2015 Results from the SIIA Vision K-20 Survey
ABOUT SIIA AND THE EDUCATION TECHNOLOGY INDUSTRY NETWORK

SIIA is the leading association representing the software and digital content industries. SIIA provides global services in government relations, business development, corporate education, and intellectual property protection to more than 700 leading software and information companies.

The Education Technology Industry Network (ETIN) of SIIA serves and represents more than 200 of SIIA’s member companies worldwide that provide educational software applications, digital content, online learning services and related technologies across the K-20 sector. SIIA-ETIN shapes and supports the industry by providing leadership, advocacy, government relations, corporate education, intellectual property protection, business development opportunities and critical market information.

The ETIN provides a neutral business forum for its members to understand business models, technological advancements, market trends, and best practices. With the leadership of the Division Board and collaborative efforts with educators and other stakeholders, the Division undertakes initiatives to enhance educational technology and the success of SIIA members.

For more information, visit www.siia.net/etin.

ABOUT THE VISION K-20 CONTRIBUTORS

The SIIA Vision K-20 initiative has many contributors who have supported the project since its inception.

We would like to thank the Education Division Board and Committee members for their contributions to the development of the initiative and the following member companies for their continued support:

- CollinsConsults
- The Winter Group
- Paula Maylahn Consulting

We especially thank MMS Education and consultant Karin Pavlovic for their data analysis and production of the final report. Their work on the Vision K-20 survey and their analysis of the results made a huge contribution to the initiative, and we appreciate their work around the survey benchmarks. www.mmseducation.com

We appreciate the support of Market Dara Retrieval for their help in deploying the survey to Postsecondary education leaders.

We also appreciate the work of all our member companies (listed in the addendum), educators, representatives of the technology industry, and the education community for contributing to the initiative.

Please contact the SIIA Education Division if you have suggestions for or comments about this document. Email: education@siia.net
SIIA Vision K-20 Initiative and Surveys

SIIA Education member companies provide the software application, digital content, and other technology tools that are essential for education in the 21st Century. The SIIA Vision K-20 Initiative promotes the best uses of technology to ensure that all U.S. students have access to a teaching and learning environment capable of preparing them to compete globally and lead the world in innovation.

The K-20 Vision is centered on the belief that every K-20 institution should have an instructional and institutional framework that embraces technology and eLearning to:

- Personalize learning to increase student engagement and achievement
- Provide equity and access to new learning opportunities
- Document and track student performance
- Empower collaborative learning communities
- Maximize teaching and administrative effectiveness
- Build student proficiencies in 21st Century skills

The Vision K-20 Survey is an annual online self-assessment, hosted on SIIA’s Vision K-20 website, for educators and educational leaders in K-12 classrooms, schools, and districts, and postsecondary courses, departments, and campuses. The self-assessment consists of 33 benchmark statements representing progress toward the SIIA Vision, articulated in two ways:

- **SEVEN EDUCATIONAL GOALS** represent the instructional and institutional outcomes enabled through technology and e-learning:
  1. Meet the personalized needs of all students
  2. Support accountability and inform instruction
  3. Deepen learning and motivate students
  4. Facilitate communication, connectivity, and collaboration
  5. Manage the education enterprise effectively and economically
  6. Enable students to learn from any place at any time
  7. Nurture creativity and self-expression

- **FIVE TECHNOLOGY MEASURES** may indicate progress for technology and e-learning implementation toward these educational goals:
  1. Widely utilizes 21st Century Tools for teaching and learning
  2. Provides anytime/anywhere educational access
  3. Offers differentiated learning options and resources
  4. Employs technology-based assessment tools
  5. Uses technology to redesign and enable the enterprise support

The Vision K-20 Survey was first developed by SIIA and its partners in 2007, piloted in 2008, and conducted every year since 2009. In 2012, the survey was enhanced by gathering more demographic information, adding questions about the general perception about technology integration, and asking participants to rate the ideal level of technology integration. Adding the ideal level of integration to each benchmark statement allows schools to see where they are in
relationship to their ideal level and allows SIIA to create a collaborative vision with educators about the future possibility for technology integration.

In 2013, the benchmarks were simplified into 37 shorter statements of agreement on a 7-point scale, creating a longitudinal baseline for the new benchmarks. Specific comparisons of benchmark statements are from this 2013 baseline study. In 2015, the benchmarks were revised; while most benchmarks remained the same, six benchmarks were removed and two added to maintain relevance with technology changes. Additional questions about the use of technology and individual student data to evaluate how schools are adapting to new challenges with technology integration were also added.

METHODOLOGY OVERVIEW
The 2015 report analyzes the results of more than 1,000 Internet surveys completed by educators representing all levels of K-20 education:

- The Vision K-20 Survey was fielded this year between March 12 and May 18, 2015. (Fielding dates for 2014: January 29 to May 7; fielding dates for 2013 with the new benchmarks used as a baseline in this study: May 21 to August 3).
- Participants were recruited through SIIA partners and a link to the survey was available on the Vision K-20 website. Fielding and survey hosting was provided by a third party, MMS Education.
- Survey participants were asked to select whether they were answering the survey on behalf of their class/course, school/department, or district/campus.
- Participants responded to 33 benchmarking statements about their institutions, as well as questions about their general perception of technology integration, the use of technology and individual student data, and demographic questions.
- Upon completion of the survey, participants were eligible to receive a progress report showing how close their institutions are to achieving the Vision K-20 Technology Measures and Educational Goals, as well as the opportunity to participate in a drawing for a gift card in exchange for their participation (2015 is the sixth year an incentive has been offered).

As this is an annual survey, multiple-year trend data are reported wherever possible (2015: n=1038; 2014: n=981; 2013: n=1,457; 2013: n=312; 2012: n=1,635). While the survey is not designed as a formal sample of the entire K-20 marketplace, its results have generally been consistent over the years. Data presented in this report are not weighted.

A note about the benchmark scoring used in this report
Participants were asked to select their level of agreement on a scale of 1 to 7, where 1 = ‘Strongly disagree’ and 7 = ‘Strongly agree’ for each of the 33 topics that best described the current situation in their education settings, and also the ideal situation. Participants had the option of selecting ‘NA’ or Don’t Know for any of the benchmarks.

Average scores (means) were calculated for each benchmark, based on their ratings from 1 to 7. The score may indicate how close institutions are toward achieving a particular benchmark, particularly when compared to respective ratings for the ideal for each benchmark.

1 See Addendums A and B in Detailed Findings for further detail on the methodology of this study, the 2013 baseline study, changes in methodology, more information about the survey participants, the survey instrument, and a list of current Vision K-20 Partners and SIIA members.
SIIA Vision K-20 Survey Results – 2015

Additionally:

- Although a wide range of participants representing educators from K-12 classrooms, schools, and districts, as well as postsecondary courses, departments, and campuses participated in the survey, sampling was not random.
- Although demographics varied somewhat in the 2013 study, which serves as a benchmarks baseline in this study, the sample is directionally similar to other years.
- Responses to the benchmarks and questions were subjective.
- Statistical significance testing is conducted at the 95% confidence level to compare years, and compare current and ideal scores at the highest level.
- Bars may not add to 100% due to rounding.

**SUMMARY OF SURVEY PARTICIPANTS**

A total of 1,038 educators completed the survey in 2015.

- Most (89%) participants represent the K-12 sector in 2015. This represents a significant increase in proportion over 2012 and 2013, but is in line with proportions seen in 2014. Since 2012, the proportion of Postsecondary participants has decreased from 33% to 12%. However, this segment includes 119 participants in 2015, which is sufficient for analysis. Education levels of institutions have varied each of the past four years of the survey, most likely resulting from year-to-year fielding variations.

- The strongest and most consistent variations in technology usage levels and perception scores are seen when comparing the K-12 and Postsecondary levels. Correlating (but weaker) demographic variations are observed.

### Education Level of Institutions Represented in Surveys

<table>
<thead>
<tr>
<th>Education Level</th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
<th>2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>K-12</td>
<td>1635</td>
<td>312</td>
<td>981</td>
<td>1038</td>
</tr>
<tr>
<td>Elementary</td>
<td>67%</td>
<td>78%</td>
<td>88%</td>
<td>89%</td>
</tr>
<tr>
<td>Secondary</td>
<td>24%</td>
<td>17%</td>
<td>27%</td>
<td>29%</td>
</tr>
<tr>
<td>K-12 District</td>
<td>18%</td>
<td>30%</td>
<td>25%</td>
<td>29%</td>
</tr>
<tr>
<td>Postsecondary</td>
<td>33%</td>
<td>22%</td>
<td>12%</td>
<td>12%</td>
</tr>
<tr>
<td>2-Year</td>
<td>10%</td>
<td>5%</td>
<td>5%</td>
<td>3%</td>
</tr>
<tr>
<td>4-Year</td>
<td>23%</td>
<td>17%</td>
<td>8%</td>
<td>9%</td>
</tr>
</tbody>
</table>

2012= Data prior to introduction of new benchmarks baseline in 2013.

Superscript numbers = Significantly higher than year indicated at the 95% confidence level.

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2 See Addendum B in Detailed Findings for more detail about the survey participants.
The demographics of the participants in the 2015 survey are similar to previous years. More of the participants are female than male, particularly in the K-12 segment; a majority have more than 15 years of experience, and the median age is 52 years.

Similar to previous years, the greatest number of participants in both K-12 and Postsecondary selected “Professor/Instructor/Teacher” as their role. In K-12 there is a decrease in the proportion (36%) of “Professor/Instructor/Teacher” respondents, while the proportion who report their role as “Librarian/Media Specialist” (25%) or “Department Chair” (9%) increases in 2015. In Postsecondary, there is an increase in the proportion (64%) who report their role as “Professor/Instructor/Teacher,” while a decrease is seen among those reporting their role as “Department Chair” (3%) this year.

In 2015, 54% of K-12 participants say they are reporting for their school/department, while 46% of Postsecondary say they are reporting for their class/course. Previous years had lower proportions for each of these respective responses.

Participants are geographically diverse, with representation from all 50 states and a variety of settings: urban, suburban, and rural.

Institutions of different sizes are well represented, ranging from small to very large. Postsecondary participants more often report they represent “very large” institutions than small institutions, although the proportion in Postsecondary representing “Small” institutions has grown to 9%. A greater proportion (39%) of K-12 participants represent “Large” or “Very large” institutions compared to 2014 (26%). In this study, very large institutions are defined as having more than 7,500 students, and small institutions as having fewer than 450 students.

KEY FINDINGS – STUDENT DATA

Every year for the past few years, new lines of questions have been added to the survey that focus on current “hot” topics in education. This year we asked about the use of technology to collect, manage, and report on individual student data. The results reflect the heightened awareness and need for student data in both K-12 and Postsecondary. Specifically:

Technology use has increased with regards to individual student data

A vast majority (almost 70%) of the participants in both K-12 and Postsecondary report the use of technology to collect, manage, and report individual student data has increased or increased significantly in the last two years. Among K-12 participants, very few report ‘no change’ or a decrease.

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3 See Addendum B in Detailed Findings for more information about the sample.
While a majority among Postsecondary participants also report an increase or significant increase in the use of technology to collect, manage, and report individual student data, those from 2-Year institutions more often report ‘no change’ in the use of technology to collect individual student data in the last two years, compared to 4-Year. However, the difference is not significant.

Data utilization primarily to track student performance and improve instruction
The top two most important ways digital student data is currently used in both K-12 and Postsecondary is to ‘track student performance’ and ‘improve instruction.’ Secondary and K-12 District participants see a greater role for students and parents to track student performance than do Elementary respondents, but there are no significant differences between 4-Year and 2-Year respondents within Postsecondary.
The value placed on tracking student performance and improving instruction is consistent across both K-12 and Postsecondary. Postsecondary places even greater emphasis on enabling students to track their own performance than K-12, while few in Postsecondary place much importance on enabling parents to track student performance in contrast to K-12.
More training is desired to support the use of individual student data
Both K-12 and Postsecondary segments say that increased training to use data systems would do the most to support the effective use of individual student data in digital form at their educational institution, with little variation by educational level. In addition to increased training, better access to data systems is a close second among Postsecondary, followed by more widely adopted technical data standards, specifically among those representing 2-Year institutions.
KEY FINDINGS – TECHNOLOGY INTEGRATION/BENCHMARKS

**Long term ideal usage levels decline**

At the beginning of the survey, participants are asked to rate the importance of technology integration, then their overall current level and ideal level of technology integration on a scale of 1 to 7 (1 = no technology integration/not important to 7 = complete technology integration/very important).

The table and qualitative graphic below illustrate the divergence between overall current and ideal technology usage levels and shows the general lag in the K-12 segment. While overall perception of current levels have remained relatively static over the past four years, statistically significant declines are seen in ideal levels over the same period among both K-12 and Postsecondary, and in importance levels among Postsecondary. These declines in stated overall ideal level correspond with a trend toward declines for ideal level in the individual benchmarks:

- **In K-12**, ideal levels on most individual benchmarks lag behind previous years, sometimes with statistically significant declines.
- **Postsecondary** sees directional decreases in ideal level for most benchmarks, with a few that remain static with 2014.

Yet there is still a significant gap between the current and ideal levels, and technology integration continues to resonate as very important to these participants. While further analysis indicates educators may be taking a more strategic approach to technology integration, additional research studies are needed to better understand these trends.

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Qualitative graphic: The figure is not quantifiably valid, but is intended to reflect an overview of the findings garnered from the survey. Arrows indicate direction of change.

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4 Qualitative graphic: The figure is not quantifiably valid, but is intended to reflect an overview of the findings garnered from the survey. Arrows indicate direction of change.
Gap between current and ideal usage levels narrowing

The closer the current score is to the ideal score, the closer the institution may be to achieving the benchmarks of the K-20 Vision. While a few benchmark statements were changed between 2014 and 2015, most remain the same. Six benchmarks were removed and two added to maintain the relevance of the survey as technology changes.

While ideal and current levels generally positively correlate, current usage lags behind ideal on every metric, sometimes to a dramatic degree.

- For both K-12 and Postsecondary, the ideal score is significantly higher than the current score on every benchmark in 2013, 2014, and 2015.

- While only a minority of participants report their overall current level of technology integration as high (23% for K-12 and 33% for Postsecondary), most aspire to a high ideal level and view technology integration as highly important, indicating a desire for greater technology integration in all benchmarks tested.

Directionally, the gap between current and ideal has narrowed in both K-12 and Postsecondary between 2014 and 2015, and consistently for K-12 since 2013, indicating that institutions are making positive progress towards their ideal levels.

- The overall average current and ideal usage scores for the 33 benchmarking statements in 2015 are on par with 2014 for both K-12 and Postsecondary, with a steady increase seen in current usage of technology for K-12 since 2013, from 3.95 to 4.13.

- For K-12 the gap between overall average current and ideal benchmarks scores has declined from 2013 (2.33) to 2015 (2.17), while Postsecondary has declined from last year (1.68) to 2015 (1.59), largely from a directional decline in ideal scores.
Ideal scores continue to outpace current scores on all individual benchmarks at a significant rate among both K-12 and Postsecondary, yet almost all are the same or lower than in 2013 and 2014.

Variation strongest between K-12 and Postsecondary

- In general, scores on the benchmarks for current level of technology implementation are higher for participants from Postsecondary institutions than those from K-12 institutions, the largest variation observed in this study and consistent with past years. The overall score for Postsecondary current usage (4.62) is significantly higher than for K-12 (4.13), at the 95% confidence level, in all three years tracked. This is not surprising given the older age level of Postsecondary students and the propensity for students to have and use technology at the Postsecondary level.

- While other differences are observed between organizational or demographic segments, these differences are not as strong nor as consistent as those observed by the comparison between K-12 and Postsecondary, and are typically defining characteristics of the K-12 and Postsecondary segments:
  - Smaller enrollment size correlates with lower ideal scores. Participants from K-12 institutions more often report their enrollment size as ‘small,’ while Postsecondary participants more often say their institutions are ‘very large.’
  - Older and more experienced participants give higher current usage scores than do younger participants. K-12 participants skew younger than Postsecondary participants.
  - Responding for District/Campus in K-12 correlates with higher current and ideal scores compared to those responding for Class/Course. This correlates to lower current and ideal scores given by Professor/Instructor/Teachers than those with most other titles. Postsecondary has almost twice the amount of Professor/Instructor/Teachers this year compared to K-12. Only 16% of K-12 participants and 15% of Postsecondary participants responded to the survey for their District/Campus.
K-12 sees trends toward improvement in current levels of technology integration

While most benchmarks remain relatively similar over the past two years in terms of current and ideal level, many statistically significant increases are observed longitudinally over the past two years of the study on individual benchmarks, indicating progress in these areas toward the Vision K-20 goal. Yet trending declines are observed in ideal scores among a few notable benchmarks in the same time period.

- These trends in the past two years, which show consistent increases in current scores among a number of benchmarks and no longitudinal decreases observed, may indicate significant improvement in the current level of technology integration at the K-12 level.
- Other increases in current usage are driven by fewer participants who give low current usage scores, indicating possible greater ubiquity for institution leaders’ use of technology tools, institutional management use of digital enterprise systems, online access, and online assessments:
  - Institution leaders use technology tools for planning.
  - Institutional management is supported by digital enterprise systems.
  - There is ubiquitous online access through wireless/wifi.
  - Online assessments are used to inform instruction.
  - Digital educational content can be accessed through multiple platforms.
- Some of the increases in current usage are driven by an increasing number who give high current scores, indicating these increases may not be universally observed in K-12:
  - Institution leaders use technology tools for decision-making.
  - Online access is available through all mobile devices.
  - All multimedia instructional materials are interactive.
- Yet decreases are seen in ideal levels among some notable benchmarks during the same time period, indicating areas where technology relevancy is dropping, or K-12 educators are observing the limitations of technology and are now seeking more strategic integration of technology with traditional classroom methods:
  - Online courses are available to all students.
  - Students have access to digital educational content online.
  - Personal ePortfolios incorporate a wide range of students’ skills and knowledge.
  - Educational content is always delivered in digital formats.

The charts that follow show the benchmarks, in boxes, that have the largest gaps between ideal and current levels in 2015, and those that experienced significant changes between years in K-12, shown by average score and by the percent of K-12 participants at the highest level of agreement. The benchmarks are in descending order by 2015 current usage levels.
Benchmarking Statements on Vision K-20 Survey: K-12 Average Scores

Security tools are used to protect student data.

Security tools are used to protect students’ online privacy.

Institution leaders use technology tools for budgeting.

Institution leaders use technology tools for planning.*

Information systems are used to establish educational accountability.*

Information systems track student performance for decision-making.*

Students have access to digital educational content online.*

An institution website/portal provides the education community access to appropriate resources.

Institutional business activities are supported by digital enterprise systems.*

Institution leaders use technology tools for decision-making.*

Institutional management is supported by digital enterprise systems.*

There is ubiquitous online access through wireless/wifi.*

Online access through wireless/wifi is reliable.*

Online access is available through all mobile devices.*

Adequate bandwidth is provided for students to access digital instructional materials.

Educators have access to the level of technology resources common to other professionals.

Digital student achievement data is always available to guide instructional decisions.

Online assessments are used to inform instruction.*

Access to online professional learning communities is provided.

Digital educational content can be accessed through multiple platforms.*

Access to online professional learning courses is provided.

There is always access to adequate bandwidth.

Online collaborative student tools are used in instruction.

Project-based learning technologies are used in teaching.

Educators have access to the level of technology training common to other professionals.

Students have access to adaptive digital curriculum.

All multimedia instructional materials used are interactive.*

Learning management systems are used to differentiate instruction.

Assessments measure student technology skills and competencies.

Educational content is always delivered in digital formats.*

Online courses are available to all students.*

Personal ePortfolios incorporate a wide range of students’ skills and knowledge.*

Online tutoring is available to all students.*

* = Statistical significance between years at the 95% confidence level.
13, 14, 15 = Statistically significant differences every year indicated at the 95% confidence level. (Color indicates higher year).
Note: Statistically significant difference between Current and Ideal for all benchmarks at the 95% confidence level. In 2013, 2014, 2015.
□ = Largest gap(s) between Current and Ideal in 2015.
Bandwidth and training identified as critical unmet needs for K-12

- Gap analysis identifies the benchmarks with relatively higher ideal scores but lower current scores, representing unmet goals and therefore are in greatest need of attention.

- Among K-12 participants, the largest gaps between current and ideal integration include the following benchmarks, none of which score in the top half for current usage.
  - With relatively high ideal scores by over 90% of K-12 participants, indicating an unmet need:
• There is always adequate bandwidth.
• Educators have access to the level of technology resources common to other professionals.
• Educators have access to the level of technology training common to other professionals.
  o With relatively low ideal scores, these benchmarks may be somewhat less critical to educators:
    • Learning management systems are used to differentiate instruction.
    • Online tutoring is available to all students.
    • Personal ePortfolios incorporate a wide range of students’ skills and knowledge.
      o Ideal scores for this benchmark are relatively low and dropping among the proportion who give it high ideal scores over the course of the past two years. This indicates that personal ePortfolios may be falling out of favor for educators, at least among some.

Postsecondary sees trend toward increasing expectations among specific benchmarks
  ➢ While most benchmarks remain relatively similar over the past two years in terms of current and ideal level, 2015 benchmarks rarely exceed scores from previous years.
  ➢ Trends among Postsecondary are nuanced and relate to specific benchmarks. Frequently these trends point toward increasing expectations.
    o Those with a trend toward increasing current usage levels are:
      ▪ Online assessments are used to inform instruction.
      ▪ Access to online professional learning courses is provided.
        • This increase in current usage is driven by an increasing number of participants who provide high scores, but about one-quarter still provide low current usage scores indicating access to online professional learning courses is not broad.
      ▪ All multimedia instructional materials used are interactive.
        • While current usage scores are low, they are increasing, and correspond to an increase in ideal scores. This indicates increased importance and growing expectations on this benchmark.
    o Benchmarks trending toward decreased current usage levels are:
      ▪ Students have access to digital educational content online.
        • This benchmark still has relatively high current and ideal scores. The drop may be related to increasing expectations of online educational content as changes in technology affect access.
      ▪ There is always access to adequate bandwidth.
        • This benchmark maintains high ideal scores so the decline, driven by lower numbers of respondents who rate current level highly this year, indicates that at some institutions bandwidth requirements are outpacing the bandwidth available.

  ➢ In the charts that follow for Postsecondary, a large number of statistically significant declines are seen, primarily on ideal level, indicating areas where expectations may be decreasing.
Among Postsecondary participants, the benchmarks with largest gaps between current and ideal are all in the lowest tier of current scores and have middling ideal scores:

- Digital student achievement data is always available to guide instructional decisions.
- Online tutoring is available to all students.
- Students have access to adaptive digital curriculum.
  - An increasing number of participants give very low current usage scores on this benchmark this year, indicating a growing number with perceived inadequate access to adaptive digital curriculum.
All multimedia instructional materials used are interactive.

- With increases seen since 2013 in both current and ideal scores, this benchmark is becoming increasingly important, but expectations may be increasing as goals are approached.

**There is a ‘floor’ in technology integration**

- Where the current level approaches the ideal level, participants may be closer to achieving their ideal level of technology integration.

- Among both K-12 and Postsecondary, security-related benchmarks have been on the top with the highest current and ideal scores, with little change over the past two years. **For both K-12 and Postsecondary**, security-related benchmarks are among those closest to ideal levels:
  - Security tools are used to protect student data.
  - Security tools are used to protect students’ online privacy.

- Each segment also has additional benchmarks that approach ideal levels:
  - **K-12**:
    - Institution leaders use technology tools for budgeting.
  - **Postsecondary**:
    - There is ubiquitous online access through wireless/wifi.
    - Online courses are available to all students.

- Among Postsecondary, ‘Security tools are used to protect student data’ also sees a significant increase in those giving high current usage scores compared to last year. This may indicate a segment who is observing increasing visibility or usage of security tools.

- These benchmarks with high current and high ideal scores that are close together may represent ‘the price of entry’: These are benchmarks considered minimum technology standards, and anything below these standards would be considered widely unacceptable.

**ANALYSIS AND IMPLICATIONS**

The 2015 Vision K-20 Survey suggests that U. S. education institutions are continuing to make limited progress in leveraging technology and eLearning to meet their educational goals. There is **evidence of increased current usage of technology**, while some declines are seen in the ideal level of integration, effectively narrowing the gap between what educators have and what they want, and indicating progress toward the Vision K-20 goal. Yet the contrast between the level of current technology integration compared with the high ideal level continues and is reflected in all study metrics.

The collected data shows the **ideal level of technology integration continues to be significantly higher than current levels**, indicating that educators have a desire to integrate technology at a deeper and broader level. The current level of technology integration is on par with 2014, with some benchmarks showing directional signs of

“I feel our school district is making positive strides towards technology integration.”

**Elementary Librarian/Media Specialist**

“I feel that the use of Digital Technology is extremely important to the student of today and the student of tomorrow.”

**K-12 District IT/Technology**
improvement and several showing statistically significant improvement over the previous year or since 2013. There is a slight decline in the ideal scores this year and a statistically significant decline for a number of the ideal benchmarks, suggesting technological integration is approaching perceived saturation and educators are looking for smarter ways to integrate technology. When compared to previous years’ results, the survey shows consistent results for K-12 and Postsecondary with increases in specific areas, indicating schools are holding up in the face of the increasing demands for more technology. This may indicate that despite challenging budget conditions and technological advances, many schools have been able to maintain their technology integration, at least in certain areas. It appears education institutions have focused on maintaining their current infrastructure and are targeting key areas for improvement.

Postsecondary consistently outperforms K-12 on current technology integration, a trend seen over the past four years. In addition, the gap between current and ideal technology integration scores is slightly lower for Postsecondary institutions, while ideal scores are generally higher, indicating Postsecondary may have better technology integration and higher expectations overall. The decrease in importance of technology integration among Postsecondary participants may be an indication that, once a minimum or base level of technology integration is met, educator focus is removed from technology itself. This also illustrates the differences among institutions serving students at various education and age levels: What might be a highly appropriate approach to teaching and learning for college students might be a pedagogical (or at least social) problem when applied to elementary students. The use of online courses or digitally delivered content, for example, would be predictably higher for older students. Results from 2015 underpin the differences between the K-12 and Postsecondary technology integration issues, particularly with regards to specific benchmarks tested.

Among K-12 participants, current levels are longitudinally increasing for online access (mobile and wireless/wifi), online assessments, digital educational content, Institution leaders’ use of technology tools, and institutional management use of digital enterprise systems, and there is evidence of greater ubiquity in current usage in these areas. K-12 participants express satisfaction with institution leaders’ use of technology tools for budgeting, with current levels that approach ideal levels. Yet results indicate that K-12 educators may now be seeking more mixed use of technology with traditional classroom methods with regards to online courses and online digital educational content, while personal ePortfolios may be dropping in relevancy. Critical unmet needs in K-12 are identified as adequate bandwidth and educator access to technology training and resources.

Postsecondary sees longitudinal increases in current levels of online assessments, and an increase in access to online professional learning courses, at least among some participants. Postsecondary participants express satisfaction with the availability of online courses for students, with current levels that approach ideal levels. Postsecondary educators appear to have growing expectations for the interactivity of multimedia instructional materials, as both current and ideal levels increase. Yet as demands on technology increase with advances, fewer agree

“...Technology issues are relevant where I instruct but disparities exist. Digital has expanded from my graduate school years to present days.”

Four-Year College Librarian/Media Specialist
there is enough adequate bandwidth for their needs, or enough student access to online digital educational content.

These results continue to suggest that participants may be holding themselves and their institutions to an increasingly higher standard of excellence in the face of advances in technology. The low current scores but high scores for ideal levels for adequate bandwidth among K-12, and the decrease in the number of Postsecondary participants who give high scores to current levels of adequate bandwidth suggest that bandwidth is not keeping up with demand at educational institutions. Adequate bandwidth, along with online access and wireless/wifi, is one of the most important preconditions to bring applications such as virtual classes, web-hosted, multimedia-rich content, and interactive software into the classroom. It continues to give educational providers the incentive to develop technology-rich curriculum materials and online courses that can be delivered via the Internet.

As technology integration has increased, educators are recognizing the limitations of more technology without prudent implementation. Key is a growing recognition that technology training for educators is lacking. K-12 participants indicate educator access to technology training and resources available to other professionals is a critical unmet need. While Postsecondary sees an increase in online professional learning courses, this access is not ubiquitous. Both K-12 and Postsecondary segments say that increased training to use data systems would most support the effective use of individual student data in digital form at their educational institution.

Security-related benchmarks are considered a technology standard, below which educators would consider widely unacceptable at this point in technology advancement. Security is a key ‘stated’ variable in how educators for both the K-12 and Postsecondary level evaluate technology integration and infrastructure at their institutions, along with adequate bandwidth, wireless/wifi, and online access (to a lesser extent). Security may be of particular importance to institution leaders as virtually all of both K-12 and Postsecondary report the use of technology to collect, manage, and report individual student data has increased or increased significantly in the last two years.
These findings suggest that as the demands of technology continue to expand (e.g. the need for greater bandwidth access and technology training) schools are struggling to keep pace with demands. While security is still the highest-rated area in terms of integration, bandwidth and technology training have not maintained the same level of progress. **Lower than desired bandwidth access may have a stranglehold effect on satisfying other technology needs.** such as digital student achievement data, interactive multimedia instructional materials, and learning management systems. Likewise, **lower than optimal technology training may have a stranglehold effect on satisfying educational needs.** The top two most important ways digital student data is currently used in both K-12 and Postsecondary is to track student performance and improve instruction, both of which require technology training for educators in order to implement effectively.

> “Technology should be considered a supportive tool in education not the primary source of instruction, and not only something students in lower socioeconomic areas use only for test taking.”

**Elementary Teacher**

Comparing current scores with ideal scores indicates that educators have a vision for how they would like technology implemented. While most do not see 100% technology integration as ideal across all benchmarks, the gap between ideal and current usage scores indicates a great deal of room for and desire to increase technology integration even as they seek to strike a balance, and approach technology integration more strategically.

The survey indicates that **educators in both K-12 and Postsecondary have a desire to integrate technology at a much higher level than they currently have, but need support and assistance to make that happen.** As technology evolves and technology solutions expand, there may be new opportunities to reach ideal goals with more cost-effective and less hardware-dependent solutions.

With minimal changes occurring year to year, what will it take to accelerate the pace for leveraging technology and transforming K-20 education institutions? The findings of the Vision K-2015 Survey indicate the work is not complete. **Education stakeholders face significant work to achieve the Vision K-20 goals and increase opportunities for all students to fulfill their promise through technology-supported education.**

With the support of SIIA members and partners, SIIA will continue surveying faculty and administrators to track this rate of change. More importantly, SIIA, SIIA members, and other education stakeholders will continue to support educators making the transition from print to digital. We will also continue to call on education market leaders and policymakers to increase investment, leadership, and support to ensure the nation’s educational system can innovate and compete on a global scale.

> “While there is very high interest in using technology in every aspect of the learning process, assessment, and evaluation, funding remains the greatest road block.”

**Secondary School Librarian/Media**

> “It is imperative that we have the technology available for students and staff to use on a regular basis. Equal for all.”

**K-12 District Librarian/Media Specialist**
Addendum A

VISION K-20 PARTNERS AND SUPPORTERS

We appreciate the work of our Vision K-20 partners who support SIIA’s Vision K-20 in many ways, and we particularly thank them for their efforts in sending their members and readers to the benchmarking survey this year. Those efforts helped to increase the number of participants.

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We also thank the many SIIA members who emailed their education customers and the colleagues who emailed education contacts, posted information on their websites or Facebook pages, and blogged and Tweeted about the SIIA Vision K-20 Survey.

SIIA MEMBERS ACTIVE IN THE EDUCATION DIVISION

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