

TECHNOLOGY NEEDS ASSESSMENT FOR SMS

Executive Summary

The objective of the Technology Needs Assessment is to determine how technology is being implemented in education at Somewhere Middle School and what interventions need to occur to make the use of technology more positively affect student learning. Using the Performance Pyramid model, this study focuses primarily on the classroom activities of teachers and students as well as past training efforts, opinions, feelings, and impressions. Data was gathered from both secondary and primary sources, analyzed, organized, and presented in this written report

Problem Statement

In an optimal situation, technology in schools should be frequently integrated into lessons to facilitate knowledge construction and higher-order thinking. However, according to teacher lesson plans, it appears that most teachers at SMS do not generally use technology to its fullest potential despite the district's push to improve overall student learning and achievement. Note that teacher lesson plans are posted online for District Employees only and are therefore not included in this report.

Organizational Description

Somewhere Middle School (SMS) is a rural public education institution of about 550 students in grades 6-8 and is part of the Somewhere School District (SSD). In addition to the teaching staff 34 teachers, SMS also employs 2 principals, 2 secretaries, 6 teacher's aids, 4 custodians, and 1 librarian. The building contains a great deal of computer technology with four computer labs, many classroom computers, and several SmartBoards. During the past year, all four computer labs were equipped with 22 new computers each. Also, SMS is a new recipient of the eMINTS grant which will deliver six sets of classroom computers in the Spring of 2009 and staff training for the teachers receiving the new equipment. While not a wealthy school district, the SSD has modern facilities and competitive salaries for teachers.

Audience Analysis

The primary individuals who will be assessed are the 34 teachers who work in the SMS building. However, the principals and higher administrative personnel who are involved with technology and/or professional development are also included peripherally as they share responsibility for teacher training and performance. Among the teachers, age and experience vary widely though there is a roughly even mix of veterans and novices. Responsibilities also vary by teacher depending upon the subjects they teach. Since SMS is a small building, there

are no department chairs or other leadership structures among the teachers; all teachers report directly to the principal and assistant principal.

Data Sources and Techniques

Secondary

| <u>Source</u> | <u>Technique</u> | <u>Rationale</u> |
|----------------------------------|----------------------|----------------------------------------------------------------------------------------------------------------------|
| Professional Development Plans | Extant Data Analysis | To establish how technology was included in the state mandated District and Building Professional Development Plans |
| Professional Development Agendas | Extant Data Analysis | To determine how District and Building professional development activities have included technology training |
| Technology Training Agendas | Extant Data Analysis | To establish what topics have been covered by the technology department during their past training activities |
| SMS Computer Lab Sign-up Records | Extant Data Analysis | To verify how often the three open computer labs at SMS have been used and what kinds of activities occurred therein |

Primary

| <u>Source</u> | <u>Technique</u> | <u>Rationale</u> | <u>Instrument</u> |
|-------------------|------------------|------------------------------------------------------------------------------------------------|-------------------|
| Teaching staff | Survey | To gather data from as many teachers as possible | Appendix A |
| SMS Students | Survey | To gather data from a large sample of students | Appendix B |
| Library Computers | Observation | To gather data about how computers were actually being used in the library over a span of time | Appendix C |

Data Gathering Process

The data gathering process began with requests for extant data from school administrators. Professional Development plans and agendas were requested and obtained electronically from the Assistant Superintendent of Curriculum and Assessment. The Technology Training agendas were requested via email to the District Technology Coordinator and were also delivered electronically. SMS Computer Lab sign-up records were provided as hard copy from the SMS librarian.

Following the gathering of extant data, the focus of the study shifted to primary data. The Student Survey was administered online and concluded in a single school day. Requests to SMS teachers to participate in the Teacher Survey were sent out via email with a link to the online survey. The Teacher Survey remained open for one week with a reminder email going out prior to the last day of the survey. Of the 34 SMS teachers, 25 completed the survey within the given time frame.

The observation portion of the study was conducted covertly during the same week as the online teacher's survey. The goal of the observation was to get several quick "snap-shot" observations for each day of the week. Data gathered from the pilot observation which occurred earlier in the school year were also included in the final observation results.

Data Analysis Process

Professional Development Plans

Both the District Professional Development plan and the Building Professional Development plan were examined to determine how many objectives related to the use of technology in education were included in each.

Professional Development Agendas

These agendas were used to ascertain what percentage of mandatory professional development hours were devoted to educational technology issues. The agendas spanned the past calendar year and included both district-wide and building activities.

Technology Training Agendas

This data provided insight into the topics that have been covered at District Technology Training meetings and also how many SMS teachers were in attendance at each. Individual topics were sorted into two categories: those that primarily taught how to use various technology tools (i.e. web pages, podcasts, Outlook, etc.) and those that taught teachers how to implement technology in the classroom for the benefit of student learning. It should be noted that these meetings were not mandatory nor were teachers compensated for their time.

SMS Computer Lab Sign-Up Records

These records revealed two important sets of data: how teachers were planning to use the computers in the three SMS computer labs and also how many class periods the computer labs were not used at all. Over a one month span, computer activities for each class period were categorized and tallied. The data was entered into a pie chart to illustrate and compare percentages for each category. Additionally, the results were compared to the Library Computer observation data discussed in a later section.

Teacher Survey

The results of the survey were downloaded into an Excel file then averaged and sorted. Questions from the survey were designed to establish what the teachers believed to be the ideal uses of technology in education (optimal). The questions also helped determine the teachers' perceptions of technology usage at SMS as a whole and as individuals. Results from the survey were organized into a line graph.

Student Survey

Like the Teacher Survey, the Student Survey was also designed to establish what students believe to be the optimal use of technology at SMS and what they believe is actually happening. The results were downloaded into Excel and were added to the same line graph as the teacher scores. Having all of the survey results on one line chart allows for comparisons between sets of data to identify general trends. Finally, the optimal and actuals for students and teachers were averaged together and placed on a line graph (see “Selected Data Illustrations” section) to identify the largest gaps.

The last set of student questions related to what kinds of activities students were using technology for at SMS and were designed to be analyzed along with the Library Computer observation discussed in the next section.

Library Computers

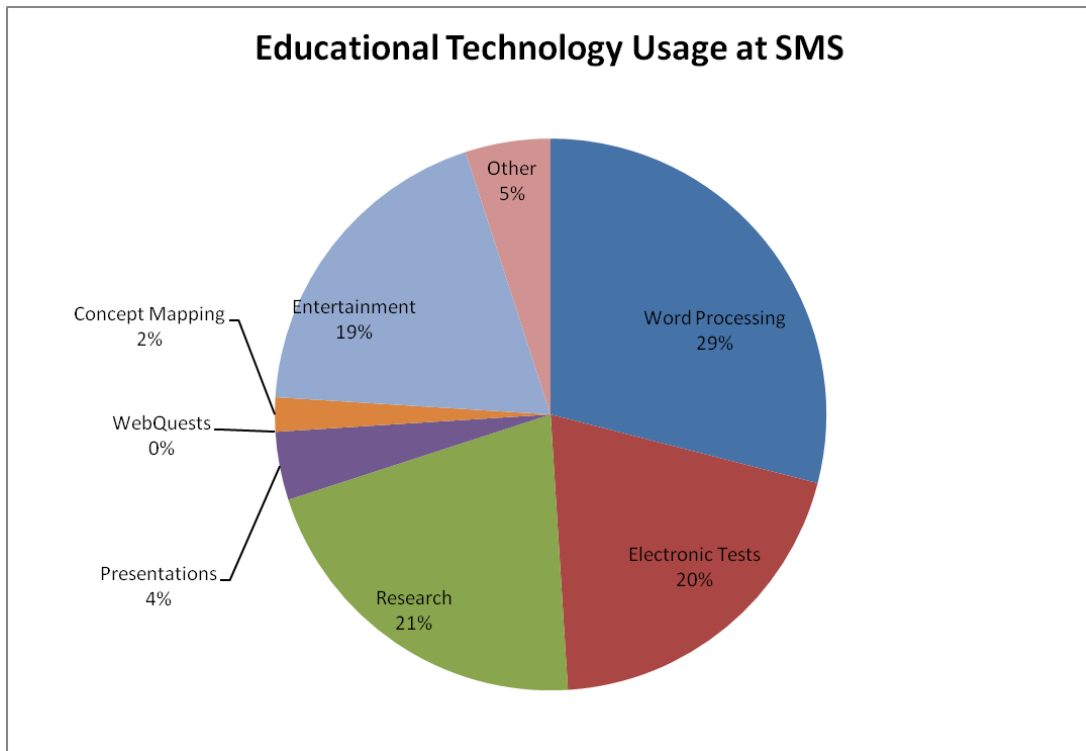
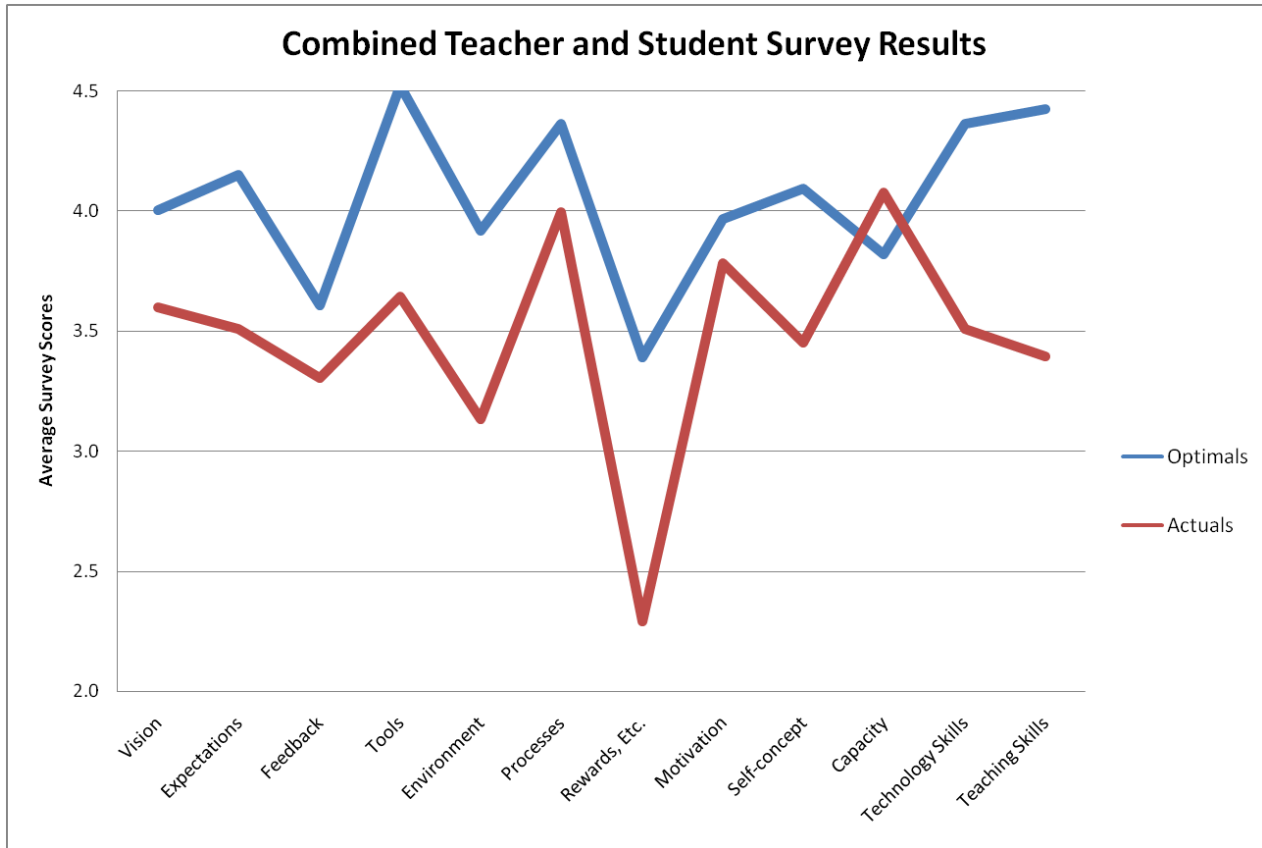
The primary purpose of the Library Computer observation was to ascertain how technology resources were being used at SMS. Data was also included from the SMS Computer Lab Sign-Up Records and the last set of questions in the Student Survey allowing for triangulation of results. The three sets of relevant data were combined in a pie chart (see “Selected Data Illustrations” section) to illustrate the most common technology activities.

Data Results

| <u>Technique/Instrument</u> | <u>Source</u> | <u>Results</u> |
|-----------------------------|----------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Extant Data Analysis | Professional Development Plans | The District PD Plan has 3 objectives with a total of 26 activities to meet the objectives, only one of which relates to technology. The SMS PD Plan has one full objective dedicated to technology integration with two supporting activities. However, one of the activities mentions eMINTS which only applies to 12 SMS teachers and the other activity is extremely vague. |
| Extant Data Analysis | Professional Development Agendas | So far in 2008 there have been a total of 37 hours of required professional development for SMS teachers. Three of those hours, or 8%, have been devoted to technology topics |
| Extant Data Analysis | Technology Training Agendas | There have been 15 voluntary Technology Workshops since May 2008 only one of which has been held at the SMS campus. There were six SMS teachers who participated in 1 workshop each, two SMS teachers who attended 2 different workshops, and one SMS teacher who participated in 4 different workshops. Furthermore, none of the workshops involved teachers learning how to implement technology to enhance learning but focused instead on learning various technology applications. |

| | | |
|-----------------------------|----------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Extant Data Analysis | SMS Computer Lab Sign-up Records | Over the course of a four week period, computer labs were empty and unused 66% of the time. Results pertaining to how the labs were being utilized when they were occupied was combined with the observation results. |
| Teacher Survey (Appendix A) | Teaching staff | The largest gaps occurred in the pyramid areas of Vision, Expectations, Tools, Environment, Rewards/Incentives/Recognition, and Knowledge/Skills. The areas of Rewards/Incentives/Recognition were considered to be of lowest importance while Knowledge/ Skills were highest. Comparing teachers perceptions about their own performance using technology versus their perception of SMS as a whole, teachers almost universally rated themselves higher, so Self-Concept does not appear to be a major concern. Other non-issues appear to be in the areas of Feedback, Processes, Motivation, and Capacity. |
| Student Survey (Appendix B) | SMS Students | Interestingly, the student results followed the same general trends as the teacher results. The optimalms in particular were very close though the actuals from the teachers were generally more pessimistic. As such, some of the areas of concern to the teachers do not to be as much of a concern to the students. In particular, Vision, Expectations and Environment had noticeably smaller gaps. The final section of question results were combined with the observation data. |
| Observation (Appendix C) | Library Computers | Combining the results of the observation with data from the Computer Lab Sign-Up Records and the Student Survey yielded the following results for how technology is being used: Word Processing = 29%, Electronic Tests = 20%, Research = 21%, Entertainment = 19%, Other = 5%, Presentations = 4%, Concept Mapping = 2%, WebQuests = 0%. Additional data gathered from the observation: teachers were present in the library with their students 77% of the time, help was available to students 90% of the time from the teacher or librarian, and teachers were engaged with their students 57% of the time. Students appeared to be very proficient at using the computers, but they were occasionally found to be off task in the computer lab (17% of the time). |

Selected Data Illustrations



General Data Summary and Interpretation

Vision/Organizational Culture – The teacher survey indicates that there may be issues in these areas. However, the lack of technology related goals in the Professional Development Plans and the lack of paid Professional Development time for technology training are stronger indicators of a problem. It does not appear that technology training is valued.

Expectations/Feedback – With a lack of Vision in the organization comes an obvious lack of Expectations or Feedback from administrators. The surveys also tend to support the idea that Expectations are set rather low.

Tools/Resources – While the surveys seem to indicate that both teachers and students feel they do not have enough technology resources, the fact that the computer labs sat empty for 66% of the total class periods over a month would seem to contradict the survey results. It is more likely that teachers simply do not know how to use the Resources they have available to them.

Environment – The teacher survey revealed that collaboration between teachers is highly valued yet sorely lacking and the low number of Professional Development hours would support that conclusion.

Processes – No data collected suggested major issues in this area.

Rewards/Incentives/Recognition – While the surveys revealed a gap in these areas, these areas are considered of low relative importance to the survey participants. A lack of Rewards/Incentives/Recognition is part of the reality of working in a public education environment.

Motivation – The survey data would suggest that teachers are willing to use technology in their lessons but they do not know how. There is also little Incentive to gain the needed skills since teachers are not paid for their training efforts nor are they Expected to use technology in their lessons.

Self-Concept – The survey data did not indicate a major gap between optimal and actuals in this area. Also the fact that teachers generally rated their individual performance higher than that of the whole school would also support that Self-Concept is not an issue.

Capacity – No data collected suggested major issues in this area.

Skills/ Knowledge – All of the data collected suggests major issues in this area. Teachers are not receiving enough technology training and that which they are receiving does not seem to be particularly effective.

Knowledge/Skills Needs

It is apparent from the data that the teaching staff at SMS needs significantly more technology training, especially in the areas related to student learning. However, basic computer skills must be achieved first. Following the order they are presented, the subsequent objectives would be appropriate to meet the Knowledge/Skills needs of the SMS staff:

- *Objective 1* - SMS teachers will demonstrate proficient knowledge of basic computer application skills.
- *Objective 2* – SMS teachers will participate in training activities designed to help them apply technology tools for the benefit of student learning.
- *Objective 3* - SMS teachers will use technology to stimulate higher-order thinking in students thus enhancing the quality of student learning.

Recommendations

To begin, it is recommended that the SSD and SMS revise their Professional Development Plans to include more specific technology related objectives and activities. Additional technology training hours must also be included in the mandatory Professional Development activities. Basic computer skill requirements should be added to the annual evaluation process for teachers and training should be offered for those teachers who need it. When teachers participate in training on any technology tool or application, the trainer must also include methods by which the technology can be used to benefit student learning. Training sessions for productivity tools such as word processing, email, electronic gradebooks, etc., should be efficient and kept to a minimum. Efforts should be made to ensure that individuals providing training are qualified and effective. Furthermore, it is highly recommended that the District implement a technology coaching program in which expert users of technology are available for extended periods in classrooms with teachers who are learning new applications of technology in their teaching. Finally, the evaluation process should be modified to include expectations that teachers use technology tools to enhance student achievement.

Teacher Survey

Note: Survey was created and administered via Questionpro.com. Complete survey results online at <http://www.questionpro.com/akira/ShowResults?id=1090598&mode=data>.

How many years have you been teaching (counting the current school year)?

| Frequency Analysis | | | | | | | | |
|--------------------|--------|-------|---------|----------------------|-----|-----|-----|------|
| | Answer | Count | Percent | 20% | 40% | 60% | 80% | 100% |
| 1. | 1-5 | 7 | 28.00% | <input type="text"/> | | | | |
| 2. | 6-10 | 7 | 28.00% | <input type="text"/> | | | | |
| 3. | 11-20 | 7 | 28.00% | <input type="text"/> | | | | |
| 4. | 21-30 | 4 | 16.00% | <input type="text"/> | | | | |
| 5. | 31+ | 0 | 0.00% | <input type="text"/> | | | | |

Please rate **how important** you feel each of the following items are to the overall success of SMS in terms of student achievement.

| Overall Matrix Scorecard | | | | | | | | |
|--------------------------|-------------------------------------------------------------------------------------------------------------|-------|-------|----------------------|---|---|---|--------------------|
| | Question | Count | Score | 1 - Not important | 2 | 3 | 4 | 5 - Very Important |
| 1. | Integrating technology into lessons | 25 | 3.920 | <input type="text"/> | | | | |
| 2. | Expecting teachers to gain new technology skills | 25 | 4.040 | <input type="text"/> | | | | |
| 3. | Assessing technology usage as part of the teacher evaluation process | 25 | 3.400 | <input type="text"/> | | | | |
| 4. | Providing sufficient technology resources for students and teachers (computers, software, projectors, etc.) | 25 | 4.400 | <input type="text"/> | | | | |
| 5. | Frequent collaboration with other teachers about using technology in the classroom | 25 | 4.040 | <input type="text"/> | | | | |
| 6. | Having processes in place to receive assistance with classroom technology issues | 25 | 4.280 | <input type="text"/> | | | | |

APPENDIX A – Teacher Survey

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|-----|------------------------------------------------------------------------------------------------|----|-------|----------------------|
| 7. | Rewards/incentives/recognition for teachers who effectively use technology with students | 25 | 3.240 | <input type="text"/> |
| 8. | Teachers being willing to use technology in lessons | 25 | 4.000 | <input type="text"/> |
| 9. | Teachers feeling successful in integrating technology | 25 | 4.120 | <input type="text"/> |
| 10. | Employing teachers who have the ability to learn new technology skills | 25 | 3.680 | <input type="text"/> |
| 11. | Providing effective training for teachers on new technology skills | 25 | 4.600 | <input type="text"/> |
| 12. | Providing effective training for teachers on how to use technology to improve student learning | 25 | 4.560 | <input type="text"/> |

Please rate **how successful** you feel SMS is **as a whole** in each of the following areas at the present time.

| Overall Matrix Scorecard | | | | | | | | |
|--------------------------|-------------------------------------------------------------------------------------------------------------|-------|-------|----------------------|---|---|---|---------------------|
| | Question | Count | Score | 1 - Not Successful | 2 | 3 | 4 | 5 - Very Successful |
| 1. | Integrating technology into lessons | 25 | 2.960 | <input type="text"/> | | | | |
| 2. | Expecting teachers to gain new technology skills | 25 | 3.160 | <input type="text"/> | | | | |
| 3. | Assessing technology usage as part of the teacher evaluation process | 25 | 3.080 | <input type="text"/> | | | | |
| 4. | Providing sufficient technology resources for students and teachers (computers, software, projectors, etc.) | 25 | 3.400 | <input type="text"/> | | | | |
| 5. | Frequent collaboration with other teachers about using technology in the classroom | 25 | 2.800 | <input type="text"/> | | | | |
| 6. | Having processes in place to receive assistance with classroom technology issues | 25 | 3.480 | <input type="text"/> | | | | |

APPENDIX A – Teacher Survey

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|-----|------------------------------------------------------------------------------------------|----|-------|----------------------|
| 7. | Rewards/incentives/recognition for teachers who effectively use technology with students | 25 | 2.320 | <input type="text"/> |
| 8. | Teachers being willing to use technology in lessons | 25 | 3.440 | <input type="text"/> |
| 9. | Teachers feeling successful in integrating technology | 25 | 3.040 | <input type="text"/> |
| 10. | Employing teachers who have the ability to learn new technology skills | 25 | 3.680 | <input type="text"/> |
| 11. | Effective training for teachers on new technology skills | 25 | 3.360 | <input type="text"/> |
| 12. | Effective training for teachers on how to use technology to improve student learning | 25 | 3.040 | <input type="text"/> |

As an individual, how often:

| Overall Matrix Scorecard | | | | | | | |
|-------------------------------------------------------------------------------------|-------|-------|----------------------|--------|-----------|------------|--------|
| Question | Count | Score | Never | Rarely | Sometimes | Frequently | Always |
| 1. Are you integrating technology into lessons? | 25 | 3.400 | <input type="text"/> | | | | |
| 2. Are you expected to gain new technology skills? | 25 | 3.400 | <input type="text"/> | | | | |
| 3. Are you assessed for technology usage in your evaluation process? | 25 | 3.080 | <input type="text"/> | | | | |
| 4. Are you provided with sufficient technology resources for you and your students? | 25 | 3.400 | <input type="text"/> | | | | |
| 5. Do you collaborate with other teachers about using technology in the classroom? | 25 | 3.000 | <input type="text"/> | | | | |
| 6. Do you receive timely assistance with classroom technology issues? | 25 | 4.040 | <input type="text"/> | | | | |

APPENDIX A – Teacher Survey

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|-----|------------------------------------------------------------------------------------------------|----|-------|----------------------|
| 7. | Are you getting rewards/incentives/recognition for effectively using technology with students? | 25 | 1.840 | <input type="text"/> |
| 8. | Are you willing to use technology in lessons? | 25 | 4.040 | <input type="text"/> |
| 9. | Do you feel successful in integrating technology? | 25 | 3.360 | <input type="text"/> |
| 10. | Do you feel you have the ability to learn new technology skills? | 25 | 4.200 | <input type="text"/> |
| 11. | Are you receiving effective training on new technology skills? | 25 | 3.400 | <input type="text"/> |
| 12. | Are you receiving effective training on how to use technology to improve student learning? | 25 | 2.840 | <input type="text"/> |

Student Survey

Note: Survey was created and administered via Questionpro.com. Complete survey results online at <http://www.questionpro.com/akira/ShowResults?id=1103065&mode=data>.

What grade are you in?

| Frequency Analysis | | | | | | | |
|--------------------|------------|-------------|----------------------|-----|-----|-----|------|
| Answer | Count | Percent | 20% | 40% | 60% | 80% | 100% |
| 1. 6th | 35 | 33.65% | <input type="text"/> | | | | |
| 2. 7th | 41 | 39.42% | <input type="text"/> | | | | |
| 3. 8th | 28 | 26.92% | <input type="text"/> | | | | |
| Total | 104 | 100% | | | | | |

How **how important** are the following items to you?

| Overall Matrix Scorecard | | | | | | | |
|--------------------------------------------------------------------------------------------------------------------|-------|-------|----------------------|---|---|---|--------------------|
| Question | Count | Score | 1 - Not important | 2 | 3 | 4 | 5 - Very Important |
| 1. Using technology in lessons at school | 103 | 4.078 | <input type="text"/> | | | | |
| 2. Having teachers who know a lot about using technology | 103 | 4.243 | <input type="text"/> | | | | |
| 3. Having principals who expect teachers to use technology | 103 | 3.806 | <input type="text"/> | | | | |
| 4. Having enough technology tools for students and teachers to use (such as computers, software, projectors, etc.) | 103 | 4.631 | <input type="text"/> | | | | |
| 5. Teachers working together to use technology in lessons | 103 | 3.777 | <input type="text"/> | | | | |
| 6. Teachers being able to get help if something goes wrong with technology | 103 | 4.447 | <input type="text"/> | | | | |

APPENDIX B – Student Survey

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|-----|--------------------------------------------------------------------------|-----|-------|----------------------|
| 7. | Rewarding or recognizing teachers who use technology with students | 103 | 3.534 | <input type="text"/> |
| 8. | Having teachers who feel good about using technology in lessons | 103 | 3.922 | <input type="text"/> |
| 9. | Having teachers who feel successful at using technology in lessons | 103 | 4.068 | <input type="text"/> |
| 10. | Hiring teachers who are able to learn new technology skills | 103 | 3.961 | <input type="text"/> |
| 11. | Training teachers with new technology skills | 103 | 4.117 | <input type="text"/> |
| 12. | Training teachers on how to use technology to help students learn better | 103 | 4.301 | <input type="text"/> |

Please answer the following questions according to **your opinion**

| Overall Matrix Scorecard | | | | | | | | |
|--------------------------|---------------------------------------------------------------------------------------------------------------|-------|-------|----------------------|--------|-----------|---------|--------|
| | Question | Count | Score | Never | Rarely | Sometimes | Usually | Always |
| 1. | Do you use technology at school? | 103 | 4.010 | <input type="text"/> | | | | |
| 2. | Do your teachers know a lot about using technology? | 103 | 3.738 | <input type="text"/> | | | | |
| 3. | Do your principals expect teachers to use technology? | 103 | 3.524 | <input type="text"/> | | | | |
| 4. | Do you and your teachers have enough technology tools to use (such as computers, software, projectors, etc.)? | 103 | 3.883 | <input type="text"/> | | | | |
| 5. | Do your teachers work together to use technology in lessons? | 103 | 3.359 | <input type="text"/> | | | | |
| 6. | Are your teachers able to get help if something goes wrong with technology? | 103 | 4.243 | <input type="text"/> | | | | |

APPENDIX B – Student Survey

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|-----|---------------------------------------------------------------------------------|-----|-------|----------------------|
| 7. | Are your teachers rewarded or recognized for using technology with students? | 103 | 2.505 | <input type="text"/> |
| 8. | Do you think your teachers feel like using technology in lessons? | 103 | 3.825 | <input type="text"/> |
| 9. | Do you think your teachers feel successful at using technology in lessons? | 103 | 3.718 | <input type="text"/> |
| 10. | Do you think your teachers are able to learn new technology skills? | 103 | 4.204 | <input type="text"/> |
| 11. | Are your teachers being taught new technology skills? | 103 | 3.641 | <input type="text"/> |
| 12. | Are your teachers being taught to use technology to help students learn better? | 103 | 3.854 | <input type="text"/> |

How often do you **use technology at school** for the following purposes?

| Overall Matrix Scorecard | | | | | | | |
|--------------------------|---------------------------------------------------------|-------|-------|----------------------|-------------|-----------|------------|
| | Question | Count | Score | Never | Hardly Ever | Sometimes | Very Often |
| 1. | Word processing for assignments (such as typing papers) | 102 | 3.098 | <input type="text"/> | | | |
| 2. | Word processing for fun (such writing notes to friends) | 102 | 2.069 | <input type="text"/> | | | |
| 3. | Research for assignments | 102 | 3.225 | <input type="text"/> | | | |
| 4. | Reading about stuff you like | 102 | 2.735 | <input type="text"/> | | | |
| 5. | Creating PowerPoint presentations for assignments | 102 | 2.863 | <input type="text"/> | | | |
| 6. | Creating PowerPoint presentations for fun | 102 | 2.078 | <input type="text"/> | | | |
| 7. | Playing educational games | 102 | 2.843 | <input type="text"/> | | | |
| 8. | Playing games just for fun | 102 | 3.284 | <input type="text"/> | | | |

APPENDIX B – Student Survey

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|-----|---------------------------------------------------------------------------|-----|-------|----------------------|
| 9. | Desktop publishing for assignments (such as creating flyers or brochures) | 102 | 2.078 | <input type="text"/> |
| 10. | Desktop publishing for fun | 102 | 1.902 | <input type="text"/> |
| 11. | Electronic tests (such as Reading Counts or class tests) | 102 | 3.000 | <input type="text"/> |
| 12. | Creating concept maps (like Inspiration or Kidspiration) | 102 | 1.892 | <input type="text"/> |
| 13. | Practicing keyboarding skills | 102 | 3.520 | <input type="text"/> |
| 14. | Using Excel to create spreadsheets | 100 | 1.980 | <input type="text"/> |
| 15. | Building web pages | 101 | 1.851 | <input type="text"/> |

Performance Pyramid Observation Guide for SMS - Date: _____

| | | | | | | |
|-------------------------------------------------------|-------------------|--|--|--|--|--|
| Time: | | | | | | |
| <u>Environment/ Processes/ Tools</u> | | | | | | |
| Is the teacher present? | | | | | | |
| Can the students get help if they need it? | | | | | | |
| Which tools are being used? | | | | | | |
| <u>Expectations</u> | | | | | | |
| Number of students who are using the computers for: | Word processing? | | | | | |
| | Electronic tests? | | | | | |
| | Research? | | | | | |
| | Presentations? | | | | | |
| | WebQuests? | | | | | |
| | Concept Mapping? | | | | | |
| | Playing games? | | | | | |
| | Net Surfing? | | | | | |
| | Other? (describe) | | | | | |
| Describe the observed activities | | | | | | |
| <u>Knowledge and Skills/Capacity</u> | | | | | | |
| Do students know how to use the computer? | | | | | | |
| Do students know how to do their assignment? | | | | | | |
| <u>Rewards/Recognition/Incentives/Feedback</u> | | | | | | |
| Is teacher/librarian engaged with students? | | | | | | |
| What is he/she doing? | | | | | | |
| <u>Vision/Motivation/Self-Concept</u> | | | | | | |
| Are students engaged in their assigned activity? | | | | | | |

Other Notes: