In partnership with:

2016

K-12 IT Leadership Survey Report

Sponsored by: Schooldude
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Overview

Introduction

This is the fourth year the Consortium for School Networking has conducted a survey of K-12 IT Leaders. The goal of the survey is to gain insight about the use of technology in K-12 institutions from those charged with managing it. This report provides an annual snapshot and highlights the trends and changes that have occurred over time.

The online survey was conducted in partnership with MDR and distributed to over 120,000 U.S. school system technology leaders. Over 500 surveys were completed between January and March of 2016. As in prior years, IT leaders were asked questions about their priorities, challenges, budgets, and salaries. They were also asked about personal characteristics (professional background, years of experience, and education) to build a better understanding of the IT leadership profile.

New to this year’s survey are questions about how districts assess the impact of technology, what support is provided to emerging leaders, what policies are in place regarding students’ use of personal devices in school, and what role IT leaders play in districts’ digital content purchasing decisions. As districts increasingly integrate technology for instruction as well as backend administrative operations, it is essential that we have a clear understanding of the realities faced by K-12 IT leaders. This report will help to provide that information, and by so doing help CoSN better serve its membership.
Top 10 Key Findings

1. Broadband & network capacity are the top priority for IT Leaders, replacing assessment readiness, which for the first time failed to make the top three.

2. Privacy and security of student data is an increasing concern for IT Leaders, with 64% saying it is more important than last year.

3. Nearly 90% of respondents expect their instructional materials to be at least 50% digital within the next three years.

4. Virtually all respondents (99%) expect to incorporate digital Open Educational Resources (OER) over the next three years, with 45% expecting their digital content to be at least 50% OER within that timeframe.

5. Nearly 80% of IT Leaders use online productivity tools, making it the most-used category of cloud-based solutions in education.

6. District bans on student personal devices are a thing of the past—only 11% have banning policies.

7. The path to IT Leadership differs for women and men. The vast majority of women come from education/instructional backgrounds (72%). The majority of men (54%) come from technology/technical backgrounds.

8. Racial diversity in IT Leadership is lacking. Ninety percent (90%) of school IT Leaders are white.

9. IT Leaders have advanced education, with 75% earning some college beyond their Bachelor’s Degree.

10. More than a third of IT leaders plan to retire in the next six years.
The CTOs

Demographics

As in prior years, the survey results reflect the landscape of public schools. An overwhelming majority (86%) of survey respondents were from the public school system, including both school and district level IT Leaders. Private and independent schools comprised 4%, religious schools and charter schools had 3% each. Educational service agencies (ESAs) accounted for 2% and state education agencies (SEAs) for 1%.

About a third of respondents (32%) were from rural districts and almost a quarter (24%) were from urban districts. Suburban respondents comprised the largest category with 44%. IT Leaders from 47 states participated in the survey; only Delaware, North Dakota, and West Virginia were missing. The overall geographic representation was the same as last year: 60% of the responses came from east of the Mississippi River, and 40% from west of the Mississippi, matching the general regional population breakdown of the county.

The largest group of respondents (43%) was from medium sized districts with enrollments between 2,500 and 14,999. Small school districts (less than 2,500 students) comprised only 36%. This is a reduction from 45% in the prior year, representing a reduction in the relative percentage of small school respondents rather than a reduction in the number of small public schools. Representation in the other categories was essentially unchanged from 2015.

What is the total Student Enrollment in your school or district?
**Race, Ethnicity, & Sex**

The lack of racial and ethnic diversity is apparent in districts’ IT Leadership. An overwhelming majority (90%) of respondents identified as White.

<table>
<thead>
<tr>
<th>Race/Origin</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>American Indian or Alaska Native</td>
<td>1%</td>
</tr>
<tr>
<td>Asian</td>
<td>1%</td>
</tr>
<tr>
<td>Black or African American</td>
<td>3%</td>
</tr>
<tr>
<td>Native Hawaiian or Other Pacific Islander</td>
<td>0%</td>
</tr>
<tr>
<td>White</td>
<td>90%</td>
</tr>
<tr>
<td>Two or more races</td>
<td>3%</td>
</tr>
<tr>
<td>Other Race</td>
<td>1%</td>
</tr>
</tbody>
</table>

Respondents of Hispanic or Latino or Spanish origin comprised 4%. Respondents who identified as Black or African American comprised 3% and another 3% identified themselves as two or more races. Respondents who were American Indian or Alaska Native, Asian, and all “Other Race” each had less than 2% representation. Native Hawaiian or Other Pacific Islander had less than 1%. School systems aren’t the only organizations that lack diversity in their leadership—93% of partners in law firms,1 86% of Publishing executives,2 and 72% of the leadership in tech companies identify as White.3 When comparing IT Management across all industry segments, school systems are less diverse than the average. According to the Bureau of Labor Statistics, “computer and information systems managers” are 20% non-white and 5% Hispanic or Latino.4

The responses also had a higher male representation than female, with a 64%-37% split, respectively. This is actually better than the 73%-27% average for IT management across all segments, but represents a 10% difference from the 54%-45% reported in the prior year survey. This change may be attributable to a reduced percentage of women completing the survey as compared to men, not an actual reduction in the number of women in IT Leadership positions. Despite the 10% decrease in female respondents this year, women increased their representation in higher educational attainment by 3%. In 2015, 87% of women and 72% of men had continued their academic studies after receiving their Bachelor’s Degree. In 2016, the gap widened with an 86%—68% split. The gap is even larger when looking only at advanced degrees — 80% of women and only 57% of men have a Master’s or a

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1 Ibid.
4 http://www.bls.gov/cps/cpsaat11.htm
Doctorate. Regardless of their sex, salaries for the majority of IT Leaders (59%) are comprised of those making less than $100,000. When moving up the pay scale only 32% of women as compared to 42% of men earn more than $100,000. When comparing professional backgrounds, 54% of men as compared to only 19% of women described their primary professional background as "Technology/Technical." On the flip side, 72% of women as compared to only 37% of men described their primary professional background “Education/Instruction.” This suggests that the path to IT Leadership is very different for women and men, with men having more technical backgrounds while women having more educational backgrounds.

The 2016 survey is only the second time in which respondents were asked to indicate their race, ethnicity, and sex. As more data is collected going forward, more longitudinal data and a clearer picture of IT Leaders will emerge.

**Salary**

Salaries have remained fairly consistent over the four years this survey has been conducted. There is no clear trend for increases or decreases in the various categories. However, percentages for salaries between $130,000 and $159,999 have only gone up since 2013 for a net increase of 3% in 2016. A 3% gain is also reflected for salaries between $160,000 and $200,000, which was achieved in a single jump this year. Outside the education sector, IT Leader compensation is much higher. The median annual income for “Chief Information Technology Officer” in the private sector is $258,969, with only 10% earning less than $172,000. Even Higher Ed IT Leaders, with an average CIO salary of $149,597, earn more than their counterparts in K-12.

<table>
<thead>
<tr>
<th></th>
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<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Under $70K</td>
<td>30%</td>
<td>24%</td>
<td>30%</td>
<td>24%</td>
</tr>
<tr>
<td>$70K-$99,999</td>
<td>36%</td>
<td>35%</td>
<td>39%</td>
<td>35%</td>
</tr>
<tr>
<td>$100K-$129,999</td>
<td>26%</td>
<td>27%</td>
<td>23%</td>
<td>26%</td>
</tr>
<tr>
<td>$130K-$159,999</td>
<td>5%</td>
<td>10%</td>
<td>6%</td>
<td>8%</td>
</tr>
<tr>
<td>$160K-$200K</td>
<td>1%</td>
<td>1%</td>
<td>1%</td>
<td>4%</td>
</tr>
<tr>
<td>More than $200K</td>
<td>Less than 1%</td>
<td>Less than 1%</td>
<td>Less than 1%</td>
<td>Less than 1%</td>
</tr>
<tr>
<td>Did not provide</td>
<td>2%</td>
<td>3%</td>
<td>2%</td>
<td>3%</td>
</tr>
</tbody>
</table>

* 2015 totals more than 100% due to rounding-up percentages .5 or greater

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5 [http://www1.salary.com/Chief-Information-Technology-Officer-Salary.html](http://www1.salary.com/Chief-Information-Technology-Officer-Salary.html)

**Education**

An area where IT Leaders exceed national averages is in education. Over the years, results from the survey show IT Leaders are a well-educated group, with at least 75% having some college beyond their Bachelor’s Degree. The 58% of IT Leaders with Master’s Degrees represents a 7% decrease from the prior year, however. This decrease could be a reflection of the 10% fewer women respondents, as women IT Leaders are more likely than their male counterparts to have a Master’s.

What is your highest level of educational achievement?

Academic degrees are only part of the story. With the pace of technology changing and expanding the number of technologies to manage, IT Leaders have unique pressures for ongoing professional development. Therefore, the increase in certifications should not come as a surprise. There were increases for every certification option, with the exception of Comp TIA which remained the same from the prior year. CoSN’s CETL certifications increased by 6%, the second largest increase after ITIL certifications, which increased by 8%. The percentage of CETL certification holders (25%) is in alignment with the 23% of total survey respondents who indicated that CETL certification was “extremely important.”

Do you currently hold an industry-specific certification? (Mark all that apply.)
Retirement

For the majority of IT Leaders, retirement is still a while off, with 43% planning on retiring in more than 10 years. This means that there is now a majority planning to retire in ten years or less. Over the next six years, more than a third of all IT Leaders plan to retire, a 3% increase from 2015.
CTO Issues

Priorities

For the past four years, we have asked IT Leaders to indicate their top three priorities (from a list of 20 options). For the first time, “Assessment Readiness” does not appear as one of the top three. That drop-off in the rankings is likely an indicator that districts are now more prepared for online assessments than they have been in the past. This year almost half of all districts (48%) rated themselves as “fully prepared” compared to less than a third (28%) in the prior year. Seventy-five percent (75%) of all districts are either “fully prepared” or “almost ready,” indicating a large majority is in good shape for implementing their high-stakes online assessments.

To what extent is your district ready to implement Common Core or state-wide, high-stakes online assessments?

Taking over as the number one priority for districts is "Broadband & Network Capacity." This makes sense in light of the other two priorities in the top three—Wireless Access and Mobile Learning. The three priorities are intrinsically linked. The infrastructure that pursuit of these three priorities enables would provide for online assessment, which could explain the de-emphasis on "Assessment Readiness."

<table>
<thead>
<tr>
<th>Priorities</th>
<th>2013</th>
<th>2014</th>
<th>2015</th>
<th>2016</th>
</tr>
</thead>
<tbody>
<tr>
<td>#1</td>
<td>BYOD</td>
<td>Assessment Readiness</td>
<td>Assessment Readiness</td>
<td>Broadband &amp; Network Capacity</td>
</tr>
<tr>
<td>#2</td>
<td>Assessment Readiness</td>
<td>Mobile Learning</td>
<td>Wireless Access</td>
<td>Wireless Access</td>
</tr>
<tr>
<td>#3</td>
<td>Broadband Access</td>
<td>Wireless Access</td>
<td>Mobile Learning</td>
<td>Mobile Learning</td>
</tr>
</tbody>
</table>
Privacy & Security

There have been a number of high-profile data breaches outside the education ecosystem, including the theft from federal government databases of personally identifiable information (PII) for 21.5 million people. And the debate rages on about the balance between personal privacy and the government’s right to access private data for the sake of national security. However, when it comes to the privacy and security of student data, there is growing concern regarding school and vendor access to students’ PII. There have been hundreds of bills introduced at the state level that seek to exceed the protections provided at the federal level by the Family Educational Rights and Privacy Act (FERPA) and the Children’s Online Privacy Protection Act (COPPA). Diverse groups such as the ACLU and the Eagle Forum of Alabama have come together to draft model language for legislation restricting the use of student data. As a result, it isn’t surprising that when IT Leaders were asked about the importance of the privacy and security of student data, 64% of respondents rated the topic as “somewhat” or “much more important” than it was last year. This is a 7% increase from the 2015 survey responses. IT Leaders also ranked “Privacy and Security of Student Data” sixth out of a list of 20 priorities, compared to dead last when privacy was added to the list in 2014. These are difficult waters to navigate for school districts and vendors, as student data is required for both administrative functions and for delivering personalized learning. IT Leaders are tasked with managing both requirements.

How would you rate privacy and security of student data as a priority as compared to last year?

- Somewhat less important than it was last year 1%
- No change. Same level of importance as it was last year 35%
- Somewhat more important than it was last year 35%
- Much more important than it was last year 29%

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8  http://www.edweek.org/ew/articles/2016/02/10/aclu-tenth-amendment-center-join-forces-on.html?qs=student+data+privacy
In the Cloud

As in the prior year, almost every survey respondent indicated that he or she used Cloud services for some IT function. The percentage of usage increased for every category except "Inspections" which remained flat. The category with the biggest increase was Productivity Tools, which already had the greatest usage, growing from 65% adoption in 2015 to 79% in 2016. Learning Management Systems (LMSs) had the next largest year-over-year increase, from 45% to 57%. This compares to 40% in 2014, indicating a steady increase and also that the tipping point for LMS Cloud solutions has been reached, with a majority of districts implementing them. Student Information Systems (SIS) rounds out the top three Cloud services list, with 46%, up from 39% the prior year, suggesting that the SIS will follow the LMS as the next enterprise system to hit the tipping point for Cloud usage.

*Note that percentages won't total 100% because respondents were instructed to "Mark all that apply" from the list of 20 functions.*
Print-to-Digital Transition

There was essentially no change (less than 1%) from those who expected their instructional materials would be either digital-only or print-only in three years. However, the dial did shift towards digital this year. Eighty-eight percent (88%) of respondents, representing an increase from 84% in 2015, expect their instructional materials to be at least 50% digital in the next three years. This shift away from print is supported at the state level. Twenty-two states have changed their definition of a textbook to include the option for digital instructional materials for adoptions, 24 have state resource digital repositories, and seven states have policies regarding access to digital instructional material outside the classroom. However, managing the devices, infrastructure, and systems needed to support the digital learning environment are significant challenges. The print-to-digital transition is not an easy one but one that is likely a factor in making broadband and wireless into CTO priorities.

Open Educational Resources (OER)

For the first time, the survey addressed the topic of digital Open Educational Resources (OER). Although OER are not new to schools, the federal government’s advocacy for their use is. In October 2015, the Department of Education (DOE) announced its #GoOpen initiative, which encourages schools to use open licensed materials instead of copyrighted ones. At the time of this writing, 13 states and 40 school districts have committed to participate. As part of its support of OER, the DOE proposed regulations requiring that educational materials created with public funds must be made available for free.

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9 http://dmaps.setda.org/?fwp_dlr=digital-learning-resources-bool
available to the public via open licenses. Passed into law as part of the Every Student Succeeds Act (ESSA)\(^\text{11}\) states and local agencies can use block grants for technology that supports open materials. The DOE’s commitment to this initiative is also demonstrated by the hiring of an “Open Education Advisor” that will help schools expand their OER efforts. With this backdrop, the responses to the OER survey questions are not surprising.

A large majority of respondents (79%) indicated the OER was part of their district’s digital content strategy, with 37% rating the initiative either "very important" or "extremely important." Virtually all respondents (99%) expect to incorporate digital OER to some extent over the next three years. While a third of respondents still expect proprietary digital materials to remain their primary source, only 1% claimed proprietary materials would be their only source of digital content. Almost half (46%) of all respondents expect OER to comprise 50% of all digital materials over the next three years.

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\(^{11}\) https://www.congress.gov/114/bills/s1177/BILLS-114s1177enr.pdf
**Bring Your Own Device (BYOD)**

The tallies of responses to the question "Does your district have a BYOD/BYOT policy as part of a 1:1 initiative?" were essentially unchanged from the prior year. A small percentage (16%) of districts have fully implemented BYOD/BYOT, a 2% increase from the prior year. The percentages for “currently working on a large scale implementation” and “piloting in some areas to study large scale adoption” remained unchanged year-to-year, 12% and 16% respectively. The trend data to watch is the increase in respondents reporting “no interest” in BYOD/BYOT. In 2014, only 20% of districts expressed no interest. In 2015, the percentage was 29%. The significant increase was surmised to be the result of modified wording from the prior year. The new wording clarified the question by referencing BYOD policies for instruction versus BYOD policies for students’ personal use of devices. This year the percentage increased from 29% to 33%. While not a large jump, the change is not in the expected direction. However, it aligns with the downward movement of BYOD on IT Leaders’ priority lists. BYOD fell to number eight on the priority list this year, down from number seven last year—plummeting from its number one position in 2013. Since “mobile learning” has remained one of the top three priorities over the past three years, the affordability of new mobile devices may be eliminating the interest and circumventing the need for BYOD initiatives. The growing awareness that not every device is adequate for instruction, online assessment requirements, and equity issues could also be contributing factors to BYOD’s slippage in the priority hierarchy.

**Does your district have a BYOD/BYOT policy as part of a 1:1 initiative?**

![Pie chart showing distribution of responses:](chart.png)

- District has fully implemented BYOD/BYOT: 16%
- Currently working on large scale BYOD/BYOT implementation: 12%
- Piloting BYOD/BYOT in some areas, to study large scale adoption: 17%
- Discussions or planning for BYOD/BYOT project: 22%
- No BYOD/BYOT Interest: 33%
Districts were asked about their policies regarding students’ use of personal devices outside of a BYOD 1:1 initiative. A surprisingly low 11% banned student devices. This is a major shift from seven years ago when a majority of schools — 69% as reported by students12 — had bans. A $4-million cottage industry was created in New York City, with businesses holding phones for students while they attended class.13 This reversal in policies reflects the changes in general attitudes about teenagers using devices. While there are still concerns about bullying, sexting, and general distractions by their presence in school settings, texting on devices is now a common method for teens to communicate their plans and whereabouts with parents and is also becoming a common method for schools to communicate with students about instruction.

<table>
<thead>
<tr>
<th>Method</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Internally developed self-assessment/rubric</td>
<td>36%</td>
</tr>
<tr>
<td>Self-assessment tools available online</td>
<td>11%</td>
</tr>
<tr>
<td>External review from other districts/peers</td>
<td>4%</td>
</tr>
<tr>
<td>External review from your technology vendors</td>
<td>3%</td>
</tr>
<tr>
<td>External review from an outside organization. Please specify name of organization:</td>
<td>7%</td>
</tr>
<tr>
<td>We have not completed an assessment</td>
<td>33%</td>
</tr>
<tr>
<td>Don't know</td>
<td>7%</td>
</tr>
</tbody>
</table>

12 http://msnbcmedia.msn.com/i/MSNBC/Sections/NEWS/PDFs/2010_PDFs/100202_CellPhoneSchoolCheating.pdf
13 http://nypost.com/2012/06/18/businesses-make-4m-off-nyc-students-by-holding-their-cellphones-during-school/
State of the CTO

Reporting & Decision-Making

Reporting directly to the Superintendent, a CoSN recommendation, is a practice followed by 51% of Technology Coordinators and 57% of respondents with the title CTO, CIO, or District Tech Director. Fifty-two percent (52%) of CIO/CTO represent both IT and Ed Tech as part of the Superintendent’s Cabinet or Executive Leadership team. This year’s survey asked respondents to describe their level of involvement in district digital content purchasing decisions. Though only 8% of IT Leaders had final decision-making authority, when combined with IT Leaders with a heavy level of involvement they comprised about a third (30%) of all respondents. Another 32% reported a moderate level of involvement in digital content purchasing decisions. And another 32% reported lower level involvement in purchasing decision. Some believe that over time greater IT Leadership involvement will be required because of the inherent interoperability issues between digital content and the enterprise systems it needs to connect with.

How would you describe your general level of involvement in your district’s decision to purchase digital content?

When asked about the type of digital products they are involved in purchasing, the largest percentage of IT Leaders (67%) responded that they were involved with the purchase of productivity tools. This makes sense, as digital productivity tools are likely the most consistently implemented across all districts. Broad-scale implementation also holds true for the second largest category, content creation tools, with 57% of IT Leaders involved in their purchase. Both productivity and content creation tools usually require strong involvement at the district level. More than a third of all IT Leaders are involved with the purchase of both library reference tools (39%) and supplemental materials (38%). Though IT Leaders were relatively less involved in the purchase of digital materials for core curriculum (28%)
than other categories, it may indicate that the transition to digital materials for core instruction hasn’t taken place in the majority of districts.

Are you involved in purchasing any of the following digital content? (Mark all that apply.)

![Graph showing involvement in purchasing digital content]

**Staffing**

The majority (63%) of all IT Leaders indicate that the size of their overall staff has stayed the same, with 24% reporting an increase and 14% reporting a decrease. These percentages roughly align with overall IT budget reporting—57% flat, 30% increase, and 13% decrease. Compared to last year, IT staffing has not changed for the majority of respondents (63%). Almost a quarter of IT Leaders have had staff increases, while 14% have experienced a decrease.

Compared to last year, has the size of your IT staff:

- Increased 24%
- Decreased 14%
- Stayed the same 62%
When asked to assess how they spend their time, the majority (61%) indicated more time spent problem-solving technical issues as opposed to working in a proactive mode. This likely has a direct impact on IT Leaders’ assessment of the adequacy of their staffing size. (See page 20.)

What percent of your department’s workload is spent reacting to technical problems (as opposed to working in a proactive mode)?

There has been some improvement since 2015 with respect to the perceived adequacy of IT Leaders staffing. Although the percentages are still quite low, there was an increase across the board in the “Staffing is matched to needs” category. The activity with the biggest gain in staffing over the prior year was “maintain network systems adequately” achieving a 7% increase. On the opposite side of the spectrum there was a decrease across the board in activities rated “we are stretched too thin and can’t get to critical areas.” The activity that benefited the most was “Install IT applications” with a decrease of 10%. The changes in percentages are all going in the right direction. Hopefully this trend will hold. What is important to note is that there are still two activities for which at least half of the respondents reported inadequate staffing:

- Implement new technology
- Integrate technology in the classroom

With 58% reporting that the IT staff can’t get to critical areas, “integrating technology in the classroom” had the worst rating. And while all aspects of a district’s IT ultimately supports learning, it’s unfortunate that the one that is most student-facing is the one that is least supported.
<table>
<thead>
<tr>
<th>Task Description</th>
<th>We are stretched too thin and can’t get to critical areas</th>
<th>Staffing is adequate but we are very busy</th>
<th>Staffing is matched to needs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Effectively support the needs of the district/school</td>
<td>38%</td>
<td>53%</td>
<td>9%</td>
</tr>
<tr>
<td>Meet your department’s yearly objectives</td>
<td>32%</td>
<td>57%</td>
<td>10%</td>
</tr>
<tr>
<td>Maintain network systems adequately</td>
<td>29%</td>
<td>54%</td>
<td>17%</td>
</tr>
<tr>
<td>Install IT applications</td>
<td>27%</td>
<td>57%</td>
<td>16%</td>
</tr>
<tr>
<td>Maintain IT applications</td>
<td>27%</td>
<td>58%</td>
<td>15%</td>
</tr>
<tr>
<td>Plan for new technology</td>
<td>46%</td>
<td>44%</td>
<td>11%</td>
</tr>
<tr>
<td>Implement new technology</td>
<td>50%</td>
<td>42%</td>
<td>7%</td>
</tr>
<tr>
<td>Integrate technology into the classroom</td>
<td>58%</td>
<td>34%</td>
<td>9%</td>
</tr>
</tbody>
</table>
Technology Assessments

In addition to managing technology policies and implementations, IT Leaders are now being asked to assess the impact of technology in their school districts. This year, the survey asked that question as well. A third of all respondents have not yet completed such an impact assessment. When impact assessments are done, 47% conduct a self-assessment, 36% use their own internally-developed rubric, and 11% use a self-assessment tool available online. Of external assessments, those conducted by districts’ technology vendor were the least-employed method (3%), followed by external reviews from other districts/peers with 4%. Only 7% of respondents use outside organizations to conduct impact reviews.

<table>
<thead>
<tr>
<th>Method</th>
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<tr>
<td>External review from other districts/peers</td>
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<tr>
<td>External review from your technology vendors</td>
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</tr>
<tr>
<td>External review from an outside organization. Please specify name of organization:</td>
<td>7%</td>
</tr>
<tr>
<td>We have not completed an assessment</td>
<td>33%</td>
</tr>
<tr>
<td>Don’t know</td>
<td>7%</td>
</tr>
</tbody>
</table>

Budgets

Budgets continue to be relatively stable or flat, with a consistent majority of respondents indicating “no change in budget” over the past four years. Almost a third of respondents (30%) reported an increase in budgets and 13% reported a decrease.

<table>
<thead>
<tr>
<th>Technology Budget</th>
<th>2013</th>
<th>2014</th>
<th>2015</th>
<th>2016</th>
</tr>
</thead>
<tbody>
<tr>
<td>Decreased</td>
<td>19%</td>
<td>9%</td>
<td>10%</td>
<td>13%</td>
</tr>
<tr>
<td>Stayed the Same</td>
<td>62%</td>
<td>57%</td>
<td>59%</td>
<td>57%</td>
</tr>
<tr>
<td>Increased</td>
<td>19%</td>
<td>34%</td>
<td>30%</td>
<td>30%</td>
</tr>
</tbody>
</table>

For the first time, when asked if their budgets enabled them “to meet the overall expectations of the school board/district leaders,” the answer of the majority (57%) of respondents was “yes.”
represents a significant shift in the percentages from the 2014 survey, when only 46% answered yes. However, the shift to the positive was slight (1%) in the answer to the question, “Does your IT budget allocate enough financial resources to support the technology assets that have already been purchased?” This year, 56% indicated yes, as compared to 55% last year.

**Does your IT budget allow you to meet the overall expectations of the school board/district leaders?**

![Pie chart showing 57% Yes, 43% No]

Yet despite these positive budget trends, for the second straight year and for three of the four years this survey has been conducted, “budget constraints and lack of resources” still ranks as the number one challenge to planning and implementing technology-enabled learning environments. This suggests that while budgets in general are enabling IT Leaders to meet current demands and expectations, the ability to plan and implement technology for the future is not supported. The IT activity that was ranked lowest in term of adequate staffing was “implement new technology.” (See pg. 20).

The other top challenges that districts face don’t have anything to do with budgets. Since 2013, the problem of silos within districts has been rated the third biggest challenge until this year, when it moved in ranking to second. Replacing silos in the number three slot is “Lack of vision/support from senior district leadership.” These number two and three challenges unfortunately affirm a core CoSN belief—“The primary challenge we face in using technology effectively is human.”
### Professional Development (PD)

Of the comments referencing challenges in the open-ended response section, Professional Development (PD) issues were raised in a third of the comments (35%), second only to budget issues that were referenced in 38% of the comments. While funds for PD was cited as a root problem, “time” shared an equal amount of blame. What is important to note about the PD comments is that most IT Leaders raised concerns not for themselves but for the non-technical staff. The comment of one respondent is typical:

> “Our greatest challenge with planning and implementing technology-enabled learning environments is not so much a lack of good PD out there, but a lack of time with the teacher to provide the PD.”

When reporting on their own PD, there seems to be an up-tick on reimbursement amounts for IT Leaders’ “personal training and professional development each school year.” While those receiving more than $5,000 a year haven’t changed from the prior year (4%), those in the next-highest reimbursement category (between $2,500 and $5,000) increased from 10% to 14%. The increase was greater for the $1,000—$2,999 category where there was a 6% increase from 24% to 30%. These gains mean the under-$1,000 category has shrunk. Unfortunately, the majority (53%) of IT Leaders still have very small budgets. Hopefully the downward trend from the prior year’s 62% will continue.
For the first year, the survey asked specifically about targeted PD support for emerging leaders—those with five years or less experience in educational technology. The majority of respondents (56%) don’t budget separately for this. Those that do, primarily support online courses and other online professional development (26%), but an almost equal amount (24%) fund conference attendance and face-to-face learning. The next largest category of support (20%) was funding for certifications/credentials with 20%. Although funding for membership in professional associations was the smallest category of support with only 11%, the majority of those respondents specified CoSN as a membership that was supported. CoSN and ISTE were tied for the number one most popular membership.
In Closing

In Summary

The ranking of “Broadband & Network Capacity” as the number one priority is a clear indicator that districts, like the general population, are embracing online solutions. To address that priority IT Leaders need to navigate the number one challenge—“budget constraints and lack of resources.” This is especially difficult for small districts which, as expressed by one survey respondent “…still have to do all the same things that larger school districts do but with fewer people and resources.” So perhaps the key take-away from this CoSN survey is about CoSN. The “N” of CoSN stands for networking, a network comprised of IT Leaders managing technology ecosystems of all types. Districts of all sizes can leverage the CoSN community and the resources they develop. Districts do not have to sort these issues out on their own.

About CoSN

CoSN (the Consortium for School Networking) is the premier professional association for district technology leaders. For nearly quarter of a century, CoSN has provided leaders with the management, community building, and advocacy tools they need to succeed. Today, CoSN represents over 10 million students in school districts nationwide and continues to grow as a powerful and influential voice in K-12 education.

CoSN Core Beliefs:

• The primary challenge we face in using technology effectively is human.
• Technology is a critical tool to personalize learning and overcome barriers of time and space for each learner.
• Equitable and ubiquitous access to technology is a necessity.
• The effective use of technology for the systemic transformation of learning cannot occur without strong organization, leadership, and vision.
• Technological fluency allows our children to be prepared for the world of today and tomorrow.
CoSN Resources

CoSN’s Certified Education Technology Leader (CETL)™ Certification program – www.cosn.org/certification

Leadership & Vision

• Leadership for Mobile Learning – www.cosn.org/MobileLead
• The Empowered Superintendent - http://www.cosn.org/superintendents
• Collaboration for Innovation: Advancing Excellence and Equity – www.cosn.org/OnlineCoP

Understanding the Educational Environment

• Teaming for Transformation – www.cosn.org/OnlineCoP
• CoSN’s Annual E-rate and Broadband Survey – www.cosn.org/ErateSurvey

Managing Technology & Support Resources

• Smart Education Networks by Design (SEND) – www.cosn.org/SmartEdNetworks
• Protecting Privacy in Connected Learning - http://www.cosn.org/focus-areas/leadership-vision/protecting-privacy
• Interoperability Standards - http://www.cosn.org/interoperability-standards
• Raising the BAR: Becoming Assessment Ready – www.cosn.org/RaisingTheBar
• Data-Driven Decision Making – www.cosn.org/3dm

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This report was prepared by Paula Maylahn, an education industry consultant with over 30 years’ experience across the K-20 spectrum. Paula is a contributing author to The Experts’ Guide to the K-12 Market and The Experts’ Guide to the Postsecondary Market and penned the “Enterprise Systems” chapter of the State of the K-12 Market 2015 publication. Paula is an active CoSN member, a former board member of the Education Division of the Software & Information Industry Association, and an Executive Council member of the PreK-12 Learning Group of the Association of American Publishers.