOUS FORMS DOCUMENTS MAY TAKE AND WHY CERTAIN TYPES ARE MORE PRACTICAL AND EFFECTIVE IS A GATEWAY TO UNDERSTANDING AND MOVING BEYOND THE LOCKSTEP, HIGHLY INEFFICIENT, INEFFECTIVE, AND COST-INTENSIVE HABITUAL GENERATION, REPRODUCTION, AND DISTRIBUTION OF ALL DOCUMENTS IN HARD COPY.



assignments, etc.) are usually needed in hard copy, but can be quite useful in digital form for students — like those in some 1:1 computer implementations — when they need to have continual access.

Items distributed to parents (i.e. newsletters, permission requests, report cards, school notices, etc.) are generally distributed in hard copy but are more recently distributed via digital format through the school to parents' e-mail or via the school or class website, in order for parents to receive information in a more timely manner.

While some documents that are essential to the work of schools and districts may, out of necessity, require a hard copy in one or more of the various phases of their life and use, improved workflow can be achieved through flexibility in document use and through document availability in multiple formats.

For instance, Individualized Education Plans (IEPs) may be generated or modified in digital format at a teacher's desktop from handwritten notes or from data recorded on a mobile device carried by the teacher moving through the classroom. These may be updated digitally and then printed out for distribution to parents or a teachers' workspace for convenience,

or they may be distributed to pertinent personnel throughout the district via a secure network.

Understanding the various forms documents may take and why certain types are more practical and effective is a gateway to understanding and moving beyond the lockstep, highly inefficient, ineffective, and cost-intensive habitual generation, reproduction, and distribution of all documents in hard copy.

Teachers and administrative staff's ability to see the benefits that come from more efficient document management goes a long way in getting them on board. There are essential administrative and business tasks for which digital documents can save time and overall hassle for faculty and staff. Hard copy documents that at one time continually moved back and forth between classrooms and offices, such as attendance and lunch forms, can easily be simplified by using a digital format and inputting the information to a student information system (SIS) where it can be viewed in real time on a computer screen.

THE TRANSFORMATION OF DOCUMENTS THROUGH WORKFLOW OPTIMIZATION

A district can plan to see some distinct changes in the ways documents are used as workflow is optimized.

DOCUMENT MOBILITY

Document mobility will be changed in two ways: inter-district mobility and intra-district mobility. Inter-district mobility is the need for document migration from district to district and will occur as more student records are moved to a digital environment. Intra-district mobility will require the establishment of a 'print anywhere' environment.

Through the establishment of an environment in which staff with appropriate printing needs are empowered to do their printing where they need it and when they need it, the workflow of many may improve. Staff who move from area to area, who may not have an assigned area, or who may need to distribute quantities of copies in certain areas that would otherwise dictate transporting large quantities of copies would be positively impacted.

Mark Finstrom points to how greater document mobility has benefited the teachers in his district. "Teachers are planners

by nature; they often work from home and by using our portal they can print from home and have what they want available to them when they walk into one of our offices via one of our MFDs, which makes printing cheaper. They can also save documents digitally to their website and, if need be, a student who needs a hard copy can print it, or if the teacher knows a student needs it in special form because of special physical or language needs, they can prepare and print it that way.”

DOCUMENT CONTROL

When documents are moved to a digital environment and start becoming more mobile, ensuring accountability down

to user level or based on type of job and document routing is essential. Leaders need to know who has access to a document, and who can read it, alter it, print it, and re-distribute it. These are control points that allow for greater security, time on task purposefulness and savings in print costs.

DOCUMENT SECURITY

Protection from loss is a major concern for school districts as so many vital student records are stored throughout a student’s lifetime. Storing documents in digital form protects schools from the data loss that can occur as a result of natural disasters, document misplacement or even normal wear and tear.

On the other side of document security is the ability to keep now digital records confidential. School and district copiers and printers can contain highly sensitive information that must be protected from landing in the wrong hands. Establishing a document management strategy allows user settings to be configured on multi-function devices to ensure that only the proper staff are accessing and printing secure documents.

WHERE ARE THE COST SAVINGS?



Highline Public Schools moved from a situation in which printing was done in every classroom and office in each school in the district as well as at district headquarters. This massive number of small, inefficient printers and the unmanaged culture that evolved around its use resulted

in an overreliance on hard copies, resulting in waste of paper, toner, and power. Furthermore, maintaining this vast inventory of mismatched devices, each with its own networking and driver requirements was a tremendous drain on the IT department’s time and manpower resources. The managed, centralized infrastructure that replaced it, featuring highly efficient, multi-function devices, all on a single network and obviating different drivers has resulted in a broad spectrum of significant savings and efficiencies.

THE FUTURE OF WORKFLOW OPTIMIZATION

Widespread implementation and refinements in document capture and document management solutions will continue to result in more robust digital workflow. Districts can realize positive results by utilizing some infrastructure that’s often already in place. By enhancing ‘in place’ collaboration tools with an eye toward how all elements contribute to holistic, district-wide workflow, systems can scale practically as the district grows and develops.

Improvements need not necessarily involve large purchases of new equipment and infrastructure components. It is common for school districts to have underutilized equipment and devices that can perform important next-step tasks if they are simply set up to do so. Identifying these situations and supporting districts in taking advantage of them is becoming an important part of optimizing workflow.

The state-of-the-art digital environment, one designed to optimize workflow, is a continually moving target. It requires the backing of district leadership, administration and staff. In Oak Hills Local School District, the district vision that is unfolding is the result of a practical, team process.

OPTIMIZING WORKFLOW WILL RESULT IN COST SAVINGS, INCREASED PRODUCTIVITY AND COLLABORATION FOR SCHOOL DISTRICTS LOOKING FOR INNOVATIVE SOLUTIONS TO SOLVE BUDGET PROBLEMS.

“Our issues in further developing our digital environment and optimizing workflow are related to dealing with our district priorities, time available, and manpower capacities,” Cooper says. “We move only as quickly as is practical, but steadily. We have a team of people who jointly develop and hold the vision. The team includes people from the district office, directors who receive requests from principals and who look at it all from a superintendent’s point of view and ask ‘Is there a better way of doing this?’ The vision comes from different places within the school district.”

Once implemented, workflow optimization can only lead to greater benefits down the road. Optimizing workflow will result in cost savings, increased productivity and collaboration for school districts looking for innovative solutions to solve budget problems. Heightened security can also be easily achieved in new and previously unanticipated ways by better understanding the factors involved. This improved work environment and the important benefits derived from it are achievable by all districts. Those that keep themselves informed and have the will to better their own capacity to serve their students will make this goal a priority.





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