Gadsden County School District:
School Observation Measure and Survey of Computer Use, 2006-07

During the 2006-07 academic year, two grant programs were implemented in the Gadsden County School District. "Digital Math" and "Leveraging Laptops" both provided classroom hardware and professional development. The "Digital Math" project also provided online resources for students. "Leveraging Laptops" provided laptop computers for eighth-grade students. "Digital Math" provided mobile laptop carts, interactive whiteboards, and classroom sets of iPod Mp3 players.

Schools were observed with the School Observation Measure (SOM) and Survey of Computer Use (SCU). Classroom observations were made in the fall and spring semesters at the schools. Student performance information is provided as a result of the work of five teachers who completed classroom inquiry projects. The summaries of these projects document the effects of classroom technology on a range of students. Seventeen teachers from three different schools in Gadsden County participated in the Leveraging Laptops Program, and 14 (response rate of 82%) of these teachers responded to a survey pertaining to teacher professional development experiences and perceptions, and use of computers in the classroom.

Setting

Teachers involved with the Leveraging Laptops Program from Gadsden County reported an average of 19.43 (SD=6.36) students per class. The teachers reported an average of 20.67 (SD=7.23) laptops and average of 6.86 (SD=8.64) desktops in their classrooms. Four teachers reported currently teaching English, 2 in mathematics, 1 in reading, 3 in science, 3 in social studies, and 1 reported other.

Teachers from all school levels participated in the program. One teacher reported teaching Pre-K, 1 taught Kindergarten, 1 taught 1st grade, 1 taught 2nd grade, 3 taught 6th grade, 3 taught 7th grade, 13 taught 8th grade, 1 taught 9th grade, 1 taught 10th grade, 1 taught 11th grade, 1 taught 12th grade, and 1 taught adult education.

Technology Used

Teachers in Gadsden County used productivity software packages more than other software classifications. Fifty percent or more teachers reported using word processing, spreadsheets, Draw/paint/graphics, presentation, and Internet browsing one or more times a week. Authoring, database, and concept mapping software packages were used much less frequently by teachers. Fifty percent or more teachers reported their students use word processing, draw/paint/graphic, presentation, and Internet browsing software at least once a month or more. Fifty percent or more teachers reported their students did not use spreadsheet, database, authoring, and concept mapping software at all.

Teachers and students also used other software packages. Fifty percent or more teachers reported using planning, problem-solving, and CD reference software at least once a month or more. More than 50% of teachers reported not using blogging, wiki, process tools, testing, ebooks, and podcasting software at all. Teachers reported that more than 50% of their students did not use planning, CD reference, blogging, wiki, Drill/practice/tutorial, problem-solving, process tools, testing, ebook, or podcasting software at all.

When looking at digital production software, both student and teacher use is much less frequent. Forty percent of teachers or more report using digital audio, video, and graphics organizer software packages at least once a month. Fifty percent or more teachers report never use podcasting or digital story-telling software packages. Sixty percent or more teachers report their students never use digital audio, video, podcasting, and digital story telling software. According to 36% or more of the teachers, their students use graphics organizers at least once a week.

Professional Development

Teachers involved with the Leveraging Laptops Program from Gadsden County had different paths to professional certification. Eight teachers came from approved college degree programs, 4 teachers earned college course certification, and 2 earned district alternative certification. Teachers reported an average of 9.29 (SD=7.56) years in the education profession, and an average of 2.5 (SD=3.59) years of using computers in their classrooms for the delivery of instruction.

Teachers involved were certified to teach in many areas including Professional Education (1), Biology 6-12 (1), Elementary Education K-6 (2), English 6-12 (3), ESOL (1), Exceptional Student Ed. K-12 (1), Middle Grade Science 5-9 (1), Middle Grade Mathematics 5-9 (2), Middle Grade Social Science 5-9 (3), Physical Education K-12 (1), and Social Sciences 6-12 (2).

Teachers reported acquiring their computer skills from a variety of sources, including as part of their college coursework, professional development, independent learning, interaction with other faculty and staff, distance learning courses, and the teaching and learning summer institutes. Table 1 shows the responses.

Table 1. Source of computing skills.

Computer Skills Source	1 (%)	2 (%)	3 (%)	4 (%)	5 (%)
As part of your college coursework	21.4	21.4	7.1	28.6	21.4
Professional Development	0	0	35.7	64.3	0
Independent learning	7.1	7.1	50	21.4	14.3
Interaction with other faculty/staff	0	35.7	14.3	35.7	14.3
Distance Learning courses	50	28.6	7.1	7.1	7.1
Teaching and Learning Summer Institute	0	21.4	28.6	42.9	7.1

1 – Not at all
2 - To a small extent
3 - To a moderate extent
4 - To a great extent
5 - Entirely

Teachers were asked to provide their attitudes towards their professional development opportunities. Table 2 illustrates the responses. Overall attitudes were positive with a 50% or more of responses reported as agree or strongly agree.

Table 2. Teacher attitudes toward professional development opportunities.

Professional development opportunities…	1 (%)	2 (%)	3 (%)	4 (%)	5 (%)
‣encourage me to think about how technology can support my teaching goals.	14.3	0	0	71.4	14.3
‣encourage me collaborate with my colleagues on technology integration.	14.3	7.1	14.3	50	14.3
‣encourage me to think about the contextual factors in my school that support or hinder my technology integration efforts.	14.3	7.1	0	57.1	21.4
‣help me think about how technology may change my teaching practices.	14.3	0	0	57.1	28.6
‣provide me with relevant knowledge, skills and abilities I can immediately use in my classroom.	14.3	7.1		57.1	21.4
‣encourage me to consider how technology can be used to facilitate student learning of content.	14.3	0	7.1	50	28.6
‣focus on both the technical and instructional skills required to integrate technology.	14.3	0	7.1	64.3	14.3
‣are traditionally in the form of after school workshops.	21.4	14.3	14.3	35.7	14.3
‣are consistent and continual.	21.4	7.1	14.3	50	7.1

1 - Strongly Disagree
2 - Disagree
3 - Neutral or no opinion
4 - Agree
5 - Strongly agree

Teaching and Instructional Practices: Student-Centered and Tool-based teaching practices

Teachers involved with the Leveraging Laptops Program reported the various teaching methods supported by the computers. Table 3 illustrates the responses. Fifty percent or more of teachers involved with the program in Gadsden County report using computers to support direct instruction, cooperative/collaborative learning, inquiry/research, discussion and communication, instructional delivery, instructional delivery, and as a learning/resource tool several times a week.

Table 3. Instructional method supported by computers.

Teaching method	0 (%)	1 (%)	2 (%)	3 (%)	4 (%)	5 (%)
For direct instruction	0	14.3	0	0	35.7	50
For team teaching	7.1	0	35.7	21.4	35.7	0
For cooperative /collaborative learning	0	7.1	0	7.1	42.9	42.9
In centers	7.1	0	42.9	14.3	21.4	14.3
For project-based learning	0	0	14.3	42.9	35.7	7.1
For sustained writing	7.1	7.1	28.6	7.1	21.4	28.6
For sustained reading	7.1	7.1	42.9	7.1	21.4	14.3
For independent inquiry/research	0	0	14.3	28.6	28.6	28.6
For student discussion/communication	0	0	35.7	14.3	7.1	42.9
For instructional delivery	0	14.3	0	0	35.7	50
As a learning tool/resource	0	0	14.3	0	21.4	64.3
For student assessment	0	0	35.7	21.4	14.3	28.6

0 - does not apply
1 - not at all
2 - once a month or less
3 - once a week
4 - several times a week
5 - every day

Support

Teachers responded to a number of survey items pertaining to technical and instructional support. Seventy-nine percent of teachers responded that their schools did not have on-site computer support specialists. In the schools involved with the Leveraging Laptops Program that did have on-site specialists in Gadsden County, teachers reported 1-2 technical support staff members were available. Twenty-one percent of the teachers reported the staff was full-time, and none of the teachers reported the computer support specialists were grant-funded. Responses about the type of support provided by the technical staff is shown in Table 4 (Note 64% of the teachers did not respond because a support specialist was not available at their school).

Table 4. Teacher perception of technical support.

Teacher perspective	1 (%)	2 (%)	3 (%)	4 (%)	5 (%)
The on-site computer specialist adequately assists me in problem solving and trouble shooting.	0	7.1	7.1	14.3	7.1
The on-site computer specialist is dedicated to helping teachers.	7.1	0	7.1	14.3	7.1
I have adequate access to our on-site computer specialist.	7.1	7.1	14.3	7.1	0
I have to contact our specialist several times before I get assistance.	0	14.3	7.1	7.1	7.1
Our computer specialist demonstrates techniques to integrate computer technology into classroom instruction.	0	7.1	14.3	14.3	0

1 - Strongly Disagree
2 - Disagree
3 - Neutral or no opinion
4 - Agree
5 - Strongly agree

Changes in Teacher Practices: Student-Centered and Tool-Based

The Appendix of this report includes detailed tables that display the percentages of observed teachers who were using a range of technology and teaching practices during the fall 2006 and spring 2007 observation periods. Teachers showed large increases in student-centered teaching and tool-based technology integration.

Student Achievement

The five teachers who completed classroom inquiry projects each focused on a different aspect of the effects of classroom technology on student performance. Their questions, data collection methods, and results are summarized in Table 5.

Table 5. Classroom inquiry project summaries

Context	AR Question	Data Collection Methods	Results	Other Outcomes
8th grade life science	After a presentation of the science lesson utilizing technology, will a content related assessment, designed by the textbook publisher and issued to 8th grades students through their laptops, improve their test scores compared to students who are assessed on paper?	Test Scores	‣The group of computer test takers had the higher average test score (76), compared to the paper test takers which averaged (70).	‣Students have more confidence going in to test time when be assessed on the computer. I also realized the students were able to read faster from the computer screen and finish their test much quicker than those students on paper. These results say that with technology, the students will increase their level of performance.
8th grade life science with project based learning	Will a project-based learning activity, designed to engage 8th grade science students in research as well as enhance their understanding of the importance of food chains/ webs in Earth's biomes, support learning for students of various learning styles when paired with a peer?	Student Artifacts	‣The group of computer test takers had the higher average test score (76), compared to the paper test takers which averaged (70).	‣I will continue allow students who find assignments challenging to receive assistance from a peer. ‣This was a worthwhile project.
8th grade genetics with internet resources	Which sub-group will produce a quality multimedia presentation to present their findings of a DNA laboratory observation: Sub-Group 1--students using laptops computers to explore referenced science websites in our current text books or Sub-Groups 2: students who will use only handouts and textbooks?	Student artifacts Reflective Journals	‣The group of computer test takers had the higher average test score (76), compared to the paper test takers which averaged (70).	‣Laptops provided opportunity for the students to enjoy the project they were working on, gain more knowledge in the particular subject area, and gain a better understanding of how to work the laptops and programs they used ‣Our team will incorporate the use of laptops in much more of the curriculum and stress to the other two teams how helpful integrating computers into the lessons really is.

8th grade FL history with internet and publishing	How has the new available technology resources improved my students participation in learning Florida history?	Test scores Student Artifacts	‣The group of computer test takers had the higher average test score (76), compared to the paper test takers which averaged (70).	‣Students displayed greater interest in Florida history when using their laptop as a resource. ‣Our eighth grade team have met to discuss incorporating laptops into many assignments for students to gain and retain more information
8th grade writing with Inspiration	Will Inspiration software help my 8th Grade Language Arts students better plan their essays during the pre-writing process and will the more detail plan in turn, improve their final drafts?	Test scores Student Artifacts Rubrics Reflective Journals	‣The group of computer test takers had the higher average test score (76), compared to the paper test takers which averaged (70).	‣Inspiration was a tool that fascinated students with its many capabilities. Therefore they took interest and used it to organize their thoughts on the writing prompt.

Appendix:
Classroom Observation Data

Introduction

This report provides the results of data collected at your school. Many schools have found these reports to be very useful for making data-driven improvement decisions. As such, you are encouraged to examine the results of this report and share the findings with the faculty and staff members as appropriate. This report may also be shown to parents and other stakeholders, if desired, to demonstrate the progress that your school is making.

Our staff can provide assistance in the interpretation and use of the evaluation results as well as technical information regarding instrumentation. Please do not hesitate to contact us toll free at 1-866-670-6147. If you are interested in learning more about the school improvement tools we offer, please contact us or visit http://crep.memphis.edu.

Thank you for the opportunity to work with your school.

Sincerely,

The Center for Research in Educational Policy/Education Innovations

About the Instrument: School Observation Measure

Summarized in this section of the report are the results from the school observation visits that were conducted at your school. Multiple observations using the School Observation Measure (SOM©) allow researchers to determine the extent to which 24 factors associated with school improvement are present in each school. Schools can then evaluate actual, observed classroom practices within the context of their instructional goals.

The factors are organized in six categories:
- ‣Instructional Orientation
- ‣Classroom Organization
- ‣Instructional Strategies
- ‣Student Activities
- ‣Technology Use
- ‣Assessment

In addition, the instrument solicits summary information regarding:
- ‣The amount of class time devoted to academics
- ‣The level of student engagement

To ensure the reliability of data, observers are trained to use the SOM. In a reliability study (Lewis, Ross, & Alberg, 1999), pairs of trained observers selected the identical overall response on the five-category rubric on 67% of the items and were within one category on 95% of the items.

The results begin with a Big Picture look at the SOM followed by a detailed Data Summary.

School Observation Measure (Whole School/Multi-Class)
Big Picture

Items with the most prevalence (% Frequently + Extensively) in Spring 2007:

Instructional Orientation	
N/A	N/A

Classroom Organization	
N/A	N/A

Instructional Strategies	
Teacher acting as a coach/facilitator	66.6
Project-based learning	33.3

Student Activities	
Independent seatwork (self-paced worksheets, individual assignments)	100.0
Student discussion	33.3

Technology Use	
Technology as a learning tool or resource (e.g., Internet research, spreadsheet or database creation, multi-media, CD-ROM, Laser disk)	33.3

Assessment	
N/A	N/A

Summary Items	
High academically focused class time	66.7
High level of student attention/interest/engagement	66.7

Items with the least prevalence (% Not Observed + Rarely) in Spring 2007:

Instructional Orientation	
Direct instruction (lecture)	100.0
Team teaching	100.0
Individual tutoring (teacher, peer, aide, adult volunteer)	100.0

Classroom Organization	
Ability groups	100.0
Multi-age grouping	100.0
Work centers (for individuals or groups)	100.0

Instructional Strategies	
Higher-level instructional feedback (written or verbal) to enhance student learning	100.0
Integration of subject areas (interdisciplinary/thematic units)	100.0
Use of higher-level questioning strategies	100.0
Parent/community involvement in learning activities	100.0

Student Activities	
Experiential, hands-on learning	100.0
Systematic individual instruction (differential assignments geared to individual needs)	100.0

Technology Use	
Computer for instructional delivery (e.g., CAI, drill & practice)	100.0

Assessment	
Performance assessment strategies	100.0
Student self-assessment (portfolios, individual record books)	100.0

Summary Items	
N/A	N/A

Items with the biggest changes (% Frequently + Extensively)

Items	Fall 2006	Spring 2007
High level of student attention/interest/engagement	0.0	66.7
Teacher acting as a coach/facilitator	0.0	66.6
Direct instruction (lecture)	66.6	0.0
High academically focused class time	100.0	66.7
Technology as a learning tool or resource (e.g., Internet research, spreadsheet or database creation, multi-media, CD-ROM, Laser disk)	0.0	33.3
Student discussion	0.0	33.3
Project-based learning	0.0	33.3

School Observation Measure (Whole School/Multi-Class)
Data Summary

Number of Respondents for Survey Period 1   Fall 2006   N = 3
Number of Respondents for Survey Period 2   Spring 2007   N = 3

Note: One school observation visit equals approximately 10 classroom visits.

School Observation Measure (WS/Multi-Class) Items	% Not observed		% Rarely		% Occasionally		% Frequently		% Extensively	
Survey Period	1	2	1	2	1	2	1	2	1	2
Instructional Orientation										
Direct instruction (lecture)	0.0	0.0	0.0	100.0	33.3	0.0	33.3	0.0	33.3	0.0
Team teaching	66.7	100.0	33.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cooperative/collaborative learning	66.7	33.3	33.3	33.3	0.0	33.3	0.0	0.0	0.0	0.0
Individual tutoring (teacher, peer, aide, adult volunteer)	100.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0
Classroom Organization										
Ability groups	100.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Multi-age grouping	100.0	66.7	0.0	33.3	0.0	0.0	0.0	0.0	0.0	0.0
Work centers (for individuals or groups)	100.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Instructional Strategies										
Higher-level instructional feedback (written or verbal) to enhance student learning	66.7	33.3	33.3	66.7	0.0	0.0	0.0	0.0	0.0	0.0
Integration of subject areas (interdisciplinary/thematic units)	66.7	66.7	33.3	33.3	0.0	0.0	0.0	0.0	0.0	0.0
Project-based learning	100.0	66.7	0.0	0.0	0.0	0.0	0.0	33.3	0.0	0.0
Use of higher-level questioning strategies	66.7	66.7	33.3	33.3	0.0	0.0	0.0	0.0	0.0	0.0
Teacher acting as a coach/facilitator	33.3	0.0	66.7	33.3	0.0	0.0	0.0	33.3	0.0	33.3
Parent/community involvement in learning activities	100.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Student Activities										
Independent seatwork (self-paced worksheets, individual assignments)	0.0	0.0	0.0	0.0	0.0	0.0	33.3	66.7	66.7	33.3
Experiential, hands-on learning	100.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Systematic individual instruction (differential assignments geared to individual needs)	100.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sustained writing/composition (self-selected or teacher-generated topics)	100.0	33.3	0.0	33.3	0.0	33.3	0.0	0.0	0.0	0.0
Sustained reading	100.0	33.3	0.0	33.3	0.0	33.3	0.0	0.0	0.0	0.0
Independent inquiry/research on the part of students	100.0	33.3	0.0	33.3	0.0	33.3	0.0	0.0	0.0	0.0
Student discussion	33.3	33.3	66.7	33.3	0.0	0.0	0.0	0.0	0.0	33.3
Technology Use										

School Observation Measure (WS/Multi-Class) Items	% Not observed		% Rarely		% Occasionally		% Frequently		% Extensively	
Computer for instructional delivery (e.g., CAI, drill & practice)	0.0	100.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0
Technology as a learning tool or resource (e.g., Internet research, spreadsheet or database creation, multi-media, CD-ROM, Laser disk)	66.7	33.3	33.3	0.0	0.0	33.3	0.0	0.0	0.0	33.3
Assessment										
Performance assessment strategies	66.7	100.0	33.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Student self-assessment (portfolios, individual record books)	100.0	66.7	0.0	33.3	0.0	0.0	0.0	0.0	0.0	0.0
Summary Items										
High academically focused class time	0.0	0.0	0.0	0.0	0.0	33.3	100.0	66.7	0.0	0.0
High level of student attention/interest/ engagement	0.0	0.0	0.0	33.3	100.0	0.0	0.0	66.7	0.0	0.0

School Observation Measure (Targeted)
Big Picture

Items with the most prevalence (% Frequently + Extensively) in Spring 2007:

Instructional Orientation	
Individual tutoring (teacher, peer, aide, adult volunteer)	50.0
Direct instruction (lecture)	25.0

Classroom Organization	
Multi-age grouping	25.0

Instructional Strategies	
Teacher acting as a coach/facilitator	50.0

Student Activities	
Independent seatwork (self-paced worksheets, individual assignments)	100.0

Technology Use	
Technology as a learning tool or resource (e.g., Internet research, spreadsheet or database creation, multi-media, CD-ROM, Laser disk)	25.0

Assessment	
N/A	N/A

Summary Items	
High academically focused class time	50.0

Items with the least prevalence (% Not Observed + Rarely) in Spring 2007:

Instructional Orientation	
Team teaching	100.0
Cooperative/collaborative learning	75.0

Classroom Organization	
Ability groups	100.0
Work centers (for individuals or groups)	100.0

Instructional Strategies	
Integration of subject areas (interdisciplinary/thematic units)	100.0
Project-based learning	100.0
Use of higher-level questioning strategies	100.0
Parent/community involvement in learning activities	100.0

Student Activities	
Experiential, hands-on learning	100.0
Systematic individual instruction (differential assignments geared to individual needs)	100.0
Sustained reading	100.0
Independent inquiry/research on the part of students	100.0

Technology Use	
Computer for instructional delivery (e.g., CAI, drill & practice)	100.0

Assessment	
Performance assessment strategies	100.0
Student self-assessment (portfolios, individual record books)	75.0

Summary Items	
High level of student attention/interest/engagement	25.0

Items with the biggest changes (% Frequently + Extensively)

Items	Fall 2006	Spring 2007
High level of student attention/interest/engagement	66.7	0.0
Computer for instructional delivery (e.g., CAI, drill & practice)	66.6	0.0
Individual tutoring (teacher, peer, aide, adult volunteer)	0.0	50.0
Independent seatwork (self-paced worksheets, individual assignments)	66.7	100.0
Technology as a learning tool or resource (e.g., Internet research, spreadsheet or database creation, multi-media, CD-ROM, Laser disk)	0.0	25.0
Multi-age grouping	0.0	25.0

School Observation Measure (Targeted)
Data Summary

School Observation Measure (Targeted) Items	% Not observed		% Rarely		% Occasionally		% Frequently		% Extensively	
Survey Period	1	2	1	2	1	2	1	2	1	2
Instructional Orientation										
Direct instruction (lecture)	33.3	50.0	0.0	25.0	33.3	0.0	33.3	0.0	0.0	25.0
Team teaching	100.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cooperative/collaborative learning	100.0	75.0	0.0	0.0	0.0	25.0	0.0	0.0	0.0	0.0
Individual tutoring (teacher, peer, aide, adult volunteer)	100.0	25.0	0.0	0.0	0.0	25.0	0.0	50.0	0.0	0.0
Classroom Organization										
Ability groups	100.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Multi-age grouping	100.0	75.0	0.0	0.0	0.0	0.0	0.0	25.0	0.0	0.0
Work centers (for individuals or groups)	100.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Instructional Strategies										
Higher-level instructional feedback (written or verbal) to enhance student learning	100.0	75.0	0.0	0.0	0.0	25.0	0.0	0.0	0.0	0.0
Integration of subject areas (interdisciplinary/thematic units)	100.0	75.0	0.0	25.0	0.0	0.0	0.0	0.0	0.0	0.0
Project-based learning	100.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Use of higher-level questioning strategies	100.0	75.0	0.0	25.0	0.0	0.0	0.0	0.0	0.0	0.0
Teacher acting as a coach/facilitator	66.7	0.0	0.0	25.0	0.0	25.0	33.3	50.0	0.0	0.0
Parent/community involvement in learning activities	100.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Student Activities										
Independent seatwork (self-paced worksheets, individual assignments)	0.0	0.0	0.0	0.0	33.3	0.0	0.0	50.0	66.7	50.0
Experiential, hands-on learning	100.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Systematic individual instruction (differential assignments geared to individual needs)	100.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sustained writing/composition (self-selected or teacher-generated topics)	100.0	75.0	0.0	0.0	0.0	25.0	0.0	0.0	0.0	0.0
Sustained reading	100.0	75.0	0.0	25.0	0.0	0.0	0.0	0.0	0.0	0.0
Independent inquiry/research on the part of students	100.0	75.0	0.0	25.0	0.0	0.0	0.0	0.0	0.0	0.0
Student discussion	100.0	50.0	0.0	25.0	0.0	25.0	0.0	0.0	0.0	0.0

School Observation Measure (Targeted) Items	% Not observed		% Rarely		% Occasionally		% Frequently		% Extensively	
Technology Use										
Computer for instructional delivery (e.g., CAI, drill & practice)	0.0	100.0	0.0	0.0	33.3	0.0	33.3	0.0	33.3	0.0
Technology as a learning tool or resource (e.g., Internet research, spreadsheet or database creation, multi-media, CD-ROM Laser disk)	100.0	50.0	0.0	0.0	0.0	25.0	0.0	25.0	0.0	0.0
Assessment										
Performance assessment strategies	100.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Student self-assessment (portfolios, individual record books)	100.0	75.0	0.0	0.0	0.0	25.0	0.0	0.0	0.0	0.0
Summary Items										
High academically focused class time	0.0	0.0	33.3	0.0	0.0	50.0	33.3	25.0	33.3	25.0
High level of student attention/interest/engagement	0.0	0.0	33.3	25.0	0.0	75.0	66.7	0.0	0.0	0.0

About the Instrument: Survey of Computer Use

The SCU was designed to capture exclusively student access to, ability with, and use of computers rather than teacher use of technology.

Therefore, four primary types of data are recorded:

   (a) computer capacity and currency
   (b) configuration
   (c) student computer ability
   (d) student activities while using computers

Computer capacity and currency is defined as the age and type of computers available for student use and whether or not Internet access is available. Configuration refers to the number of students working at each computer (e.g., alone, in pairs, in small groups). Student computer ability is assessed by recording the number of students who are computer literate (e.g., easily use software features/menus, saved or printed documents) and the number of students who easily use the keyboard to enter text or numerical information. Student use of computers is observed with regard to the types of activities, subject areas of activities, and software being used.

The results begin with a Big Picture look at the SCU, followed by a detailed Data Summary and concluding with an Addendum detailing other tools or software observed, if provided.

Survey of Computer Use (Whole School/Multi-Class)
Big Picture

Items with the most prevalence (% Frequently + Extensively) in Spring 2007:

Indicate how frequently students used the following computers	
Laptop computers.	66.6

Production Tools Used by Students	
Word Processor	66.7
Presentation	66.6

Internet/Research Tools Used by Students	
Internet Browser	33.3

Educational software used by Students	
Problem-Solving	33.3
Process Tools	33.3

Testing Software	
N/A	N/A

Overall Meaningful Use of Computers	
Meaningful use of computers	33.3

Items with the least prevalence (% Not Observed + Rarely) in Spring 2007:

Indicate how frequently students used the following computers	
Desktop computers.	100.0
Personal Data Assistants (PDA).	100.0
Graphing calculators.	100.0
Information Processors (e.g. Alphaboard).	100.0
Digital Accessories (e.g. camera, scanner, probes).	100.0

Production Tools Used by Students	
Database	100.0
Concept Mapping	100.0
Planning (e.g. MS Project)	100.0
Other production tools	100.0

Internet/Research Tools Used by Students	
CD Reference	100.0
Communications	100.0
Other Internet/Research Tools	100.0

Educational software used by Students	
Drill/Practice/Tutorial	100.0
Other educational software	100.0

Testing Software	
Individualized/Tracked	100.0
Generic	100.0
Other testing software	100.0

Overall Meaningful Use of Computers	
Low level use of computers	100.0
Very meaningful use of computers	100.0

Items with the biggest changes (% Frequently + Extensively)

Items	Fall 2006	Spring 2007
Low level use of computers	100.0	0.0
Word Processor	0.0	66.7
Presentation	0.0	66.6
Meaningful use of computers	0.0	33.3
Process Tools	0.0	33.3
Problem-Solving	0.0	33.3
Internet Browser	0.0	33.3

Survey of Computer Use (Whole School/Multi-Class)
Data Summary

Number of Respondents for Survey Period 1   Fall 2006   N = 3
Number of Respondents for Survey Period 2   Spring 2007   N = 3

Note: One school observation visit equals approximately 10 classroom visits.

Survey of Computer Use (Whole School/Multi-Class) Items	% Not observed		% Rarely		% Occasionally		% Frequently		% Extensively	
Survey Period	1	2	1	2	1	2	1	2	1	2
Indicate how frequently students used the following computers										
Desktop computers.	100.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Laptop computers.	0.0	0.0	0.0	33.3	66.7	0.0	0.0	33.3	33.3	33.3
Personal Data Assistants (PDA).	100.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Graphing calculators.	100.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Information Processors (e.g. Alphaboard).	100.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Digital Accessories (e.g. camera, scanner, probes).	100.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Production Tools Used by Students										
Word Processor	33.3	33.3	66.7	0.0	0.0	0.0	0.0	66.7	0.0	0.0
Database	100.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Spreadsheet	100.0	66.7	0.0	0.0	0.0	33.3	0.0	0.0	0.0	0.0
Draw/Paint/Graphics/Photo-imaging	100.0	66.7	0.0	0.0	0.0	33.3	0.0	0.0	0.0	0.0
Presentation	66.7	33.3	33.3	0.0	0.0	0.0	0.0	33.3	0.0	33.3
Authoring	100.0	33.3	0.0	0.0	0.0	33.3	0.0	33.3	0.0	0.0
Concept Mapping	100.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Planning (e.g. MS Project)	100.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other production tools	66.7	100.0	0.0	0.0	0.0	0.0	0.0	0.0	33.3	0.0
Internet/Research Tools Used by Students										
Internet Browser	66.7	66.7	33.3	0.0	0.0	0.0	0.0	33.3	0.0	0.0
CD Reference	100.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Communications	100.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other Internet/Research Tools	100.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Educational software used by Students										
Drill/Practice/Tutorial	66.7	66.7	0.0	33.3	33.3	0.0	0.0	0.0	0.0	0.0
Problem-Solving	100.0	66.7	0.0	0.0	0.0	0.0	0.0	33.3	0.0	0.0
Process Tools	100.0	66.7	0.0	0.0	0.0	0.0	0.0	33.3	0.0	0.0
Other educational software	66.7	100.0	33.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Survey of Computer Use (Whole School/Multi-Class) Items	% Not observed		% Rarely		% Occasionally		% Frequently		% Extensively	
Testing Software										
Individualized/Tracked	100.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Generic	100.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other testing software	100.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Overall Meaningful Use of Computers										
Low level use of computers	0.0	33.3	0.0	66.7	0.0	0.0	66.7	0.0	33.3	0.0
Somewhat meaningful use of computers	33.3	66.7	66.7	0.0	0.0	33.3	0.0	0.0	0.0	0.0
Meaningful use of computers	100.0	66.7	0.0	0.0	0.0	0.0	0.0	33.3	0.0	0.0
Very meaningful use of computers	100.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Survey of Computer Use (Whole School/Multi-Class)
Summary Items

Number of Observations for Survey Period 1   Fall 2006   N = 3
Number of Observations for Survey Period 2   Spring 2007   N = 3

Computer Configuration		
Classrooms most frequently had the following number of computers or digital tools		
Survey Period	1	2
None	0.0	0.0
One	0.0	0.0
2-4	0.0	0.0
5-10	0.0	0.0
11 or more	100.0	100.0

Classroom computers were most frequently		
Survey Period	1	2
Up-to-date	100.0	100.0
Aging but adequate	0.0	0.0
Outdated/limited capacity	0.0	0.0
No computers were observed	0.0	0.0

In classrooms, computers were most frequently		
Survey Period	1	2
Connected to the Internet	0.0	0.0
Not connected to the Internet	100.0	100.0
No computers were observed	0.0	0.0

Total number of classrooms visited		
Survey Period	1	2
Total Number	28	21

Total number of classrooms without students using computers		
Survey Period	1	2
Total Number	17	7

Computer Use		
Classroom computers or digital tools were most frequently used by		
Survey Period	1	2
Few (less than 10%) students	0.0	0.0
Some (about 10-50%) students	0.0	33.3
Most (about 51-90%) students	100.0	0.0
Nearly all (91%-100%) students	0.0	33.3
Students did not use computers	0.0	33.3

Students most frequently worked with computers or digital tools		
Survey Period	1	2
Alone	100.0	66.7
In pairs	0.0	0.0
In small groups	0.0	0.0
Students did not use computers	0.0	33.3

Student computer literacy skills were most frequently		
Survey Period	1	2
Poor	0.0	33.3
Moderate	66.7	33.3
Very good	0.0	0.0
Not observed	33.3	33.3

Student keyboarding skills were most frequently		
Survey Period	1	2
Poor	0.0	33.3
Moderate	66.7	33.3
Very good	0.0	0.0
Not observed	33.3	33.3

	% Language Arts		% Mathematics		% Science		% Social Studies		% Other		% None	
Survey Period	1	2	1	2	1	2	1	2	1	2	1	2
Indicate all subject areas involved with the use of Production Tools:	33.3	66.7	33.3	66.7	0.0	0.0	0.0	33.3	0.0	33.3	33.3	33.3

	% Language Arts		% Mathematics		% Science		% Social Studies		% Other		% None	
Survey Period	1	2	1	2	1	2	1	2	1	2	1	2
Indicate all subject areas involved with the use of Internet/Research Tools:	0.0	66.7	0.0	33.3	33.3	0.0	0.0	33.3	0.0	0.0	66.7	33.3

	% Language Arts		% Mathematics		% Science		% Social Studies		% Other		% None	
Survey Period	1	2	1	2	1	2	1	2	1	2	1	2
Indicate all subject areas involved with the use of Educational Software:	33.3	33.3	33.3	33.3	0.0	0.0	0.0	0.0	0.0	0.0	33.3	66.7

	% Language Arts		% Mathematics		% Science		% Social Studies		% Other		% None	
Survey Period	1	2	1	2	1	2	1	2	1	2	1	2
Indicate all subject areas involved with the use of Testing Software:	0.0	66.7	0.0	33.3	0.0	0.0	0.0	33.3	0.0	0.0	100.0	33.3

Survey of Computer Use (Whole School/Multi-Class) Addendum

Survey Period: Fall 2006

Note: Activities are reported verbatim from observers.

Please describe other production tools
Calculator

Please describe other educational software
Adopted text electronic dictionary/glossary; students typed in word and read definition aloud
Text publisher FCAT Prep Software

Survey Period: Spring 2007

Note: Activities are reported verbatim from observers.

Please describe other production tools
Smartboards and LCDs were located in classrooms; no use or power whatsoever throughout the day; I witnessed two or three students in the hallway between classes with a laptop appearing to listen to music; not positive what was being watched

Survey of Computer Use (Targeted)
Big Picture

Items with the most prevalence (% Frequently + Extensively) in Spring 2007:

Indicate how frequently students used the following computers	
Laptop computers.	75.0

Production Tools Used by Students	
Draw/Paint/Graphics/Photo-imaging	25.0
Presentation	25.0
Other production tools	25.0

Internet/Research Tools Used by Students	
N/A	N/A

Educational software used by Students	
Problem-Solving	25.0

Testing Software	
N/A	N/A

Overall Meaningful Use of Computers	
Somewhat meaningful use of computers	25.0
Meaningful use of computers	25.0

Items with the least prevalence (% Not Observed + Rarely) in Spring 2007:

Indicate how frequently students used the following computers	
Personal Data Assistants (PDA).	100.0
Graphing calculators.	100.0
Information Processors (e.g. Alphaboard).	100.0
Digital Accessories (e.g. camera, scanner, probes).	100.0

Production Tools Used by Students	
Database	100.0
Spreadsheet	100.0
Authoring	100.0
Concept Mapping	100.0
Planning (e.g. MS Project)	100.0

Internet/Research Tools Used by Students	
CD Reference	100.0
Communications	100.0
Other Internet/Research Tools	100.0

Educational software used by Students	
Drill/Practice/Tutorial	100.0
Process Tools	100.0
Other educational software	100.0

Testing Software	
Individualized/Tracked	100.0
Generic	100.0
Other testing software	100.0

Overall Meaningful Use of Computers	
Low level use of computers	75.0
Very meaningful use of computers	75.0

Items with the biggest changes (% Frequently + Extensively)

Items	Fall 2006	Spring 2007
Low level use of computers	66.7	0.0
Word Processor	66.7	0.0
Meaningful use of computers	0.0	25.0
Problem-Solving	0.0	25.0
Other production tools	0.0	25.0
Presentation	0.0	25.0
Draw/Paint/Graphics/Photo-imaging	0.0	25.0

Survey of Computer Use (Targeted)
Data Summary

Number of Respondents for Survey Period 1   Fall 2006   N = 3
Number of Respondents for Survey Period 2   Spring 2007   N = 4

Survey of Computer Use (Targeted) Items	% Not observed		% Rarely		% Occasionally		% Frequently		% Extensively	
Survey Period	1	2	1	2	1	2	1	2	1	2
Desktop computers.	100.0	75.0	0.0	0.0	0.0	25.0	0.0	0.0	0.0	0.0
Laptop computers.	33.3	25.0	0.0	0.0	0.0	0.0	0.0	50.0	66.7	25.0
Personal Data Assistants (PDA).	100.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Graphing calculators.	100.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Information Processors (e.g. Alphaboard).	100.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Digital Accessories (e.g. camera, scanner, probes).	100.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Production Tools Used by Students										
Word Processor	33.3	50.0	0.0	0.0	0.0	50.0	0.0	0.0	66.7	0.0
Database	100.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Spreadsheet	100.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Draw/Paint/Graphics/Photo-imaging	100.0	50.0	0.0	0.0	0.0	25.0	0.0	25.0	0.0	0.0
Presentation	100.0	50.0	0.0	0.0	0.0	25.0	0.0	25.0	0.0	0.0
Authoring	100.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Concept Mapping	100.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Planning (e.g. MS Project)	100.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other production tools	100.0	75.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	25.0
Internet/Research Tools Used by Students										
Internet Browser	100.0	50.0	0.0	0.0	0.0	50.0	0.0	0.0	0.0	0.0
CD Reference	100.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Communications	100.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other Internet/Research Tools	100.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Educational software used by Students										
Drill/Practice/Tutorial	100.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Problem-Solving	100.0	75.0	0.0	0.0	0.0	0.0	0.0	25.0	0.0	0.0
Process Tools	100.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other educational software	100.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Survey of Computer Use (Targeted) Items	% Not observed		% Rarely		% Occasionally		% Frequently		% Extensively	
Testing Software										
Individualized/Tracked	100.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Generic	100.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other testing software	100.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Overall Meaningful Use of Computers										
Low level use of computers	33.3	50.0	0.0	25.0	0.0	25.0	0.0	0.0	66.7	0.0
Somewhat meaningful use of computers	66.7	25.0	0.0	0.0	0.0	50.0	33.3	25.0	0.0	0.0
Meaningful use of computers	100.0	50.0	0.0	25.0	0.0	0.0	0.0	25.0	0.0	0.0
Very meaningful use of computers	100.0	75.0	0.0	0.0	0.0	25.0	0.0	0.0	0.0	0.0

Survey of Computer Use (Targeted)
Summary Items

Number of Observations for Survey Period 1   Fall 2006   N = 3
Number of Observations for Survey Period 2   Spring 2007   N = 4

Note: One school observation visit equals approximately 10 classroom visits.

Classrooms most frequently had the following number of computers or digital tools		
Survey Period	1	2
None	0.0	0.0
One	0.0	0.0
2-4	0.0	0.0
5-10	0.0	0.0
11 or more	100.0	100.0

Classroom computers were most frequently		
Survey Period	1	2
Up-to-date	100.0	100.0
Aging but adequate	0.0	0.0
Outdated/limited capacity	0.0	0.0
No computers were observed	0.0	0.0

In classrooms, computers were most frequently		
Survey Period	1	2
Connected to the Internet	0.0	50.0
Not connected to the Internet	100.0	50.0
No computers were observed	0.0	0.0

Total number of classrooms visited		
Survey Period	1	2
Total Number	3	4

Total number of classrooms without students using computers		
Survey Period	1	2
Total Number	1	3

Classroom computers or digital tools were most frequently used by		
Survey Period	1	2
Few (less than 10%) students	0.0	25.0
Some (about 10-50%) students	0.0	0.0
Most (about 51-90%) students	0.0	25.0
Nearly all (91%-100%) students	66.7	25.0
Students did not use computers	33.3	25.0

Students most frequently worked with computers or digital tools		
Survey Period	1	2
Alone	66.7	50.0
In pairs	0.0	0.0
In small groups	0.0	25.0
Students did not use computers	33.3	25.0

Student computer literacy skills were most frequently		
Survey Period	1	2
Poor	0.0	0.0
Moderate	66.7	50.0
Very good	0.0	25.0
Not observed	33.3	25.0

Student keyboarding skills were most frequently		
Survey Period	1	2
Poor	33.3	25.0
Moderate	33.3	25.0
Very good	0.0	25.0
Not observed	33.3	25.0

	% Language Arts		% Mathematics		% Science		% Social Studies		% Other		% None	
Survey Period	1	2	1	2	1	2	1	2	1	2	1	2
Indicate all subject areas involved with the use of Production Tools:	0.0	25.0	0.0	25.0	0.0	25.0	33.3	0.0	0.0	0.0	66.7	25.0

	% Language Arts		% Mathematics		% Science		% Social Studies		% Other		% None	
Survey Period	1	2	1	2	1	2	1	2	1	2	1	2
Indicate all subject areas involved with the use of Internet/Research Tools:	0.0	25.0	0.0	25.0	0.0	25.0	0.0	0.0	0.0	0.0	100.0	25.0

	% Language Arts		% Mathematics		% Science		% Social Studies		% Other		% None	
Survey Period	1	2	1	2	1	2	1	2	1	2	1	2
Indicate all subject areas involved with the use of Educational Software:	0.0	0.0	0.0	25.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	75.0

	% Language Arts		% Mathematics		% Science		% Social Studies		% Other		% None	
Survey Period	1	2	1	2	1	2	1	2	1	2	1	2
Indicate all subject areas involved with the use of Testing Software:	0.0	0.0	0.0	25.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	75.0

Survey of Computer Use (Targeted) Addendum

Survey Period: Spring 2007

Note: Activities are reported verbatim from observers.

Please describe other production tools
Puzzle Maker