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IMPROVING PARENTAL INVOLVEMENT AND STUDENT ACHIEVEMENT

WITH A CLASSROOM WEBSITE

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A Project

Presented to the

Faculty of

California State University,

San Bernardino

_____

In Partial Fulfillment

of the Requirements for the Degree

Master of Arts

in

Education:

Instructional Technology

_____

by

Jennifer Allison O'Kelley

June 2008

IMPROVING PARENTAL INVOLVEMENT AND STUDENT ACHIEVEMENT
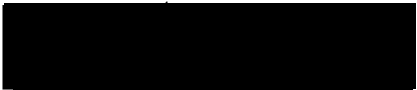
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Approved by:

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ABSTRACT

The importance of parental involvement in their children's education cannot be overestimated. Due to the fact that in today's society both parents typically work during the hours that school is in session, it has become increasingly difficult to maintain consistent communication between the school and home. This combined with the fact that parent involvement tends to decline as the child becomes older, reduces most parental involvement in the upper grades to attending the annual Back to School Night and Open House. The lack of communication between the parents and the school leaves parents uninformed about their children's academic progress and thus unable to intervene in a timely, effective manner. Through the use of technology, this lack of communication can be addressed so that parents and teachers are able to work collaboratively to improve student achievement. This project demonstrated a teacher-created website is an ideal venue for increasing parent communication and involvement with the classroom teacher.

ACKNOWLEDGEMENTS

I thank my parents and family for pushing me to be successful in my endeavors, and providing the guidance needed to accomplish my goals. I am forever thankful for their love, understanding, and acceptance of the choices I have made in my life.

I would also like to thank the Professors who assisted me in developing my Master's Thesis. Thank you Dr. Leh, Dr. Newberry, and Dr. Baek.

DEDICATION

I dedicate this Master's Project to my mom and dad for their unconditional love and understanding, and the encouragement they have provided me throughout the years.

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CHAPTER ONE

BACKGROUND

Introduction

In the aftermath of the No Child Left Behind Act of
2001 (P.L. 107-110), schools are under increasing pressure
to produce academically proficient students (Scheeler,
McAfee, Ruhl, & Lee, 2006, p.12).

> The No Child Left Behind Act of 2001
> reauthorizes the Elementary and Secondary
> Education Act of 1965 and expands on major
> reforms, particularly in the areas of state
> academic standards, assessment,
> accountability, and school improvement. The
> new federal law requires states to develop
> assessments linked to these standards for all
> students (NCLB, 2004, p.1).

Schools and assorted community partners- including
government agencies, parents and guardians, business
partners, community-based agencies and others- must
communicate, plan, assess, strategize, and mobilize
together to enhance outcomes for youths. Emphasis on
teaching is replaced by emphasis on learning as a lifelong

project. In order to be successful, teachers, administrators and all community organizations need to encourage parents to be more involved.

One of the main concerns that teachers and administrators have is how to involve parents in the classroom and school. Schools addresses this challenge by organizing activities, programs, and conferences to appeal to parents so they will come to school and actively participate in their child's education. The lack of parental involvement in schools has lead to a decrease in effort, interest, and concern for their students toward school, therefore, resulting in a decline in student achievement (Halsey, 2005).

Parent involvement generally declines as children progress from elementary to secondary schools. Studies have shown that although parents want involvement in their children's education, they tend to be more involved in extracurricular activities, field trips, concerts, games etc., rather than in the classroom (Halsey, 2005).

As the use of technology increases, more teachers are turning to technology to help them improve their communication with their parents. Using email (Ramirez, 2001) and a classroom website, parents were able to check grades, attendance and behavior of their child on a weekly

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basis. In addition parents were able to receive emails from the teacher with the classroom calendar and/or updates of events.

Statement of the Problem

The problem was to address that schools are witnessing less parental involvement in the school, the classroom and with their child. There is a correlation with the decrease in the success rates of students and the decline in parental involvement (Halsey, 2005). More students are dropping out of high school, joining gangs, becoming addicted to narcotics and failing to meet the mandated requirements for graduation (Swanson, 2004). Student success in school is greatly impacted by parental involvement and communication with the school.

Purpose of the Project

The project was to develop an instructional tool, which would enable students and their parents to access the student's progress electronically at anytime and to determine if students whose parents utilized the teacher-created website and used email to communicate showed significant improvement in students' academics, behavior and attendance (Halsey, 2005). Most of the time, parents and teachers do not contact each other until a serious

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problem arises. By that time, it may be extremely difficult to resolve the issue. The lack of communication between school and home has resulted in many students slipping through the "cracks" of the education system (Swanson, 2004).

Through the use of technology and the teacher-created website, parents were able to contact the teacher, school, and administrator as well as view their child's progress weekly.

Significance of the Project

The decline in parental involvement in children's education has increased over the past three to four decades (Halsey, 2005). In most homes, both parents work, making it difficult for them to be involved in classroom activities or attend parent meetings. As the level of school and parent communication has decreased, student apathy, poor academic performance, inappropriate behavior and irregular attendance have increased. Most school age children are not self-motivated; they are motivated to be successful in order to please someone, namely their parents. If students feel that their parents do not care about their performance in school, they typically will not perform (Comer & Haynes, n.d.). Ramirez, (2001, p.30)

explains "students tend to place greater importance on their education when they see their parents actively involved in it. Also, students have suggested that they want to see their parents involved in their education at the school level" (Ramirez, 2001, p.30).

This project is significant in that the proposed website provides a solution to the issue of the lack of school and parent communication. Parents utilizing the website were able to monitor their children's progress at all times, which allowed them to recognize successes and address areas of concern immediately. Students were also able to monitor their own grades and communicate with their teacher outside of school.

Limitations

Teachers and schools need to be aware, however, that technologies such as email are not a panacea. Parents may be resistant to, uncomfortable with, or unable to use technology. Not all families are equipped with computers, and some that are may not have access to the Internet (Ramirez, 2001, p.31).

The limitations of this project included the following:

1. Not all students have computers at home and not all students (Ramirez, 2001) have access to the Internet or an email account. Many of these parents used a workplace computer to access the website if it was available.

2. Another limitation of the project is a language barrier. Some of the parents have email and/or a computer available, but they cannot read or write English. This creates a problem for 5% of the class.

3. A minor limitation that affects 3% of the class is that parents forgot the students' password to get on the computer.

Definition of Terms

The following terms are defined as they apply to the project.

1. Parental involvement: Ensuring that parents play an important part in their child's education through effective communication with the teachers, active participation in the classroom, attendance at school functions and providing a

learning environment at home that promotes
student success.

2. State standards/requirements: Content standards
   were designed to encourage the highest achievement
   of every student, by defining the knowledge,
   concepts, and skills that students should acquire
   at each grade level (www.cde.ca.gov).

3. Communication: "Any act by which one person
   gives to or receives from another person
   information about that person's needs,
   desires, perceptions, knowledge, or affective
   states. Communication may be intentional or
   unintentional, may involve conventional or
   unconventional signals, may take linguistic or
   nonlinguistic forms, and may occur through
   spoken or other modes." (National Joint
   Committee for the Communicative Needs of
   Persons with Severe Disabilities, 1992, p.2)
   This project focuses on using technology as a
   means of increasing parent communication, in
   this case, primarily a teacher created
   website.

4. ADDIE process: ADDIE contains several

   components – the analysis, design,

   development, implementation, and evaluation.

   The ADDIE process refers to the instructional

   design model that researchers work through

   specific phases of development when designing

   programs, software, websites or tools to be

   used in various career fields (Thomas,

   Mitchell, & Joseph, 2002, p.41).

CHAPTER TWO

REVIEW OF THE LITERATURE

Introduction

Research has indicated that there is a direct

connection with parent involvement and student success. In

fact, research has shown that involving parents

effectively in their children's education can be more

effective than any other strategy for school improvement.

The following review of literature will provide a

definition of parental involvement for the purposes of

this project, and will discuss the advantages and

challenges of developing and implementing avenues for

parental involvement. Since one such avenue is a teacher-

created website, a definition of a classroom website, the

advantages and challenges of a classroom website and

guidelines for utilizing a classroom website are also

included in this discussion.

Explanation of Parental Involvement

Although there are various definitions of parent

involvement, it is generally referred to as the connection

that occurs with parents, teachers, and school

administrators. Parents who are cognizant of their child's

academic strength and weaknesses can provide targeted

assistance in areas of need. Parents can support their

children's schooling by attending school functions and

responding to school obligations such as parent-teacher

conferences. For the purpose of this project, parent

involvement was defined as the communication that was

created between parents and school through the use of a

classroom website. Specifically, this project observed the

frequent use of the classroom website and perceived

usefulness of the teacher-parent web-based communication.

Advantages of Parental Involvement

School leaders explain that improvement in

communication will strengthen the relationship between the

school and home thus improving parental involvement and

ultimately, student success (Epstein, 1995). Experts

believe that "improving communication between school and

home through newsletters; memos; conferences; school

tours; summer and fall orientations for students and

parents, back-to-school nights and the use of phone and

mail communications" are excellent strategies and

activities for involving parents (Ramirez, 2001, p.30).

Researchers have found the "main problem is the lack

of communication in the classroom, from student to parent

and student to teacher" (Murie, 2004, p.2). This lack of

communication has a negative impact on students'
performance. Providing opportunities for increased
communication between the parents, students, and teachers
allows all stake holders to develop and implement
strategies to improve student achievement.

As stated previously, research has indicated that
there is a strong correlation between home/school
communication and student success (Nelms, 2001). The
research has found that:

1. Children of parents who are involved have a
   positive attitude about school, improved
   attendance, and show better homework habits than
   those of children whose families are less
   involved (Freedman & Montgomery, 1994).

2. Parents involved with school in parent-related
   activities show higher self-confidence in
   parenting, more knowledge of child development,
   and an expanded understanding of the home as an
   environment for student learning (Nelms, 2001).

3. A teacher who has successfully generated parent
   involvement in their students' education have
   indicated they have developed a greater
   understanding of diverse cultures, an increased
   appreciation of parental interest in helping

their children, and a deeper respect for parents'
time and abilities. The teacher gains the ability
to understand not only the students that they are
teaching, but their family life as well.
Understanding the family and their culture can
help to give insight on how to communicate
effectively with parents (Nelms, 2001).

The African proverb "it takes a whole village to
raise a child," rings true especially in today's society.
Schools, parents, and community members must pool their
resources to ensure student success. Community
organizations and special programs are utilized in order
to achieve student success (Miller, Adsit, & Miller,
2005). Having the ability to inform parents on a regular
basis of their child's specific learning needs, enables
parents to seek out appropriate resources to assist their
children. (Wighting, 2006).

Challenges of Parental Involvement

Traditionally parent communication with the school
was established through phone calls and parent-teacher
conferences (Halsey, 2005). Unfortunately, in today's
society typically both parents work during school hours,
making it difficult for parents and the school to maintain

the level of communication necessary to improve achievement both academically and behaviorally.

The time available for parents to contact teachers is greatly restricted by the inability of teachers to talk to parents during class time. Often, teachers have left school for the day when parents have the time to call them. Likewise, teachers may try to contact parents at work, and they are often unable to talk at that time due to work responsibilities.

Parent involvement tends to decline as children progress from elementary to secondary schools (Halsey, 2005). Parents who were actively involved in their children's classrooms during the early years of elementary school tend to decrease their involvement dramatically during the upper elementary and secondary grades. Many parents fear that their presence in the classroom will embarrass their children as they approach adolescence. At the high school level, parents are often only involved in after school or extra curricular activities (Halsey, 2005).

In a few cases, parents show a lack of communication with schools because of their inadequate sense of self worth which results in poor parent involvement (Nelms, 2002). "To increase parent involvement in schools, these

obstacles must be addressed and hopefully, overcome. In order to accomplish this, schools must adopt new beliefs and attitudes concerning parent involvement" (Nelms, 2002, p.1).

"Institutional interactions" (Halsey, 2005, p.61) are an effective form of parent communication and involvement system. "An institutional interaction refers to general practices that involve all families including parent-teacher organizations, open houses, newsletters, calendars, conferences, back-to-school night, summer programs, and phone calls, or inviting all families to a public event such as a play or athletic competition (Ramirez, 2001, p.30)." Traditional communication between parents and teachers usually occurs through the use of institutional interactions (Halsey, 2005).

Although these traditional methods are effective in improving the general communication between home and school, they do little to directly impact student achievement.

Parents use casual contacts (Halsey, 2005), more than teachers. Teachers and parents understand the benefits of casual contacts as a means of encouraging more parental involvement. A negative aspect of causal contacts is when parents use it to obtain informal reports of their child's

progress (such as grades and behavior reports). Casual contacts are difficult to teachers who felt they were not prepared to address all concerns of the child (Halsey, 2005).

Teachers want to include parents and encourage their involvement with the class however; many teachers are discouraged with the idea of meeting without an appointment due to other professional obligations. The question becomes, what is an efficient way that we can reach more parents without arranging appointments every time?

Classroom Website

Bauch (n.d.) suggests, "the first step toward active participation for families is a common information base with the schools" (Nelms, 2001, p.2). Communication between the school and home can now take place in numerous forms including the use of technology and a classroom website.

The power of technology has helped many teachers increase their communication with parents and thus increased parental involvement their children's education. "Many teachers enjoy the ease of using technology to inform their students about current events and topics of

interest within their subject matter" (Ramirez, 2001, p.30). Email is not the only form of technology that teachers can use to communicate with their parents. Classroom websites have also been shown to be extremely effective and helpful for the parents to use (Perkins & Pfaffman, 2006). A classroom website, is a program where the parents and students can access all school related information from home to see upcoming events, such as extracurricular activities, theater productions, open house, PTA events and how to contact staff and personnel at the school site (Miller, Adsit, & Miller, 2005). A classroom website can also add information regarding daily assignments and projects in the class. Links on the website are used to find information on daily lesson plans, grades, teacher email, upcoming activities (field trips), attendance, and all printable materials provided by the teacher. Some teachers link tutoring sites and online resources to their website to help students with homework or a test that is coming up (Maddux, 2001).

The use of technology has become a key component in the classroom and with teachers.

By integrating technology as a form of a communication strategy, schools can quickly reach more parents than before. Teachers

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often indicate that they do not have enough
time to effectively communicate with all
parents nor want to encourage impromptu drop
ins. By creating a distribution list of
parents with their email addresses, for
example, teachers can easily notify them of
upcoming events" (Ramirez, 2001, p.30).

The distribution list works as a fast and effective way to
mass email (Ramirez, 2001). Teachers are not troubled with
remembering email addresses or trying to organize a system
to keep them on hand, the teacher simply creates a file of
the addresses and when the teacher needs to inform the
parents, accesses the distribution list, writes the
message and sends it.

Benefits of a Website

Some of the significant benefits of utilizing a web-
based communication system include the ability to link
schools, districts, families, and teachers together, to
help foster a deeper understanding from the community, to
develop a communication system across classes, different
grade levels, cultures and between the network of schools.
At the same time, encouraging parental involvement and
displaying school awards and special recognitions to the

public (Miller, Adsit, & Miller, 2005). A website also addresses more parents more quickly than traditional methods. Technology is allowing teachers and administrators to communicate and provide families information in a timelier manner.

The benefits of the classroom website might be to allow parents and students the ability to communicate with the teacher, review up-to-date progress reports, and to utilize any online resources provided by the teacher (Maddux, 2001). This communication system is far more effective than handing out newsletters to parents or calling home (Nelms, 2001). Both newsletters and phone calls are time consuming are often ineffective. Due to fact that parents often move throughout the school year, their number changes or the students fail to deliver the notes to their parents.

Challenges of a Website

Challenges are to be expected when dealing with any form of technology. The most common challenge is accessibility; the ability for parents to successfully access the website from home or work. "Never assume that your students have access to technology at home" (Ramirez, 2001, p.30). Many families can't afford a computer or do not have Internet.

Beside accessibility issues, the other common challenges are language barriers where parents cannot read or write English, making it difficult to use the website. Internet speed can also impact the parents' use of the site. For instance, a slower Internet speed may take longer to load pages that are large, have graphics or animation, or have several media files, causing parents to not want to spend the time waiting for the page to load.

The last main challenge is getting the parents to use the website on a weekly basis. Parents may view the website from time to time, and during the weeks it was not reviewed can cause communication problems, where parents were not aware of upcoming events.

Instructional Design and Website Guidelines

Website Guidelines

Guidelines and standards are incredibly important when creating a website as an instructional tool for learning. Jakob Nielson, a web designer specialist, indicates in his article on "Top Ten Mistakes in Web Design," how to create a successful and easy to navigate website. Throughout his study on poor website designs, he has created a list of ten items to avoid.

1. Using Frames: splitting frames can become very
   confusing and troublesome to the user, creating a
   situation where they are unable to bookmark the
   page, printout forms or the URL stops working all
   together.

2. Gratuitous Use of Bleeding-Edge Technology: Do
   not use advertisement and bragging announcements
   to get users to come to your site. Most users
   will be discouraged by the advertisements and not
   want to visit the page. Especially a classroom
   website, many advertisements can be seen as
   inappropriate.

3. Scrolling Text, Marquees, and Constantly Running
   Animations: Never include a page(s) that have
   incessantly moving images. It is overpowering on
   a persons peripheral vision and can be a
   distraction.

4. Complex URLS: Always create an URL that minimizes
   the risks of typos by using shorter names that
   have all lowercase characters and excluding any
   special characters such as symbols. This allows
   the user to find the page with ease.

5. Orphan Pages: Be sure that all the pages on the
   site provide a clear indication of what website

they belong to since users my access pages directly through a search engine without going directly through the homepage. Also be sure that all the pages on the site have the ability to return to the homepage.

6. Long Scrolling Pages: Keep all of the pages on the site short in length. Very few users will scroll down to see what is off the screen. Keeping pages at a length that is visible on the screen will help users get all the information needed.

7. Lack of Navigation Support: Not all users are as skilled in using a website as you may believe. Be sure to provide support to help users navigate through the site and to be able to locate the information needed.

Start your design with a good understanding of the structure of the information space and communicate this structure explicitly to the user. Provide a site map and let users know where they are and where they can go (Nielsen, 1996, p.1).

Providing a search feature is an easy way for the user to find exactly what they needed.

8. Non-Standard Link Colors: Pages that the user has not clicked on should be in a blue font; links that have previously been seen are to be red or purple. Keeping this consistency is key to teaching your users what the link colors mean and allowing them to browse the website faster.

9. Outdated Information: Keep all information up-to-date and erase any expired items regularly.

10. Overly Long Downloading Times: "Traditional human factors guidelines indicate 10 seconds as the maximum response time before users lose interest" (Nielsen, 1996, p1). Users do not like having to wait for a page to load or for an item to download into their computer. Be sure to consider download times, or users will be discouraged and not return.

(Nielsen, 1996)

This "Top Ten List" was published in 1996 however, each of these items are still relevant today. Avoiding many of these common mistakes will allow the website to be used more frequently, without confusion, and create an enjoyable experience (Nielsen & Sano, 1994b). Designers

want to create a website that is a learning tool, which
will be engaging, user friendly and encouraging to
learners- especially when the site is designed with the
child in mind.

Instructional Design

The ADDIE process is a design theory used when
creating any type of Rapid Prototype. ADDIE (analysis,
design, development, implementation, and evaluation) are
combined with strategies used for Rapid Prototyping where
several steps often occur at the same time with each
other. These two processes are both needed in creating a
web based instructional tool. Some researchers believe
that the culture of the audience needs to be accounted for
when designing a learning tool.

> Technology has taken a culturally neutral
> position in the creation of instructional
> products. By not directly addressing culture
> in the design of instruction, many products
> have been designed that inadequately address
> the needs of the population for whom the
> instruction was designed (Thomas, Mitchell, &
> Joseph, 2002, p.40).

Culture is basically defined as a refinement in the development of education- "a cultured person is an educated person" (Thomas, Mitchell, & Joseph, 2002, p.40). During the initial analysis phase of the project, the cultural needs of the audience must be addressed in order to produce a meaningful product. Knowing the target audience, the Rapid Prototype will be able to successfully meet the goal of user and developer.

Each rapid prototype is a vision that has a problem seeking a solution, much like the scientific method. The term *rapid prototyping* (RP) refers to a class of technologies that can automatically construct physical models from Computer-Aided Design (CAD) data" (Palm, 2002, p.2). Even though there are several different techniques to creating a Rapid Prototype, they all are structured around the same five-step concept.

1. Create a CAD (Computer-Aided Design) model of the design. Developing a model design can assist in the layout of the project and assess the needs and allows the researcher to analyze the contents of the prototype (Tripp and Bichelmeyer, n.d).

2. Convert the CAD (Computer-Aided Design) model to STL (stereo lithography) format. Take the model and develop the project into layers, break it down

into sections, to ensure that all areas of the project is sequential and are able to meet the set objectives (Tripp and Bichelmeyer, n.d).

3. Slice the STL (stereo lithography) file into thin cross-sectional layers. Make sure that the layers that overlaps, is linked together and flows from one to the next. Then construct and design the prototype (Tripp and Bichelmeyer, n.d).

4. Construct the model one layer atop another. Begin to place the layers together, linking all the pages together and organizing the data. Utilize the prototype and test to make sure it is operating in which it was designed (Tripp and Bichelmeyer, n.d).

5. Clean and finish the model. Complete with a test run and install and maintain the system as it needs (Tripp and Bichelmeyer, n.d).

(Palm, 2002)

A Model of Rapid Prototyping
Applied to Instructional Design

Assess Needs & Analyze Content	Set Objectives

Construct Prototype (Design)

Utilize Prototype (Research)

Install & Maintain System

Time ⟶

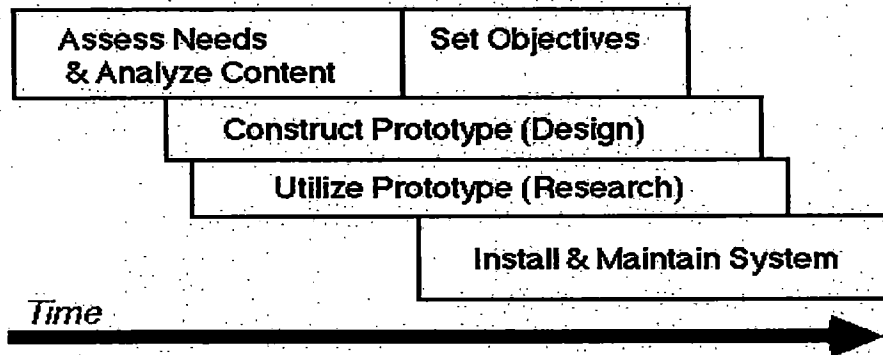Figure 1 Chart design of Rapid Prototyping by Tripp and Bichelmeyer (1990).

Typically the prototype is created with a "hands-on- approach" which is then developed into a "mock-trial" (Cennamo & Kalk, 2005, p.8) of the real project. Constructing and utilizing the prototype takes up the bulk of the development time, with some time at the end for installing the system" (Tripp and Bichelmeyer, n.d, p.1).

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Here the project is tested (or pilot tested) and run to ensure that all aspects of the prototype have been addressed. In the analysis stage, the prototype is conducted to determine if it meets the needs of the intended audience (Thomas, Mitchell, & Joseph, 2002, p.40). All of these stages are necessary in order to have an effective and successful learning tool.

By conducting a pilot test of the prototype, the developer is able to survey users for any changes early on in the development process, which enables the developer to work at a faster more efficient level. This helps to narrow down any faults in the system, creating a smooth final design (Cennamo & Kalk, 2005). Since this ADDIE process is a long and time-consuming process, it is helpful to receive the feedback needed early on in the development process than at the final stages.

Summary

Parental involvement and communication is key to increasing student motivation and success (Nelms, 2001). The main purpose of this project was to determine how a teacher-created website would affect the communication between teacher, parent, and student. More importantly the meaningful exchanges of information between parents and

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teacher indicate the parents knowledge of the website and shows the website is effective in increasing communication.

The power of communication is often times the determining factor for students who are struggling (Swanson, 2004). Students enjoy knowing that their parents want them to be successful and are willing to help them in school to do their best (Ramirez, 2001). Parents tend to decline in classroom participation during the late elementary years and more so through the middle and high school years (Halsey, 2005). By keeping parents informed through institutional interactions (Halsey, 2005) or a classroom website (Ramirez, 2001), parents can help to guide their child to do better. With technology, teachers, administrators, and parents can stay in contact through the use of email and a website (Ramirez, 2001). The website provides pertinent information regarding school activities and their child's progress (Perkins & Pfaffman, 2006). Email is a form of direct communication that parents use to stay in contact with the teacher (Ramirez, 2001). This allows parents and teachers to discuss personal issues without having to create appointments (Halsey, 2005).

CHAPTER THREE

PROJECT DESIGN PROCESSES

Introduction

Many factors contribute to a productive classroom
website. The literature demonstrated many factors that
need to be included on a classroom website in order to be
a successful communication system. These factors are
usability, organization, pertinent information for all
users, and layout (Reigeluth & An, 2006). This project
was designed to satisfy all of these components as well
as for parents and students to gain access to any up-to-
date information in the class as well as student grade
information. In developing the website, the ADDIE
(Thomas, Mitchell, & Joseph, 2002) process was utilized
by breaking each aspect of the website into categories in
order to keep it organized and uniform. The ADDIE process
is described in greater detail below.

Analysis

Intended Users

This project was designed specifically for students
between the ages of 10-13 years and their immediate family

members (parents); however, any teacher can use or modify the website to fit the needs of their specific students. It was also intended for students and parents with moderate computer knowledge and computer processing skills.

Surveys

An analysis of an online communication system is vital because it demonstrated the online user's demands and needs for the website. The analysis plan is a variety of methods for gathering data. The data collected is in the form of grades, parent communication, interviews, website usage and behavioral performance in the class as well as colleague interviews (SEE APPENDIX C). The teachers interviewed were asked questions about what an effective classroom website would best benefit the teacher, parent, and student. Parents and students were asked a series of questions regarding how they communicated with teachers in the past. (SEE APPENDIX C)

Concerns from Surveys Collected

After reviewing all the surveys given to parents prior to using the website, the data indicated some common computer-related issues that parents experienced. Many of the parents reported that accessibility of the website would be the largest issue for parents to be able to use

the website. Many stated that they have a computer at home with Internet service, but they do not check their email on a daily basis or they seldom log-on in order to communicate. Another issue mentioned was they have a computer at home but it was not connected to the Internet and they did not want the added expense of getting Internet just to communicate with the teacher. Finally, the third issue indicated that about 5% of parents expressed on the pre-survey, was that they did not have a computer at all, and felt that buying a computer is far too expensive.

Building the Website

Part of the analysis was an ongoing grading system that has the ability to be imported into an online website developing system such as Dreamweaver. The grading system used was Easy Grade Pro. It allowed the researcher to import names and student IDs into the grading system providing each student with a unique username and password once it has been published to a website. This creates a more secure method for the parents to check only their students' grades.

Integrating the Grading System

A Principal at a Southern California Elementary School was asked about the grading system Easy Grade Pro.

The researcher explained to her that this is an organized way of keeping grades and it helps to eliminate human error on figuring grades and GPA. The Principal was impressed by the system and excited to see that it could be imported into a website. Her concern with the program was usability by the parents and the security of the grades. With a demonstration, she learned how each child is given a username and password to ensure security from other students and also from users of the World Wide Web. The researcher explained that parents would begin to use it more frequently, once they saw the effectiveness of keeping up-to-date on their child's academic progress. After this interview, she purchased the software for the entire staff to use in their classrooms.

Design

The design of the website focused mainly on simplicity and user-friendliness. It was designed as an instructional support tool that would be incorporated into a classroom setting. The main focus of the website was the index page (or home page) where all the information was accessed. The users can use the index page of the website to search for the information they needed instead of having to travel through several pages to find

information. The index page was organized using a tab margin bar on the left side and an introduction paragraph on the right side. The page also has a search engine that is linked to Google as well as links to specific websites that the researcher would like students to use as an online resource for help on assignments or projects. Within some of the tabs, are subtitles. These subtitles are linked to other pages under that same category. For instance, the tab "Daily Lessons" has subtitles linked to Math, Science, Social Studies, and Language Arts. These pages contain information of assignments that are conducted during class throughout the week. Other components include a teacher contact information page, student grades, homework, class assignments, download, and links for parent information, and school information.
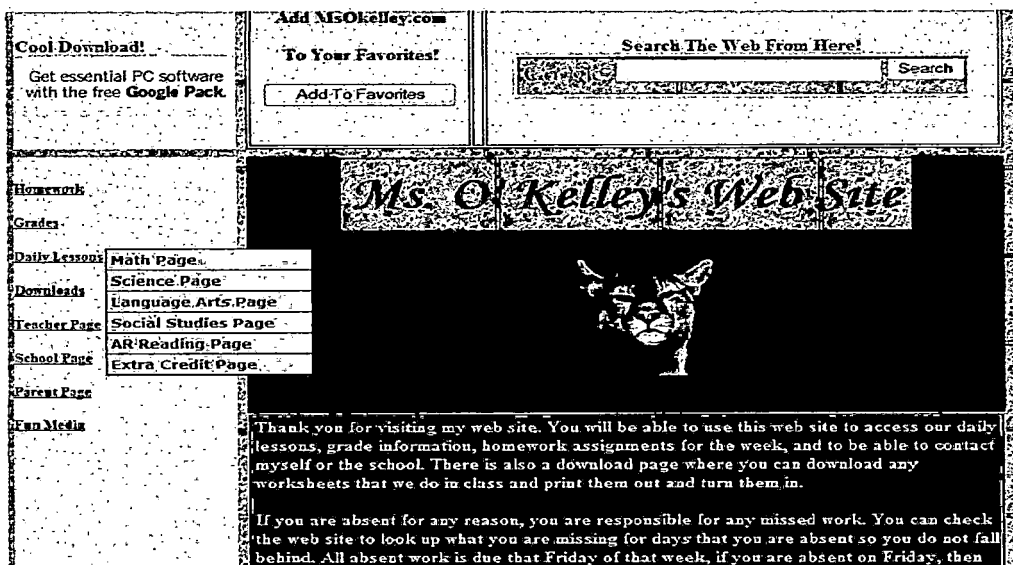
Figure 2 Screenshot showing index page with a drop- down

table including subtitles.

All of the pages in the website with the exception of

a few, are all formatted the same to allow for easier

navigation and less confusion. The pages are linked back

to the "Home" page so the user can return to the index

page with ease.

Parents and students use the grade page the most.

Before students or parents can view the grades, they must

first provide a username (last name) and password that has

been provided to them by the teacher.

Grade Reports

CONFIDENTIAL AREA
PASSWORD REQUIRED

Class
[All Classes ▾]
Last Name

Password

[View Report]

Reports last updated:Fri, Jan
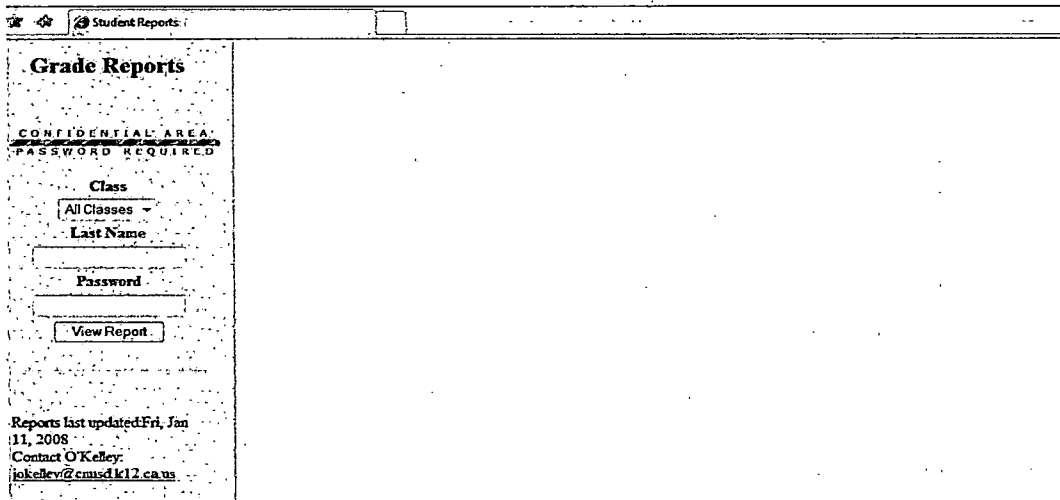11, 2008
Contact O'Kelley:
jokelley@cmsd.k12.ca.us

Figure 3 Screenshot of the grades with the username and password bars.

Since the project was primarily designed to increase the communication with parent and teacher, the teacher contact page is important and used often. This page contains a hyper-linked tab that sends an email directly to the teacher.

Figure 4 Screenshot of teacher contact information which is hyper-linked to teachers email address.

Development

The prototype of the website was developed over the course of a few months using Macromedia Dreamweaver MX 2004. The prototype was the most time consuming portion of the project. Once the researcher was able to have an analysis group review the site and post their comments and concerns. The researcher was then able to go back to the prototype and make corrections. Then publishing of the final project was developed over a period of a few weeks and connected to a host server for mass public usage.

Testing Prototype Website

Once the prototype website was created a task
analysis was conducted by a group of teachers, parents,
and students. They were given a questionnaire to fill out
as they navigated through the classroom website. Most
users commented on the grade page, expressing that they
felt it was secure, easy to access, and beneficial to
students and parents. They mentioned that the layout and
organization of the grade page allowed users to see grades
in all subjects as well all missing assignments. In
addition they found that the website format was user-
friendly and easy to navigate which was due to all the
links being connected to the correct page. The teacher
communication page was rated and examined for usability,
connection, and importance. They were all able to send an
effective email to the teacher with no compatibility
issues.

Areas of Concern During Testing

The users testing of the prototype revealed some
concerns. The tab "Subjects" on the index page was
unclear. The users felt that it did not provide enough
information to the user as to what that link was connected
to. The tab was changed to "Daily Lessons" which informed

the user that the lessons plans for the week were posted under this title.

Another concern of parents was the inability to access their child's work online in the event that their child was absent. They wanted to be able to print out the assignments from home. A new page was added to the website titled "Downloads," where all worksheets given in class were scanned into a ".doc" format for parents to download and print. Once that page was published, a second concern was prompted. Parents mentioned that they were running into issues of compatibility if they did not have Microsoft Word on their computer, the download would not read, preventing them from being able to view and print the document. Those that did have Microsoft Word at home still found that the scanned assignment came out distorted and hard to read. This concern was addressed by changing the format from a ".doc" to a "PDF," allowing all parents to print the document in its desired state.

Publishing the Website and URL

After publishing, the researcher created the URL for the site considering a title that would be easy for parents and students to remember and also simple to search for in most popular search engines such as Google; The URL created was www.msokelley.com.

The website was fully analyzed as a prototype, and the complete actual project was running effectively and used by students, parents and staff at a Southern California elementary school for the first time. The classroom website was officially named www.msokelley.com, and connected to Google.

Implementation

The classroom website www.msokelley.com started development in June 2006. The pages were created and complied in August 2006 to June 2007. Modifications were made throughout the year to meet the needs of the students and parents, as suggestions were brought to the researcher's attention. The site was up and running to full capacity for the 2007-2008 school year by July 2007. Each incoming student and parent was given a username and password in order to access the website at home and school. Each student was trained on how to use the website during the first week of school, and any new students were provided with a one-on-one training when they entered the class.

At the annual Back to School Night, held at the end of July 2007, parents were given information on the websites purpose and how to use the website correctly.

Parents were told that the website was an electronic means of providing ongoing relevant information regarding their children's education.

Student Training

The first student training took place in July of 2007 during the first couple weeks of school. The researcher used a PowerPoint to walk students through the website, highlighting information they could access and how to navigate easily. Many students were very positive of the overall design and interested in the idea of a classroom website. Some students commented they wished previous teachers had had classroom websites. They adapted very well and became instant professionals.

Parents were given a consent form to sign to allow their students to participate in the Masters Project. Thirty out of thirty-one students returned the form. The responses on the student and parent surveys provided positive feedback (SEE APPENDIX D). Some comments made were that the website was professional looking, organized, informational, a new form of communication, concise and easy to use. Parents were interested to see that the researcher was initiating a new form of communication that was also a way for them to monitor on their child's progress on a weekly basis. However,

technical difficulties did arise including the server
going down, time management, computer availability in the
home, and how to get all the information needed onto the
website in a timely manner.

The beta testing of the site was coupled with direct
training in the classroom. Students were shown how to
access the grades information page, daily lessons, how to
print out the worksheets from the downloads page, and how
to show their parents to use it as well. Information
posted online correlated with what was being taught in
the classroom, to ensure that if a student were absent,
they would have access to any assignments missed during
the day. This resulted in students becoming more
responsible for their own education and not having to
rely solely on the teacher.

After students were provided with training on how to
use the website, they put what they had learned into
practice in the computer lab. Students demonstrated to
the researcher that their logins worked and that they
were able to navigate through the website. This was a
prerequisite for them to be able to continue in the
study.

Due to lack of availability, of computers in the
classroom, the class made weekly trips to the computer

lab to allow all students to access the website and monitor their progress.

Evaluation

Usability of the website was evaluated by surveys, feedback from interviews, emails, and classroom observations. Parent feedback provided insight as to how often the parents were utilized the classroom website. Progress was tracked through a grade book program that integrated with the website and parent involvement was measured on their usage of the website. Emails and/or written note forms received by the teacher were inputted and collected as a form of communication from parents. Each trimester, meetings were held with the parents to discuss (a face-to-face setting) their child's progress. At that time, the researcher surveyed the parents on their usage of the website, solicited any suggestions or comments regarding the website, surveyed about its effectiveness and usefulness and if it has increased or decreased their child's performance in school. In a six-month time, the researcher collected two types of surveys both from parents and students. This collection was in the form of data and the results were compared to the students overall grades. The hypothesis was that students whose parents are more involved and current with their

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students progress in class, and were actively using the website to help their child, would have higher (or have maintained) grades than those students whose parents were not involved or not using the website. The researcher primarily focused on first and second trimester's math and language arts grades from students that volunteered for the study. From first to second trimester, there was a significant increase in some students' grades and motivation toward school.

Examples of Student Achievement

| Student A Subjects	TERM 1	TERM 2
MATH	78.30%	92.90%
LA	77.30%	88.00%
S.S	77.00%	84.30%
SCI.	85.50%	90.20%
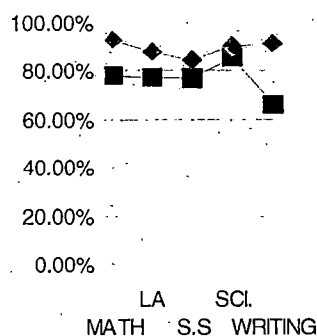
Figure 5 Screenshot of Student A's grades from first and second trimester included on a line graph. The blue line represents first trimester and red represents second trimester.

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Student A's parents attended the back to school night where the researcher demonstrated the classroom website. Both parents were interested in how it can help them to stay on top of their student. However, during the first trimester, her parents were not accessing the website on a weekly basis. When the researcher met with the parents during conferences, they explained to them their concern of some of her grades. The parents realized that they then needed to take advantage of the website and to start utilizing it as a form of communication with her. A strength this student had was that she would access the website to self-evaluate, often to make sure that she was performing to the high expectations she held for herself.

| Student B Subjects	TERM 1	TERM 2
MATH	61.50%	70.30%
LA	72.20%	77.80%
S.S	77.00%	73.20%
SCI.	61.50%	72.80%
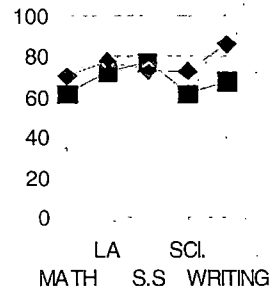
Figure 6 Screenshot of Student B's grades from first and second trimester included on a line graph. The blue line represents first trimester and red represents second trimester.

Student B is a student that was/is performing at a below grade level status. With the use of the website, her mother was able to see that she needed additional assistance with math and reading. After reviewing her grades and communicating with the researcher, she enrolled her child into Sylvan to get her the extra help. During the second trimester, she was able to raise her grades because she received the help that she needed. Her mother would check the grades on a weekly basis as well as her supervisor from Sylvan. In the combination of all team members communicating, Student B is now performing at a slightly higher ability level.

| Student C Subjects	TERM 1	TERM 2
MATH	90.60%	95.30%
LA	92.30%	90.50%
S.S	91.10%	107.50%
SCI.	96.00%	92.30%
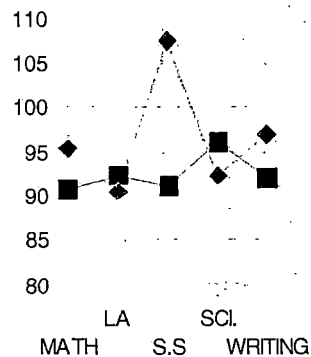
Figure 7 Screenshot of Student C grades from first and second trimester included on a line graph. The blue line represents first trimester and red represents second trimester.

Student C parents have been very involved in his education. Since the first day the website was operating, they have checked his grades and assignments on a daily basis. Both of his parents would communicate with the researcher weekly, often times, twice a week. Student C is a high performing student, but he would often miss assignments or forget to redo an assignment, so the website was a great way to keep him on track and to make sure that all his work was completed.

Student D Subjects	TERM 1	TERM 2
MATH	94.00%	102.70%
LA	90.90%	98.80%
S.S	99.00%	100.50%
SCI.	97.60%	99.40%

```
105
100
 95
 90
 85
      LA       SCI.
   MATH    S.S    WRITING
```
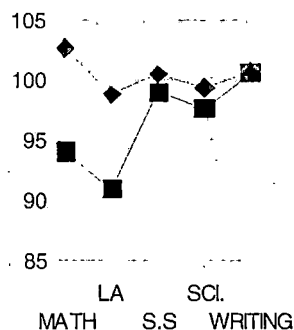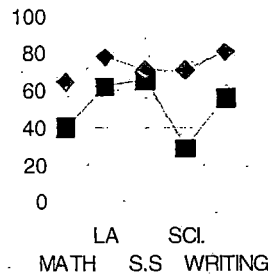
Figure 8 Screenshot of Student D's grades from first and second trimester included on a line graph. The blue line represents first trimester and red represents second trimester.

Student D is another high performing student where usually her parents would not need to communicate with the teacher, the website allowed for the parents to continue pushing her to make straight A's.

| Student E Subjects	TERM 1	TERM 2	
MATH	39.90%	64.20%	
LA	61.80%	77.70%	
S.S	65.30%	70.90%	
SCI.	28.80%	70.80%	

Figure 9 Screenshot of Student E's grades from first and second trimester included on a line graph. The blue line represents first trimester and red represents second trimester.

Student E is a great example of how powerful the classroom website was in increasing parent communication and student achievement. Student E is a struggling student that until now has never received the correct help from school and home in order to help him succeed. After his mom accessed the website, she began emailing daily to see what she and the researcher could do to help raise his grades. After several months of interventions between the parent and the researcher, they set up an appointment to meet with administration to get him extra help at the school. Student E was tested and qualified for RSP (resource) where he is now on an IEP (individualized

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Evaluation Plan) and getting the extra assistance he
needs. His second trimester grades showed improvement from
first trimester where he was not receiving extra
assistance. Now he has a team of professionals helping him
to succeed.

Student E's mom wrote an email because she noticed
that her child was struggling and was happy to see the
researcher was bringing it to her attention.

She wrote: "Thank you for the meeting this morning I
finally feel as though we are moving in the right
direction."

| Student F Subjects	TERM 1	TERM 2
MATH	80.30%	80.40%
LA	72.60%	83.30%
S.S	77.80%	73.40%
SCI.	87.50%	70.60%
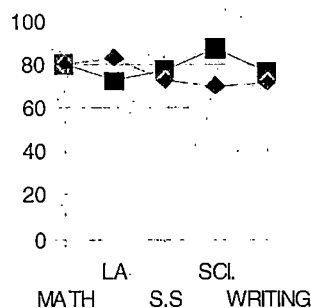
Figure 10 Screenshot of Student F's grades from first and
second trimester included on a line graph. The blue line
represents first trimester and red represents second
trimester.

Student F and Student G are two students that had parents that were not involved in using the classroom website because they did not have access to a computer or Internet. Traditional notes and progress reports for these students were sent home, but often times, it was too late to try to improve the grades. The website would have provided this information earlier on, allowing them to improve their grades sooner.

Student G Subjects	TERM 1	TERM 2
MATH	55.60%	50.70%
LA	69.30%	60.70%
S.S	64.80%	62.20%
SCI.	65.90%	62.60%
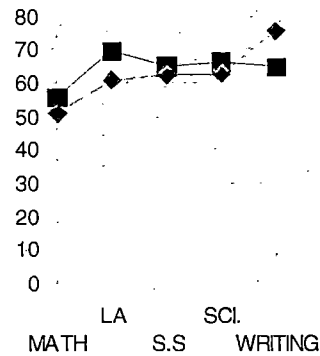
Figure 11 Screenshot of Student G's grades from first and second trimester is included on a line graph. The blue line represents first trimester and red represents second trimester.

Taking a look at first trimester grades for math and language arts and comparing them to second trimester, it is clear that the class average grew from one to the next.

CLASS GRAPHS
O'Kelley, Jennifer, Monday, January 28, 2008

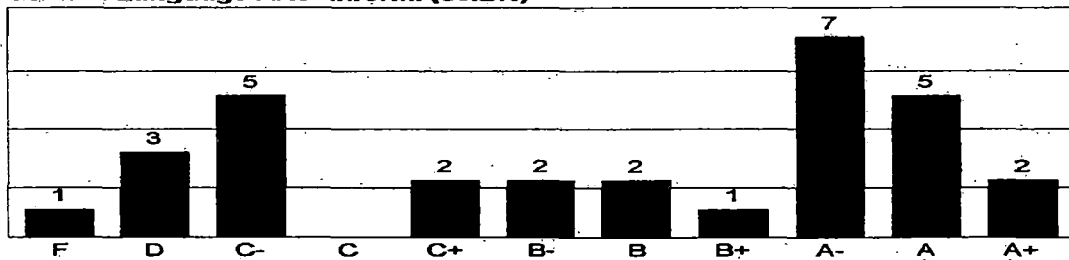**Term 1: Language Arts- Inform. (83.2%)**

Figure 12 Screenshot of first trimester language arts grades as a class average.

The class average was at 83.2% during first trimester only a few parents (about 30%) were actively using the website to check on their child's grades. Also in comparison are students' math grades from first trimester.

Term 1: Math (79.2%)
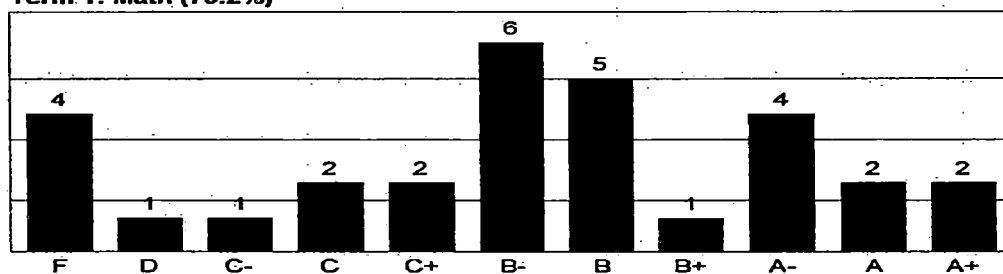
Figure 13 Screenshot of first trimester math grades as a class average.

First trimester class average without all the parents actively using the website was at 79.2% with majority of the students grades in the middle of the scale.

To compare these scores to second trimester where 95% of parents were actively using the website, the study shows that each subject area benefited from the extra parent involvement.
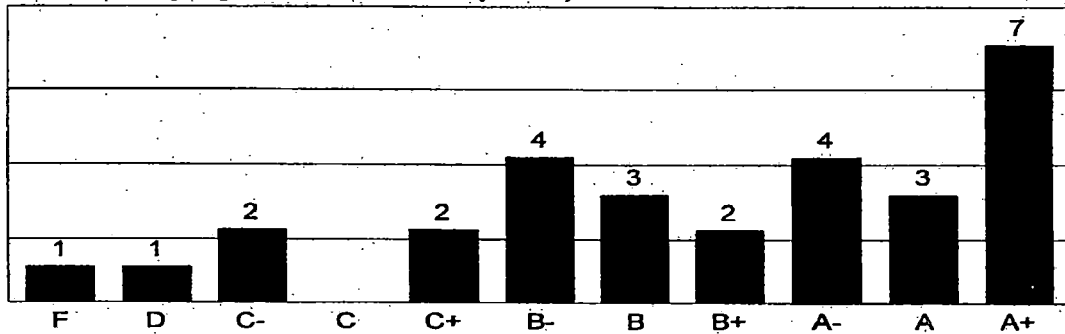
Term 2: Language Arts Informative (86.4%)

Figure 14 Screenshot second trimester language arts grades as a class average.

CLASS GRAPHS
O'Kelley, Jennifer, Monday, January 28, 2008
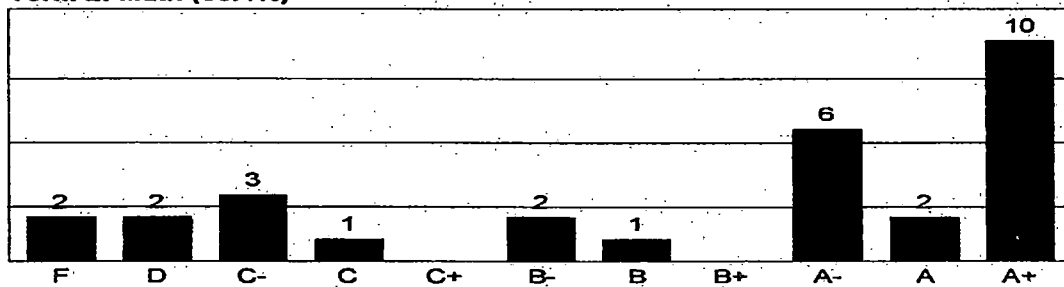
Term 2: Math (88.4%)

Figure 15 Screenshot second trimester math grades as a class average.

First trimester class average was 83.2% for language arts and in second trimester was 86.4%, a gain of 3.2% in a three-month period. Math first trimester was at 79.2% and 88.4% in second trimester, which is a gain of 9.2% in a three month period. Since students are assessed mainly in language arts and math, these were two subject areas that were studied the most during this project.

Summary

Ms.Okelley.com was created to meet the needs of sixth grade students learning to be more successful in school as well as an important tool for parent-teacher communication. The website began as an idea and was developed over the course of a year. The impact of the website was seen as an increase of parent involvement and student motivation. Students wanted to view their progress and were more inclined to discuss their performance with the teacher to ensure overall success. Parents were communicating more with the school than ever before and at the leisure of their own time. After a three-month period of 95% of parent involvement with the classroom website, students overall grades in Math and Language Arts increased.

Further evaluations will continue to take place and many adjustments maybe made in future classes to meet the needs

of new students. Students in this sixth grade class will
continue to use the website as a learning tool to support
their own motivation toward school and for parents to
continue to be involved in their children's education.

CHAPTER FOUR

CONCLUSIONS AND RECOMMENDATIONS

Introduction

Parental involvement is a form of support that will
change throughout the year and with each new class. As it
changes and develops based on the needs of the parents and
students, so will the type of communication between the
parent and teacher. After the study conducted from August
2007 to January 2008 was completed, several conclusions
and recommendations have been made. The students and
parents were intrigued to use the classroom website as a
main tool of communication with the teacher. However, any
website has its share of troubles and shortcomings, but
the overall product and usage of the website has proven to
be extremely beneficial.

Conclusions

The conclusions emerging from the project were as
follows:

1. A child's education became a strong focus for
   some parents. Parents were encouraging their
   child to perform at their highest ability level
   and to treat their education as an important tool
   for their future. This motivation was new to some

students, because for the first time their parents were now informed of their progress, and were able to stay up-to-date on how he/she was performing in the classroom.

Some parents commented on the importance and need for a classroom website. One parent wrote an email stating,

"WOW, we really WISH you were our kid's teacher EVERY YEAR. You just keep on coming up with FABULOUS ideas and WE SO APPRECIATE IT Ms. O'Kelley, you are going to have some very lucky children when you start making a family! THANK YOU so much for caring about ours!! We are also concerned that our son received 3-F's and he did mention that he made them up and he turned in a missing one, not sure, but on Tuesday we did tell him to go and check."

This email clearly stated the concern parents had about their student's grades and how they were able to communicate this to their child. Without the website, a potential problem

which might have gone unnoticed was resolved before it was too late.

2. The individual success rate of students grew since the beginning of the school year, as well as from previous years at the same school. At the beginning of the school year, students and parents were made aware of the classroom website. The majority initiated use right away, while others initially hesitated. When asked why some parents did not use the site, they indicated they did not realize how it would assist them in aiding their child. These parents were the ones who did not use a computer often, or that they felt that the website was only for students. Nevertheless, each parent and student who accessed the site during the second trimester demonstrated an increase in his/her overall GPA or maintained high academic grades from the first trimester. For the higher performing students, the website served as a tool, used to ensure students' maintained the grades they desired. Students struggling in the first trimester, the website benefited both them and their parents. This encouraged them to use the website more

aggressively. Many medium/low students showed

great growth in some or all subject areas for

the second trimester.

Parents that did not access the website

during the first trimester did not have great

communication with their child or teacher. During

parent conferences at the end of the first

trimester, the parents were given a demonstration

of the website and after using the classroom

website in the second trimester, those children

showed academic improvement.

3. Students that have struggled in school and with

their academics are now receiving the proper

assistance to help them with school due to the

fact that the parents are now aware of their

child's performance in the classroom. Assistance

such as tutoring, outside educational programs

(e.g. Sylvan), and the school resources are

available to these students.

The website has allowed parents to see

that their child was struggling from early on and

what subject areas seemed to be their

weakness. This gave the parents the understanding

that their child needed extra assistance in that

particular area. By catching the problem early on in the year, the students were able to receive the help needed to either improve their grades, increase the love of learning, increase their motivation toward school and/or to feel more successful.

4. Parents were able to increase communication with teachers than in previous years. For the first time, parents emailed the teacher with concerns rather than phoning or writing notes. Often schedule conflicts created delayed contact with the teacher; therefore, creating deferred resolution of issues. A parent shared, "As a working mother it is difficult to call during school hours and play phone tag." Another stated, "It's instant, we got prompt answers. If there is any news, we received it faster than before; and parents are more aware of current or future projects and assignments." Other parents mentioned it was hard to meet with teachers stating, "I am very busy and can rarely meet face to face." (SEE APPENDIX D).

The survey also showed that many parents were hoping that previous teachers would have had a website and that they could have used to able to help their child. 100% of surveyed parents indicated that they would like to see more teachers develop websites as a form of communication and that it helps them to monitor their students' progress. (SEE APPENDIX D).

Students were given a survey at the end of the study where they asked similar questions. One question asked, "have you ever before this year used a computer to communicate with your teachers?" 4.8% of students stated that they have never used the computer as a form of communication. Then students were asked, "have you ever been able to communicate with your teacher through the computer?" 57% of students reported yes, that they were able to communicate to their teacher this year with the use of the computer.

The survey results also indicated that 81% of the students felt that communicating with the teacher was a way to increase their grades. Finally when asked if they would like to see more

teachers using classroom websites, 100% of the students stated that they would like to see more teachers using classroom websites. (SEE APPENDIX D).

In the same survey, parents were asked if they felt that their child did better this year than previous years due to the classroom website. 75% parents agreed. (SEE APPENDIX D).

In a survey, students were asked which areas of the website www.msokelley.com did they find the most effective in helping them at home. Out of twenty-one students surveyed, the following percentages were presented in these areas:

1. Homework- 76.19%

2. Downloads page - 61.90 %

3. Email - 66.67 %

4. Media page - 42.86%

5. Daily Lessons - 76.19%

6. School Information - 47.62 %

7. Grades - 80.95 %

Clearly recognizing that the students found the grades page the most important in helping them to succeed in the class. Twelve

parents volunteered to take the survey where

similar results were given:

1. Homework- 27.3%

2. Email - 9.1%

3. Media page - 3%

4. Daily Lessons - 24.2%

5. School Information - 6.1%

6. Grades - 24.2%

The results show that parents used the homework,

daily lessons and grade information the most in

order to help their children at home. (SEE

APPENDIX D).

There are times when notes can be very confidential

and this presents a problem with who can view the notes

sent home from the teacher. Emails are one way to ensure

that the teacher and/or parent gets the information needed

and so they can communicate with each other during a

convent time to solve the situation at immediately,

without the information falling into the wrong hands.

Recommendations

The recommendations resulting from the project are as

follows:

1. It is recommended that a longer trail of testing be conducted in order to receive a full understanding of how effective the classroom website is for parents and students.

2. The website should be expanded in order to reach all parents. For instance, language barriers play a large role in this particular project. A more bilingual website would encourage parents that non-English speaking to become more involved in their student's education.

3. More training for parents would also indicate if parents were using the website correctly. Many parents felt that because they needed a username and password to view their child's grades, meant that they don't have the right access them. After informing the parents that they are allowed to view their child's academic progress, they quickly began to do so.

4. The website should also include more school-wide information for parents. It is recommended that there be a link that parents can view for all upcoming calendar events from the PTA and administration.

Knowledge of Building a Website

Building a classroom website is a wonderful learning tool for your students, however, there is some levels of computer knowledge that the teacher must have in order to create a successful website. Teachers need training or basic web design knowledge in order for this process not to be difficult or time consuming. For teachers that are not as computer savvy as some, can use templates that are available on the web. Companies such as http://www.teacherweb.com/ are excellent sites to use without having to manually design each page. These templates costs around $10.00 a month and usually come with a free trial to see if it is easy for the teacher to use.

Teachers with more computer web design knowledge can use programs that help to design websites. These programs are usually for people that understand the key components to a website and are able to create the site from scratch. These programs are Dreamweaver- for the very knowledgeable teachers, Frontpage or Web Expressions- for the medium level teacher. There are more programs available, however, before a teacher starts building a website on their own, I recommend that they first take a class in web design or perhaps starts with the templated websites first.

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For this website, the researcher was able to upload information using a scanner and basic copy and paste format from lesson plans that were created on Microsoft Excel. Once the information was downloaded into the computer, all the basic pages of the site were created during the Prototype, it was simple to maintain and upload each week. It does take time and patience, but completes the task in which it was designed for.

Summary

With the increased availability of technology in today's society, electronic communication is being utilized more frequently. Schools are constantly looking for ways to more effectively increase communication with parents. E-mail and web pages offer schools new alternatives for communication and parent involvement (Nelms, 2001, p.4).

Based on the information and data collected from the classroom website, the website was proven to be successful in creating the desire to learn, the motivation to do better, the ability to increase parental involvement and parent communication and the ability to raise a students

performance in class. There were a few times that the website was down, which lead to an uproar in the classroom. Students had become so use to going to the website to print out materials or to check on their grades, that they felt deprived. This let the researcher know that students were really using the website and in fact were using it on a daily basis.

With further instruction and extra tutoring more students will be able to raise their grades; however the increase of students that are self-monitoring is incredible. Students enjoyed using the website as well as parents. Students felt being on the Internet and viewing their grades was a great way to self-evaluate and to be more responsible for their education. Each student has been able to use and learn the benefits of the website. The most rewarding aspect to this project was observing students wanting their parents to be more involved in their education and having the desire to do better for them.

APPENDIX A

CD OF PROJECT

Appendix A contains a CD of the Master's Project for Improving Parental Involvement and Student Achievement with Technology, the Classroom Website.

APPENDIX B

CALIFORNIA STATE UNIVERSITY,

SAN BERNARDINO   INSTITUTIONAL

REVIEW BOARD APPROVAL

October 09, 2007

Ms. Jennifer O'Kelley
c/o Prof. Eun-Ok Baek
Department of Science, Math, and Technology
California State University
5500 University Parkway
San Bernardino, California 92407

> **CSUSB**
> **INSTITUTIONAL**
> **REVIEW BOARD**
> Expedited Review
> IRB# 07009
> Status
> **APPROVED**

Dear Ms. O'Kelley:

Your application to use human subjects, titled, "Improving Parental Involvement and Students Achievement with the Use of Technology" has been reviewed and approved by the Institutional Review Board (IRB). Your informed consent document is attached. This consent document has been stamped and signed by the IRB chairperson. All subsequent copies used must be this officially approved version. A change in your informed consent requires resubmission of your protocol as amended.

You are required to notify the IRB if any substantive changes are made in your research prospectus/protocol, if any unanticipated adverse events are experienced by subjects during your research, and when your project has ended.

Your project is approved for one year from the letter approval date listed above. If your project lasts longer than one year, you (the investigator/researcher) are required to notify the IRB by email or correspondence of *Notice of Project Ending* or submit a *Request for Renewal* at the end of your approval end date. Failure to notify the IRB of the above may result in disciplinary action. You are required to keep copies of the informed consent forms and data for at least three years.

If you have any questions regarding the IRB decision, please contact Michael Gillespie, IRB Secretary. Mr. Michael Gillespie can be reached by phone at (909) 537-5027, by fax at (909) 537-7028, or by email at mgillesp@csusb.edu. Please include your application identification number (above) in all correspondence.

Best of luck with your research.

Sincerely,

Samuel S. Kushner, Chair
Institutional Review Board

SK/mg

cc: Prof. Eun-Ok Baek, Department of Science, Math, and Technology

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APPENDIX C

QUESTIONS FROM TEACHERS'

TECHNOLOGY INTERVIEW

Teacher Interview Form

Questions will be discussed individually with teachers in the sixth grade at

McKinley Elementary. Please answer the questions below or on a separate paper

attached to his one.

Teacher Interviewed: _____

Date:_____

Communication Strategies:

1. What types of communication do you currently use to communicate with your

   parents?

2. What types of communication do you currently use to communicate with your

   students?

3. What do you think is your most effective way to communicate with your

   parents?

4. Which do you think is the most effective was to communicate with your

   students?

5. Do you think that technology is an effective tool to use when improving

   communication with both students and parents?

6. What would you expect to happen from using technology as a primary

   communication system?

7. What are the benefits to using technology as a way to communicate with

   parents and students?

8. List all methods of communication you currently use to communicate with your parents.

9. Which of the methods listed above do you feel is the most effective?

Types of Technology:

1. What types of technology to you currently use to communicate with your parents?

2. Do you feel that utilizing technology as a communication tool will help increase students achievements and behavior?

Computer Use:

1. Do you use technology in your regular classroom instruction? If yes, what types?

2. Rate your comfort level with technology in the classroom (1 low- 5 high). Why?

3. How do you feel technology could be best used in an educational setting?

Personal Computer Use:

1. Do you have a computer at home?

2. How many hours a week do you use the computer?

3. How often do you use the Internet? For what purposes?

APPENDIX D

SURVEY OF PARENT REPONSES TO

CLASSROOM WEBSITE
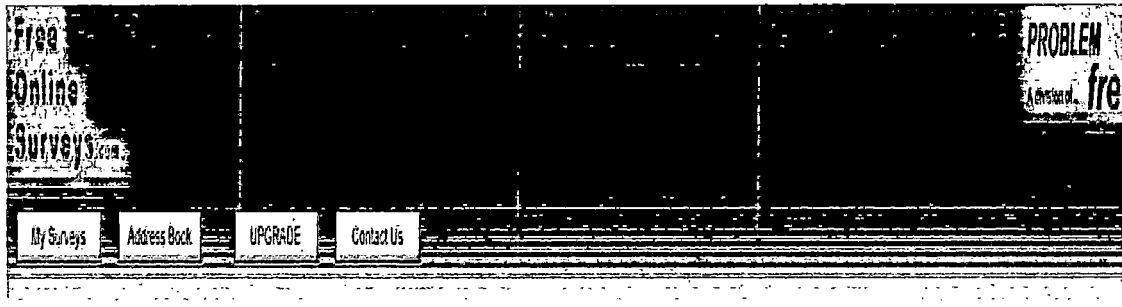
Complete list of all responses given to this question

- i can cvontact the teacher better

- As a working mother it is difficult to call during school hours and play phone tag.

- It's instant, we got prompt answers. If there is any news, faster to receive, and parents are more aware on current or future projects or assignments.

- I think it is easier because you can email her and get a repsonse sooner. It is an easy way to communicate.

- becase I am very busy and can rarely meet face to face

- PLEASE REFER TO ? 9

- Because we are able to communicate through e-mail we communicate more often and it is more productive.

- Email allows communication between people on different schedules, different hours...Email is also a more immediate way to get information.

- it's within my time frame and helps me to return email when I can, versus waiting for a phone call or trying to set up a face to face meeting

- I feel it is a faster way of communicating. It works for our family due to our busy life styles.

- Being the working parents that we are, and always on the go, It is VERY convenient to check on our own time, our sons grades and Improvement in class. Might be at midnight or later befo we are able to follow up on our kids grades, BUT one thing is for sure, WE wish all Teachers would have a website in the years ahead for our children, It makes it that much easier to check up our kids and help them in the areas that they need help with, Ms.O'kelley we thank you soo much for being the first teacher at Mc Kinley to start a website for parents, We will be the first to PLEASE make this a MUST have for all teachers in the corona district. Besides being blessed with such a Wonderful Teacher like you, this just ads the Cherry to the Sunday. Our son has NEVE been on Highest Honor Roll, I thank the teacher First but I do give us, the parents credit as well due to this website we are able to follow up with his homework DAILY and get involved in his Extra Credit and Projects.

Results for: Parent Technology Survey

1) Do you use a computer at home?

		Percentage	Responses
Yes	███████████████████	91.7%	11
No	██	8.3%	1
		Total responses:	12

2) Do you have Internet at home?

		Percentage	Responses
Yes	███████████████████	91.7%	11
No	██	8.3%	1
		Total responses:	12

3) With previous teachers, which ways of communication did you use with the teacher?

		Percentage	Responses
1. phone	████████	20.0	4
2. email	████████	20.0	4
3. face-to-face conference	████████████	40.0	8
4. writing letters/ notes	████████	20.0	4
Other		0.0	0

4)

Which way did you find was the most effective with communicating with teachers concerning your student?

		Percentage	Responses
1. phone	██	7.1	1
2. email	██████████████████	64.3	9
3. face-to-face conferences	██████	21.4	3
4. writing letters/ notes	██	7.1	1
Other		0.0	0

5) What is the most difficult thing with trying to help your student in school?

		Percentage	Responses
1. keeping up their grades		16.7	4
2. knowing what they did for the day		4.2	1
3. what projects they have coming up		20.8	5
4. if they are struggling in certain areas		20.8	5
5. helping with their behavior problems		4.2	1
6. communicating with the teacher		8.3	2
7. communicating with the school administration		4.2	1
8. trying to get them to be more responsible		8.3	2
Other		12.5	3

6) Did any of your previous teachers have a classroom website?

		Percentage	Responses
Yes		0.0%	0
No		100.0%	12
	Total responses:		12

7) Do you think a classroom website would help you to stay up to date on your students school objectives?

		Percentage	Responses
Yes		100.0%	12
No		0.0%	0
	Total responses:		12

8) Have you ever been to the website www.msokelley.com ?

		Percentage	Responses
Yes		91.7%	11
No		8.3%	1
	Total responses:		12

9)

If you answered yes to the previous question, check the areas that you used the most from the website www.msokelley.com .

		Percentage	Responses

1. homework	�	23.7	9
2. subjects area/ daily lesson plans		13.2	5
3. grades		23.7	9
4. email page (teacher contact)		21.1	8
5. media		5.3	2
6. school information		5.3	2
Other		7.9	3

10) Which areas of the website www.msokelley.com did you find the most effective in helping your child at home?

		Percentage	Responses
1. homework		27.3	9
2. subjects area/ daily lesson plans		24.2	8
3. grades		24.2	8
4. email page (teacher contact)		9.1	3
5. media		3.0	1
6. school information		6.1	2
Other		6.1	2

11) Did having a classroom website help your ablity to monitor your student?

		Percentage	Responses
Yes		100.0%	12
No		0.0%	0
		Total responses:	12

12) Do you think that your student did better this year than previous years due to the classroom website?

		Percentage	Responses
Yes		75.0%	9
No		25.0%	3
		Total responses:	12

13) Is it easier to use email as a main form of communication with your teacher?

		Percentage	Responses

Yes   91.7%   11

No   8.3%   1

Total responses: 12

14) If yes, why?

(The last five responses are given)

- i can evontact the teacher better

- As a working mother it is difficult to call during school hours and play phone tag.

- It's instant, we got prompt answers. If there is any news, faster to receive, and parents are more aware on current or future projects or assignments.

- I think it is easier because you can email her and get a repsonse sooner. It is an easy way to communicate.

- becase I am very busy and can rarely meet face to face

15) If no, why?

(The last five responses are given)

- Don't use e-mail on a consistant basis

16) Would you like to see more teachers using classroom websites for their parents and students?

		Percentage	Responses
Yes		100.0%	12
No		0.0%	0
	Total responses:		12

17) Do you feel that other parents would like to have a classroom website for their students?

		Percentage	Responses
Yes		100.0%	12
No		0.0%	0
	Total responses:		12

18) Rate the effectiveness of our classroom website www.msokelley.com

1. poor	2. fair	3. good	4. great	5. 6. excellent- make no changes	Responses	Average Score
0	0	1	1	10		4.75 / 5

						Total	Score
1. homework	(0.00%)	(0.00%)	(8.33%)	(8.33%)	(83.33%)	12	(95.00%)
2. subjects areas/ daily lesson plans	0 (0.00%)	0 (0.00%)	1 (8.33%)	1 (8.33%)	10 (83.33%)	12	4.75 / 5 (95.00%)
3. grades	0 (0.00%)	0 (0.00%)	1 (8.33%)	3 (25.00%)	8 (66.67%)	12	4.58 / 5 (91.60%)
4. email page (teacher contact)	0 (0.00%)	0 (0.00%)	1 (8.33%)	2 (16.67%)	9 (75.00%)	12	4.67 / 5 (93.40%)
5. media	0 (0.00%)	1 (8.33%)	2 (16.67%)	3 (25.00%)	6 (50.00%)	12	4.17 / 5 (83.40%)
6. school information	0 (0.00%)	1 (8.33%)	1 (8.33%)	4 (33.33%)	6 (50.00%)	12	4.25 / 5 (85.00%)
							4.53 / 5 (90.60%)

APPENDIX E

SURVEY OF STUDENT REPONSES OF THE WEBSITE

Complete list of all responses given to this question

I would change the homework schedoule to show the whole months schedule instead. I would also like for the fun media to be updated with new games that aren't about learning. I still li
ke
website anyways.

no thing

i wouldn't change anything

Nothing at all because it is fine how it is.

i would change the password

Nothing!!!!!

I wouldn't change anything the website is great.

I wouldn't change anything much.

I think that the website is realy cool. I think that there should have more media. I also think it would be cool to be able to contact the other students on the website if the parents allow it.

I wouldn't change anything else

I will like to change the home page.

I will like to change the home page.

nothing

wouldn't change anyting because I like it the way it is it really helps a lot. Also i am really glad that we have that website. i could see what my grades are.

i would put what would be your gpa so far!!!!!

i would change the e-mail thing to your phone number

can u put a few more extra credit projects.

- i would like you to have a section for missing olny to make it easier for us to see wat we need 2 get done

- you should put educational games on the website

- you should put educational games on the website

- i think you need a phone number place for all teachers

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Results for: Student Survey

1)

Are you currently in Ms. O'Kelley's class?

		Percentage	Responses
Yes		100.0%	21
No		0.0%	0
		Total responses:	21

2) How old are you?

		Percentage	Responses
1. 10		9.5	2
2. 11		85.7	18
3. 12		4.8	1
Other		0.0	0
		Total responses:	21

3) Do you have your parents permission to take this survey?

		Percentage	Responses
Yes		100.0%	21
No		0.0%	0
		Total responses:	21

4) Do you have a computer at home?

		Percentage	Responses
Yes		100.0%	21
No		0.0%	0
		Total responses:	21

5) Do you have Internet at home?

		Percentage	Responses
Yes		100.0%	21
No		0.0%	0
		Total responses:	21

6) Do you use the computer at school?

	Percentage	Responses
Yes	81.0%	17
No	19.0%	4
Total responses:		21
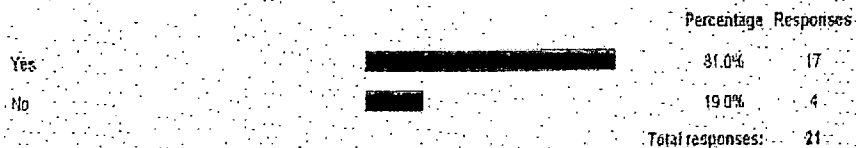
7) Do you use a computer to commincate with people?

	Percentage	Responses
Yes	85.7%	18
No	14.3%	3
Total responses:		21
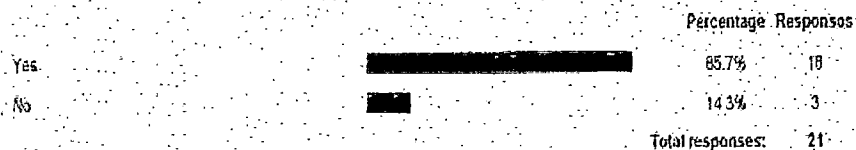
8) If yes, what forms of commincation do you use?
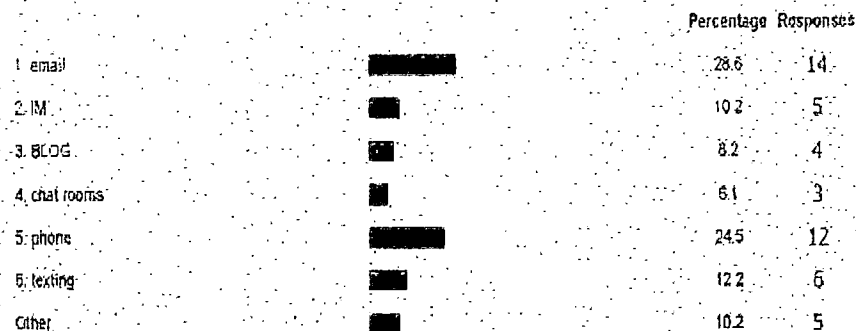
	Percentage	Responses
1. email	28.6	14
2. IM	10.2	5
3. BLOG	8.2	4
4. chat rooms	6.1	3
5. phone	24.5	12
6. texting	12.2	6
Other	10.2	5

9) Have you ever been able to communicate with your teacher through the computer?

	Percentage	Responses
Yes	57.1%	12
No	42.9%	9
Total responses:		21

10) Have you before this year, used a computer to commincate with your teachers?

	Percentage	Responses
Yes	4.8%	1
No	95.2%	20
Total responses:		21

11) Do you think that it is easier to communicate with your teacher through the use of the computer?

		Percentage	Responses
Yes		71.4%	15
No		28.6%	6
		Total responses:	21

12) Do you think that it would be more effective to be able to talk to your teacher on your own time, while at home?

		Percentage	Responses
Yes		76.2%	16
No		23.8%	5
		Total responses:	21

13) Do you think that communicating more with the teacher would help you increase your grades?

		Percentage	Responses
Yes		81.0%	17
No		19.0%	4
		Total responses:	21

14) What ways do you think would be the easiest way to communicate with your teacher?

		Percentage	Responses
1. email		50.0	17
2. IM		8.8	3
3. BLOG		0.0	0
4. phone		17.6	6
4. texting		14.7	5
Other		8.8	3

15) Have you ever had a teacher that used a classroom website as a form of communication?

		Percentage	Responses
Yes		9.5%	2
No		90.5%	19

16) If yes, was it effective?

		Percentage	Responses
Yes		33.3%	3
No		66.7%	6
		Total responses:	9

17) Have you ever been to the website www.msokelley.com ?

		Percentage	Responses
Yes		100.0%	21
No		0.0%	0
		Total responses:	21

18) If yes, what areas of the website did you use?

		Percentage	Responses
1. homework		17.8	18
2. downloads		14.9	15
3. email		9.9	10
4. media		13.9	14
5. daily lessons		12.9	13
6. school information		8.9	9
7. grades		18.8	19
Other		3.0	3

19) Which areas do you feel helped you in the class?

		Percentage	Responses
1. homework		19.7	15
2. downloads		15.8	12
3. email		10.5	8
4. media		5.3	4
5. daily lessons		14.5	11
6. school information		6.6	5
7. grades		26.3	20

| Other | | 1 | | | 13 | 1 |

20)

Rate each areas as how effective it was for you.

	1 1. poor	2 2. fair	3 3. good	4 4. great	5 5. excellent- make no changes	Responses	Average Score
1. homework	0 (0.00%)	0 (0.00%)	2 (9.52%)	3 (14.29%)	16 (76.18%)	21	4.67 / 5 (93.40%)
2. downloads	0 (0.00%)	0 (0.00%)	5 (23.81%)	3 (14.29%)	13 (61.90%)	21	4.33 / 5 (87.60%)
3. email	0 (0.00%)	5 (23.81%)	1 (4.76%)	1 (4.76%)	14 (66.67%)	21	4.14 / 5 (82.80%)
4. media	0 (0.00%)	2 (9.52%)	4 (19.05%)	6 (28.57%)	9 (42.86%)	21	4.05 / 5 (81.00%)
5. daily lessons	0 (0.00%)	0 (0.00%)	1 (4.76%)	4 (19.05%)	16 (76.19%)	21	4.71 / 5 (94.20%)
6. school information	1 (4.76%)	0 (0.00%)	4 (19.05%)	6 (28.57%)	10 (47.62%)	21	4.14 / 5 (82.80%)
7. grades	0 (0.00%)	0 (0.00%)	1 (4.76%)	3 (14.29%)	17 (80.95%)	21	4.76 / 5 (95.20%)
							4.41 / 5 (88.20%)

21) Would you like to see more teachers using classroom websites?

		Percentage	Responses
Yes	████████████	100.0%	21
No		0.0%	0
		Total responses:	21

22) Do you think being able to view your grades on a weekly basis, helped you to do better in the class?

		Percentage	Responses
Yes	████████████	100.0%	21
No		0.0%	0
		Total responses:	21

23) Do you think that other students would like to have their teacher use a classroom website?

	Percentage	Responses
Yes	100.0%	21
No	0.0%	0
Total responses:		21

24) Do you feel more in charge of your grades and how you are doing in the class because of the website?

	Percentage	Responses
Yes	100.0%	21
No	0.0%	0
Total responses:		21

25) What would you change about the website www.msokelley.com?

(The last five responses are given)

- I would change the homework schedule to show the whole months schedule instead. I would also like for the fun media to be updated with new games that aren't about learning. I still like the website anyways.
- no thing
- I wouldn't change anything
- Nothing at all because it is fine how it is.
- I would change the password

APPENDIX F

CITI COURSE IN THE PROTECTION

OF HUMAN RESEARCH SUBJECTS

CITI Course in The Protection of Human Research Subjects

Human Research Curriculum Completion Report
Printed on Saturday, May 12, 2007

Learner: Jennifer O'Kelley (username: jennieo33)
Institution: California State University, San Bernardino
Contact Information: 13809 Titonka Rd
                     Apple Valley, Ca. 92307
                     Phone: (951)751-9722
                     Email: jennieaok@yahoo.com
Group 2: Social Behavioral Research Investigators and Key Personnel

Stage 1. Basic Course Passed on 05/11/07 (Ref # 1021602)
For this Completion Report to be valid, the learner listed above must be affiliated with a CITI participating institution. Falsified information and unauthorized use of the CITI course site is unethical, and may be considered scientific misconduct by your institution.

Paul Braunschweiger Ph.D.
Professor, University of Miami
Director Office of Research Education
CITI Course Coordinator

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