

White Paper IDM in EDU



TOOLS4EVER
IDENTITY GOVERNANCE & ADMINISTRATION

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FOREWORD

To facilitate the goal of providing the best-possible learning environments, educators continuously use more specific, purpose-designed, and connected technology in and outside of the classroom.



However, strict and relatively fixed budgets have made keeping pace with the exponentially quicker development of technological capabilities, needs, and requirements correspondingly difficult. Further, antiquated practices of determining access rights to siloed resources according to loosely understood organizational (“tribal”) knowledge only threatens the likelihood of ever successfully adopting the numerous technologies.

Achieving greater or higher quality output from fixed inputs requires processes that are more efficient. The only method to prepare and future-proof your environment against an ever-evolving technological landscape is to standardize and connect the one constant in IT – the information. Without an Identity Management (IDM) solution, there will always be a limit on the quality of education provided to students through technology.

With nearly 20 years and more than 10 million managed user accounts of experience helping K12 Districts and Higher Ed Institutions transform their information resources into organization-driving solutions, Tools4ever understands that navigating through IDM solutions and implementations is a complex process, to say the least. Given the right knowledge and preparation, IDM projects do not have to be painful.

We at Tools4ever would like to share our insight through a comprehensive but accessible overview of IDM solutions, their functions, current environments and trends, and how to best prepare for and carry out a successful implementation for the typical education environment

INTRODUCTION: EDTECH TROUBLES

Providing students with the best possible learning environments will forever remain the primary goal of education and educators.

For mostly the better, education today intertwines with technology - but what about the “worse?”

The varied methods instructors and staff utilize to facilitate and foster vibrant classrooms have continually evolved, ranging from unconventional seating arrangements to all manners of heuristic strategies. Contemporary education frameworks across all of academia are overwhelmingly and increasingly technology-dependent – from K12 Districts to the upper-est echelons within Higher Ed Institutions.

Yet for however much the utilized technology enables learning possibilities, it also relies on correspondingly greater requirements: the relevant data must be available; devices must be connected to the internet to access resources; technology must be up-to-date; some resources require specific hardware, software, or other platforms; and so on. Despite these challenges, and amidst information technology's increasing need for connectivity and interdependency, the most consistent requirements will forever remain an organization's resources of time and money.

EdTech investments since 1997 equal \$37.8 Billion, with 62% of those investments made in the last 3 years. (Forbes 2018)

As these technological necessities increase year after year, budgets remain relatively fixed and determined by mostly static metrics such as local property taxes and student enrollment numbers. School Districts and Higher Ed Institutions are expected to do more and more with relatively the same for every seemingly modular and “easy-to-install” educational technology resource (EdTech) that IT, Curriculum Directors, instructors, HR, and other staff wish to add – and that is before those perpetually pesky parental demands...

With respect to this exponentially developing technological landscape, how do you maximize today's resources while future-proofing your digital environment from tomorrow's unforeseen challenges?

IDM solutions are dynamic, leveraging technologies comprised of a range of organizationally driven technical implementations that manage, integrate, and synthesize user identities, account lifecycles, user permissions, and activities to enable organizations with respect to facilitating rapid access to necessary resources as well as assisting critical security and compliance needs.

IDM solutions manage the “who, what, where, when, why, and how” as they relate to users operating across any organization's “increasingly heterogeneous technological environments” (Gartner).

IDM SOLUTIONS

AN IDM SOLUTION IS THE ANSWER

The one constant always present despite every groundbreaking and industry-disrupting tech breakthrough is the use of data.



An IDM solution standardizes all of your information and data beginning right with your district or institution's source systems (SIS & HR). Establishing a flawless, easily managed information database facilitates seamless connectivity and transfer across your entire environment. IDM solutions ensure your organization's identity information for each individual contains all the associated permissions, security, organizational, and "tribal" knowledge. Typically, that knowledge is only preserved behind the cloudy eyes and cloudier analogies of the resident IT Old-Timer – yeah, you know who this is in your organization.

If your district or institution's inputs (e.g. budget, staff) remain relatively fixed, the only way to create increased output supporting more powerful and ambitious technology implementations is by improving your organizational efficiency. An IDM solution thus becomes one of the smartest and most financially responsible decisions any K12 District or Higher Ed Institution can make.

A comprehensive technology plan can act as an organizational lever, allowing more accomplishment with less. If that premise is true, then Identity Management is the fulcrum with which that multiplication achieves the greatest benefit.

Without an IDM solution, there will always be a hard-felt limit on the EdTech benefits provided to students. The available budget as well as the time and management each new resource requires to achieve successful adoption and usage determine this limit. With an IDM solution, the information foundation required to utilize any technology is already standardized and available for use, as meeting the data requirements for one resource meets the data requirements for all resources.

Because, despite the ever-evolving technological landscapes you are forced to keep pace with, the need for data... the need for data never changes...

WITHOUT AN IDM SOLUTION: RESORTING TO NOT-SO-WISE WORKAROUNDS AMIDST THAT BUDGET BEATDOWN

Districts and institutions maneuver around budget difficulties for hardware and EdTech “add-ons,” to improve classroom experiences. However, if you cannot adequately adopt or support such, what do these expenditures accomplish?

The fixed nature of education budgets inherently limits both today's technology expenditures as well as future financial forecasting. Already difficult to navigate and allocate, responsible spending is made much more chaotic by the modular nature of EdTech and the management pains of supporting purchased platforms and learning resources.

EdTech is continually growing year over year, with seemingly exponential leaps in recent periods. EdTech investments since 1997 equal \$37.8 Billion. Market research firm Metaari calculated \$9.5 billion was spent in 2017 alone (Forbes 2018). With every conference, convention, trade show, summit, or other event comes requests for different EdTech implementations from your various staff members – and those continual efforts to improve our students' learning experiences should be applauded.

However, every system, learning tool, or cloud application requires more than meeting an upfront price tag. Throughout Tools4ever's extensive experience implementing Identity solutions and providing consultative expertise, we have seen firsthand the result of improperly evaluated or unadopted EdTech.

K12 Schools and districts in the U.S. spent more than \$12 billion on EdTech, but 2017 usage data estimates 35% of licenses were never even activated and 24% of licenses were activated but failed to meet a single usage objective for an educational organization.

Our schools simply do not have the budget bandwidth to bury funds in severely underutilized and unadopted technologies.

(Lea(R)n Platform, 2018).

Of all the EdTech implementations, absolutely one thing remains constant: the need for information. Without information about students, staff, or the required and relevant matter, any one piece of technology becomes useless. Often, this results in your IT staff or the technology owner being responsible for managing the data and other requirements. Without an IDM solution, and due to the modular nature of EdTech, this typically creates silos in which information is increasingly isolated and inconsistently managed across each platform or application.

We have heard all the stories: closets filled with unused hardware; classroom technologies requiring too much manual management and data upkeep for teachers to utilize effectively; rickety, finicky, and slap-dash scripting setups stranded in systems by bygone staff; wildly inconsistent data fields; unused licenses and abandoned efforts.

If it has happened, we have encountered it.

Already managing strapped budgets, these are scenarios that schools simply cannot – and should not have to – afford.

When forced to silo your information across disparate technologies, every iteration of such multiplies management efforts and cost. This means ensuring (at the very least) all of the right staff and student accounts are created and included, provisioned, given the proper permissions and access rights, old users are deactivated, and orphaned accounts are cleaned up. There comes a point where manual efforts simply cannot keep pace. Without a centralized database containing all of this information, retaining all of the knowledge of what your organization's digital infrastructure should look like is theoretically possible at best. Most often, the most senior IT staff member or district administrator is the only person who has any understanding of this organizational information and how these structures should be set up to operate. When left to individuals who simply do not have access to such "tribal" knowledge, your data is entered and applied inconsistently across these disparate silos.

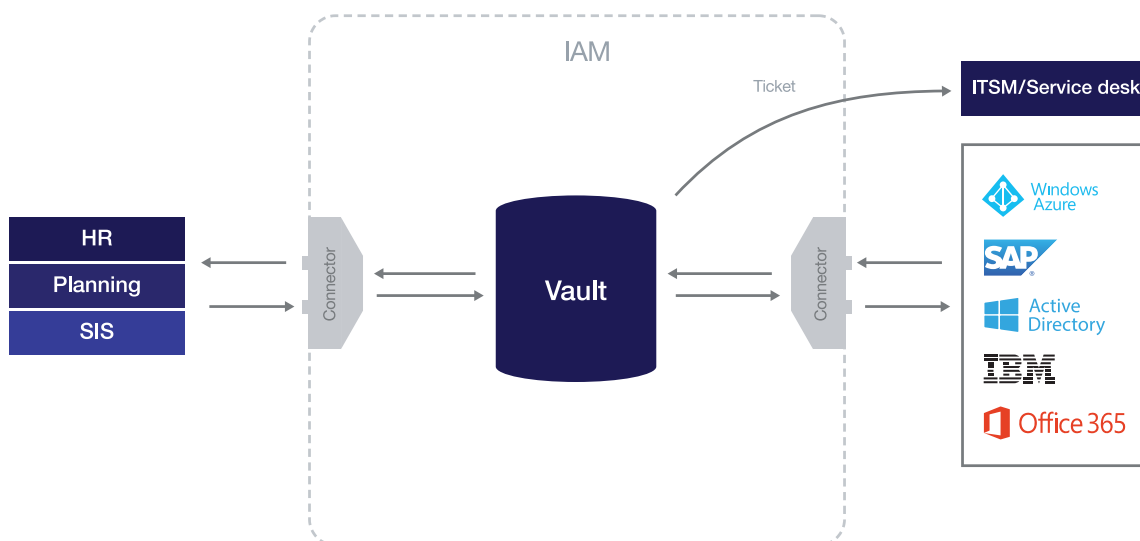
Attending to all of your EdTech implementations is a repetitive time-sink involving the exact same effort replicated over and over. Eventually, your district or department suddenly finds itself in a digital stranglehold, unable to keep up. If only there was a solution to this problem...

IDM SOLUTIONS OVERVIEW

IDM: an organizational fulcrum that makes everyone's heavy lifting lighter.

By implementing verifiable identities, automated processes, access governance, and self-service and delegation modules, an IDM solution suite constructs an organization's framework to control and monitor all of these aforementioned challenges – and to prevent future imbalances.

IDM solutions are dynamic, leveraging technologies comprised of a range of organizationally driven technical implementations that manage, integrate, and synthesize user identities, account lifecycles, user permissions, and activities to enable organizations with respect to facilitating rapid access to necessary resources as well as assisting critical security and compliance needs.



IDM solutions manage the who, what, where, when, why, and how as they relate to users operating across any organization's "increasingly heterogeneous technological environments" (Gartner). The implementation of this platform allows verified users to access necessary resources, IT professionals to focus on productive work instead of menial management tasks, and the school organization as a whole to operate more efficiently. IDM gives an organization the ability to shift energy towards education-enriching, ROI-focused, and beneficial operations rather than being restrained by its own systems.

This holistic, organization-driven mentality is central to successfully implementing an IDM solution. From the start, regard IDM as an enabler for what it can accomplish rather than purely a series of technical implementations dropped on the IT department to set up and switch on. To best integrate with your school or district's needs and operations, your solutions' configuration must reflect those to be effective.

IDM solutions have always ensured proper access, compliance, and security, but are now beginning to reap the benefits of new data, diverse application interoperability, and business intelligence – transitioning from a safety net to an active participant in organizational growth. Wide-ranging functionalities empower users at every level – such as a self-service engine allowing for

individuals to request all sorts of digital resources (e.g. home directories, documentation, group access, file shares) from their managers or the resource's owner and gaining compliant approval without ever needing to pass through the IT department. With user and consumer demand driving IT innovation to new possibilities, with connectivity and access continually surging to unprecedented levels, there is no better time to solidify, protect, and enable your organization with an IDM solution.

Once viewed primarily as a legal and compliance necessity for financial, healthcare, and other industries handling sensitive information, schools and all other types of organizations implement IDM solutions for their informational power, efficiency, and timesavings.

Tools4ever distinguishes four main components of any full-range IDM solution: Authentication Management (identity verification), Authorization Management (management of privileges and access governance), Administration (user account management automation), and Monitoring and Auditing (activity reporting, audit trails, and business intelligence).

- **Authentication Management** is the IDM function that verifies identities and accordingly grants or denies initial access to systems. Traditional verification requires username and password credentials, but multi-factor authentication supports the use of one-time-passwords (OTP), tokens, smartcards and more for additional levels of security.
- **Authorization Management** guarantees that access is restricted to only the necessary applications and resources for each individual user (e.g. students, teachers, administrators, and other staff), primarily through Access Governance and a matrix constructed and maintained according to role-based access control (RBAC).
- **Administration** refers to the automation of user account lifecycles: creating, modifying, disabling and deleting user accounts for systems and applications. Linking educational source systems (e.g. SIS and HR systems) to target systems (e.g. Active Directory, GSuite, LMS, child nutrition, transportation, and library systems), automate manual tasks up to complete, end-to-end processes with additions such as workflow delegation allowing for fluidity.
- **Monitoring and Auditing** capabilities of IDM solutions support the internal, active management of organization-wide strategies and processes through comprehensive activity logs. These activity logs can be used to compile business intelligence reports and audit trails, manage enterprise resources, ensure correct roles and access (e.g. Segregation of Duty; Attestation and Reconciliation), and fix any inefficient IDM processes or issues.

The distinguishable components of IDM solutions naturally lend themselves toward a phased, over-time implementation approach that prioritizes the most impactful solutions, evenly spreads out investment over a longer period, and makes transitions more manageable. If an IDM implementation goes correctly, you will not necessarily see the benefit through an easily defined metric. Because IDM solutions operate in the background of your environment by consistently managing identity information and instantly executing rules and logic when necessary, you should instead look for increasing marginal improvements and efficiencies across all of your organization's departments, teams, and processes to ascertain an implementation's tangible impacts.

IDM SPECIFICS AND STAKEHOLDERS

Different departments deal with different dilemmas. A comprehensive IDM implementation requires communication to enforce your environment's eccentricities.

When researching IDM solutions, understanding how to carry out an implementation is as crucial as knowing your desired results. As already stated, an IDM solution is organization-driven. Unlike other technology projects, the expectation that your IT team alone will figure out and maintain the software will create complications.

Your decision makers, departmental heads, and stakeholders must collaborate throughout the implementation to derive the maximum beneficial impact. This collaboration must continue once the project is in place because an IDM solution will interact between numerous departments and their processes, continually evolving with your organization over time. Your IT team will work with a solution provider to digitally transition and optimize various departments' operations. To do so effectively, IT must clearly understand how these processes work and why to implement them fully within the IDM project and according to each department's needs.

For example, consider processes for enrolling new students or onboarding new staff hires. This may first involve HR or administrators entering the individual's information into their system. When does this happen? Are there a set range of dates this information needs to be preemptively entered for, such as to coordinate with payroll systems and timelines? Alternatively, are individuals entered on their first day? Does this day-of execution delay other onboarding steps?

What happens next? How does that individual's information make its way to all relevant departments? Do they need accounts created within various systems? What permission levels do they require? Are physical access codes necessary to enter into specific buildings? Do they require hardware such as a laptop? What process enrolls students into specific instructors' classes? Just a quick glance and asking some related questions regarding the processes for new individuals demonstrates the need for deeper understanding in order to incorporate and optimize them within an IDM solution – even if it is as simple as sending notifications to relevant parties.

As imperative as it is that your different departments communicate with your IT team to effectively implement processes within an IDM solution, equally so is IT's ability to challenge those processes with regard to their digitalization and automation. Processes and steps that make sense in a non-digital environment do not always translate well or as necessities. Due to the rules and logic governing the execution of the process within your environment via the IDM solution, the organizational and compliance steps are still rigidly adhered to in principle if not in actions carried out by staff.

Sometimes changing processes is as fundamental as standardizing data entry. For example, inputs such as JR, JR., Jr, Jr., jr, and jr. all effectively mean the same to humans, but are explicitly different values to a computer. This inconsistent entry will disrupt your automations when your solution attempts to synchronize or utilize the conflicting identity information. One person may receive multiple identities and accounts or be lost within your systems due to an easily avoided clerical error. Similarly, for identity data to reflect the associated individuals throughout your environment accurately, specific fields must only contain relevant values. Just because HR rarely fills out a field such as Allergies in your HR system or SIS for its intended use does not make it available for general notes because of the easier viewing it provides.

There are many examples that can concretely demonstrate the difficulty in transitioning the exact steps of a given process into an automated component of an IDM solution. The easiest to conceptualize are those involving various stages of review, approval, or filing for record (often on physical forms). Anything related to an individual's identity (for the school or district's purposes) often crosses a few different desks and departments, requires a few signatures, and needs updating in as many systems as are relevant. These processes can involve anything more complex – from employee role changes, new registration applications, or student transfers within the district – to simpler adjustments – such as name and address changes or all manner of ad hoc requests (e.g. PTO, transportation services, classroom resources, equipment sign-outs, temporary access).



In automating these processes, the manner of achieving the desired result will almost certainly change. Whereas many requests required approval prior to automation, an organization's role model (Access Governance) determines access and privileges according to the identity information stored within the solution. The logic and rules built into this structure will pre-determine much of the permissions, access, and capability granted to users. Once submitted, processes direct any need for action instantly to the appropriate decision maker for review (e.g. HR, their manager). Anyone else who should be aware of a change or decision may simply be notified of its occurrence via email, as the rules and logic prevent individuals from being incorrectly approved for anything outside of their permissions.

Instead of working through numerous forms, cleaning up and updating old files, and transferring necessary information across multiple departments, the act of merely updating an individual's identity data within the solution can kick off workflows and automation that edit the associated user's accounts, access, and more. The proper parties will still be notified and asked (if necessary) to click their approval. That seventeen-step process to update Janet's address to correctly reflect her new apartment across town just got cut down to three – and one of those is kicking back for a quick sip of coffee from your favorite mug.

If your IT team lacks the latitude to challenge and adjust existing processes, you will find that the exact automation of such simply does not make sense, is no more (maybe even less) efficient, or outright breaks during execution. All departments and teams need to be able to foster open communication and constructive dialogue as to what parts of the process are essential, what can be automated, and what cannot.

These decisions cannot be contingent on one department's convenience, but depend on the entire organization's needed result. It is tough to hear for some, but "we like it this way," "that is how we have always done it," or trying to defend part of a process with similar "reasons" is simply not justifiable when rendered redundant, obsolete, impractical, or simply not possible within the automation. In fact, these are not reasons at all.

The result of an IDM implementation should be an efficient organization in which processes easily kick off or execute automatically to set up every department and individual with a platform for more consistent and impactful success. Your IT team should receive firmly specified and designated data inputs in order to deliver the outputs expected by departments and teams through the school district's whole organization, creating an ideal structure governed by pragmatic logic.

BARRIERS TO ENACTMENT

Proper planning prevents poor performance. Make the education business a bit less burdensome by busting on through typical barriers to bump up that budget breathing room.

Researching IDM solutions is step one in achieving a more efficient environment capable of executing your school or district's organizational processes and maintaining well-established identities for all of your users. Reaching completion will require continual and collaborative communication through each step of the way. But before you start setting up demos and requesting purchase orders, what things can you tackle internally to position yourself for success? Preparing to make decisions and changes is a critical part of the process.

Stubborn adherence to organizational processes and the lack of standardized or thorough data represent the most substantial barriers to implementing an effective IDM solution. Start setting up conversations with decision makers, department heads, and stakeholders. Review the pain points of their processes with them and open the conversation about how an IDM solution will address those issues.

The lack of flexibility in automating processes leads to considerable frustration between departments and delays – if not outright jeopardizes – your project. Begin evaluating what processes will benefit most from an IDM implementation or are the easiest to adapt for automation. Set aside the more complex, less necessary, infrequently used, and difficult-to-transition processes for gradual examination and refinement. Tackling some of the easier processes can help give your organization the momentum needed to get the ball rolling and demonstrates what the benefits will look and feel like.

At the same time, start cleaning up your data. That is not to say that your data is dirty, but it probably needs at least a good once-over and light dusting. While a time consuming process, standardizing and cleaning your data will be necessary for your IDM implementation. You may have data fields left empty that require values. You may need to move some values to the proper (or at least more appropriate) fields. You may just need to ensure all the suffixes follow the proper format. The quality of your data can create a large disparity in the ease of adopting an Identity Management solution.

Because an IDM solution's ability to execute processes and enforce rules is dependent on data, the relevant values need to exist. For example, quickly finding an instructor or student's courses will require the index of identity information to store those values. You could catalogue, access, and execute processes according to a user's shoe size if you have the right fields and relevant data. Ask yourself things like: "Do we properly utilize each field?", or "Do we have intuitive and clear naming conventions?" Questions like these can save your school district or institution tons in time, effort, frustration, and good old-fashioned money.

CONSULTATION

Set up your students and staff for success by providing everyone the platform they need to be productive.

Tools4ever intends for the information provided in this whitepaper to be educational and agnostic of any one IDM solution. By reading, you hopefully have a more complete understanding of what an IDM solution entails, why IDM solutions are fiscally responsible solutions for school districts and educational institutions in supporting ongoing EdTech initiatives, how to prepare for a project, the collaborative communication needed to complete an implementation successfully, and the “behind-the-scenes” nature of its organizational impact.

Contact Tools4ever

If you would like more information on the subject of IDM solutions or to set up a consultative discussion with Tools4ever regarding steps to improve your organization’s maturity, please contact our team at sales@tools4ever.com.

For more reading on Tools4ever’s IDM solutions and consultative expertise, please visit tools4ever.nl/resources/ or tools4ever.nl/referenties/.

Tools4ever’s complete range of IDM solutions includes:

1. Identity and Access Manager (IAM)
2. HelloID (Cloud-Based IDaaS & SSO)
3. Self-Service Reset Password Manager (SSRPM)
4. Enterprise Resource Authorization Manager (ERAM)

RESEARCH & CITED WORKS

BUDGET BREAKDOWN: EXAMINING EXPENDITURES

It is common knowledge that school budgets are relatively static and it is a massive undertaking to make meaningful money moves within Education. However, it is still super important to support our statements with solid statistics and transparent data, so feel free to flip through our budget research.



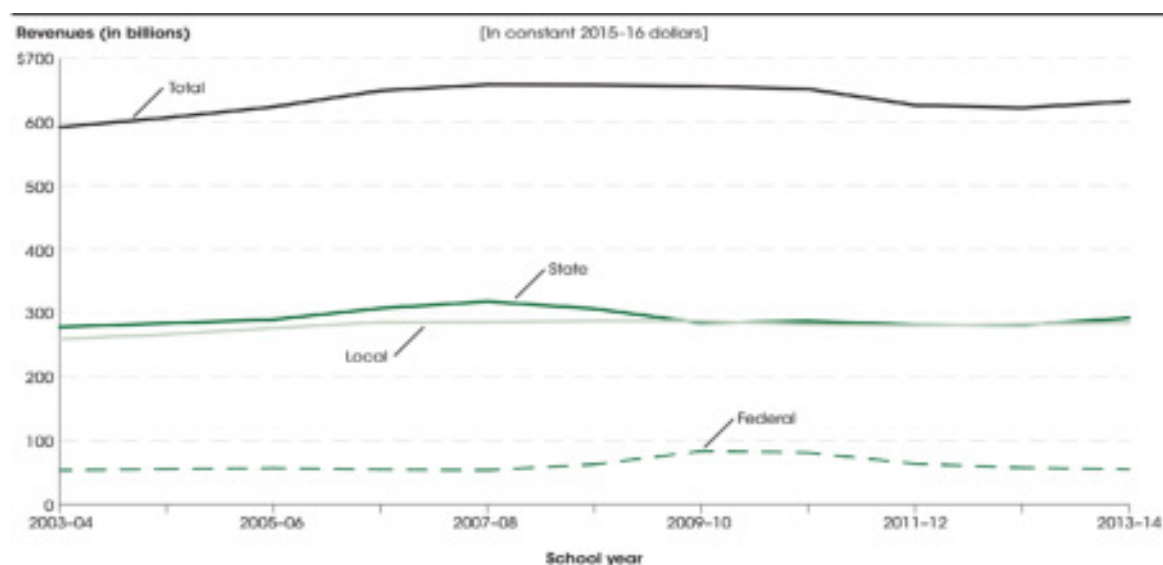
A brief overview of the fixed nature of education budgets provides greater context regarding the need to do more with relatively the same or less. Information provided by the National Center for Education Statistics (NCES) and the Center on Budget and Policy Priorities (CBPP) demonstrates a decade of diminishing dollars dedicated to delivering quality education to our students.

NCES' The Condition of Education 2017 report reveals that school budgets and expenditures per student remained relatively flat over the 10 year period from 2003/2004 and 2013/2014 (Figures 1 and 2). Under a more powerful microscope, the data shows that salaries and benefits comprise 80% of expenditures per student (Figure 3). A 2010 document released by the American Association of School Administrators (AASA) provides similar salary and benefit percentages of overall school budgets. As compared to most public and private enterprises, where salaries and benefits make up only 35-40% of operational budgets, schools often dedicate 80-85% to those costs with much of what remains already tied up due to government mandates (AASA 2010).

In an ideal world, our schools have unlimited resources to dedicate towards students. However, what do school budgetary restrictions really look like?

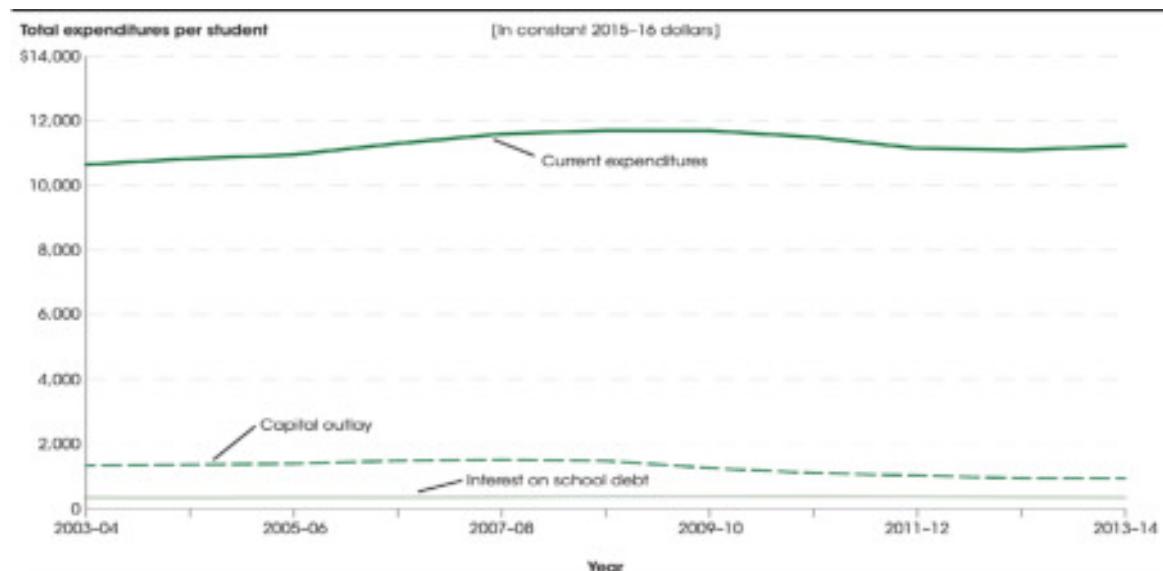
Alternatively, examining expenditures per student by the function of those expenditures demonstrates the lack of dedicated or substantial EdTech funds (Figure 4). According to NCES' categories in Figure 4, technology expenditures would most likely fall under the Instruction or Instructional Staff Services categories. While Instruction makes up an overwhelmingly large percentage of this distribution, the category includes salaries and benefits of teachers and teaching assistants as well as costs for instructional materials and instructional services provided under contract. Instructional Staff Services includes curriculum development, staff training, libraries, and media and computer centers. Even within these categories, EdTech's allocated amounts remain a fraction of the total.

FIGURE 1 – Revenues for public elementary and secondary schools, by revenue source: School years 2003-04 through 2013-14 (NCES 2017)



NOTE: Revenues are in constant 2015-16 dollars, adjusted using the Consumer Price Index (CPI). See *Digest of Education Statistics 2016*, table 106.70.
SOURCE: U.S. Department of Education, National Center for Education Statistics, Common Core of Data (CCD), "National Public Education Financial Survey," 2003-04 through 2013-14. See *Digest of Education Statistics 2016*, table 235.10.

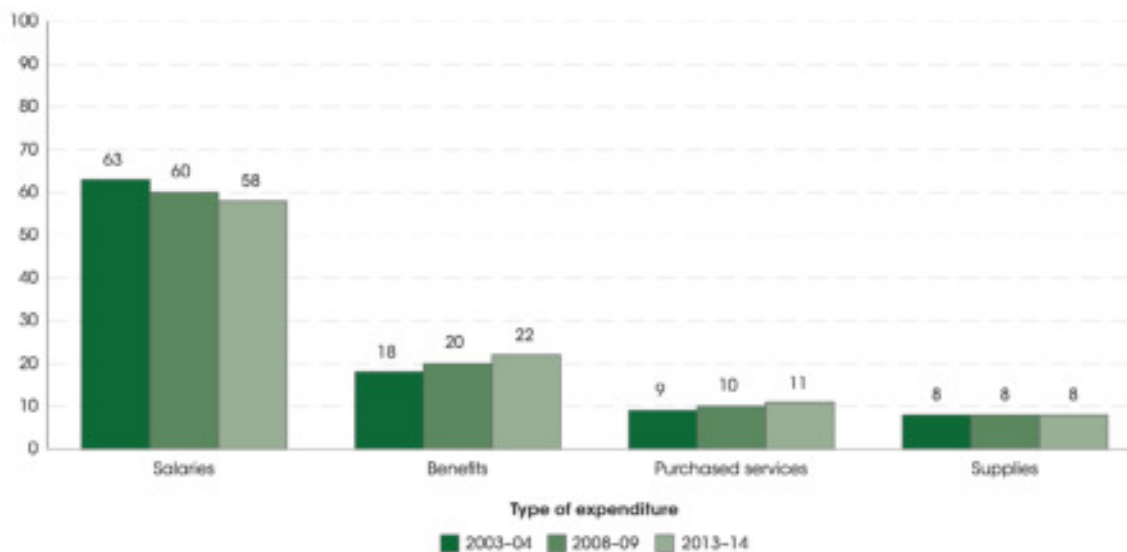
FIGURE 2 – Current expenditures, interest payments, and capital outlays per student in fall enrollment in public and secondary schools, by type of expenditure: School years 2003-04 through 2013-14 (NCES 2017)



NOTE: "Current expenditures," "Capital outlay," and "Interest on school debt" are subcategories of total expenditures. "Current expenditures" include instruction, support services, food services, and enterprise operations (expenditures for operations funded by sales of products and services). "Capital outlay" includes expenditures for property and for buildings and alterations completed by school district staff or contractors. Expenditures are reported in constant 2015-16 dollars, based on the Consumer Price Index (CPI).
SOURCE: U.S. Department of Education, National Center for Education Statistics, Common Core of Data (CCD), "National Public Education Financial Survey," 2003-04 through 2013-14. See *Digest of Education Statistics 2014*, table 236.60; *Digest of Education Statistics 2015*, tables 203.20 and 236.60; and *Digest of Education Statistics 2016*, tables 236.10, 236.55, and 236.60.

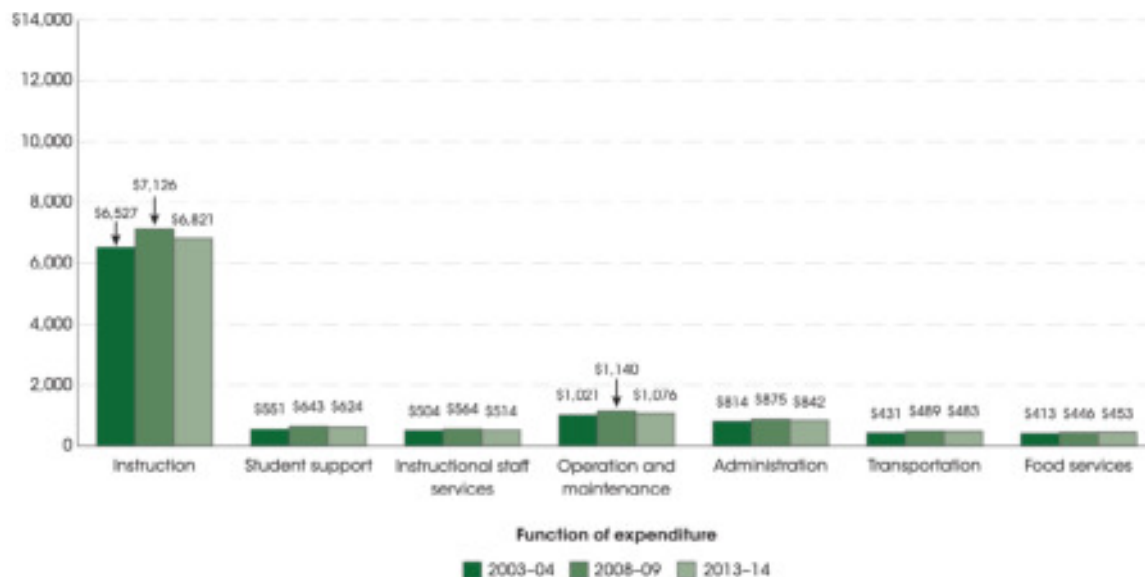
FIGURE 3 – Percentage of current expenditures per student in fall enrollment in public elementary and secondary schools, by type of expenditure: School years 2003-04, 2008-09, and 2013-14 (NCES 2017)

FIGURE 4 – Current expenditures per student in fall enrollment in public elementary and secondary



NOTE: "Salaries," "Benefits," "Purchased services," and "Supplies" are subcategories of current expenditures. "Purchased services" include expenditures for contracts for food, transportation, and janitorial services, and professional development for teachers. "Supplies" include expenditures for items ranging from books to heating oil. Two additional types of expenditure, tuition and Other, are not included in this figure. Detail may not sum to totals because of rounding. SOURCE: U.S. Department of Education, National Center for Education Statistics, Common Core of Data (CCD), "National Public Education Financial Survey"

schools, by function of expenditure: 2003-04, 2008-09, and 2013-14 (NCES 2017)



NOTE: "Instruction," "Student support," "Instructional staff services," "Operation and maintenance," "Administration," "Transportation," and "Food services" are subcategories of current expenditures. "Student support" includes expenditures for guidance, health, attendance, and speech pathology services. "Instructional staff services" include expenditures for curriculum development, staff training, libraries, and media and computer centers. "Administration" includes both general administration and school administration. "Transportation" refers to student transportation. The two smallest subcategories in 2013-14 dollars, enterprise operations and Other support services, are not included in this figure. Expenditures are reported in constant 2015-16 dollars, based on the Consumer Price Index (CPI). SOURCE: U.S. Department of Education, National Center for Education Statistics, Common Core of Data (CCD), "National Public Education Financial Survey"

FLAT FISCAL FUTURE: MORE OF THE SAME?

Unfortunately, drastic improvements to available education funding do not seem to be around the corner – due to the composition of budgets.

Why are these flattened trends poised to continue? The 2008 Recession's continuing aftereffects permeate all levels of school funding 10 years later. As of 2015, 29 states provided less funding than pre-Recession levels in 2008 and local funding per student similarly fell in 19 states. School district job cuts have led to increased demands on staff, with 135,000 fewer employees than in 2008 despite increases of 1.4 and 1.3 million students in K12 and public Higher Ed institutions, respectively. Much of this struggle to reach 2008 levels is due to wide-reaching state cuts to make up budget shortfalls and to limits on affected property taxes – the primary source of local funding contributions to school districts (CBPP 2017).

Over 90% of all education budgets are comprised of state and local funding – 46% and 45% in 2013/2014, respectively (NCES). Collected property taxes provide school districts' primary source of locally contributed funds. Because of the housing crisis' significance in the 2008 Recession, decreasing property values naturally affected this pool. Pulling from property taxes as a primary funding source inherently lends towards slow – if any – increases for two reasons: enforced limits on increasing property tax rates and the blurred boundaries of contemporary school enrollment.

As of 2018, 46 states and the District of Columbia have imposed their own limits on increasing property tax rates, a trend tracing itself back to the 1970s (CBPP 2018, Tax Foundation 2018). This clearly affects the financial pool of local resources schools pull from. Further exacerbated by the rise of Charter Schools, Open Enrollment Programs, and other contemporary changes, the more transitory nature of school attendance for students complicates distribution. If students are crossing the boundaries demarcating specific property taxes rates to attend different schools, the allocation of funds becomes much messier.

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