

Understanding the Role of Technology in a Secondary School Social Studies Classroom

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Abstract

Recent research has shown that technology is extremely important when used in the classroom because it enhances student learning. It is imperative that teachers learn the best practices for use of technology in the classroom. Using interviews, questionnaires, and observations with social studies teachers in a rural school district in Central New York, the studies showed that there are issues of access to technology for both students and teachers. Technology is a tool, and is changing the role of the teacher. Teachers have little or no professional development in the use of technology in their classroom. It is also not clear what purpose technology should serve in the classroom.

Introduction

Technology plays a significant role in our society today. Most students, parents, and teachers use technology on a regular basis. There is no doubt that technology affects all aspects of our society. It also influences everything that we do on a daily basis. This also is true for the classroom environment. Teachers and students are consistently being introduced to new technologies. School districts are being pressured to buy even more technology and teachers are being pressured to use the technology.

During my student teaching I was thrust into a classroom with a Smart Board and was asked to use it as part of my lesson planning. The teacher wanted to demonstrate to me the power of technology in the classroom. However, after all my preparation to be a teacher in my undergraduate education, I had never used a Smart Board. This presented a problem because not only was I learning things like classroom management but I also had to learn how to use the Smart Board and integrate it into my lessons on a daily basis. These types of examples illustrate the problems that come with technology. Teachers are no longer just teaching, but they are also learning new technologies. Teachers have to learn technology and implement it into their lessons, while also making sure that the content that is being presented is valid and differentiated.

While technology plays an important role in the 7-12 social studies classroom, its overall role, purpose, and function is not completely known. Furthermore, best practices for use of technology in the 7-12 social studies classroom, professional development and preparation are varied. Some teachers feel that they need more professional development to use the technology in such a way that will benefit all students.

Literature Review

In reviewing literature for this study, a number of themes emerged: a) technology is changing education; b) technology is important to education; c) technology enhances education. Finally, there are issues that still exist with teacher training and accessibility to technology in schools and in the classroom.

Technology is changing education

It is clear that technology has brought dramatic change in the world and in education. One of the areas where change is clearly visible is the internet. The internet has forever changed the way people look at and access information. Therefore, it only makes sense that learning could also be moved from the classroom to the internet, as a new form of learning. A study done by Fu, Wu, and Ho (2009), focused on web-based learning and how student motivation could be affected over the internet. College students responded to incentives while working together in a web-based learning environment. The study had different types of groups that all received different types of rewards: lower competition, collaboration-intense, and competition-intense. The participants were given different types of rewards, financial being the most lucrative. They showed that both social and the financial aspects of rewards help to improve student learning because students enjoy the social, and the financial

benefits. This shows that web-based learning can be manipulated by the outside factors like money collaboration, and financial rewards. Meaning, students' performance could be manipulated by the situation, and the rewards they were given.

A study by Swan (2009) investigated the use of a program called CaseMate. CaseMate essentially provides instant feedback to teachers about students' progress on an electronic assessment. Many people believe feedback is one of the most important aspects in education. Feedback comes in many formats, comments, and corrections. This study shows that programs like CaseMate can be powerful tools in gathering data about students learning and where they may need help with in the classroom. However, this study focuses on a college classroom, which is still a traditional educational environment. Nonetheless, the secondary school classroom is a very different place where assessment data collected using a program like CaseMate might be used in a different way.

Technology is Important to Education

A study by Lecklider, Britten, and Clausen (2009) surveyed administrators' view of the importance of technology in the classroom. According to the study 87% of administrators rated technology as something important that teachers should be using in their classrooms. Furthermore, 95% of administrators viewed student use of technology as extremely important. This study was conducted over the fall of 2006, using a survey that was made up of Likert type items. The survey was sent to school leaders, and administrators. This study clearly shows how administrators view technology use by students and by teachers as something that is very important in schools, proving even further the viewed importance of technology in schools and in the classroom.

Accessibility and Training

Wright and Wilson (2009) followed pre-service teachers through their preparation program and after they had completed their program. One of the concerns that were expressed by the participants in this study was the “red-tape” that they had to go through in their positions to get the use of the computer lab in their buildings. The study also found that, for teachers to stay proficient with technologies in the classroom it is important that they stay in contact with professors and mentors from their teacher preparation programs. This speaks to the need for professional development before, during, and after preparation for teaching.

Technology Enhances Education

Stoddard (2009) investigated the use of documentaries. Documentaries and movies in general are used a lot in today’s classrooms at all levels. Stoddard (2009) investigated the effect that documentaries had on students’ opinions, specifically in this study, world war two and the atomic bomb. The study found that that some opinions were changed after viewing the documentary and some were not. It also states that some students truly had a hard time understanding the opinion of the movie. This made it difficult for it to influence their opinions.

There is a lot of research that deals with technology, but few focus on the secondary school social studies classroom. Furthermore, lots of the research presented deals solely with one aspect of technology in the classroom or in the learning process. There are some questions that are left after reviewing this literature. What are social studies teachers doing in their classrooms in relation to technology? What effect does technology have on student learning, if any? How prepared are teachers to use technology?

Methodology

Sampling

This study targeted specifically secondary social studies teachers, in grades 7-12. The first phase of the study included observations at a rural 7-12 Jr. /Sr. High School in Central New York. In this phase of the study there were five participants. Four of the participants were male and one was female. They were all white and between the ages of 30-50. Teacher 1 was a white female in her 30's. Teacher 2 was a white male in her early 30's. Teacher 3 was a white male in his late 30's. Teacher 4 was also a white male in his 30's and finally teacher five was a white male in his early 40's.

Instruments

Questionnaire

The first instrument was the questionnaire (Appendix 3). The questionnaire was made up of twenty-six questions, some open ended, some Likert-based items, and some questions that asked participants to select what applied to them or was contained within their classroom. Administration of the questionnaire was handled through Google Document's which allows the researcher to e-mail participants the URL address which allowed them to complete it anonymously. The questionnaire was estimated to take less than ten minutes to complete.

Interviews

The next instrument used during this study was the interview (Appendix 4). This instrument was used with five participants. This instrument was important because it allowed one to gain further information about what teachers were doing in their classroom. It allowed the research and participant to explore more about the teachers' feelings in regards to technology in the social studies classroom. The questions for the interviews were open ended

to allow exploring of the particular issues that were important to the particular participant in the study.

Observations

The third and final instrument was observation. While no documents were prepared for this instrument, it is equally important. The observations were done intentionally this way because I did not want to enter the observation situation with any pre-conceived notions about what was supposed to happen, or should happen in the classroom. Rather the purpose was to allow me to record what all the teachers were doing in the classroom on a daily basis.

Each instrument was validated through a process of piloting and professional feedback and editing. This helped to decide whether or not the items were valid, and to help rid the questionnaire of items that solicited incorrect or un-needed data. This was also done through a pilot and editing process with the interview questions. Three instruments were used in general with the principal of triangulation to insure validity of this study.

Procedure

The research process started by seeking permission from the Human Subjects Committee (HSC) at the institution involved with this research process. After permission was obtained the research process moved forward with gaining permission from the building principal and the teachers that were asked to participate in the research process. A signed letter of permission was obtained from the building principal. Furthermore, informed consent letters were obtained from all the teachers involved in this research process. Once this process was completed the research process commenced. The first day at the site was spent scheduling the interviews and observations that were to take place. After this, interviews and observations began for all teachers who agreed and signed informed consent

forms. Teachers were informed of their right to withdraw from the study at any time, and all data would be kept confidential, and destroyed after six months (Appendix 2).

The questionnaire was sent to teachers via e-mail. The informed consent was that if they choose to take the survey they agreed to waive consent, if they did not wish to take it they simply did not have to. Furthermore, information was provided in the initial e-mail for teachers to be removed from further mailings regarding the study. This helped to insure that no participants felt pressured to complete the questionnaire aspect of the study.

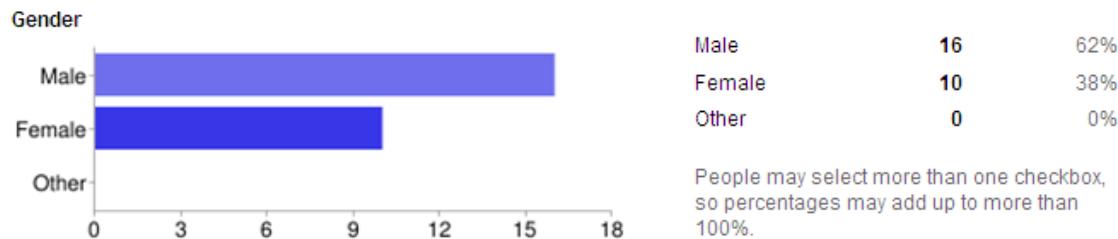
Results and Findings

Data – Questionnaire

Data collected from the questionnaire was done on Google Documents. Google Documents automatically collected and compiled the data into charts.

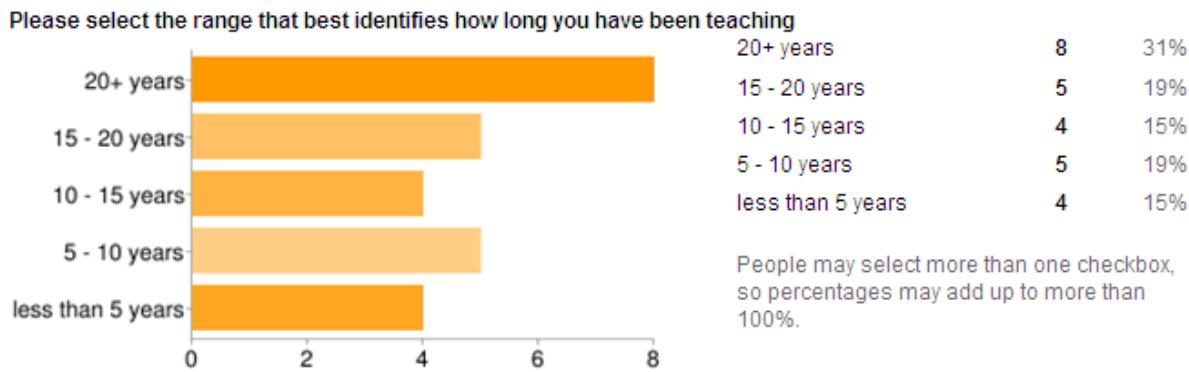
The first three items gathered were demographic data such as gender. Sixty two percent who responded were male, and 38 were female (Figure 1).

Figure 1



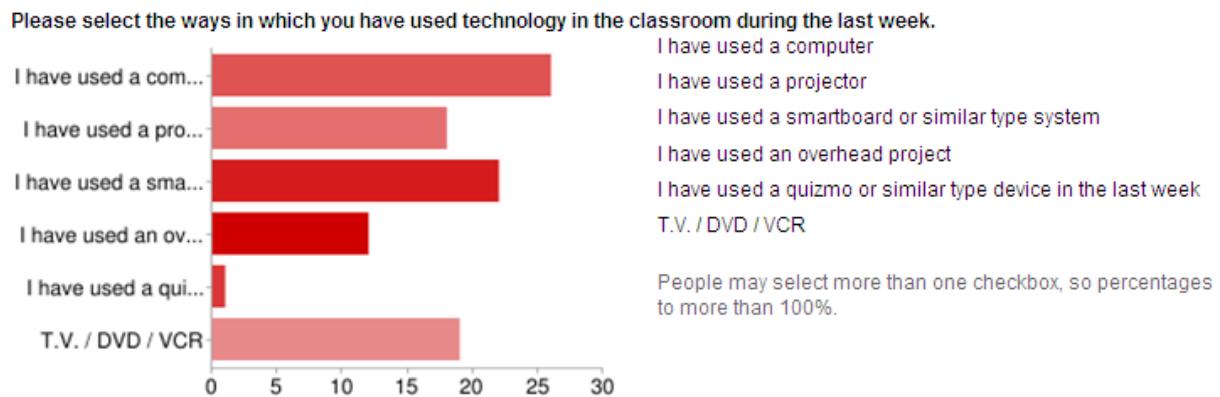
Participants taught everything from 7th grade through 12 including some 10th Grade Advanced Placement (AP), and 11th AP history courses. Thirty-one percent of the teachers have been teaching for 24 or more (Figure 2).

Figure 2



When asked whether or not they had used technology for the previous one week, 100% responded had used a computer within the last week, while 85 % responded that they had used a Smart Board or similar type system in the last week. The lowest was four percent for the use of a quizmo or similar type device (Figure 3).

Figure 3



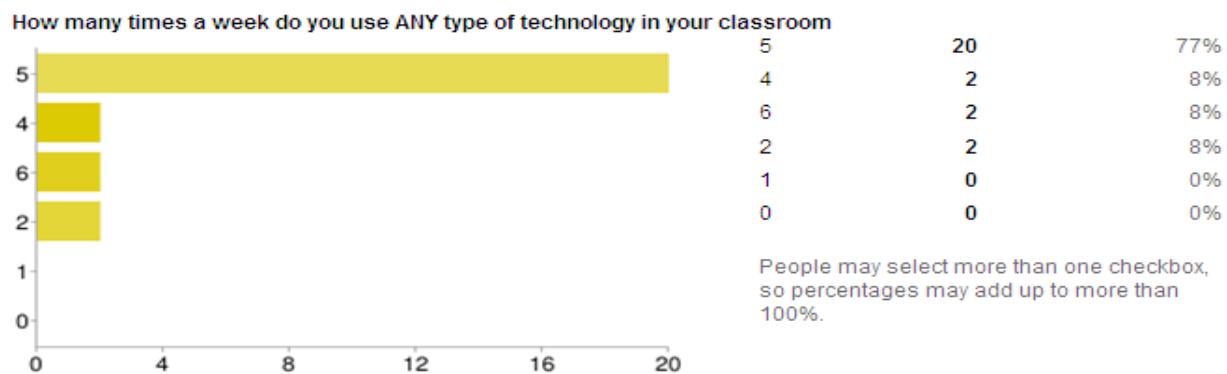
Examples of technology used: “Ipod, clickers, websites, Red Cat auditory system, Flip Camera, IPad, Airliner.”

Some responses to how technology is shared were:

Category	Comment
Sign Up /Out	"Technology is shared in terms of signing out Smart Responders for use with the Smart Board, we can also sign out a smart document camera via our library." "Technology is shared in terms of signing out Smart Responders for use with the Smart Board, we can also sign out a smart document camera via our library."
Verbal Agreement	"We talk about how we use technology in class as in-service classes are offered on a regular basis. We have a tv/vcr.dvd shared by the department. Smart Boards to be installed in every room by the end of the year."
Collaboration	"Videos are shared. Most information used in the classroom is located on shared folder." "We shared various equipment items among each other."

Seventy-seven percent responded they used technology five or more times a week, while four, three, and two all at eight percent (Figure 4).

Figure 4



Thirty-five percent strongly agree that they give assignments where students require a computer to complete, while twenty-three percent remained neural and forty-two percent disagreed or strongly disagreed.

Figure 5 – Graph of Likert Items

Item	Strongly Agree	Agree	Neutral	Disagree	Strongly disagree
Computer to Complete Assignments	4%	31%	23%	19%	23%
Lessons using projector	46%	19%	19%	4%	12%
Lessons using Smart Board	42%	19%	12%	12%	15%
Lessons using overhead / elmo	19%	12%	15%	12%	42%
Technology is an important tool in presentation of lessons	50%	42%	4%	4%	0%
Use of movies to supplement text	38%	31%	27%	4%	0%
	Very Satisfied	Satisfied	Neutral	Dissatisfied	Very Disatisfied
Level of technology in your classroom	23%	46%	19%	8%	4%
	Strongly Agree	Agree	Neutral	Disagree	Strongly disagree
Power Point to present Lessons	19%	27%	38%	8%	8%
Incorporation of Multi-Media	35%	19%	31%	12%	4%
Use of Internet when teaching	27%	23%	38%	12%	0%
Student use of internet when completing assignments	12%	35%	35%	15%	4%
Level of comfort using technology	54%	23%	15%	8%	0%
Comfort intergrating technology into lessons	42%	31%	19%	8%	0%
I feel that student learn better when I use technology	35%	23%	35%	8%	0%

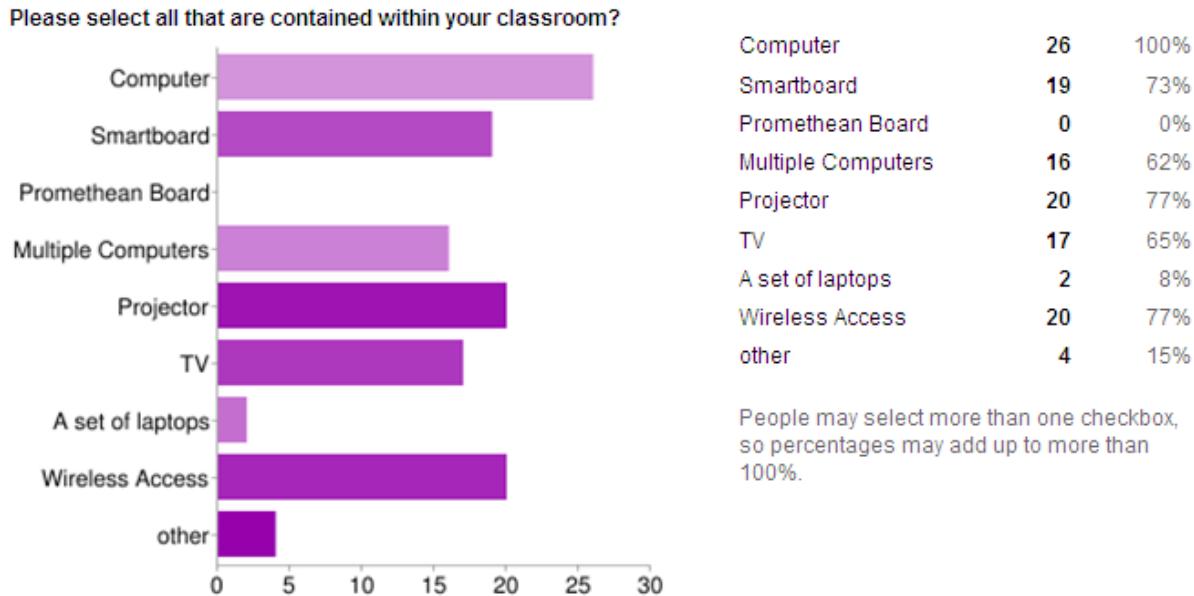
Item nine asks respondents how often they use a projector to project media images or a presentation during a lesson (Figure 5). Sixty-six percent stated they agree or strongly-agree that they use a projector to present presentations or media during a lesson, 19% were neutral, and 16% stated they disagreed or strongly disagreed.

Item ten asks respondents to rate how often they teach lessons with a Smart Board (Figure 5). Sixty-one percent agree or strongly-agree, 12% were neutral, and 27% selected disagree or strongly disagree. Item eleven asked respondents to rate how often they use an overhead projector or Elmo in the presentation of their lessons (Figure 5). Participants responded with, nineteen percent strongly agree, twelve percent agree, fifteen percent neutral, twelve percent disagree and finally forty-two strongly disagree.

Fifty percent of respondents strongly-agreed that technology is important in the presentation of their lessons, forty-two percent agreed, and only eight percent were neutral or disagree (Figure 5). Item thirteen asks respondents to rate how often they used movies to supplement textbook information as part of unit of chapter plans (Figure 5). Sixty-nine percent rated this item strongly-agree or agree, twenty-seven percent rated it neutral and four percent disagreed.

Sixty-nine percent of those teachers rated they were satisfied with the level of technology that is contained within their classroom. Twelve percent stated they were dissatisfied. Item fifteen asked teachers to select all the technology that is contained within their classroom (Figure 6).

Figure 6



Additional technology used included:

- “Smart Board, Student response system”
- “Class set of laptops”
- “Senteos, Flip camera,”
- “My personal Ipod Touch”
- “transparency projector”

Forty-six percent strongly-agree or agree, thirty-eight percent were neutral, and sixteen percent disagreed or strong-disagreed. This item is important because of the fact that that power point is standard presentation tool. Item eighteen asks respondents to rate how often teachers incorporate multi-media into their lesson plans that they teach on a daily basis (Figure 5). Forty-four percent stated agree or strongly agree, thirty-one percent were neutral, and sixteen percent disagree or strongly disagree.

Item nineteen ask respondents to rate how often they use the internet in the presentation of their lessons (Figure 5), and item twenty ask respondents to rate how often they ask student to use the internet in the completion of their lessons (Figure 5). Item twenty-one asks teachers to rate how comfortable they are with using technology in the classroom (Figure 5). Forty-four percent of respondents strongly-agreed that they feel comfortable using technology in their classroom and only eight percent disagreed that they are comfortable.

Item twenty-two stays on the same track as question 21, but asks the question differently (Figure 5). It asks how respondents to rate how comfortable they are implementing technology into their lessons as a teacher. Seventy-three percent of teachers say that they strongly-agree or agree that they are comfortable implementing technology. Eight percent of respondents disagree, stating that they are not comfortable.

The final item on the questionnaire asks respondents if they feel students learn better when they use technology (Figure 5). Forty-three percent stated neutral or disagree, and fifty-eight percent said strongly-agree or agree.

Interview Data

Interviews were conducted with five classroom teachers who were also observed. The primary focus was to understand how teachers view and use technology on a daily basis so that this information can be transferred to those who need to help with the implementation of technology. The conversations with teachers were often varied. In reviewing the data, five themes emerged: technology as a tool; good teaching can happen without technology; technology enhances engagement and active learning, teachers need professional development to properly implement technology in their classrooms, and technology as a supplement to good teaching

Technology as a tool

The majority of teachers interviewed agreed that technology is a tool. One that should be used no matter what you have in the classroom. This is to say that technology is meant to enhance the learning experience with students and agreed that this was important because of the culture of technology that students grew up in. One teacher stated, “Technology makes lesson planning easy, and to edit it all you have to do is re-save the file.”

Good Teaching can happen without technology

Use of technology does not make good teaching. Good teachers, teach well no matter what they have in their classrooms. This theme is supported by the fact that even the teachers without the use of Smart Boards were able to successfully engage their students without a Smart Board in their classroom. One of the teachers interviewed argued that a good teacher will be able to engage students without technology. It does not matter how nicely dressed or how much technology is contained within a classroom, if a teacher is not charismatic and cannot grab the students attention then they still will not be able to teach well.

Technology enhances engagement and active learning

When I asked teachers about their best lesson using technology, all the teachers with Smart Boards (three out of the five) spoke of lessons that were student centered using the Smart Board. Review games and interactive lessons using the smart book software. These same teachers talked about how the Smart Board technology helps to engage students by bringing in audio and video which excites and stimulates the students. One teacher used the Smart Board in an amendment lesson, and could put “pictorial representations” of the amendments to help the students grasp the concepts behind the amendments.

Professional Development

All the teachers talked a lot about professional development in terms of technology in their classrooms particularly the Smart Board. They focused on two main issues: not enough training, and not enough time or lack of Smart Board to use to practice and learn the craft of the Smart Board in particular. The teachers without the Smart Boards in their classroom felt that the presentations about how to use one were fine except for the fact that they do not have one in their classroom which makes it hard to become proficient in using one. Conversely, those with Smart Boards felt that more training should be offered so that they can get a deeper understanding of what a Smart Board can do it enhance their lessons, some of them seemed to be afraid to experiment with their Smart Boards.

Technology as a supplement to good teaching

All of the teachers that I interviewed seemed to agree on one thing, teaching is a human activity and that to do it well requires a good teacher. No amount of technology is going to make a human, who cannot teach, teach better. A good teacher uses technology to supplement their already good teaching skills. “Humans need to teach, technology is there to support the lesson and help things to become more real.” stated one of the teachers interviewed.

Observation Data

In the narrative that follows you will find some observational data that came out of the time spent in the classroom. Note taking was used to record the data for fear of entering the observation setting with any bias. There were no set expectations of what was to be too observed while inside the classroom, only the use of technology and what was happening at that time was recorded.

Five different classrooms were observed, all at the secondary level. Three out of the five classrooms observed contained a Smart Board, mounted to the wall with speaker systems and projectors. The other two classrooms contained different types of technology. The classrooms researched have all been randomly assigned classroom numbers, and will list the technology contained in each of them below.

Classroom and Grade Level	Technology Contained	How it was used
(1) – 11 th 12 th Social Studies, Global, Leadership	Smart Board, computer, printer, five student use computers, overhead projector.	Displaying Directions, Notes, audio visual, show students how to use software.
(2) – 7 th & 8 th Social Studies	Smart Board, computer, printer.	Notes, maps, audio visual, white board, review games.
(3) -- 7 th & 8 th Social Studies	Computer, printer, overhead projector	Presentation of Notes
(4) – 9 th & 10 th Social Studies Global Studies	Smart Board, computer, printer.	Displaying Directions, Notes, audio visual, show students review games.
(5) – 11 th Social Studies U.S 11	Computer, printer, overhead projector	Presentation of Notes

Each classroom had some level of technology in it. Each classroom, for example, contained a computer. However, from my observations the computers were only for teachers use only. The classroom that contained the student computers could be used at any time but contained older models of computers, and were not as powerful as the computers that the teachers used. In the classrooms that did not contain a Smart Board, the teacher utilized the overhead project to display notes for the students. During the observation period, none of the teachers were observed using a T.V or D.V.D player to display a movie in supplement to a lesson. All of the teachers during their lessons used the technology to supplement their lessons. All lessons observed were not based on the technology.

Discussion and Conclusion

There are four conclusions that can be taken from this study. First, there are issues with access to technology in schools, and in the homes of students. Secondly, that the use of technology in the presentation of lessons is increasing and changing the role of the teacher in the classroom. Thirdly, there is an increased need for improved, and more focused professional development of teachers that is needed for teachers to successfully implement technology in their classrooms. Finally, that technology is a tool and not a teacher; we still need teachers to teach well.

Access and Disparities

Many educators believe that technology is a great tool to use and to have in the classroom. It brings innovation, new ideas, and a fresh feel to the classroom. It helps to get students attention, and helps students with disabilities. Technology also makes differentiated instruction easier. However, one of the major problems with technology in general is access to technology and the disparities that exist in the level of technology contained in social studies classrooms. There are schools and classrooms that have technology, and use it. There are also schools and classrooms that do not have technology. There are students who have limited access to technology and are well versed in it, and there are those who simply are not, and have limited access in the home. There are also teachers who have access to professional development in regards to technology and there are those that do not.

One of the items in this study asked respondents, “I have often given assignments that require students’ use of computers to complete.” Over 65% percent of respondents responded neutral or disagree. Forty-two percent responded simply disagree or strongly disagree. This data speaks directly to the concern over accessibility of technology in

students' homes. Provenzo (1999) argues that the internet opens unseen doors for students. While in principle this maybe correct, teachers still have to deal with the issue of accessibility to computers at home when assigning work that may require a computer to complete. Another item on the questionnaire that speaks to the issue of accessibility asked, "My students use the internet when completing assignments." Fifty-four percent of respondents answered neutral or disagree which shows further concern over accessibility. Internet in the home can be costly, so not only is there an issue of actually have a computer, but also paying for internet service to that computer is an issue.

During the interview process some teachers expressed concerns with not only students having access to the internet or a computer in the home, and being able to complete an assignment and having it returned back to the classroom on-time. Furthermore, issues of technological literacy were brought up, teachers interviewed pointed out that not all students are at the same level in regards to the general use of a computer. This makes the completion of computer driven tasks in the social studies classroom even more complicated as computer literacy must then be woven into the lesson. When using computers not only must students learn the content, but some must also learn how to use the computer making the overall project more difficult for them to complete.

Respondents in my study presented concerns about accessibility to technology within the school such as not being able to reserve a computer lab. This concern was mirrored in a study by Wright and Wilson (2009) which found that pre-service teachers has had major concern about the use of technology in the classroom when they went out into the teaching environment. One concern was the scheduling and use of a computer lab for completion and augmentation of lessons and student assignments. This shows that access to computer

technology is an issue for both in-service as well as pre-service teachers. It is hard to use technology in a lesson when there is none available in the classroom.

Technology for the presentation of Lessons

Overwhelmingly the results of this study showed that the majority of teachers are using technology as a tool in the presentation of their lesson. Several items on the survey asked teachers to identify the types of technology contained within their classroom or what they use to present lessons. One-hundred percent of teachers on item fifteen said they had a computer contained within their classroom. Seventy-three percent said they have a Smart Board. Seventy-seven percent of teachers responded that they used technology in some form in their classroom five times a week.

This demonstrates in the increased importance of the use of technology in lessons. Fu, Wu, Ho (2009) investigated web-based learning and student motivation in that environment. While this study itself does not directly connect with my study the change in the role of the teacher is evident in both. Specifically the role of the teacher changing from “lecture” to “facilitators of knowledge” is consistent with my findings.

Many of the teachers observed had a high level of technology in their classroom used a Smart Board. This is essentially an interactive piece of technology which allows direct interaction between the computer software and the user, student or teacher. There were many observed uses of the Smart Board, including presenting notes, maps, audio and visual material, and review games and interactive games. These all have one connected theme, the change from the teacher being the sole presenter and “lecturer” of the material. The teacher still creates the material; it is just being presented differently, as with web-based learning. The teacher is becoming the facilitator of knowledge even in the live classroom setting.

Even as the facilitator of knowledge the teacher presence is still required within the classroom, meaning that they are using the technology as a tool in the presentation of their lessons.

The importance of technology and professional development

One key finding of this study was how unprepared teachers felt in the use of technology in the classroom. They also felt that professional development in technology is important and should be provided often to teachers.

When teachers were asked, “I consider technology an important tool in presenting lessons in my classroom”, ninety-two percent stated that they agree or strongly agree that it is an important tool. This is also a finding that is shared by administrators. Lecklider, Bitten, and Clausen (2009) found “87% rated technology use by teachers a high priority”. This concurs directly to the way many of the teachers felt in my study regarding the use of technology in the classroom.

Along with this comes the complication of professional development. Two out of the five teachers interviewed in my study who did not have technology in their classrooms felt that the professional development provided to them for using the Smart Board was a waste of time because they did not have one to practice on in their classroom. The three teachers who did have a Smart Board said that professional development was provided, but they felt like more in-depth training should be provided because they were not sure generally if they were using their Smart Boards to their full capacity.

Technology as a tool, not a teacher

Many of the discussions and studies here have alluded to technology as a tool. One teacher in this study made it clear that technology is a tool, and even bad teachers cannot

teach well with technology. In other words technology is not a crutch to be used by bad teachers. This participant felt that even good teachers could teach without any technology in their classrooms. They felt that a teacher's charisma and charm was all that is needed to successfully engage students in the learning process, and that if a teacher could not engage students naturally technology was not going to help in that process.

Overall, it is clear that most teachers involved in this study viewed technology as a tool. That in no way should technology ever over take the role of the teacher in the classroom, it should just augment it. But the increase use of technology does have some out stretching and important implications for teaching.

Limitations

Time: First, and foremost, the issue was time. This study was conducted over a short four-week period in which a questionnaire, observations, and interviews had to take place. This made the study difficult to conduct and to find people who were willing to participate. For the interviews and observations, a convenience sample was used, in that they were teachers that the researcher had easy access to.

Small sample: Finding out what teachers wanted to do on a normal day was difficult because of time, but also because when teachers were asked about observations they became very uncomfortable. Some of the teachers that were observed for this project prepared their lessons ahead of time so that it included some type of technology. Those teachers without a large amount of technology in their classrooms were more comfortable showing me what they did on a daily basis without the technology.

Implications

The implications of this study are far reaching, and to help ground social studies teachers' view of technology in their classroom. They provide a basis for understanding the role of technology, and the fact that technology should be well thought-out and carefully processed in its implementation. More than teachers, administrators can use this research to look at how technology is implemented in their schools, and the type of training they are providing to teachers. This is important because teachers need support if they are to meet the goals of their districts and administrators.

This study does not answer the question, "what is a good level to technology?", rather it shows that there are still gaps. This study supports those who support providing laptops in every classroom, and providing time for students every day to use a computer to complete assignments. Computer literacy is extremely important, as computers are now used in almost every major field of employment in some fashion or another.

This study shows clearly, along with others discussed that technology is changing the role of the teacher. Before we move any further we need to decide collectively what the role of teacher and technology is. Clearly from this study, the social studies teacher is no-longer just lecturing and providing facts and figures.

Teachers need to be prepared to use technology in the classroom, but also that administrators need to set a vision for how they want their teachers to use technology. With this vision, and the technology needs to come professional development opportunities. This is so that teachers can use the technology in their classroom to the fullest extent possible. This will help teachers use technology as a tool, and not as a crutch.

As a society we need to be careful not to let technology take over the teaching process. While, it has its benefits, the opinions in this study stress the need for solid teachers to be using that technology as a tool. Without a professional trained teacher there is no depth to the educational experience.

It is clear that technology is always changing. Because we know this fact to be true then as educators we need to make a choice about what we are going to place in our schools so that there is consistence and money is spent wisely. The issue of money was not directly addressed in this study, but because of recent events we know that it plays an important role in decisions that are made at the district level. Schools need to be able to implement technology in their schools that is sustainable both physically and financially.

With the current financial climate the way it is, it is extremely important that school districts set goals for the use and implementation of technology in their classroom. Goals will allow them to purchase the technology they need without breaking the budget.

Recommendations for Further Research

Technology is an ever growing field of wonder. There is always something new coming out. To that end, teachers, and the companies that produce the technology used should always be researching how their product functions in the classroom. The main question, which still needs to be answered out of this research project, is what role technology should play in the classroom? After talking with teachers, professors alike, they all stated that technology should be a tool, one that does not replace the teacher, rather one that enriches the student experience. A study that could quantify the affect that technology had on student achievement would make this argument more solid. One way of doing this

would be to compare a classroom with technology and a classroom without technology. But even with that easy comparison, you still have different students, who may or may not be in different classrooms for different reasons, making this process even more difficult to research. Or giving all students laptops to use in all their classes, and seeing if this affects student achievement, while this may not seem practical with the use of grants and private funding it could be a possibility. Furthermore, the price of laptops continues to fall, and they are becoming more and more economical.

Further research should also be done in terms of professional development. One could survey teachers about their comfort level with the use of a Smart Board, and then survey them about how many features they use on the Smart Board. This would help give the field a greater understanding of truly where teachers are learning the skills for the Smart Board and technology alike. Teachers and administrators alike would know where to put their professional development dollars.

This research project opens up a solid foundation on which to conduct further research, especially in regards to teachers' use of technology, pre-service teacher education, and professional development. Technology is expensive, costly, and as a field we still have not answered the question, "what is it truly doing for our students?"

References

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Appendices

Appendix 1 – Letter to Administrator

Appendix 2- Letter of informed consent

Appendix 3 – Questionnaire

Appendix 4 – Interview Question Outline

Administrator Permission and Introduction – Appendix One

February 18, 2011

Dear,

My name is Jacob Gardner, and I am currently a graduate student at The State University of New York at Oswego. Part of my graduate work is conducting a research project where we attempt to solve a problem or shed light on something. I have chosen to ask the following question: How do I successfully implement technology in the secondary social studies classroom in a rural district?

I hope to shed light on the best practices of teachers, with a focus on rural districts, these are the types of districts that I one day hope to see employment. With your permission, I would like to send questionnaires and conduct interviews with teachers in your social studies department. I would also like access to your technology plan for the building if you have one.

I would need your permission in writing, and your willingness to sit down and talk regarding my research. I can provide my research proposal that was submitted to SUNY Oswego's human subject committee upon request. This study research phase will be short only lasting 2-4 weeks as to minimize classroom and teacher disruptions.

Please respond to this request at your earliest convenience to enable me to seek participation from teachers soon. Participation for both the district and the teachers is totally voluntary. I also will be taking great lengths to assure all information is kept confidential, and there will be no names attached to the project. All raw data collected in this study will be kept secure, and destroyed six months after this study is complete. If you have any concerns or questions regarding this study, please contact my academic advisor, Dr. Faith Maina (faith.maina@oswego.edu) or 315-312-2641, For any concerns regarding the rights of the participants, please contact Dr. Barry Friedman (barry.friedman@oswego.edu) or 315.312-3474, Chair of the Human Subjects Committee, SUNY Oswego. I look forward to hearing from you.

Regards,

Jacob Gardner

Appendix Two

E-Mail: jgardner@oswego.edu

Teacher's Informed Consent

February 18th 2011

My name is Jacob Gardner, and I am currently a graduate student at The State University of New York at Oswego. Part of my graduate work is conducting a research project where we attempt to solve a problem or shed light on something. I have chosen to ask the following question: How do I successfully implement technology in the secondary social studies classroom.

I would like to ask for your participation in my study. The study will consist of one questionnaire, an interview and a possible observation. Your participation in this study is voluntary and you can withdraw at any time without penalty. All information obtained during the study will be kept confidential and your identity will be protected at all times. Raw data will be kept secure, and will be destroyed six months after the completion of the study

If you have any concerns or questions regarding this study, please contact my academic advisor, Dr. Faith Maina (faith.maina@oswego.edu) or 315-312-2641, For any concerns regarding your rights as a participants, please contact Dr. Barry Friedman (barry.friedman@oswego.edu) or 315.312-3474, Chair of the Human Subjects Committee, SUNY Oswego.

Agreement

I _____ consent to complete participation in Jacob Gardner's study on technology use in the social studies classroom. I understand confidentiality will be maintained in any reports of this research, and all raw data will be kept secure, and will be destroyed six months after the completion of the study.

Participant Signature

Date

Research's Signature

Date

Questionnaire – As reflected on Google Doc's – Appendix Three

1.) Gender

- a. Male
- b. Female

2.) Please list the grades you currently teach:

3.) Please select the range that best identifies how long you have been teaching

- a. 20+ years
- b. 15-20 years
- c. 10-15 years
- d. 5-10 years
- e. Less than 5 years

4.) Please select the ways in which you have used technology in the classroom during the last week.

- a. I have used a computer
- b. I have used a projector
- c. I have used a Smart Board or similar type system
- d. I have used an overhead projector
- e. I have used a quizmo or similar type device in the last week
- f. T.V/D.V.D/V.C.R

5.) Please list an additional technology you have used in the classroom during the last week not listed above.

6.) How is technology shared in your building or department?

7.) How many times a week do you use ANY type of technology in your classroom?

- a. 5
- b. 4
- c. 3
- d. 2
- e. 1

8.) I often give assignments that require students' use of computers to complete?

- a. Strongly Agree

- b. Agree
 - c. Disagree
 - d. Strongly Disagree
- 9.) I often teach lessons using a projector, to project media images or a presentation.
 - a. Strongly Agree
 - b. Agree
 - c. Disagree
 - d. Strongly Disagree
- 10.) I often teach lessons using a Smart Board or similar system
 - a. Strongly Agree
 - b. Agree
 - c. Disagree
 - d. Strongly Disagree
- 11.) I often teach lessons using a overhead projector
 - a. Strongly Agree
 - b. Agree
 - c. Disagree
 - d. Strongly Disagree
- 12.) I consider technology an important took in presenting lessons in my classroom
 - a. Strongly Agree
 - b. Agree
 - c. Disagree
 - d. Strongly Disagree
- 13.) I often used movies to supplement textbook information as part of a unit or chapter plans.
 - a. Strongly Agree
 - b. Agree
 - c. Disagree
 - d. Strongly Disagree
- 14.) How satisfied or dissatisfied are you with the level of technology in your classroom?
 - a. Strongly Agree
 - b. Agree
 - c. Disagree
 - d. Strongly Disagree
- 15.) Please select all that are contained with your classroom
 - a. Computer
 - b. Smart Board
 - c. Promethean board
 - d. Projector
 - e. TV
 - f. A set of laptops
 - g. Wireless access
 - h. Other
- 16.) If you selected other please list any technology not contained within the list above

- 17.) I use power point to present my lessons
- Strongly Agree
 - Agree
 - Disagree
 - Strongly Disagree
- 18.) I incorporate multi-media (videos, music, and pictures) into my lessons on a regular basis.
- Strongly Agree
 - Agree
 - Disagree
 - Strongly Disagree
- 19.) I use the internet when teaching my lessons
- Strongly Agree
 - Agree
 - Disagree
 - Strongly Disagree
- 20.) My students use the internet when complete assignments
- Strongly Agree
 - Agree
 - Disagree
 - Strongly Disagree
- 21.) As a teacher, I feel comfortable using technology in the classroom
- Strongly Agree
 - Agree
 - Disagree
 - Strongly Disagree
- 22.) As a teacher, I feel comfortable integrating technology into my lessons
- Strongly Agree
 - Agree
 - Disagree
 - Strongly Disagree
- 23.) As a teacher, I feel that students learn better when I use technology
- Strongly Agree
 - Agree
 - Disagree
 - Strongly Disagree

Interview Questions – Appendix Four

- 1.) Please tell me about yourself?
- 2.) Describe for me a typical school day?
- 3.) Lists for me the types of technological devices you have in your classroom, and what they are used for.
- 4.) What role do you think technology should play in the presentation of your lessons?
- 5.) Can you think of the ways you integrate technology into your lessons?
- 6.) What are students' reactions to your lessons?
- 7.) Are you satisfied with your level of technology in your classroom?
- 8.) Do you have to share any technology with your department/team?
 - a. If so, what is the policy?
- 9.) How would you describe the overall technology level in your district or building?
- 10.) Is there anything else you would like to add?
- 11.)What are three examples of your best lessons using technology?
- 12.)What are three examples of your best lessons without using technology?
- 13.)How do you use technology on a daily basis in your classroom?