Closing the Gap: Turning SIS/LMS Data into Action

Report: Implementation and Selection Approaches Toward SIS/LMS Solutions
Report Overview

The Bill & Melinda Gates Foundation has provided funding for a project entitled *Closing the Gap: Turning SIS/LMS Data into Action*. A key underlying premise of this project is that by capturing and analyzing the data housed in Student Information Systems (SIS) and Learning Management Systems (LMS), the education community can positively impact classroom practice and ultimately student learning. This report aggregates information on selection and implementation practices for school districts of all sizes from the perspective of the Teachers, District, School, and Technology/IT leaders involved in those activities.
Key Findings and Next Steps

**Findings:** From this survey, Gartner uncovered the following key findings:

- SIS and LMS evaluation, selection and implementation activities are currently viewed as being owned by Technology Leaders.
- Districts do not emphasize the use of data in the classroom as a part of the selection and implementation processes.
- Teachers are not fully utilizing the scope of functionality acquired during LMS implementations.
- With some exceptions, Districts report being on-budget with respect to their SIS and LMS projects.
- Implementation projects are more frequently on-schedule compared to the Education industry average; however, 40% of projects are reported as behind schedule.

**Next Steps:** These findings suggest that the education community should take steps, including the following, to improve the selection and implementation practices of SIS and LMS solutions to leverage data use in the classroom.

- District leaders should take ownership of SIS and LMS implementation efforts and continue to include relevant stakeholder groups in all phases.
- District, school and technology leaders should aggressively eliminate barriers in order for teachers to utilize the breadth of LMS functionality.
- Teachers should anticipate the capability to use all available data in the classroom and aggressively leverage tools and techniques to achieve desired educational outcomes.
- Data policy, assessment and achievement leaders should lead in the creation of a culture that utilizes the wealth of data available.
- Approval entities should require a comprehensive estimate of the subject matter expertise and financial resources necessary to implement and sustain SIS and LMS solutions to achieve desired education outcomes.
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Engagement: 223972910

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Executive Summary
Why Was This Report Published?

- Gartner, Inc. has collaborated with the American Association of School Administrators (AASA) and the Consortium for School Networking (CoSN) to explore the factors driving or inhibiting the use of data in the classroom, in a program funded by The Bill & Melinda Gates Foundation entitled *Closing the Gap: Turning SIS/LMS Data into Action*.

- There are a total of 5 outputs that will result from this project and ultimately will be published for the education community on the “Closing the Gap” Website:
  - Report on Education Community Attitudes Toward SIS/LMS Solutions
  - *Report on SIS/LMS Selection and Implementation Approaches*
  - Report on SIS/LMS Vendor Product Features
  - Various Assistance Templates and Frameworks
  - District Case Studies

- Collectively, the various reports and outputs from this project will allow school districts and state education departments to:
  - Gain a more complete understanding of the current state of Student Information System (SIS) and Learning Management System (LMS) solutions and how the data provided by those solutions are used in the classroom by teachers to achieve desired education outcomes.
  - Begin to move beyond the current state and adopt practices that will lead to realizing their vision for using SIS/LMS data to strengthen instructional practices.
  - Become fully engaged in dialogue and in implementing best practices for using SIS/LMS data to inform classroom practice, and in selecting and implementing those solutions for their organizations.
Who Should Read This Report?

- The purpose of this report is to help provide increased insight into the selection and implementation practices for SIS and LMS solutions. This report aggregates, for the first time, information on selection and implementation practices for school districts of all sizes from the perspective of the Teachers, District, School, and Technology leaders involved in those activities.

- Individuals who would find this report of interest include:

<table>
<thead>
<tr>
<th>Role</th>
<th>Benefits and Uses of This Report</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>District, School, and Technology</strong></td>
<td>• Highlight considerations to help inform effective decision-making regarding technology investments.</td>
</tr>
<tr>
<td><strong>leadership</strong> who are leaders and sponsors of SIS and/or LMS implementation or upgrade initiatives</td>
<td>• Sustain and derive value from investments to achieve education achievement goals.</td>
</tr>
<tr>
<td><strong>Teachers and other education stakeholders</strong></td>
<td>• Raise awareness and facilitate engagement of stakeholder groups.</td>
</tr>
<tr>
<td>participating in SIS and/or LMS solution selection and implementation processes</td>
<td>• Facilitate greater visibility on the factors involved in effectively selecting, implementing, adopting, and sustaining SIS and LMS solutions.</td>
</tr>
<tr>
<td><strong>Data Policy, Assessment and Achievement leaders</strong></td>
<td>• Encourage their participation in SIS and LMS solution selection and implementation activities, with a focus on how instructors use the data.</td>
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<tr>
<td><strong>Local School Boards, District Leaders,</strong></td>
<td>• Provide insight on the resource and investment requirements to select, implement, adopt, support, and sustain SIS and LMS solutions to achieve the desired benefits.</td>
</tr>
<tr>
<td><strong>State Education Departments,</strong></td>
<td></td>
</tr>
<tr>
<td><strong>and Regional Education IT providers</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Vendors</strong> who provide SIS and LMS solutions to school districts and state education agencies across the U.S.</td>
<td>• Learn from the aggregation of user experiences implementing their solutions and inform their product and service offerings.</td>
</tr>
</tbody>
</table>
Key Terms

In order to ensure that all respondents had the same understanding of SIS and LMS solutions, Gartner established the following definitions that were included in all surveys and focus group sessions:

- **Student Information System (SIS):** A software application for the collection, organization and management of student data that includes, but is not limited to, student schedules, enrollment, course history, achievement profile, grades, attendance and demographic information.

- **Learning Management System (LMS):** A software application used by education institutions for planning, delivering and managing, tracking, and reporting of learner events, e-learning programs, educational records, and training content. Learning Management Systems support a variety of instructional resources and settings including virtual, hybrid, online and/or instructor-led instructional settings. On-line assessment, management of continuous professional education, collaborative learning, and training resource management (e.g., facilities, equipment), are also tracked and managed using Learning Management Systems.

Throughout the report, we use the following terms to describe the participants in the aggregate:

- **Education Community:** Includes the aggregation of District, School, and Technology leaders, and Teachers.

- **Instructional Professionals:** A subset of the Education Community which includes those persons who are involved in instructional activities (e.g., Curriculum Specialists, Teachers, Chief Academic Officers, etc.)
Where Did the Data in This Report Come From?

This report is based upon input from educators, district and state education representatives, and school leaders via surveys and focus group discussions.

- **Education Community Survey** - received input from 716 district, school, and technology leaders representing school districts of varying sizes, geography, and economic distribution. Particular attention was paid to ensuring substantive input from larger school districts.

- **Teacher Survey** - received input from 1,010 teachers, 80% of whom were active users of SIS or LMS solutions, representing schools of varying sizes, geography, grades and economic distribution.

- **Focus Group Sessions** – six sessions were held with 10-20 district and school leader participants in each focus group in conjunction with AASA or CoSN sponsored events or conferences to provide a better understanding of how data is used in classrooms, the benefits that have been realized from these efforts, potential barriers, and other recommendations to improve usage.

- A small subset of information was provided directly from SIS and LMS vendors.
Where Did the Data in This Report Come From? (cont’d)

The data gathered, as a part of this effort, was designed to help answer the following questions:

– Who participated in the solution identification and selection process and what role did they play?
  ▪ Who led the effort?
  ▪ Who was part of the selection team?
  ▪ How substantive was their participation?
– What are the typical purchase and implementation costs for an SIS and LMS effort? How does this vary by district size?
– What implementation activities are typically funded as a part of SIS and LMS implementation efforts?
– Do SIS and LMS implementation efforts typically remain on budget and on schedule?
Data Collection Respondent Groups

As a part of the surveys, respondents were asked to describe their primary role, using the following definitions:

- **District Leaders:** Includes Superintendents, Assistant Superintendents, Curriculum Leaders, and other roles typically found at the district level.

- **School Leaders:** Includes Principals, Assistant Principals, Deans, etc. that are considered a part of the leadership team within an individual school.

- **Technology Leaders:** Includes District Level Chief Information Officer, Chief Technology Officers or other roles accountable for defining and executing the technical direction of a school district.

- **Teachers:** Includes only those persons providing instruction in the classroom. This group does not include paraprofessionals, guidance counselors, hall monitors, or other support staff.
Data Collection Respondent Overview – Education Community Survey

There were 716 respondents to the Education Community Survey, representing District, School and Technology leaders. The survey included input from 574 District and School leaders, 90% of whom had over ten years experience in education and 51% with more than five years experience in their current role. Investment decisions in SIS and LMS solutions are more often made at the district level, rather than by individual schools. Technology leaders were specifically asked about selection and implementation practices, budgets, and implementation experience within their respective school districts. District leaders who were close to the process, and knowledgeable about project budgets, scope and experience, provided input as well. The distribution of survey participants is representative of the distribution of districts across size and metropolitan category reported by the National Center for Education Statistics (NCES).

School District Representation in Education Community Survey

Education Community Survey Participants

- District Leaders: 62%
- School Leaders: 17%
- Technology Leaders: 21%

District Size – Number of Students within District

- Small (0-2,499 students): 41%
- Medium (2,500-24,999 students): 46%
- Large (Over 25,000 students): 13%
Most Teachers Use SIS, LMS, or Both

Participants in the teacher survey were selected to provide a broad sampling based on geography, district size, grade representation, and exposure to LMS and SIS solutions. Teachers were specifically asked about their experience in the SIS and LMS selection and implementation processes.

LMS and SIS Usage Among Teachers

- **SIS Users**: 56%
- **LMS Users**: 38%
- **Use Both**: 6%

% represents self-described teacher usage
Findings Summary

- **SIS and LMS evaluation, selection, and implementation activities are currently viewed as being owned by Technology Leaders.**
  - Across all district sizes and respondent roles, IT is most frequently reported as the leader and/or sponsor of SIS/LMS initiatives.
  - Technology, instructional, and administrative stakeholders at all levels are represented in SIS and LMS selection and implementation processes.
  - Teachers are more involved in substantive selection and implementation activities for LMS than SIS initiatives.

- **Districts do not emphasize the use of data in the classroom as a part of the selection and implementation processes.**
  - 38% of IT leaders report implementation projects had no specific practices to encourage the use of data in the classroom.
  - Over 70% of IT leaders report that implementation projects did not focus on how teachers should use the data provided by the solutions.
  - Few districts report using change management services that could facilitate the use of data in the classroom.

- **Teachers are not fully utilizing the scope of functionality acquired during LMS implementations.**
  - Technology leaders report acquiring and using LMS solutions primarily for content management and sharing, however teachers are not using LMS solutions for these functions.
Findings Summary (cont’d)

- **With some exceptions, Districts report being on-budget with respect to their SIS and LMS projects.**
  - The majority of all SIS projects are reported as on-budget with the exception of medium-sized districts where one-third report being over-budget.
  - Medium-sized districts report being on-budget for LMS projects more than small and large districts.
  - District leaders, similar to IT leaders, report projects are primarily on-budget.

- **Implementation projects are more frequently on-schedule compared to the education industry average; however, 40% of projects are reported as behind schedule.**
  - 65% of IT leaders report their SIS implementation project schedule on-time, which is higher than the Education industry average of 53%.
  - 25% of small and large districts report their LMS implementation projects are behind schedule.
  - The majority of District leaders report SIS/LMS projects typically on-time; however, nearly 40% are behind schedule.
Gartner Recommends Best Practices When Selecting and Implementing SIS and LMS Solutions

Solution Management Lifecyle

Solution Management Best Practices

- Organizations should strategize on how to achieve student learning needs and goals using the data provided by these solutions early in the selection and implementation process.

- In general, a cross-section of stakeholders from Senior leadership, Administrative, Instructional, and IT areas should participate in the solution management lifecycle, and specifically in the solution selection process.

- Program or Project Management is required for successful implementation, and Change Management is required for successful benefits achievement.

Information technology solution implementations go through a multi-year lifecycle that includes developing a strategy, evaluating and selecting solutions, implementing the solutions, and managing the solutions for effective usage and benefits attainment. This lifecycle framework was used when asking survey respondents about their participation in selection, identification and implementation projects.
## Recommendations

<table>
<thead>
<tr>
<th>Role</th>
<th>Next Steps</th>
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</table>
| **District and School Leaders** | ▪ District leaders should take ownership of SIS and LMS implementation efforts.  
▪ Continue to include all stakeholder groups in the selection and implementation processes and further clarify and optimize the roles and responsibilities of each group.  
▪ Place more emphasis on the analysis of SIS and LMS data to inform classroom instruction.  
▪ Use organizational change management and professional development best practices during implementation to promote the use of data in the classroom by leveraging the expertise of subject matter experts to supplement internal resources.  
▪ Aggressively eliminate barriers for teachers to utilize the breadth of LMS functionality.  
▪ School leaders should discuss the use of data in the classroom pre- and post-observation conferences. |
| **Technology Leaders**        | ▪ Ensure SIS and LMS projects have effective program/project management for successful implementations.  
▪ Estimate the educational subject matter expertise needed to implement and sustain SIS and LMS solutions. |
| **Teachers**                  | ▪ Teachers should anticipate the capability to use all available data in the classroom and aggressively leverage tools and techniques to achieve desired educational outcomes.  
▪ Discuss opportunities in professional learning committees to make better use of available LMS solution capabilities.  
▪ Initiate discussions with school and district leaders for professional development. |
## Recommendations (cont’d)

<table>
<thead>
<tr>
<th>Role</th>
<th>Next Steps</th>
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</table>
| **Data Policy, Assessment and Achievement Leaders**                  | - Lead in the creation of a culture that utilizes the wealth of data available.  
- Validate the effectiveness of existing policies and practices on how data is used in the classroom.  
- Implement policies and promote practices to ensure educators know how to access, analyze and use data appropriately. |
| **Local School Boards, State Education Agencies and Regional Education IT Providers (Approval Entities)** | - Provide the financial and human resources needed to effectively implement and support SIS and LMS solutions.  
- Promote strategies to raise awareness of available data and ensure that all key stakeholders, including state policymakers, know how to access, analyze and use the information.  
- Require a comprehensive estimation of the subject matter expertise and financial resources necessary to implement and sustain SIS and LMS solutions to achieve desired education outcomes. |
SIS and LMS Evaluation, Selection, and Implementation Activities are Currently Viewed as Being Owned by Technology Leaders
The Education Community has Different Perspectives On Who is Leading and/or Sponsoring SIS/LMS Implementations

- Information Technology is most frequently reported as the leader of SIS/LMS initiatives.
- Differing responses on who is leading and/or sponsoring the SIS/LMS initiative demonstrates the need for District and Academic leaders to own the SIS/LMS initiative.
- School leaders report IT as the leader of SIS/LMS initiatives, while District leaders saw the role dispersed among District Administrative, District Academic and IT leaders.
- Nearly 40% of Medium and Large-sized school districts cite Information Technology leadership as the leader or sponsor.

District and School leaders were asked who organized and lead the effort for their SIS/LMS initiatives.
Some SIS Vendors Market Their Solutions to Technology Leaders Rather Than District or Academic Leaders

Gartner surveyed SIS and LMS vendors to expand its understanding of current solutions in the marketplace. Below are selected SIS vendor responses describing who they market their solutions to within school districts. Based on Gartner best practice, projects should have strong executive sponsorship from education leaders since the impact of change on people and business processes requires commitment from senior leadership to drive these changes.

<table>
<thead>
<tr>
<th>SIS Vendor</th>
<th>Please discuss the target market (size, region, nature of organization, etc.) for your SIS products including the target buyer.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Century Consultants</td>
<td>“Very often there is an Assistant or Deputy Superintendent of either Accountability or Administration that carries the responsibility of reporting student performance, but many times the decision making falls to either the CIO or IT Director.”</td>
</tr>
<tr>
<td>Edupoint</td>
<td>“Our target buyers range from Chief Technology Officers/Directors of Technology to Superintendents and Asst. Superintendents. The process of SIS selection usually involves multiple members from a school district and often includes a competitive request for proposal process.”</td>
</tr>
<tr>
<td>Infinite Campus</td>
<td>“The target buyer for the core district solution is typically the district’s technology officer and superintendent.”</td>
</tr>
<tr>
<td>SunGard</td>
<td>“In recent years many school districts are selecting Student Information Systems by committee. Our marketing is directed to IT staff, Superintendents, Assistant Superintendents, Curriculum Directors and Business Managers.”</td>
</tr>
<tr>
<td>Pearson PowerSchool</td>
<td>“Our student information system solutions are usually the responsibility of the top Technology Leader (CIO, Technology Director, etc.) in the district. However, because of the importance of the enterprise student data contained in the student information system, often times the top educational officer (Superintendent or CEO) is involved in the decision making at the district or state level.”</td>
</tr>
</tbody>
</table>
Technology, Instructional, and Administrative Stakeholders at All Levels Are Represented in SIS and LMS Selection and Implementation Processes

- All roles are represented, although not equally, in the Evaluation and Recommendation processes.
- District leaders are seen as approvers in the selection and implementation lifecycle.
- Teachers were reported to have the least involvement in Approving (10%) and Recommending (18%) the solution.

District, School, and IT leaders were asked who was involved in the decision-making process and what role did they play.
Teachers are Two Times More Likely to Participate in LMS Selection Activities Than in SIS Selection Activities

Teachers were asked how they were involved in the SIS and LMS selection and implementation processes.
Teachers are More Involved in Substantive Selection and Implementation Activities for LMS Than SIS Initiatives

- Less than half of Teachers report participating in the selection and implementation of SIS and LMS solutions.
- Teachers participated in substantive selection activities, such as requirements development, and implementation activities, such as user testing and pilots for both.
- Nearly two times more Teachers report involvement in the selection process for LMS solutions than for SIS.
- A significant number of Teachers report greater participation in implementation activities for LMS solutions versus SIS solutions.

Teachers were asked how they were involved in the SIS and LMS selection and implementation processes.
Districts Do Not Emphasize the Use of Data in the Classroom as a Part of the Selection and Implementation Processes
Solution Integration Practices Which Lead to Successful Implementation Can Be Extended to Help Facilitate the Use of Data in the Classroom

<table>
<thead>
<tr>
<th>Solution Integration Best Practice</th>
<th>How This Can Facilitate Increased Use of Data in the Classroom</th>
</tr>
</thead>
<tbody>
<tr>
<td>Include End-users Early and Often</td>
<td>- Teachers, and teacher-representatives can provide input and insight for selection, and can ensure their role-specific needs, especially with respect to use of data in the classroom.</td>
</tr>
</tbody>
</table>
| Develop Use Cases to Model Processes | - Requirements focus on what needs to be done, while use cases are a role-based focus on how the work is done, and can be used for both training and documentation.  
  - This can be especially helpful for describing how teachers can aggregate and use the information for instructional decision making. |
| Utilize Subject Matter Experts     | - Point-specific advisors for implementing new processes, overcoming resistance to change, developing communications plan, etc. can increase chances of success and address known risks. |
| Role-Specific Training on How to Use the Data in Addition to Using the Tools | - Training is tailored on what teachers do and how they can use the data in addition to how teachers can use the tools themselves. |
On Average, 38% of IT Leaders Report that No Specific Practice was Used to Encourage the Use of Data in the Classroom

The majority of SIS and LMS implementations did not include activities to facilitate the use of data in the classroom.

Systems implementation best practice suggests the inclusion of end-users on implementation core teams result in increased solution adoption; however, over 70% of surveyed IT leaders reported that end-users (academic / instructional representatives) were not included on the core team.

Small districts, more so than medium and large districts, include academic / instructional representatives on their implementation core teams.

IT leaders were asked if the following practices were used as part of the implementation or ongoing support effort to promote use of data in the classroom.
Over 70% of IT Leaders Report That Implementation Projects Did Not Focus on How Teachers Should Use the Data Provided by the Solutions

Use cases are tools used to describe how users interact with a solution. Systems implementation best practice suggests that developing use cases to describe how the data from SIS and LMS solutions can be used in the classroom would help teachers better integrate data into classroom practice.

On average, 20% of IT leaders report the use of use cases during implementation and ongoing support.

Large districts, more so than small or medium districts, have established use cases regarding the use of data in the classroom for both initial and ongoing training.

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IT leaders were asked if the following practices were used as part of the implementation or ongoing support effort to promote use of data in the classroom.
Few Districts Report Using Change Management Services That Could Facilitate the Use of Data in the Classroom

IT leaders were asked which services were included in the scope of their district’s project.

Without the expertise/personnel/funding/time to help teachers understand how to use what is available, all the information/data in the world is of no benefit. I can see the advantages, but lack the resources needed. Limited training - without follow-up support, has done little to assist staff make full use of the resources we have at our disposal. – District Leader

Services associated with Risk Assessment, Organizational Change Management and Business Process Re-Engineering were the least reported third-party services included in the scope of district SIS projects.

At 12%, medium-sized school districts were the largest group reporting the inclusion of subject matter experts for these activities.
More than Half the School Districts Do Not Explicitly Use System Integration Services For Their Implementation Projects

Services associated with Risk Assessment, Organizational Change Management and Business Process Re-Engineering were the least reported external services included in the scope of their SIS project.

Cutover occurs when testing of the new system is complete and regular usage begins.

IT leaders were asked which services were included in the scope of their district’s project.
Teachers Are Not Fully Utilizing the Scope of Functionality Acquired During LMS Implementations
Small Districts are Likely to Use More LMS Functions

Across all district sizes, the top LMS functional scope areas in use at school sites are Content Management and Sharing, Assignments, Quiz/Test scores, Class participation, Lesson Plans, and Professional Development.

All districts identified Student Messaging and Notifications as the least functional scope area in use at school sites.

Small districts appear to have more robust LMS solutions installed at their sites compared to medium and large districts.

IT leaders were asked which functional scope areas are in use at their site.
Teachers Report Using LMS Solutions Primarily for Entering Grades and Tracking Assignments; Less for Course Content Development and Delivery

- Despite the fact that LMS solutions are acquired primarily for content management and sharing, fewer than 40% of Teachers report using their LMS solution for curriculum development.
- Almost half of Teachers utilize their LMS solution for capturing data such as entering grades and tracking assignments.

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Data Capture Uses of LMS Solutions

- Entering grades: 49%
- Tracking assignment completion: 47%
- Entering attendance: 42%

Instructional Content Development and Delivery Uses of LMS Solutions

- Curriculum development: 39%
- Communicating with parents: 38%
- Communicating with students: 36%
- Posting/collecting assignments: 34%

Teachers were asked which capabilities of their LMS do they personally use.
With Some Exceptions, Districts Report Being On-Budget With Respect to Their SIS and LMS Projects
Gartner Benchmark Data Shows 68% of Education Industry Implementation Projects are Completed On-Budget

- On-budget percentage is defined as projects on-budget complete divided by total projects complete within the year.
- The on-budget project completion average across all industries is 67%.

Source: Gartner IT Key Metrics Data (December 2011)
Gartner Benchmark Data Measures the Education Industry Budget Variance for Implementation Projects at 10%

- Budget variance is defined as amount over project budget divided by the amount of planned project budget.
- The education industry budget variance is lower than the all industry average of 14%.

<table>
<thead>
<tr>
<th>Industry</th>
<th>Budget Variance</th>
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<tbody>
<tr>
<td>Average</td>
<td>14%</td>
</tr>
<tr>
<td>Government - National/International</td>
<td>23%</td>
</tr>
<tr>
<td>Insurance</td>
<td>15%</td>
</tr>
<tr>
<td>Transportation</td>
<td>15%</td>
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<tr>
<td>Software Publishing and Internet Svcs</td>
<td>15%</td>
</tr>
<tr>
<td>Retail and Wholesale</td>
<td>14%</td>
</tr>
<tr>
<td>Industrial Manufacturing</td>
<td>14%</td>
</tr>
<tr>
<td>Food and Beverage Processing</td>
<td>14%</td>
</tr>
<tr>
<td>Government - State/Local</td>
<td>14%</td>
</tr>
<tr>
<td>Energy</td>
<td>13%</td>
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<tr>
<td>Professional Services</td>
<td>13%</td>
</tr>
<tr>
<td>Media and Entertainment</td>
<td>13%</td>
</tr>
<tr>
<td>Banking and Financial Svcs</td>
<td>12%</td>
</tr>
<tr>
<td>Utilities</td>
<td>12%</td>
</tr>
<tr>
<td>Pharmaceuticals, Life Sciences and Medical...</td>
<td>12%</td>
</tr>
<tr>
<td>Industrial Electronics and Electrical...</td>
<td>11%</td>
</tr>
<tr>
<td>Construction, Materials and Natural Resources</td>
<td>10%</td>
</tr>
<tr>
<td>Education</td>
<td>10%</td>
</tr>
<tr>
<td>Telecommunications</td>
<td>8%</td>
</tr>
<tr>
<td>Healthcare Providers</td>
<td>6%</td>
</tr>
</tbody>
</table>

Source: Gartner IT Key Metrics Data (December 2011)
The Majority of SIS Projects are Reported as On-Budget With the Exception of Medium-Sized Districts Where One-Third Report Being Over-Budget

- On average, 68% of IT leaders report their SIS project on-budget which aligns with the education industry average of 68%.
- IT leaders from small and large districts report their SIS project on-budget while only half of medium districts report being on-budget.
- 10 to 15% of all districts reported their projects as being under-budget.

**IT Leaders’ SIS Project Performance -- Budget**

IT leaders were asked if they were over or under their project budget.
IT Leaders Report Medium-Sized Districts Are On-Budget for LMS Projects More Than Small and Large Districts

IT Leaders’ LMS Project Performance -- Budget

- On average, 84% of IT leaders report their LMS project on-budget which is much higher than the education industry average of 68%.
- 16% of Large districts report their LMS project over-budget.
- LMS projects were on-budget more so than SIS project budgets.

IT leaders were asked if they were over or under their project budget.
District Leaders, Similar to IT Leaders, Report Projects are Primarily On-Budget

Both 75% of District and IT leaders report their projects on-budget which is higher than the education industry average of 68%.

District and IT leader SIS and LMS budget performances were averaged, resulting in the average percentages in the chart.

<table>
<thead>
<tr>
<th></th>
<th>District Leaders</th>
<th>IT Leaders</th>
</tr>
</thead>
<tbody>
<tr>
<td>Under-Budget</td>
<td>7%</td>
<td>9%</td>
</tr>
<tr>
<td>On-Budget</td>
<td>75%</td>
<td>75%</td>
</tr>
<tr>
<td>Over-Budget</td>
<td>18%</td>
<td>16%</td>
</tr>
</tbody>
</table>

District and IT leaders were asked if they were over or under their project budget.
Implementation Projects are More Frequently On-Schedule Compared to the Education Industry Average; However, 40% of Projects are Reported as Behind Schedule
Gartner Benchmark Data Reports 53% of Education Industry Application Projects are Completed On-Time

- Average on-time percentage is defined as on-time projects complete divided by total projects complete within the year.
- The Education industry falls below the average (57%) across all industries.
- The averages reported by District and Technology leaders are higher than industry averages.

Source: Gartner IT Key Metrics Data (December 2011)
Gartner Benchmark Data Measures the Education Industry Schedule Variance for Implementation Projects at 20%

Schedule variance is defined as extra days divided by total planned project duration.

Source: Gartner IT Key Metrics Data (December 2011)
65% of IT leaders Report Their SIS Implementation Project Schedule On-Time, Which is Higher Than the Education Industry Average of 53%
25% of Small and Large Districts Report Their LMS Implementation Projects are Behind Schedule

- On average, 74% of IT leaders reported their LMS project schedule on-time; much higher than the education industry average of 53%.
- Medium districts reported their LMS project on time (95%) more so than small and large districts.
- 33% of large districts report being behind schedule on their LMS implementation.
- 24% of small districts report being behind schedule on their LMS implementation.

IT leaders were asked if they were over or under their project schedule.

IT Leaders’ LMS Project Performance -- Schedule

- Small District
- Medium Districts
- Large Districts
The Majority of IT Leaders Report SIS/LMS Projects Typically On-Time; However, District Leaders Report Nearly 40% Are Behind Schedule

- Compared to IT leaders, 36% of District leaders across all district sizes reported their SIS/LMS projects behind schedule.
- District leader responses were more aligned with education industry averages for project schedules.
- Rarely did districts complete their SIS/LMS projects ahead of schedule.

District and IT leaders were asked if they were over or under their project schedule.
Gartner Benchmark Data Reports Factors in Projects Being Late or Over-Budget

Significant Factors in Projects Being Late or Over-Budget

- Poor Initial Scope: 3.8
- Resource Availability: 3.6
- Scope Creep: 3.6
- Shifting Priorities: 3.3
- Technical Expertise: 2.5

- Poor initial scope, resource availability, scope creep and shifting priorities are all ranked similarly.
- Poor initial scope and scope creep are related, both to missing a schedule and to each other. If the initial scoping is done poorly, there will be scope creep.
- Cost is the least-cited failure factor though cost estimates should only be provided using proven estimating techniques that factor in risk since initial cost estimates will set a baseline in the minds of project sponsors.
- Estimating is dependent on functional requirements so by addressing the functionality failure factor, it can also be applied to the cost failure factor.

Source: Gartner IT Key Metrics Data (December 2011)
About Gartner
The Power of Gartner Combines Consulting & Benchmarking, Research, Executive Programs and Events

Consulting & Benchmarking
- Provides customized solutions to unique client needs through on-site, day-to-day support
- 1,500 engagements delivered each year by the 500 Gartner consultants
- Hundreds of millions of dollars in aggregate cost savings to clients
- Improved business performance by benchmarking client spending and best practices; helps clients measure, understanding and manage performance
- Largest IT performance repository in the industry, drawing on 5,500 IT benchmarks a year

Research
- World leader in technology and industry coverage
- 650 analysts engage in 260,000 one-to-one client interactions each year
- Web site alone includes 73,000 searchable documents across 1,000 technology and business topics

Executive Programs
- High-level peer networking and information sharing
- Annual CIO agenda developed from the responses of 1,500 CIOs in 30 countries, and then customized per client
- 3,700 CIOs and IT executives get customized advice and peer exchange opportunities

Events
- Worldwide events that bring executives together to learn, compare experiences and solve problems
- 42,000+ people at 70 events annually
Gartner Consulting Education Vertical

Overview

Gartner has extensive experience assisting K-12 and higher education organizations address opportunities and business challenges through leverage of information technology.

Capabilities

We have the data, tools and capabilities to help.

- Deep and broad knowledge of all facets of administrative systems and business processes
- Up-to-date trends and perspectives on a continuously evolving vendor marketplace
- Experience in challenges integrating new systems into legacy environments with a diverse set of stakeholders and decision makers
- Methodologies, tools and decision support data that have been developed and refined "in the heat of battle," and are continuously refreshed and improved
- Experienced consultants and analysts with understanding of unique requirements and organizational considerations

Gartner Consulting Advantage

- Deliverables based on unique sources of information, backed by Gartner Research and unmatched benchmarking data
- Accelerated results due to leverage of unique research and information
- Fact-based analysis and recommendations
- Support uniquely focused on management of IT
- Documented track record of tangible results
- Customized support with industry expertise
- Deep knowledge delivered by our specialists in your specific area
- Experienced practitioners that have solved similar problems many times before
- Objective and independent support with no interest in any vendor or technology