Changing Instructional Practice: The Impact on Technology Integration on Students, Parents, and School Personnel

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Abstract

Attitudes of students, school personnel, and parents toward technology use within schools are an important and often overlooked component of successful curriculum integration of technology. Due to negative responses toward increased technology use in her classroom, one teacher engaged in an action research study to explore why students, parents, and other school personnel were resistant to technology integration. Students, once accustomed to the changed classroom environment, were excited to be engaged in new types of learning experiences. School personnel were pleased with the accessibility of classroom information and support services technology provided. Lastly, parents noted that though the style of teaching was different, it offered many new possibilities for their children. From the results of the surveys, it appears that much of the initial resistance to technology integration derived from discomfort with the unknown.

Introduction

Attitudes toward technology use within the school setting are an important and often overlooked component of successful curriculum integration of technology. Much of the research done on technology integration assumes that once appropriate technological tools are in place in the classroom, students, teachers, and parents will overwhelmingly support the change toward a technologically based curriculum. However, after taking over a *low-tech* History class mid-year, one teacher, seeing that the computer resources were available, began to experiment with new teaching methods, and was disturbed by the amount of resistance toward the change by students,

colleagues, and parents. Therefore, she wanted to explore two questions: What does research say about the changes that must take place in education to make technology integration a viable instructional option, and how do all of the educational stakeholders feel about the change toward a more cyber-centric curriculum?

Literature Review

Technology becomes a more prevalent part of the education culture with each passing year. Schools cannot ignore the impact of technology and the changing face of curriculum. Those who have done research on how technology will affect secondary schools, see vast changes occurring. Symonds (2000) asserts that the high school will look much different in 2018; it will be "High Tech High" (p.190). Furthermore, Bennett (2002) addresses the actual changes that must take place for technology usage to make a difference in curriculum design and start the alteration to Symonds "High Tech High." Bennett suggests changes in the roles of teachers, students, and computers. Students would interact collaboratively with teachers and technology. Computers would deliver and remediate lessons, while the teacher would be a facilitator and a mentor (Bennett, 2002; Dooling, 2000). Harris (2002) notes that educators have "to accept changes…in [their] interactions…with students and they [have] to support students as their roles change, too" (p. 457).

Before the aforementioned changes can occur, schools must explore issues dealing with teacher training and securing equitable student access to technology. Technology must be part of the total curriculum, which means that teachers must be equipped with the tools necessary to effectively integrate technology in their classes. This brings about the issue of teacher training. Diem (2000) maintains that few teachers actually use computers themselves due to a lack of support and little free time to learn the often-complicated operation of technological devices.

Diem insists that technical support for teachers needs immediate improvement because, "teachers who are supported are less likely to feel threatened and develop more positive attitudes toward technology, and teachers who are supported are more likely to become proficient users of technology in the classroom" (Diem, 2000, p. 495). However, the presence of technology in classrooms does not necessarily produce better learners, nor does technology have the same result in all educational environments (Tolmie, 2001). Teachers must have the tools to engage students effectively, using technology.   In order to achieve the proper training in technology integration, schools must make in-service relevant and recurring (Corcoran, 1999). Furthermore, according to the National Educational Technology Standards (NETS) for future teachers, adequate preparation for technology integration should occur at the college level.

Tierman (2002) explains that problems with equitable student access to technology, often referred to as "the digital divide—or the disparity in access to computers across socioeconomic, regional, or cultural lines—is a growing concern nationwide, as computers gain even more importance in U.S. business and education" (¶1). In addition to computer availability, other issues concerned with equitable student access to computers include: computer adequacy, availability of software, Internet access, and home availability of computers (Shaver, 1999).

According to Moore's Law, computer technology changes and improves at an exponential pace, which can make many of the computers that exist in schools dinosaurs by business and private sector standards. Furthermore, much of the software, including operating systems, is outdated. Internet access is another area in which schools lack the resources (T1 lines, data ports, servers, etc.) to offer wide spread usage to students. Another availability issue lies within student homes. According to the Census Bureau, only 36.6 percent of Americans

have computers in their homes (Shaver, 1999). This is especially a problem in lower socioeconomic areas, where schools already have limited access to technology.

Answering the second question posed by the researchers is more difficult than the first. There is a need for investigation into student, school personnel, and parental attitudes concerning computer use in the classroom. Dooling (2000) found that students believed that "the effectiveness of computer technology experiences at school depends on the student's prior knowledge [and his or her] teacher" (p. 22). Furthermore, Trejos found students are undecided about the benefits of specific uses of classroom technology, such as class websites, but parents feel these sites keep them more informed (2000). Eaton (1999) particularly praises the use of class websites as a way to enhance communication and learning and Trejos (2000) indicates that students appreciate the ability to retrieve homework assignments, extra credit work, and test reviews on the Internet. However, some do not like the fact that parents are constantly kept apprised of school activity. One high school student noted, "Sometimes [class websites are] more of a hassle than a solution. If you get a bad grade, your parents will come to you and ask what happened" (Trejos, 2000, p. C01). Trejos also reveals that parents feel they are better informed of their children's academic performance when class websites and email communication with teachers are available.

The utilization of email and class websites (which will be the most closely studied technology tools throughout the remainder of this study) allows for interactive collaboration between students, teachers, and parents. Furthermore, it provides a basis for different teaching and learning styles that are offered by increased technology usage. Bass and Rosenzweig (1999) see technology supporting a constructivist learning perspective. They point, particularly, to online interaction via email and websites.

However, one must realize the drawbacks to electronic communication and online interaction. Despite all of its uses, the Internet has many sites that provide undesirable and incorrect information. According to Berson, Berson, and Ralston (1999) and Britt, Smith, Sunal, and Sunal (1998) teachers and parents should be wary of unrestricted student access to the Internet. Students will probably benefit more from having directed online assignments such as a WebQuest (developed by Bernie Dodge at San Diego State University), where Internet resources have been chosen by the teacher ahead of time to limit aimless searching of the Internet.

To further study the information presented by Dooling (2000), Tolmie (2001), and Trejos (2000), an action research study was conducted to analyze parental, student, and school personnel's reactions to the increased usage of technology as an instructional component. A teacher of tenth grade U.S. History wanted to explore the reasons behind some of the negative responses to increased integration of technology in her classroom. Replacing an educator (in the middle of an academic year) whose teaching style lacked an emphasis on technology, the teacher initially felt that she would receive overwhelmingly positive responses to this change due to the extensive research about the affirmative results technology integration has on teaching and learning. However, as previously mentioned, much of the literature involving the use of technology in a classroom setting dealt with statistics on achievement, behavior, and dreams of futuristic ideals, not on opinions and attitudes of those involved. Therefore, the teacher had a desire to study the beliefs and attitudes of those involved with her classes.

Method

Apparatus

Based on the limited amount of research available on attitudes toward increased technology integration in classrooms, the researchers in this study developed questionnaires

which they hoped would help answer questions about increased technology usage in the classroom and how it impacts all educational stakeholders. The researchers first tried to find a survey or set of surveys already existing in printed or web-based scholarly literature. After finding no surveys asking questions specific to feelings about technology integration, the researchers decided to create their own questionnaires for each focus group in the study. They examined current instructional practices used within the focus classroom and literature examining these practices, which included email, class web sites, online teaching and learning, and student Internet use. Lastly, they took the observation and research data and created three surveys.   The surveys were reviewed by a panel of professors in the college of education at a southeastern university and Institutional Review Board (IRB) approval was received.

Participants and Procedure

Three groups were included in this research study: Group A=students in five tenth grade, Early American History classes, Group B=regular classroom support personnel, Group C=parents of the students in Group A. Each group was asked to fill out an online survey developed by the researchers. Web addresses linking to the surveys were added to the teacher's class web site and participants visited the site to access the hyperlink. The participants were given directions and an explanation of their role in the project before they began taking the surveys. The students received oral directions, while school personnel and parents received written directions in the body of an email. All three groups were promised confidentiality and made aware that there would be no reward or penalty for their participation.

Group A consisted of 130 tenth grade Early American History students. The students ranged in age from fifteen to seventeen years old. The majority of Group A was lower-middle class to upper-middle class and had access to at least one personal computer at home with the

Internet. The students were members of five Early American History classes with twenty-one to

twenty-nine students per class. Students chose to participate in an online survey about using

Internet, computers and other technology, and email in the classroom (Appendix A). The teacher

instructed the students to complete the anonymous surveys at the end of a class conducted in the

computer lab. Ninety-two students completed the survey.

Group B included special education teachers and aides, English as a Second Language

(ESL) teachers and aides, as well as counselors and school office personnel who worked closely

with students and regular classroom teachers. Each of the faculty and staff who participated

were directly involved with the History class being studied through one or more students. The

special education teachers and aides as well as the ESL teachers and aides provided services for

those members of their programs. The history teacher worked with the resource teachers to

provide the best accommodations and modifications of the curriculum for each student receiving

additional academic support services.

Counselors and office personnel dealt with students in various capacities, which included

extended absences, make-up work, academic support, and students with 504 plans (504 plans

include all students qualified to receive accommodations and modification because of health

impairments or disabilities, which do not fall under the category of special education.) All of

those included in Group B had reason to access the class web site on a regular basis to assist

students and parents in academic planning. Group B received an email asking for their voluntary

participation in the anonymous, online survey (Appendix B). The focus of the survey for Group

B was usability of the class web site to gain information for the students that they assist. Seven

of the thirteen teachers and classroom support personnel completed the survey.

Group C, parents of Group A, was contacted through email and asked to complete an online survey about class websites, email usage, and student Internet access (Appendix C). The participants in Group C had access to personal computers and the Internet. Respondents were not required to provide their names or any identifying information. Furthermore, as with the other parts of the study, no incentives were provided. Approximately one hundred sets of parents were sent the email asking them to complete the survey. Of those contacted, sixteen parents responded to the survey.

Results

Student Study

Although the opinions and reactions of colleagues and parents to new teaching methods are important to all teachers, the interaction between the teacher and the students is the most important feature of a classroom. Teachers hope that with innovative and exciting lessons they can engage students and encourage lifelong learning. It is particularly important to study the ideas and reactions of students when using new methods. First, students indicated how often technology was utilized in their tenth grade history class. This question helps to give validity to a survey on student attitudes toward the use of technology in the classroom. Given the choices of never, occasionally, or often, ninety-two percent of students indicated that they used technology often. Upon elaboration, the students listed an assortment of different technological methods employed by the teacher, such as a SmartBoard, the Internet, a television/computer connector, digital cameras, and a class web page.

The majority (83; N=92) of students also indicated that technology integration in the classroom made learning more interesting. Of the ninety-two respondents, only nine said the use

of technology added nothing to the learning environment. When asked what they liked best about using technology, some of the students responded in the following manner:

Student 1: "I personally am not a big fan of technology but it does make class more interesting"

Student 2: "I like using technology because it shows another way to look at things, other than in textbooks."

Student 3: "It makes school fun because we are doing things differently in [history] than any other class."

Though many of the responses were positive, students were able to critically analyze the limitations of technology usage. Student concerns included: malfunctioning electronic devices; the inability to quickly discern the validity of information on the Internet; and lack of computer knowledge. For example, only twenty-two percent of students rated themselves as having advanced computer skill or knowledge. A minority of students also mentioned they did not like retrieving assignments via a class website.

However, the most interesting part of the study dealt with the changing attitudes of the students from the beginning of the semester until the administration of the survey. Students compared present opinions about classroom technology use to initial feelings about the concept of technology integration. The majority of students indicated that they felt scared or worried about the prospect of increased technology usage. However, many of these same students changed their opinions after becoming acquainted with new classroom policies and procedures.

In addition to classroom technology usage, students also discussed personal time spent using a computer or other technological device in a single week. Students chose from less than one hour, two to three hours, four to five hours, six to seven hours, eight to nine hours, ten to

twelve hours, or more than twelve hours. Each choice had a relatively even spread of respondents with the greatest percentage, twenty-three percent, using the computer six to seven hours per week. Although the amount of time spent using computers was not surprising, it was shocking that eighty-four percent of students claimed that of their time using computers, less than three hours a week were devoted to school related work. Students spent the remainder of the time on computers talking to friends through instant messaging, checking movie times, receiving and sending email, and playing games. This lack of scholarly computer use is also astonishing when one considers that sixty-eight percent of the students surveyed have five or more academic classes. Furthermore, fifty-eight percent of respondents indicated that only one of their academic classes had a website.

Lastly, students evaluated the use of email as a tool for scholarly collaboration. Fifty-four percent of students said they used email to contact their teachers about assignments. Students who used email for school related questions and concerns rated this type of communication using the following three choices: not helpful, somewhat helpful, and very helpful. Twenty-nine percent of students rated email as not helpful, while thirty and forty-one percent believed electronic mail was somewhat helpful and very helpful, respectively. Many of the students explained reasons why they believed email was not more useful. Some of the arguments were not having access to email, the difference between actual and desired response time, and technical difficulties with email services.

School Personnel Study

Of the school personnel who regularly interacted with the students in the study in an academic support capacity, ninety-two percent knew what the class website offered to assist students and parents, and sixty-nine percent accessed the site regularly to assist students with

assignments. Respondents said they found the site useful for helping students keep up with daily assignments, informing students and parents of work missed because of absences, and directing weaker students toward reviews and remediation.

When asked to evaluate the overall quality of the site, the responses were overwhelmingly positive. Participants rated the following characteristics regarding the class website: ease of navigation, ease of finding contact information, ease of understanding classroom information, ease of finding desired information, and the degree of relevant support offered to students, parents, and school personnel. School personnel used a numerical scale of one to three to evaluate each characteristic: 1= website did not exhibit the characteristic; 2=, the website was somewhat adequate regarding the attribute; and 3= the website consistently demonstrated the quality.

Seven of the thirteen respondents indicated that the site consistently demonstrated ease of navigation (a rating of three), which was the highest score of all website characteristics. Ease of finding classroom information and the degree of relevant support offered to students, parents, and school personnel were also highly rated, with the majority of those surveyed indicating excellence, a rating of three, in these two areas. Lastly, the ease of finding the information desired and the ability to find contact information received a rating of three by approximately fifty percent of the respondents.

In addition to rating characteristics of the website, participants were also asked to give insight on what they believed to be the advantages and disadvantages of a class website. No one indicated that there were disadvantages to having information posted on a class website. However, one respondent felt that the teacher relied too heavily on the site as part of her teaching style. The respondent noted "Students benefit from having instructions given in a variety of

formats, and usually seeing it written on the board is the best way." The same respondent also wrote "The website should be used to reinforce what goes on in the classroom, not to give new information."

However, as noted by this respondent's remarks, it is clear that there was a lack of communication between teachers about the exact functions of this particular class site. The History teacher suspected that misinformation from students may have been the participant's cause for alarm, and the particular teaching philosophy espoused by this participant is evident in her opinion that seeing information on the board is the best way to provide students with new knowledge. Moreover, the class site was used to supplement information that was also available to students through handouts and a corner of the class white board devoted to homework assignments and upcoming events.

Parental Study

The results of the parental questionnaire displayed an overall positive perception of email communication and class websites. The survey began by asking if the parents were aware of the website for their child's American History class. Over sixty percent were aware of the site; however; only fifty-six percent reported visiting it regularly. Those parents who accessed the site used it for learning about their children's assignments, test dates, and test reviews. When asked what other information should be available, some suggested links to pertinent history resources. However, the majority of respondents were satisfied with the content. Likewise, fifty-seven percent of parents felt the website offered useable and relevant support for students and parents.

When asked about the advantages and disadvantages of a class website, many responded positively. Parents were especially pleased with the ability to access homework assignments,

testing dates, and obtain review material. Moreover, parents found it convenient to access the website to retrieve make-up work, therefore, avoiding calling the school for missed assignments. Participants also responded positively to the posting of project due dates. Many felt that because these projects required more time and research it was important to know about them in advance. Another respondent praised the helpfulness of the website for his or her child who had ADD/ADHD. Because the student had trouble focusing in class, having the assignments and upcoming due dates available for home access helped the parents keep the child on track.

Participants who were not previously aware of the website were asked if they would utilize it now. Eighty percent of respondents replied that they would now access the class site. Those who said they would not view the website, after learning of its existence, qualified their responses. Most felt that their children were responsible enough to keep up with their assignments and earn a good grade in the class; however, if grades or behavior ever became a problem they were glad that the site would be there to assist them.

Parents also contributed input on email communication with teachers. Eighty-seven percent of respondents knew they could email their child's history teacher, while sixty-sixty percent used email to contact her regularly. The most common reason for email usage was a concern for their child's behavior or grades. Others saw it as a way to conveniently check the progress of their children, even if grades were not slipping. Parents also felt that email communication was quicker than attempting contacting the teacher via phone. Another advantage parents found over traditional forms of communication was less reliance on students to relay messages. Although the majority of responses dealing with email communication were positive, parents indicated drawbacks, such as, lack of personal communication and the lag in email response time.

Lastly, parents were asked if they had reservations about their children using the Internet for school-related work. The majority of respondents felt that the Internet was a valuable resource for educational tasks. Most respondents felt that skill in using the Internet and personal computers was worthwhile for students to learn. Nevertheless, most parents also qualified their support of Internet use with phrases such as "if used appropriately," or "when used correctly." Others were worried about the quality of information available on the web. Finally, one respondent expressed concern regarding universal student access to the Internet.

Overall, parents displayed a positive attitude toward the forms of technology discussed above. However, there was one notable exception. On each of the questions, the same respondent reacted very negatively to the class website, email communication, and Internet use. The responses given indicate a general negative attitude toward technology use in the classroom. However, the participant never indicated why he or she disliked the increased use of technology in the classroom.

Implications

It is important to note that although this study was prompted by negative attitudes to technology use in an instructional setting, the vast majority of the responses from the three groups were positive. The results of the survey suggest that much of the initial resistance to technology integration derived from discomfort with the unknown; for instance, survey data indicated that the History class being studied was unique in its use of technology integration as a pedagogical practice. A mid-year teacher change contributed to participants' discomfort as well. Having found the answer to their initial question, the researchers felt it was important to address individual aspects of technology integration, such as email communication and

student/teacher/parent collaboration, student Internet access, and instructional practice, to improve teaching methods and foster authentic learning.

The majority of parents and many of the students appreciated the ease and flexibility of email use. Respondents acknowledged the convenience email offers busy parents, teachers, and students. However, few of the respondents recognized the new set of problems created with this type of communication. According to Trejos (2000), many teachers feel overwhelmed with the amount of email correspondence they must deal with on a daily basis. Educators voice concern that reading and responding to email significantly diminishes the time they have to plan, an issue overlooked by the parents and students in this survey. Furthermore, the researchers also concluded from the survey response rate in the parental survey and the lack of time students spend using the Internet for school related work, such as emailing teachers, that email may not be the most effective form of communication. An area of further research should focus on the most efficient way to correspond with parents and students.

In addition, parental attitudes and opinions regarding proper Internet use by students is another area that deserves further study. According to Tolmie (2001), many pre-existing factors, such as parental attitudes, will determine successful technology integration in an educational setting. The majority of parents, who participated in the survey, viewed the Internet, in various forms, as an important instructional and communication tool. Conversely, respondents also seemed aware of the dangers that the Internet and email may pose to users. For example, many participants qualified their approval of Internet use, which indicates that they are concerned about the abundance of inappropriate and unreliable material available online.

Furthermore, as suggested by Berson, et al (1999) and Britt, et al (1998), teachers should be wary when asking their classes to use the Internet and should warn them of the dangers that

exist. Teachers, schools, and school systems should provide Acceptable Use Policies (AUP) to students and parents with guidelines for proper Internet and email use while at school. AUPs and school filtering programs can help keep students out of undesirable websites and keep them focused on academic tasks.

Moreover, when introducing students and parents to a dramatically different teaching style, it may be helpful to explain, in-depth, how technology will be used in the classroom. If a teacher adequately prepares students, in the beginning, it is reasonable to assume that the teacher will not have overwhelming resistance to technology integration. As evidenced by the student questionnaire, after having a chance to adjust to the difference in teaching style, students noted that they enjoyed technological tools such as the SmartBoard, which emphasized a more constructivist approach in which students are actively learning with "real world" implications (Britt et al., 1998). Using constructivist learning includes inquiry-based learning, bridging reading and writing through on-line interaction, and making student work public in media formats (Bass and Rosenzweig, 1999). Most students indicated that they enjoyed the hands-on learning offered by technology integration and felt they retained more of the information provided in the history class.

Conclusion

Any analysis of technological use must take into account the many components of an educational setting. Tolmie (2001) maintains that the same forms of technology will not necessarily yield comparable results in every educational environment. Technology is not used in isolation for teaching and learning, and the impact of technology on education is largely determined by the established educational setting. To be successful, a teacher attempting to integrate technology into a classroom environment must consider factors such as: administration,

teacher, student, and parental attitudes towards technology; the educator's teaching style and

philosophy; the subject and concepts taught; and the learning styles of the students. Finally,

reflective evaluation of current and future practices, as well as staying abreast of current research

will help provide the best education for all students.

Contributors

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References

Bass, R. & Rosenzweig, R. (1999). Rewiring the history and social studies classroom:

needs, frameworks, dangers, and proposals. *Journal of Education*, *181(3)*, 41-62.

Retrieved November 8, 2002, from Academic Search Elite database

Bennett, F. (2002). The future of computer technology in K-12 education. *Phi Delta*

Kappan, 83(8), 621-626. Retrieved October 12, 2002, from Academic Search

Elite database.

Berson, I. R., Berson, M. J., & Ralston, M. E. (1999). Threshing out the myths and facts of

Internet safety: A response to separating wheat from chaff. *Social Education*, *63*(3), 160-

161.

Britt, J., Smith, C., Sunal, C. S., & Sunal, D. W. (1998). Using the Internet to create meaningful instruction. *The Social Studies*, *89(1)*, 13-17.

Corcoran, T. (1999). Making the most of professional development [interview]. *Curriculum Review, 38(5),* 4-5.

Diem, R. A. (2000). Can it make a difference? Technology and the social studies. *Theory and Research in Social Education*, *28*, 493-501.

Dooling, J. (2000). What students want to learn about computers. *Educational Leadership*, *58(2),* 20-24.

Eaton, J. S. (1999). The social studies classroom on the eve of the cyber century. *Social Education*, *63*, 139-141.

Harris, S. (2002). Innovative pedagogical practices using ICT in schools in England. *Journal of Computer Assisted Learning*, *18(4)*, 449-458.

Shaver, J.P. (1999). Electronic technology and the future of social studies in elementary and secondary schools. *Journal of Education*, *181(3),* 13-41. Retrieved November 8, 2002, from Academic Elite database.

Symonds, W.C. (2000). High school will never be the same. *Business Week, 3696*, 190-193. Retrieved December 3, 2001, from Academic Search Elite database.

Tierman, K. (2002, January 15). Grant takes aim at digital divide [Electronic Version]. *Columbia Daily Tribune*. Retrieved November 8, 2002, from Newspaper Source database.

Tolmie, A. (2001). Examining learning in relation to the contexts of use of ICT. *Journal of Computer Assisted Learning, 17(3)*, 235-241.

Trejos, N. (2000, November 5). Internet makes kids' grades an open book: Websites help parents track students' progress. *The Washington Post*, p. C1.

Appendix A

Technology and Learning in the Social Studies Classroom—Student Survey

This survey includes students who are currently enrolled in Ms. _____ American History to 1900 classes. The purpose of this study is to examine the feelings of students regarding the integration of technology in the classroom. Your participation will include answering a brief questionnaire about your experiences with technology usage in the classroom. The time required to complete the questionnaire should be no more than fifteen minutes. Student participants shall not feel that their grades will be impacted upon completion of the survey. All questionnaires are completely confidential and names will not be disclosed at any point during or after the study. Your participation is voluntary, and you may withdraw from the study at any time.

1. Please indicate one of the following to describe how often Ms. _____ uses technology in the classroom?
   Never
   Occasionally
   Often

2. What forms of technology does Ms. _____ use in the classroom? (i.e. digital cameras, PowerPoint, email, SmartBoard, the Internet, etc.)

3. Do you feel that the technology used in your Social Studies class makes lessons more interesting? Please explain why or why not?

4. What do you like best about using technology?

5. What do you like least about using technology?

6. Please indicate one of the following to describe your knowledge of computer use.
   Beginner
   Intermediate
   Advanced

7. Approximately how many hours a week do you spend on the computer?
   less than 1
   2-3
   4-5
   6-7
   8-9
   10-12
   more than 12

8. Of the time you spend on the computer, approximately how much is for school-related work?
   less than 1
   2-3
   4-5
   6-7
   8-9
   10-12
   more than 12

9. Please list the school-related activities for which you use the computer. (i.e. writing papers, research, checking assignments, emailing teachers, etc.)

Please list the non school-related activities for which you use the computer. (i.e. emailing friends, using chat rooms, checking movie times, etc.)

10. How many academic classes are you currently taking?
    4
    5
    6
    7

11. Of these classes how many have a class website?
    0
    1
    2
    3
    4
    5
    6
    7

12. Specifically, how do you feel about the website used in Ms. _____ class?

13. In what ways, if any, do you find her site useful?

14. In what ways, if any, do you dislike having a website in your Social Studies class?

15. At the beginning of the semester, when you heard you would be using more technology in the classroom, how did you feel? Explain.

16. Have your feelings about class websites and other technology changed over the course of the semester? Please explain.

17. In what way has the use of technology in Ms. _____ classroom motivated you to learn differently?

18. Have you ever emailed Ms. _____ about a class assignment? (If you answer "no" to this question, please skip the remainder of the survey.)
    Yes
    No

19. How would you rate this type of communication?
    not helpful
    somewhat helpful
    very helpful

20. What advantages and/or disadvantages do you see with email communication outside the classroom?

Appendix B

Technology and Learning in the Social Studies Classroom—School Personnel Survey

Your voluntary participation in this study is requested. This study includes faculty and staff who work with Ms. _____ American History to 1900 students. The purpose of this study is to examine the feelings of school personnel regarding the integration of technology in the classroom. Your participation will include answering a brief questionnaire about your experiences with technology usage in the classroom. The time required to complete the questionnaire should be five to fifteen minutes. The benefits of this study are to provide research on this topic and to improve the instructional methods in Ms. _____ classes. All questionnaires are completely confidential and names will not be disclosed at any point during or after the study. Your participation is voluntary, and you may withdraw from the study at any time.

1. Are you aware that Ms. _____ offers a web site to assist student's parents, and school personnel?
    Yes
    No

2. Have you ever accessed Ms. _____ site? (If you have not, please skip to question 6)
    Yes
    No

3. Please indicate to what degree Ms. _____ web site exhibits the following characteristics. One meaning not at all, 2 meaning somewhat, and 3 meaning consistently.
    Ease of navigation   1 2 3
    Ease of finding contact page and contact information   1 2 3
    Ease of understanding classroom information   1 2 3
    Ease of finding the information you desired   1 2 3
    Offers useable and relevant support for students and school personnel   1 2 3

4. What are the main reasons you use Ms. _____ web site?

5. Have your ever suggested Ms. _____ web site to a parent or colleague?
    Yes
    No

6. As a member of the faculty or staff, what advantages and/or disadvantages do you see in having a class web site? (Please skip the remainder of the questionnaire if you have not visited Ms. _____ web site.)

7. Can you think of anything else you might like to see included in a web site for a Social Studies class?

8. Are there any specific features you like about Ms. _____ web site?

9. Would you recommend that other teachers offer class web sites?
    Yes
    No

Appendix C

Technology and Learning in the Social Studies Classroom—Parental Survey

Your voluntary participation in this study is requested. This study includes parents whose children are involved with Ms. _____ American History to 1900 classes. The purpose of this study is to examine the feelings of parents regarding the integration of technology in the classroom. You will answer a brief questionnaire about your experiences with technology usage in the classroom. The time required to complete the questionnaire is five to fifteen minutes. Parental participants shall not feel their completion of the survey will affect the grade or treatment of their child in Ms. _____ class. This study will provide research on this topic and help improve the instructional methods in Ms. _____ classes. All questionnaires are completely confidential. Ms. _____ and Ms. _____, graduate students at a southeastern university, are conducting this study as part of a course assignment.

1. Are you aware that your child's Social Studies class has a website where homework and other assignments are posted? (If not, please skip to question 6.)
   Yes
   No

2. Do you regularly view the class website?
   Yes
   No

3. For what reasons do you access the website?

4. Please indicate to what degree Ms. _____ website exhibits the following characteristics. One meaning not at all, two meaning somewhat, and three meaning consistently.
   Ease of navigation   1 2 3
   Ease of finding contact page and contact information   1 2 3
   Ease of understanding classroom information   1 2 3
   Ease of finding the information you desired   1 2 3
   Offers useable and relevant support for students and parents   1 2 3

5. Can you think of anything else you might like to see included in a website for a Social Studies class?

6. What advantages and/or disadvantages to parents do you see in having a class website?

7. Are you aware that your child's Social Studies teacher can be contacted by email? (If not please skip to question 10.)
   Yes
   No

8. Do you use email to contact your child's teachers? (If not, please skip to question 10.)
   Yes
   No

9. What are the main reasons you use this type of communication?

10. What do you feel are its benefits and/or limitations to email communication with your child's teachers?

11. Do you subscribe to Internet Information on Demand (IIOD) provided by _____
    School? (This service provides regular updates for student grades and attendance.)
    Yes
    No

12. Please explain why you do or do not subscribe to IIOD.

13. If you have answered ALL previous questions please skip to question 14. The website in your child's
    Social Studies class provides current and previous homework assignments, project and paper
    assignments, the class syllabus and classroom policies, test reviews, and information about your
    child's teacher. Now that you know about the website and/or email communication available in your
    child's Social Studies class, do you think you will utilize it/them? Why or why not?

14. Do you have any reservations about your child using the Internet for school-related work? Please
    explain.