School web sites: Are they effective at communicating to the public or just the newest trend?

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SCHOOL WEB SITES: ARE THEY EFFECTIVE AT COMMUNICATING TO THE PUBLIC OR JUST THE NEWEST TREND?

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
Tamara Marie Gardner

September 1999
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ABSTRACT

The purpose of this project is to look at how Saugus Union School District, and Rio Vista Elementary School in particular, could effectively use the Internet to communicate to the parents and the community the needs and achievements of the students. The project states how schools are currently using the Internet and the changes in the number of schools that have access to computers and the Internet. The research also looks at how schools are communicating with parents and how better home/school communication increases parent involvement. The last element of research concerns the proper way to design a web site.

Many schools are currently working at creating web sites and many educational technology leaders feel that this is important for schools to do. It's also important that a web site be clear, consistent and easy to use. The research shows the more parents are made aware of school events, the more they are able to get involved. Little research is available parental use of web sites to find out information more than previous methods. The survey that was conducted at Rio Vista Elementary shows that parents have a high interest in having a school web site.
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CHAPTER ONE

Background Information

Educators know they are preparing students for a rapidly changing world. Heinich et al (1996) define the Internet as "a worldwide system for linking smaller computer networks together, based on a packet system of information transfer and using a common set of communication standards" (pg 411). The Internet, as a communications tool, is causing an uproar in both the business world and the educational world. Heinich et al (1996) define the World Wide Web as "a graphical environment on computer networks that allows you to access, view, and maintain documents that can include text, data, sound and video" (pg 417). Statistics about the Web are hard to keep up-to-date since it is growing at such an astonishing rate. Current figures show there are at least 18 million people using the Web, while there are over 50 million Web pages available (Maddux, 1997). According to the CEO Forum Report (1997) 1 out of every 4 adults has access to online services. The number of Web users in 1996 was 28 million and is expected to be over 175 million by the year 2001. In contrast, only 14% of classrooms within the United States had Internet access in 1996. The main focus of the CEO report is to analyze the necessary changes needed in education to make sure schools have access and availability to the Internet.
In 1994, 62% of the workforce consisted of workers whose jobs focused on creating, organizing and communicating information. This percentage is expected to increase in the future. Moreover, workers who are proficient in technology will be rewarded with a 10%-15% pay increase as opposed to unskilled workers.

Since the demands of the business world are changing, education needs to change its focus too. This may be the reason that in 1996, President Clinton created the Technology Literacy Challenge which included the "Four Pillars" to improving educational technology. The "Four Pillars" are: 1) Hardware, 2) Connectivity, 3) Digital Content, and 4) Professional Development. The "Pillar" this project concentrates on is number two, Connectivity.

Even though there was a small percentage of schools that had access to the Internet in 1996, that number is changing. "The CEO Forum Report: Year 2 Data Snapshots" states that from the fall of 1994 to the fall of 1997, the percentage of schools with Internet access has increased from 35% to 78%. The report also stated that 56% of schools reported to have one or more Local Area Networks installed in their building and schools spent an average of $30.68 per student on instructional networks in 1997-98 (CEO Report, 1998). Due to the increase access of the Internet, some schools are taking this a step further by creating their own web sites, opening up a whole new way to communicate with the public. According
to WEB66, an international web registry, there are more than 13,000 school sites registered on the world wide web. At the date of this article, 8,000 of these web sites are in the United States (Carr, 1998). Districts around the United States are now racing at record speed to keep up with the current trends in technology. They are finally receiving both federal and state support. Many districts are digging up campuses to place down phone lines so that classrooms can have Internet capability. It has been reported that K-12 schools across the nation have already spent $4.34 billion on computers in 1996. This amount is supposed to double by 2000 (White, 1997).

The Saugus Union School District (SUSD), located in the Santa Clarita Valley forty miles north of Los Angeles, made a commitment to allow all schools access to the Internet. The district is currently comprised of twelve elementary schools with the thirteenth school expected to open in the fall of 1999. In 1998, the district spent $336,750 to update the schools and hired two full time technology coordinators to help set up and maintain the local area network (LAN). Grabe & Grabe define LAN as “an interconnected computers in one location, such as a school building or office” (pg 430). The district also surveyed students in grades kindergarten through sixth to find out how many have a home computer. The percentages ranged from 58% to 98% (See Figure 1). The district also encouraged school sites to have one computer in
every classroom. Providing this capability for classrooms comes from individual school budgets since the district is run through site based management. It was the school’s responsibility to train its own teachers on the use of e-mail and the Internet.

Figure 1

Rio Vista Elementary School, one of 12 elementary schools in the SUSD, is located in a rapidly growing community in Canyon Country. In the last five years enrollment at Rio Vista has risen from 500 students to over 900. This number is expected to be over 1,000 by beginning of the 1999-2000 school year.
The percentage of students having a computer in the household, however, was a surprising 64% at Rio Vista Elementary School. The school draws students from several housing tracks, condominiums, and modular units. The transiency rate is one of the highest in the district. Many of the students in the area come from single income households.

Rio Vista students have mid-level access to technology, according to CEO Forum Standards (CEO Report, 1997). Each classroom has its own computer with Internet capability, and the school is currently updating its computer lab. Rio Vista has received several grants and is spending this money training teachers on integrating technology into the curriculum.

For any school to be successful with its students, there has to be a team effort between the parent, child and school. However, this is becoming increasingly more difficult for families in our changing society. According to a survey completed by the National PTA in 1992, the following areas were the biggest barriers to parental involvement: 89% of the parents stated they had too little time to help their children at home after work, 32% stated they had little to contribute, and 28% didn’t have any child care so they could not attend after school meetings (Nielson & Weber, 1995). Two years later (1994) the California State Board of Education created six goals that schools and districts must comply with to increase parent involvement. These six goals are: 1) help
parents develop parenting skills to meet the needs of basic family life, 2) promote two-way (school-to-home and home-to-school) communication regarding school programs and students' progress, 3) involve parents in instructional and support roles at the school site and other locations that help the school, 4) provide parents with strategies and techniques for assisting their children with learning at home, 5) prepare parents to actively participate in decision making for the school, and 6) provide parents with skills to access community and support services that strengthen school programs (Freedman & Montgomery, 1994).

Dunman states that educators are always looking for ways to improve the parent's involvement in the educational process. "One of the newest tools being used to improve communication between families and schools is the Internet." (Dunman, 1998). This meets one of the main goals of the State Board of Education in California with home-to-school and school-to-home communication.

By involving the community more with the educational process, the education of the Rio Vista students will also improve. Rio Vista's web site will be linked to the Saugus Union School District's web site. The web site will also include a place for community members to e-mail their ideas, comments, and information on the web site. This web site will not only help parents moving into the area learn more about the school, it will also keep local businesses informed about
the activities at the school site where there input could be beneficial and appreciated.

**Statement of the Problem**

How can Saugus Union School District, including Rio Vista Elementary School, effectively use the Internet to communicate to parents and the community the needs and achievements of its students? Currently communication with the parents and community involves bimonthly newsletters written by the administration and PTA. In addition, School Site Council meetings and other events are held throughout the school year to inform parents and community members on school policies and changes. However, none of this communication involves the use of technology.

**Purpose of the Project**

The purpose of this project is to create a school web site that can be used as a model for other schools in the Saugus Union School District. It will also demonstrate how the district is meeting the state mandate of two way communication (school-to-home and home-to-school). This will also show the community that the $336,750 the district has spent on technology is being put to good use.
Project Overview

First, the parents of Rio Vista will be asked to fill out a survey on what they would like to see on a school web site. The purpose of the survey is to find out an updated percentage of students who have home computers and access to the Internet. Even if the parents don’t have a home computer, they may have access to one at work. It will be important to find out how many parents will be able to access the planned school web site. In order to best serve the needs of the parents, the survey will help indicate what they would like to see on the web site and how they are currently finding out about school events.

Based on the results of the survey, the next step will be to create a web site for Rio Vista Elementary School that informs the community. Some of the possible categories are: upcoming events at the school and in the individual classrooms, providing information on grade level standards in education passed by the State of California, Saugus Union School District’s grade level expectancies, and other links to web sites that will help parents with their child’s education.

Limitations of the Project

The greatest limitation to this project is access to the Internet. If parents do not have access to the Internet at home or at work, this line of communication will not be helpful to them. Statistics about the World Wide Web right
now indicate that at least 18 million people use the Web. The amount time spent on the Web is equaling the monthly playback time of all rented videotapes in United States and Canada (Maddux, 1997). Although the parents to be surveyed may not have access now to the Internet, this number could change in a matter of months.

The next limitation is maintaining the web site. Rio Vista has not yet provided a full time employee to administrate the daily activities of the web site. Because Rio Vista is growing rapidly, the turn over rate at the site is high.
CHAPTER TWO

Literature Review

For this project, several different aspects of research were reviewed. The use of Internet in education is the first thing to be considered. Next, this project’s intent is to inform and involve parents more in the education process at the total school level. To address these issues one needs to look at what research is doing in regards to increasing parent involvement and parent education on the Internet; second, the design process of web sites needs to be researched including the do’s and don’ts of good web sites as they relate to the targeted audience.

Internet Use in Education

Before discussing the effective use of school web sites, one needs to look at the use of the Internet in general. Galbreath (1997) discusses the changes in the Internet and where it is heading in his article, “The Internet: Past, Present, and Future”. The Internet was originally created by the Department of Defense in the 1960s. ARPANET was set up to link military contractors and universities that conducted military research. This led to other types of networks, like NSFNET. This network consisted of five US university supercomputers which were built in the late 1980s. This was one of the first steps to the development of the Internet.
After the ban on commercial use was lifted in 1991, the use of the Internet completely changed. It was no longer used as communication tool for just academic and government offices. It was now entering the commercial world. Galbreath(1997) states, "the Internet clearly is becoming a dominant communications medium, providing a plethora of applications. The Internet and its user population are growing rapidly, challenging traditional mediums (e.g., voice network) as a dominant communications technology." (p. 39)

In 1969 there were 4 hosts on the Internet, and in 1983 there were 200 hosts. The Internet is growing at a 100% annual growth rate that it is estimated by the year 2000 there will be over 150 million users (Galbreath, 1997). Since Web browsers only first became available in 1993, no other technology has reached the 10 million customer mark faster than the Web (Galbreath, 1997).

Withrow (1997) discusses the changes in technology in the last couple of decades and where technology and education will be heading in the future. Computers went from being used by research institutions and the military in the 1940s, to being word processing machines in the 1960s. Computers were then used for individual instruction in the 1980s and the 90s, and were also used as common communication devices. Over the past 20 years, different forms of technology have been appearing in homes throughout the world. According to the Public Agenda Research organization, eight out of ten
people believe that computers are "essential elements" for school. Withrow suggested that it is important that schools be outfitted with current technology. Withrow (1997) stated in his article that, "If the 19th century was the age of machines and the 20th century was the age of global transportation, the 21st century will go down as the age of the mind, the brain and telecommunications." (p. 61). The trend suggests that students need to gain knowledge and understanding of this telecommunications world not just at home, but school as well.

Figuring out how best to incorporate these computers into education is the challenge facing educators today. Maddux (1997) feels the reason it has taken so long for schools to incorporate educational technology into the curriculum is not the cost factor, but instead a theory known as "cultural lag". It is the idea that some elements of culture change more quickly than others. Changes in education take a lot longer to happen since those in charge of the large decisions are the types of individuals most resistant to change. This could be one of the reasons why schools are not getting computers as quickly as the homes of children attending the school. However, Maddux (1997) states the lack of up-to-date equipment is still part of the problem in educating students on the Internet.
Hopefully Maddux's (1997) idea of cultural lag is being addressed by educators and decision makers at all levels to make changes in educational technology. President Clinton's Four Pillars of education technology have caused a tremendous growth in the amount of money being spent on technology (CEO Forum, 1999). The CEO Forum released the latest information on how effectively schools across the nation are attaining the "Four Pillars" in educational technology. In the second year of this study, the number of computers per pupil has improved. In 1995-96 the student to computer ratio was 10:1. In 1997-98 the student to computer ratio was 7:1. The results also show that approximately two out of every five schools now have a home page on the World Wide Web (CEO Forum, 1999).

Now that more and more districts are becoming equipped with the Internet, the next concern is fitting this technology into the curriculum. In 1997 78% of public schools had access to the Internet compared to 35% in 1994 (CEO Forum, 1999). Hackbarth (1997) looks at how the World Wide Web has the capability of providing valuable learning activities. He classifies five categories that the World Wide Web can provide that aren't available from other sources. 1) It provides access to all types of people in a variety of multimedia formats. 2) Much of information on the Web can only be found there. 3) The work of teachers and students can be shared with groups around the world instantaneously. 4) The exposure to the different sources will be very similar to
what students will encounter in the workplace. 5) Students are very excited to use the World Wide Web since it is part of new technological age. Hackbarth(1997) contends that the World Wide Web provides opportunities for students to communicate via e-mail and in chat rooms. This is why so many online services provide safe, "kids only" areas as part of their services. The World Wide Web also provides places for students to retrieve information for the research they may be doing for a report or speech. It also provides places for information sharing where teachers and students can work together to produce essays or solve problems.

One needs to consider the issue of safety when letting school children explore the Internet. Anyone who has used the Internet knows that a search engine can retrieve many different sites under the keyword entered. There are several different filter sources such as NetNanny available. Schools need to consider purchasing one of these before allowing students to use the Internet. The 1997 survey of parents conducted by FamilyPC magazine found that "access to pornography and inappropriate communications with strangers" as one of major concerns of parents (as cited in Teicher, 1999, p. 70).

There is also the issue of web sites that collect personal information. The U.S. Federal Trade Commission conducted a study in June, 1998 and found that 89% of the 212 children's sites ask for personal information directly from
the children. Fewer than 10% had some sort of parental
control over this collection (as cited in Teicher, 1999).
Schools need to teach proper Internet etiquette to students
as well as the current inappropriate policy rules that
students and parents sign. Students need to learn strategies
on how to use search engines, and need to learn how to
recognize sites that may have inappropriate information. Open
communication needs to be encouraged so students are not
afraid to ask questions from parents or teachers
(Teicher, 1999).

Besides learning about safety, students need to learn
proper manners when working online, such as the copyright
laws of information that is found online and respect for
someone else’s computer space. A student should never ask for
someone else’s password. Children also need to learn how to
recognize the advertising that is online and to know when it
is not safe to give out personal information. When students
understand all these areas, they will be well prepared to
handle all the information that the Internet provides.
Students can be quite successful in gaining valuable
knowledge about technology and the world around them
(Teicher, 1999).

Examples of Internet Use

Schools are receiving computers and training students on
the proper use of the Internet. The next step in the process
is integrating the Internet into the curriculum. Dyrli and
Kinnaman (1994) discussed how in 1994 over 350,000 teachers in K-12 schools had accounts on the Internet. The authors went on to discuss a program at the University of Texas at Austin where Judi Harris has created an Internet-based service called Electronic Emissary Project. The project coordinators match students and teachers with experts to allow telecomputing exchanges. Students get their questions answered by experts in the field. For example, when studying American history, a class is provided with an opportunity to interview a curator with the National Archives. At the time of this article, this organization was just beginning and was rapidly gaining interest from other schools to increase its program. This is one example of how the Internet is being used for information sharing and retrieving which are all vital components of a student's education.

Not only is technology being incorporated into K-12 curriculum, but in higher education as well. Wepner (1997) looks at the effectiveness of telecommunication in a teacher education program at a college in Patterson, New Jersey. The study was set up to allow students to communicate with their professors and classmates via e-mail. The master teachers were also part of the communication process. The study revealed that the participants became more proficient with the equipment they were using (e-mail, PowerBooks, and word processing). This study also allowed for more opportunities
to communicate, new ways for supervising, improving teaching styles, and improving technical skills of the participants. There was some frustration, however, over technical problems and the amount of time it took to understand the procedures. Even with these frustrations, the participants felt that a great deal of communicating transpired over educational issues. The use of a computer allowed people to be open to express themselves in a way that might not have been possible in a face to face conversation. Seventy-five percent of students in the study appreciated this opportunity to participate. The author felt that e-mail significantly strengthened the communication between the participants according to the responses she received. This study supports the value that new technology has on education. It also shows that the use of the computer has improved the communication process, rather than hindering it.

Kurkijian and Sponder (1998) looked at the use of technology and its integration into the curriculum in their article. They were quite interested in how teachers were using technology in the classroom. They found that a third grade teacher in Lake Havasu was using the web site to publish student work. She was feeling quite successful with the site. Parents were responding very well to this form of technology. The authors felt this was one excellent example of integrating technology into the Language Arts curriculum.
and that Mrs. Keller has had a great deal of success with using this medium to help educate her students. Mrs. Keller explained how her students' self-esteem had risen when their work was published on the Net. The parents also enjoyed being able to easily share their child's work with other relatives. The published work samples provided Mrs. Keller with concise information of grade level expectancies in writing. She in turn was able to share this information with the parents. As a result, parents became more actively involved in their child's education.

The authors also found research done by Donald and Deborah Leu on the benefits of web pages. The Leus state that home pages provide the following: the ability to share learning resources on a global level, a place to access as well as publish information, assistance to teachers communicating with families, and the ability to present a powerful professional representation to the public (as cited in Kurkjian & Sponder, 1998). Home pages cannot only be used as a tool to communicate to the public, they can also provide an easy way to engage students in the learning process of technology. Districts should be aware of the copyright laws when publishing on the Internet. Although schools are able to copy materials to be distributed in the classrooms, this does not mean they have permission to put this material on a web site. The authors also discuss who should be in charge of
monitoring the home page. It is important that the website maintain a professional image. It will be the responsibility of the district to decide if this will be a job for a person or for a committee.

Several teachers have written articles in an attempt to convince other colleagues to create their own web sites (Deluzain, 1998), (Leuthod, 1998). Even though the web sites do take a lot of time to set up alone, the benefits are worth it. Both Deluzain (1998) and Leuthod (1998) found the benefits quite useful to their students and the community in general. Leuthod (1998) used her web sites for her economics class at the college level. Leuthod understood her students better and received higher quality work from e-mails and other projects. Both teachers warn that there are some pitfalls to using web sites, such as the lack of computers available for all students to use. Still, they are working at increasing the use of technology into their programs.

**Parent Involvement**

The purpose of this project is to use technology to increase parent involvement and understanding of the educational process. The involvement of parents in their child’s education has changed in the last twenty years. Since the increase of two-income households and single parent families, there has been a decline in parent involvement in
public schools (Freedman & Montgomery, 1994). Recent studies have shown that high parent involvement leads to improved student achievement. Hester has listed seven benefits to parent involvement in their child’s education:

1) increased academic achievement
2) improved student behavior
3) increased student motivation
4) regular attendance
5) decreased drop-out rates
6) positive student attitudes toward homework
7) increased parent and community support (as cited in Freedman & Montgomery, 1994).

Trying to find ways to get parents more involved is on the minds of many educators. Schools across the nation are working on plans to get the community more involved.

Comer and Haynes stated three different ways that schools can increase parent involvement. The first is getting parents to participate in school events and activities. The second is getting parents to volunteer in classrooms and other school programs. The third is for parents to become involved in the parent groups (as cited in Griffith, 1996).

Griffith (1996) conducted a study at a large metropolitan school district that sampled a third of the 122 elementary schools in that district. The purpose of the study was to see how parent involvement and empowerment were related to
student academic performance. After surveying the parents, Griffith concluded that parent involvement and empowerment are directly related to student academic success. Griffith also found research that offered ways for a school staff to strengthen different types of parent involvement by improving school-home communications through frequent and well communicated media. A school web site is one such medium. Parents would be able to find what activities are coming up and make proper arrangements to attend these activities.

Researchers have also found that parent involvement programs not only increased academic achievement, but also created positive attitudes toward school and more successful school programs. Higher parent involvement also leads to a decrease in school dropout rates, better student self-esteem and more support from the community for public schools (Lazar & Slostad, 1999) & (Zellman & Waterman, 1998). This is becoming such a valued topic that state and federal agencies are discussing the need for stronger ties between teacher and parent. The Goals 2000: Educate America Act states that, "Every school will promote partnerships that will increase parental involvement and participation in promoting the social, emotional, and academic growth of children" (as cited in Lazar & Slostad, 1999 pg. 206).
One of the problems with getting parents more involved in the educational process could be the organizational structure of a school. Certain structures inhibit a teacher's efforts to increase home-school networking. Some teachers feel they do not have the right to work with parents on designing curriculum for their classroom unless they have permission from the school board to do so. Some school districts make this problem even greater by not including parents in important educational issues (Lazar & Slostad, 1999).

Understanding the differences between cultures is another area of concern for educators today and lead to parents not being involved in the education process. Certain cultures feel the schooling should be left to the teacher to decide and they should not play an active role in the child's school. The parent's job is to discipline the child if he/she is not behaving at school and everything else concerning learning is left to the child's teacher (Lazar & Slostad, 1999). Once a school realizes the barriers that are keeping parents from getting involved, they can work on eliminating these barriers. Also understanding the relationship between teacher and parent is crucial to increasing parent involvement.

Saunders (1998) looks at one school's efforts to build a better bond with the community by rebuilding the sense of community within the school. The school wanted to provide a
better system of communicating with the community and within the school itself. It developed a seven step process to building a community within the school.

1) Create a shared vision that is evolving; represents sound, research-based ideas and that can be supported and defended.

2) Develop specific outcomes to provide structure to all work involving change.

3) Design a thinking, meaning-centered curriculum based upon the school’s community’s agreed-upon student outcomes.

4) Involve constituents in roles that allow them to accept responsibility and assume leadership.

5) Continually assess where the school is, where it hopes to be, and what steps must be taken to continue in that direction.

6) Provide ongoing professional development that enhances teacher’s abilities to improve academic achievement for all students.

7) Nurture a culture that is inclusive so all constituents recognize their role in bringing about their evolving beliefs and values (Saunders, 1998, pg 18-21).

There are several other steps to this school’s plan. One such step is how the school communicates with people at the site and within community itself. Before the reform process,
the school used primarily print materials to inform staff, students, parents and the community as to activities on campus. Now the school is using parent focus groups, open meetings and e-mail to communicate with everyone involved. A web site has also been created to help in the communication process (Saunders, 1998). The school recognizes that technology plays a vital role in increasing a community’s awareness and sense of belonging.

Scott and Cantor (1996) look at ways to build a strong communication process with the public. The first step to doing this is to establish an area of focus. For example, a school may focus in on how to generate positive stories that are being told through the local media. The second step to this process is the collecting of information. The committee that is in charge of the data collecting needs to agree on how this data is going to be collected and a multiple of sources should be used. Next, this committee needs to read through the data and analyze the information that was collected. How is this going to improve the area the school is focusing on? After the data have been analyzed, an action plan needs to be created. Since the focus is on increasing positive information that is being received and viewed by the community, what are different forms of media the school can use in its action plan?
Deciding what stories are more newsworthy than others will be one area the school will need to consider too. It is also important to consider the audience this story is intended for. Is this a story that will be interesting to the parents, the entire community, or just the staff and students of the school? There are many formats in which this story can be delivered. Maybe the school wants to publish the story in the local paper, or maybe this is a story for the school website. Not every story will be able to receive media coverage. It is vital that the school staff decide if the story provides a great human interest and then it will be easier to get the media coverage the school wants (Scott & Cantor, 1998).

Using technology is to increase communication between home and school is an idea that is catching on with many schools across the United States. Clevenson (1999) states how Gunston Middle School in Arlington, Virginia, is using technology to help parents better understand the projects that need to be completed by their children. During the 1997-98 school year, teachers and students produced more than 200 videos. These videos gave parents information on how to make their child successful in school, materials needed for school projects, and description of the units being taught at school. One example Clevenson (1999) gave in article was about how the eighth grade students were having difficulty completing the Science Research Investigation Project they were required to do. Every eighth grade student was required
to check out a video explaining the project. The video had incredible success. Only 3 out of 68 students were unable to complete the project, whereas the year before, 27 out of 70 students did not complete the project.

The videos the school makes are generally short (five to twelve minutes long) and are made by students. There are all different topics, such as: program descriptions, extracurricular activities, curriculum descriptions and demonstrations, and descriptions of how parents can help students succeed in school (Clevenson, 1999).

**How to Properly Design a Web Site**

Before a school decides to create a web site, they need to consider many things. The web site is representing their school to a very large population. It’s important that the right image be presented and not cause the users of the school web site to feel frustrated. It is critical that a school pays close attention to the design process.

Carr (1998) discusses how the number of school web sites have increased since 1995 by more than 1,200 percent. Web66, an international web site registry designed by the University of Minnesota states there are now over 8,000 school web sites in the United States. For schools to be considered a school of choice, they need to have a web site according to Elliot Levine, communications director for the Lawrence Public Schools in New York. It is important in this
project that Rio Vista Elementary School be considered a school of choice. Carr (1998) feels that web sites that are the most successful develop precise goals and are designed to meet the needs of the site’s users. She also states how web sites relay information more quickly to the targeted audience than paper sources. Carr cautions not to stop communicating with more traditional sources since technology is an moderately expensive tool and not all families will have Internet capability. She also warns others not be in such a hurry to get a web site out. Carr suggests that you use the “under construction” phrase on your site. Wait until it is completely designed and then put it out on the web. The basic criteria for a web site should be that it is useful, interactive, fresh and entertaining (Carr, 1998).

It is important to remember that you need to keep the audience’s interest since there is so much out there to look at on the Internet. A committee will need to be formed to keep the Web site up-to-date with current information about the school site. This will keep people coming back to the site. Policies will need to be designed by a committee in charge of the web site. Some school districts use students to help maintain the web site while others use community volunteers and the district’s public relations manager (Carr, 1998).
Hardy (1997) states there are certain qualities that make a school web site superior. These qualities are: timeliness, interactive, and strengthened community ties. Hardy agrees with Carr in that all the information on the web site is up-to-date in order to assure return visitors to the site (timeliness). The web site should also be interactive by providing e-mail listings of important people associated with the school such as the administrator, the site webmaster and school board members. The site webmaster should be prepared to respond to all e-mails in a timely fashion. Lastly, the site should strengthen community ties by incorporating school board members or local businesses into it. Some schools have hired businesses to design their web site at low cost to the schools. This allows businesses to be more involved with the community.

Hardy (1997) also discusses how parents have created their own web sites, providing them with the opportunity to express their likes and concerns with the school and/or district. In creating a school web site, positive and accurate information can be displayed and inaccurate information can be addressed that might be shared within the community. Parent concerns always need to be addressed and a school web site provides a quick and easy way to do just that.
Rutkowski (1998) looks at the use of the Internet to educate special needs children and schools which have used the Internet to help inform parents about the needs of their own children. These web sites were critiqued using the VOICES methodology. VOICES is an acronym that stands for vision, originality, integrity, community, empowerment, and structure. The methodology has six categories of equal importance. The web sites were critiqued on these categories. The following web sites were the ones that scored the highest: The Bridge School, http://www.bridgeschool.org/; Overbrook School for the Blind, http://www.obs.org/; and The Bruce Street School for the Deaf, http://www.intercall.net/.

A designer should self evaluate his/her site and see how well he/she meets these categories of VOICES. The categories of VOICES are the following:

1) Vision: How well is the fundamental purpose or purposes of the Web site articulated and implemented?  
2) Originality: How original are the technical tool kit and technical design elements? How original is the content? How different is this Web site in terms of partnerships, collaboration, and interactive elements?  
3) Integrity: How fully integrated are the design, content, technical, and vision components? How well does the site as a whole serve to advance a unified vision or create a new learning community or experience?
4) Community: How effective is the site in facilitating new communication, encouraging new collaborations, and building connections, internally, externally, or in combination?

5) Empowerment: How active is the involvement of students, teachers, and parents in the design, content development, production, and sustenance of the site?

6) Structure: How easy is it to navigate between pages and main components? How well is the code written? How well is the content organized? How well does the site serve audiences with diverse access capabilities and requirements? (Rutkowski, 1998, p. 78)

Dunman (1998) also looks at ways school web sites are being reviewed for their content. Dunman is concerned with how parents are involved in the educational process. The review of the web sites paid close attention to this component. Dunman looked at ten general sections often found in web-based information. These sections are: Welcome page—introduces user to the site and may include pictures of the school, students and mascot; Frequently Asked Questions—provides general information to the community such as school hours or school calendar; Faculty and Staff Showcase—provides names of teachers and possible e-mail addresses or links to teacher's web pages; Student Showcase—area where students can display completed projects; Library/Media
Center- provides students or others users a place to do research using sear engines; School Curriculum- outlines school's and state's curriculum and may provide weekly homework assignments or a homework hotline; Co-curricular Activities- listing of school clubs are found here; Parent/Teacher Groups- provides a location for the PTA or other parent groups to post information; Community Information- provides information about the community and city government; and Special Activities- provides information important to the school and allows the school to put whatever they want on this page (Dunman, 1998). These areas will be helpful when considering the design layout of a school web site.

Following design principles is vital to any kind of project, whether it be a web site or written material. Bailey and Blythe (1998) feel that the web designer must first strongly understand what information needs to be presented, be well prepared to organize this information, and stick to the principles of good design. The authors feel that web sites must contain the following elements which must be well balanced: message, organization and packaging. The message is what is the overall feeling the user will get when visiting the site. Organization of the site needs to be simplified, so while navigating within the site a novice does not get lost.
Lastly, how the site is designed concerning text, sound, graphics, and video is considered the packaging of the site. In order for proper "packaging" to happen the designer must incorporate the following elements; outlining, diagraming, and storyboarding. When creating an educational web site it should have just one main objective, to present information to a specific audience (Bailey & Blithe, 1998).

In order to best serve the information process one must understand information literacy. Bailey & Blithe (1998) define it as, "a process of assembling information that did not exist before by identifying the right question, organizing a search, selecting the appropriate search tool, questioning information sources, analyzing and synthesizing information, creating new information and testing the information and identifying new questions" (p. 7). By adhering to information literacy, a web site will remain most effective in reaching its target audience and outcome.

After it is decided what information is going to be presented on the web site, an outline needs to be created. Whether the outline is of linear design or one that incorporates a more global approach, the content should be clear and concise. Next, the designer needs to consider diagraming the web site so that a broader understanding of the web site can be seen. When diagraming, the designer should keep the following general information in mind: the main question the site will answer and where this is placed,
the targeted audience's needs and where this information is placed, how the content is written (technical, simple), and the natural connections between the concepts.

The last stage of the design method is the storyboard. This gives all the details that the viewer will be seeing on each web page, including text, graphics, audio, and video. A storyboard gives a detailed image of what the web site will look like once it is finished. When incorporating all these ideas into the design process, a web site will be most successful at meeting the needs of its targeted audience, be easy to navigate through and understood and be exciting for the learner (Bailey & Blithe, 1998).

**Managing the Web Site**

As mentioned earlier, the question of who will be in charge of maintaining the web site should be considered when designing the site. However, one also needs to consider what type of management system a school is going to use. According to Bailey et al (1998) there are two styles of management schools currently use: centralized and decentralized. When using the centralized plan, someone at the district is in charge of the web site and is considered the webmaster. This person is responsible for posting materials on the web server. The various schools create the pages for their site and then send the information to the webmaster. The webmaster
puts this information on the web server. The webmaster is in charge of the following areas in a centralized plan: design, content of web site, and supervising school representatives.

The decentralized plan is the same, with the exception that school representatives are directly responsible for their homepages and web sites. In this plan the district webmaster leaves design and content up to the individual school’s representatives. The authors found that the decentralized plan works better overall. The initial start up time is lengthy in this plan, but beyond that, it works better to have the school representatives be in charge of the information being presented on their web site (Bailey et al, 1998).

Maddux (1998) feels there are many barriers in effectively using the Internet in the educational process. These barriers include the lack of the proper technology needed to run the Internet, cultural barriers that relate to the fear of students accessing inappropriate material on the Internet, the administrative barriers presented when principals do not support the need for technology and when teachers lack the proper training of how to effectively use this technology with their students. However, there is still another barrier that can be just as harmful. This is the design barrier. A design barrier refers to web sites which are poorly designed then placed on the Internet. Maddux did
not focus on the problems with content and complexity. He is more concerned with the technical aspect of the web sites that makes it relatively useless to the Internet user. Since it only takes a matter of hours for a web site to be created and published, many design problems are being overlooked by the designer. Also there is not a formal review process the web sites are required to go through before they are published like there is for books. It is not necessary to understand the hypertext markup language (HTML) that is used to create a web site. There are many programs available now that translate the work into the HTML for you. Due to the reasons listed above, finding information on the Internet that has been well organized and presented in a competent manner can be a quite a chore. Research shows that most people find information on the Internet using search engines and directories (as cited in Maddux, 1998).

Maddux (1998) feels all of these problems can be eliminated if the designer remembers to follow a few easy rules: proofread, revise and stick to common sense in deciding what and when to publish. Maddux then goes on to list ways to create the web site by following a few technical strategies.

**Designing the Web Site**

First, make sure to include a meta tag, a HTML tag that allows major search engines to categorize and describe a page. This enables the search engines to better find your web
site when someone is searching under a certain category. Make sure to have the proper titles on every page of the web site. Each web page should include: name of the page, name of sponsor, name of author, and the professional qualifications the author has. Also, each page should include a link back to the home page. Not only should there be the usual title pages, but title pages should also be placed in the HTML code as well. When search engines find the site without a title placed in the HTML code, they list them as sites with "No Title" (Maddux, 1998).

Next, there should be a "purpose statement" found on the home page. By providing this, the users will be able to quickly find out if this page is going to be useful to them or not. Avoid putting a web site up if it is not completely done. It looks unprofessional to see the words, "under construction" and diminishes the educational and professional value of the web site. Stay away from the use of frames, the ability to have two or more windows visible at one time. Maddux also feels that someone needs to be in charge of keeping the web site current, especially if there are links on the web site. Nothing is more frustrating to a user to click on a link and receive an error message. To ensure repeat users, the information needs to stay current. Lastly, a site that is to have educational value completely lacks it if there are grammatical errors throughout the text (Maddux, 1998).
The design elements vary greatly from site to site on the Internet, but the general design processes are the same for all sites. In the article, "Design and Development of World Wide Web Resource Sites", Milheim and Harvey (1998) agree with Maddux in that for a web site to be effective it needs to have set goals that incorporate a purpose statement. The web site should also have clear objectives. The goals and objectives of this site should be written for the target audience. One must carefully consider the desires and needs of the targeted audience.

Since the web site that is being designed in this project is targeted for parents of elementary students, the designer needs to consider their computer knowledge, availability or access to the Internet, number of times they will use the site, and who else outside the community will want access to this site. Many of these questions will be answered in the survey being completed by the parents of the Canyon Country community.

The design of the site needs to remain as simple as possible since there will be a variety of users accessing it. Lynch & Horton (as cited in Milheim & Harvey, 1998) suggest keeping the following rules in mind:

1) use clear, consistent icons throughout the site to allow users to easily navigate to a given location
2) the use of at least one internal or external link per page
3) the placement of overview or summary screens to permit the intended audience easy access to any location within the site
4) the use of tables for the presentation of information where appropriate
5) the inclusion of a revision date for each page
6) the placement of the home page URL on every page or, alternatively, the utilization of specific URLs for each page (p. 54).

Milheim and Harvey (1998) provide the same ideas as Maddux when considering the design of a web site. They also feel that site maintenance is vital to the success of an educational web site. Milheim and Harvey also warn the designer that when updating a site be careful not to change the overall smoothness or flow of the site. It is important to make sure the new pages do not affect the flow of the site. This also applies to the deletion of web pages. Finally, be cautious with any structural changes, for they may affect other areas within the site.

Shotsberger (1996) gives some general rules to remember when designing a web site. The first is to not go overboard with the amount of links there are on a page. If there are numerous words highlighted indicating a link, the user will start to ignore these links when reading the text. By organizing the information in a concise, comprehensible manner, the user will check out the attached links rather
than ignoring them. To do this properly, stick to short paragraphs, bulleted phrases and the use of only main ideas for linking. Make each page short and concise to avoid a great deal of scrolling.

As stated previously, be sure to keep the format consistent, each page should be able to stand alone. Make sure the website is easy to navigate. There should not be any, "dead ends" wherein the user has to use the viewer's, "Back" button to get back to the home page or the previous page. Avoid making the site "cute" with flashing icons or words. Remember, simple is better when designing a website (Shotsberger, 1996).

Even though there is not any research if web sites are doing a better job than previous methods, it is obvious that many schools are embracing the new technology to make web sites available. With there already over 8,000 web sites according to Web66 (Carr, 1998), it will be interesting to see how many schools will have web sites by the year 2000. The research also states that by empowering parent in the education process, they will take a more active role in their child's education. Hopefully, a web site will make the parents and community feel more empowered since they will have up-to-date information about the school. However, one cannot forget the design process. It is important to keep the web site clear, concise, and consistent.
CHAPTER THREE

Goals

Even though this project will require teamwork, it will be an excellent way to give parents up-to-date information about school activities. Hixson and Schrock (1998) give three questions to consider when developing a web site for a school. They are: "1) What benefits can our school gain from having a home page? 2) What image do we want to portray to the community? 3) How can a presence on the World Wide Web enhance student achievement?" (pg. 42) Hixson and Schrock encourage teachers to use a web site to promote the school and send positive messages to the community about all the learning that is taking place at a school. Therefore, the goal of this project is to get parents more involved in their child’s education by improving the communication between home and school.

In order for this to be successful, the parents need to feel like they are part of the decision making. Griffith (1998) found that parents lose a sense of empowerment when they aren’t part of the decision making and are not aware about the day-to-day operations of a school. Simkins (1996) states that you need to know who your audience is going to be when creating a web site. The designer needs to think about what the community members and parents will want to see on this web site. A survey was designed to find out the needs of the parents in the Canyon Country community (See Appendix A).
Another way to make sure the goal is being met is to place a counter on the web site. The organization "The Counter" (http://www.thecounter.com/) not only keeps track of the number of hits to the web site, but also where these hits are coming from. The web site should also have a page for the user to provide feedback. An e-mail address can be provided for this or hypertext forms can be filled out while using the site (Cafolla & Knee, 1996).

Objectives

The main objective of this project is to communicate with the parents via the Internet. This demonstrates to the community how Rio Vista is using the upgrades in technology and promotes positive school experiences. It is also important to publicize the web site. Doing the survey is one way of enforcing the paradigm. Cafolla & Knee (1996) state it is necessary to have well defined goals. They also feel that it is important to know what the users are supposed to learn or accomplish when accessing a site. Next Cafolla & Knee (1996) state "The purpose of formulating objectives is to provide guidance in your design that will allow you to present your content in an orderly manner." (pg 8).

The main objectives are to keep parents informed about upcoming events, curriculum standards, and to recognize and publicize the school events. Therefore the school web site will have the following pages: Calendar, Special Events, and
Curriculum. These pages will help meet the needs of the project's objectives.
CHAPTER FOUR

Design and Development of the Project

Statement of Purpose

According to Web66, an international web registry, there are over 8,000 school web sites (Carr, 1998). As of July, 1998, the number of schools that have web sites in the state of California are 985. Out of these 985 sites, 456 are from elementary schools and 529 are from secondary (Web 66, 1998). Rio Vista Elementary is interested in joining this number. Two years ago the Saugus Union School District made a commitment to technology. They have made sure that every school site is wired for the Internet and have invested in a communications software so that teachers, administrators and parents may communicate with one another via e-mail. Rio Vista Elementary has also made a commitment to educating its teachers on technology. The next step is creating a web site for the school that contains the following: upcoming events at the school and in the individual classrooms, providing information on grade level standards in education passed by the State of California, Saugus Union School District’s grade level expectancies, and other links to web sites that will help parents with their child’s education.

Development of the Project

The first step of this process was to find out what parents would like to see on a school web site. Griffith stated from his research that the more a staff makes the parents feel welcomed and openly communicated with them, the more involved the parent became in their child’s school
According to Griffith (1998), parents at Rio Vista Elementary School were surveyed to find out what they would like to see on a school website that they will access from home and work. Appropriately, 600 surveys were sent home with the youngest child at the school site. 364 surveys were completed and returned to the school. Out of the 364 completed, 83% of the students have home computers. The figure below shows the breakdown between grade levels.

The number of homes that have Internet capability is 62 percent. Figure 3 shows the breakdown between grade levels.
The results from the survey show that 78% of the parents who completed the survey have a computer at work. Out of the 285 parents who have a computer at work, 200 have Internet capability (70%). A relatively high number of parents stated they were unaware of changes in the State Content Standards in Language Arts and Math (81%). The wording of this question could have confused the parents since the school has held many functions to inform the parents of the changes in State Standards. The meetings were held during the school day and in the evening. The next question dealt with how parents find out about upcoming events. The parents were allowed to check more than one category. The Rio Vista Newsletter received the highest amount of checks (31%). The rest were as follows School Calendar and Reminder Notes from the Office (21%).
Teacher’s Letters (20%), PTA /School Site Council Meetings (3%), and other (3%). Next, parents were asked if the Internet would be more helpful in finding out about upcoming events. Figure 4 shows the results. The results were broken down by grade level.

![Figure 4](image)

Then parents were asked if they would like access to the new State Content Standards and district grade level expectancies. Figure 5 shows the results. The results were again broken down by grade level.
The last question of the survey proved to be the most difficult to tabulate. Many parents just put checks by the categories instead of ranking the categories from most important to least important. While other parents ranked all the categories as being the most important. School calendar received the highest ranking, upcoming events received the second highest ranking, grade level standards received the third highest ranking, school and class projects and state content standards tied for fourth highest, Rio Vista Newsletter received the sixth highest ranking and school lunch menu received the lowest ranking. Several parents did want to find out how much lunch money their child owed through the web site.
Some parents wrote comments on the survey like: "Web site sometimes don’t get updated as often. Be sure web site for Rio Vista is updated.", or "How about a homework help chat type place or I guess it would pertain to my number one choice, a homework/project update so parents know that their kids are staying up with their work." Another parent wrote that they would like to see "Teachers Credentials, PTA funds and what they are used for, Teachers Specialities, Special Groups/Extra Credit, Pictures of students of the month and special award recipients."

**Design of the Project**

The basic philosophy when designing a web site is to start off simple(Simkins,1996). Cafolla and Knee(1996) actually recommend a "Top Down" design method that many computer programmers use. Start with the whole and then break down into smaller parts. Next, is the overall look the web site will have. From the research completed earlier, the "look" of the web site should be consistent and the designer should stay away from "flashy", complicated looks that will cause the user to focus more on the graphics instead of the information. These graphics also slow down some home computers. This is also important to consider since not every parent will have the same home computer and modem. Therefore, each page will have a border along the left hand side with
icons to navigate to other pages. Each page will have the proper heading with the proper links to be able to move freely throughout the web site (See Figure 6). Each title will have the school mascot, a rattlesnake. The letters of the title will use the school colors. These same colors are found in the border along the left side of the page.

Figure 6 Home Page

Whoever uses the web site will have the freedom to navigate to whatever page he/she needs and he/she will be able to move forward and backward within the web site without having to use the browser’s commands. For the purposes of

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this project, only the web pages that were the easiest to
design were chosen. The web site will be linked to the
district web site (http://www.saugus.kl2.ca.us/) and the URL
will be http://rv.saugus.kl2.ca.us/ It’s also important to
create a storyboard for the web site (See Figure 7).

I Home Page/Welcome Page
A) The name of the school <school address, school
phone number and fax number>
B) A list of topics that the web site contains
C) Name of Webmaster and a place to e-mail comments
about the web site
D) Link to District Home Page
E) Introduction from the Principal/Vice-Principal
   1) principal/vice-principal’s e-mail address
   2) picture of the principal/vice-principal

II School Calendar
A) Listing of upcoming events for the months of
   May, and June
B) List of topics on the site
C) Title of school, school address, school phone
   and fax number

III School News
A) Articles from the Rio Vista Newsletter
B) List of topics on the site
C) Title of school, school address, school phone
   and fax number

IV Lunch Menu
A) Monthly Lunch Menu
B) List of topics on the site
C) Title of school, school address, school phone and fax number
D) Link to Food Service web site

V Curriculum
A) District Grade Level Expectancies
B) Links to State Content Standards
C) Links to sites on grade level topics
D) List of topics on the site
E) Title of school, school address, school phone and fax number

VI Special Events
A) Pictures and articles of special events at the school
B) Links to sites on grade level topics
C) List of topics on the site
D) Title of school, school address, school phone and fax number

Figure 7
Rio Vista Web Site

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Formative Evaluation

I had several parents test out the web site to see if they were able to access the curriculum page and were able to reach the links that were on the curriculum page for sixth grade. The parents were able to find the web site fine and were able to reach the curriculum page with no trouble. One parent stated that it took a long time for the curriculum page to come up on her home computer. This is due to the fact that the parent has a slower modem. Also the page has several links that do take time to upload. Since the page contains a great deal of information, it could be broken down into two pages. One page for the primary grades (K-3) and one page for the upper grades (4-6). There were some problems with the web site being viewed on different browsers and style of computers.

All the parents who tested out the web site found the information helpful and useful. They were also able to access the state content standards to find out what will be expected out of their child in seventh grade.

Summative Evaluation

There were positives and negatives to doing this project. More research needs to be done on how well web sites are communicating to the community. That was one of the pitfalls to this project. This is why I feel that school web sites are the current trend in home/school communication.
Still, web sites are a very valuable trend for educators to take. It will be interesting to see how many more schools will take the time to create and maintain a school web site.

I thought creating the web site would be the most difficult part of this project. I didn't have any experience with web publishing programs and I was novice with HTML. Therefore, I did rely on others who had more experience with HTML to help fix some of the problems that occurred when designing the web site. This is one of the pitfalls of this project. Currently, Rio Vista has only one person working and maintaining the district web site.

The biggest disappointment with this project was when the site went online. The web site did not look the same when viewed through PageMill as it did through Netscape. On some of the pages, the writing was bleeding into the marble background on the left side of the web site. It was very frustrating trying to fix this problem since I was not well versed in HTML. Also the people that were available earlier to help me, were unavailable when the web site was put online. Once the web site was fixed, it was ready for viewing by parents and others.

**Strengths**

Rio Vista is one of the first schools in the Saugus Union School District to design its own web site. Rio Vista now has a reputation within the district as being as a school
where technology is a high priority. Also, I paid close attention to the design process. The web site was not placed on the Internet until it was completely finished and several people tested the functions of the internal and external links.

The web site also provides an opportunity to display a positive report about education to the public. This incredibly important in today’s society. Hopefully, by parents and community members being more aware of what is going on at school, they will want to get more involved.

Limitations

As stated earlier, the biggest limitation to this project is access to the Internet. According to the survey, 38% of the homes do not have access to the Internet. However, the number of home computers is rapidly increasing and this needs to be closely watched. The web site is outfitted with a counter that will tabulate how many users access the site and their location.

Also, since I am not well versed in HTML, the web site will be limited to what the software, Adobe Page Mill, is capable of doing. Since this web site is being created towards the end of the school year, many updates will need to be made during the summer break. Also the administration is changing at Rio Vista and hopefully the new principal will be supportive and create a committee to help run the school web site during the 1999-2000 school year.
Recommendations for Future Projects

The web site Rio Vista started off with a simple plan and more will be added to site in the next few years. A plan is being developed where each teacher will have their own home page and this will be added to the school web site. The plan includes training upper grade students (fourth-sixth) to help maintain the individual teacher web pages. It has also been recommended that the PTA also have a page in the web site. The webmaster hopes to form a staff committee of teachers that will maintain the web site for the next school year. Committee members will be in charge of keeping certain pages up-to-date, checking external links weekly, and adding more pages to the web site where needed.

Currently, I have been asked to design a web site for another elementary school in the district. So already excitement is growing on the potential this opportunity provides. Research still needs to be done how effective web sites are at communicating to the public. A study should be conducted comparing a school with a web site to a school without a web site. The study should determine if parents relied more on the web site or other forms of school communication.

Conclusion

This project is in the infancy stage with plenty of room to grow. The web site will continue to grow as more teachers, parents and community members become involved in the process.
of maintaining the site. It will be interesting to watch how the web site changes parent involvement at Rio Vista. As we approach the new millennium, Rio Vista will be a providing an education for its students that is enriched with technology. This will provide a role model for other schools in the area.
Appendix A
Parent Survey on Technology

June 2, 1999

Dear Parents,

My name is Tami Gardner and I am a sixth grade teacher at Rio Vista. I am currently working on my Masters in Instructional Technology. I have started writing my thesis and plan on making a web site for the school. In order to best serve the needs of the parents in this community, I need to find out some information from you first. The information I gather from this survey will be used in my thesis and in the designing of the web site. The purpose of the web site is to provide important information about school events, changes in State standards in Language Arts and Math, grade level activities and class projects. Please take time to fill this form out even if you don’t have a home computer. There is no need to put your name on this survey. I am just looking for how many parents currently have access to the Internet and what parents would like to see on our school’s web site. All surveys need to be returned to your child’s teacher by June 4th. Your time and effort are much appreciated!

Sincerely,

Ms. Tami Gardner

-------------------------------------------------------------------------------------------------

Parent Survey
Designing of School Web Site

1. Do you have a home computer? Yes No

2. If yes, does your home computer have access to the Internet? Yes No

3. Do you (or your spouse) use a computer at work? Yes No

4. If yes to 3, do you (or your spouse) have access to the Internet at work? Yes No

5. Are you aware of the changes in State Content Standards in Language Arts and Math? Yes No

Continued on the back
6. How do you currently find out about upcoming events (ex. Parent/Teacher conferences)? Check whatever applies

☐ 1. Rio Vista Newsletter  ☐ 3. Teacher’s Letters
☐ 2. School Calendar  ☐ 4. PTA/School Site Council Meetings
☐ 5. Reminder Notes from the Office  ☐ 6. Other

7. Do you think a web site would be more helpful in finding out about upcoming events? (Check one)

☐ Strongly Agree  ☐ Agree  ☐ Neither Agree/Disagree
☐ Disagree  ☐ Strongly Disagree

8. Would you like access to the new State Standards and grade level expectancies via a school web site?

☐ Strongly Agree  ☐ Agree  ☐ Neither Agree/Disagree
☐ Disagree  ☐ Strongly Disagree

9. On a scale of 1-7, 1 being the most important and 7 being the least, rank in order what you would like to see on the school web site.

_____ school calendar  _____ school lunch menu
_____ upcoming events  _____ Rio Vista Newsletter
_____ grade level standards  _____ changes in State Standards
_____ school and classroom projects  _____ other
May 28, 1999

Tamara Gardner
c/o Dr. Sylvester Robertson
Science, Mathematics and Technology Education
California State University
5500 University Parkway
San Bernardino, California 92407

Dear Ms. Gardner:

Your application to use human subjects in research titled, "How Effective are School Web Sites at Communicating to the Public" has been reviewed by the Institutional Review Board (IRB). Your application has been approved. Your informed consent statement should contain a statement that reads, "This research has been reviewed and approved by the Institutional Review Board of California State University, San Bernardino."

Please notify the IRB if any substantive changes are made in your research prospectus and/or any unanticipated risks to subjects arise. If your project lasts longer than one year, you must reapply for approval at the end of each year. 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 Lynn Douglass, IRB Secretary. Ms. Douglass can be reached by phone at (909) 880-5027, by fax at (909) 880-7028, or by email at Idouglas@wiley.csusb.edu. Please include your application identification number (above) in all correspondence.

Best of luck with your research.

Sincerely,

Joseph Lovett, Chair
Institutional Review Board

cc: Dr. Sylvester Robertson, Science, Mathematics and Technology Education
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Appendix C
Sample Pages of Rio Vista Web Site

Rio Vista Rattles

Rio Vista's staff and community are dedicated to developing and nurturing the whole child through innovative, continuous learning.

Welcome to Rio Vista's Web Site

Dear Parent:

At Rio Vista, we are committed to the philosophy that learning is a celebration of the progress that each child makes daily, across or across many concept understandings. We must ensure that each child succeeds.

We continue to provide a well-rounded educational program in a child-centered environment. Students at Rio Vista achieve high levels of academic achievement, develop positive self-concepts, and express the skills necessary to become contributing members of a challenging, global society. We accept the responsibility to encourage all students to continuously develop all educational opportunities.

Sincerely,

Rhonda A. Lewis, Principal

National Blue Ribbon School

Rio Vista Elementary School
24877 Cholameck Rd.
Canyon Country, CA 91351
661-297-3800

http://www.rivista111.org
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*Note: Dates and times subject to change.*

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Rio Vista Elementary School  
20417 Cahueros St.  
Chino, CA 91710  
(909) 377-3520

Website: rveis.eschoolswithapurpose.com

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Dear Parents,

I am very happy to have been named Principal of Rio Vista Elementary School. I am very fortunate to have such wonderful staff and volunteers who are committed to the success of our students.

I would like to thank all of our students, teachers, staff, and volunteers for their hard work and dedication. We are very grateful for all of the support we receive from the community.

We are very proud of the progress that has been made at Rio Vista Elementary School. We are working hard to ensure that our students receive the best possible education.

Please join me at the FTA for a special presentation on May 27th. We will be honoring our most dedicated employees.

Sincerely,

[Signature]

Assistant Principal

RIO VISTA NEWS

TOASTMASTERS WINNERS

This year our Toastmasters club had two winners in our Toastmasters’ Festival. Our first place winner was Linda Smith, and our second place winner was John Johnson.

30 YEAR CELEBRATION

On Friday, May 20th, we celebrated our 30th Year Conference. The morning featured a technical presentation by Linda Smith on effective communication. We also had a special presentation by John Johnson on leadership.

PARENT SURVEY

The Rio Vista PTA Council would like to thank all of the parents who participated in our parent survey. We hope to use the feedback to improve our services.
SCHOOL CLOSED
School will be closed on Thursday, July 31 for Memorial Day. Grade promotions to school on
Thursday, June 1.

CLASSROOM AIR QUALITY

It is crucial that we inform you that our students and teachers have been exposed to poor air quality in
many of our classrooms. The school district has been approached by several parent groups that are
concerned about the air quality in our classrooms. The district has been working closely with the
Environmental Protection Agency to ensure that our classrooms are safe for our students.

To improve the air quality in our classrooms, the district has implemented several measures:

- Increased ventilation
- Use of air purifiers
- Regular cleaning and disinfecting

These measures have been proven to improve air quality in schools. The district is committed to
providing a safe and healthy learning environment for all our students.

District Officials:

- Mr. George Menchado
  Director/CFO
  Menchado Ventures
  (818) 248-3029

- Miss forest
  President
  Jenna's Environment
  (818) 555-3923

- Mr. Jim Hoff
  Director, Safety
  Jenna's Environment
  (818) 555-3923

- Donna Ferguson
  President
  Jenna's Environment
  (818) 555-3923

MATH COMPETITION

Math competition will be held at the school on Thursday, July 31. Students will be divided into
groups based on their ability to participate in the competition. The competition will include
problems related to basic arithmetic, algebra, geometry, and statistics. The top 10 students will be
determined as the winners.

To participate in the competition, students must register by the end of July 30. Registration can be
completed online at the school's website or in person at the school office.

For more information, contact Mr. George Menchado at (818) 248-3029 or Mrs. Jenna
Ferguson at (818) 555-3923.

If you have any questions or concerns, please contact your child's teacher or the school
administration. We are committed to providing a safe and healthy learning environment for all
our students.
STANFORD 9
We are eagerly waiting to see our results on the Stanford Achievement Test. Our son will be sitting the test in the week and our CAT-6 scores with their paper next week. He will be provided to assist you in interpreting the scores.

S.T.B.Council
APPROVE BUDGETS
The council will be driven by the student council for the year. On Wednesday, 28th, our council members need approval. If we make changes we will call a special meeting.

K-CLUB & TITLE I
A special event is going to be held for the first time ever. It is going to be held in the community and a special event will be held for the Title I students. The council will be held in the community and a special event will be held for the Title I students.

Talent Show
One special talent show will take place on Thursday, from 9 to 10 pm. By the M.P. Morn room will supply the entertainment talents of the Walter Gieshank.

Volunteer Time
If you have some free time, please come join us on May 19th at 1:30 pm. By the M.P. Morn room, the students will help in making the show.

Kindergarten Enrollment
We are enrolling two kindergarten students for the 1999-2000 school year. There are three different options for enrollment.

Kindergarten Testing
On June 1st, we will be testing our kindergarten students and can be evaluated in June. If you would like to participate, please contact the office.
UPCOMING EVENTS

May
17 Parent Survey goes online
17 PTA Meeting - 7:00 p.m.
17-18 Classified Appreciation Week
18 Mad Hatter Day @ Dimon Canyon
19 Talent Show Rehearsals - 2:00-5:00
19 Parent Information Night @ Taft Annex - 7:00-8:00 p.m.
19 Addressed those presentations - Hollywood School
30 6th Grade Speech Night Out
31 4th Grade (and 2nd Grade)
31 Parent Survey to be returned
31 Site Council Meeting - 7:00 p.m.
27 LA Zoo Parent BBQ - 5-8 p.m.
28 Volunteer "Co - 8:45 a.m. in MTR
29 MCFLY - Advanced Day

JUNE
2-9th Grade Celebration - 10:00-11:00 a.m.
2 Kindergarten testing begins
3 T-Chip and Title I and today
5 Talent Show - 7:00 p.m.
6 Awards Assembly
8 Specials last day
9 5th Grade to Griffith Park Observatory
10-11 Project Imagination @ Helmens
7 Project Imagination @ Cohensack
9 5th Grade State Fair
11 4th Grade softball games - 9-11:00 a.m.
14 4th Grade to Bridge Laboratory
15 BBQ picnic @ all buildings
May Events

30th Birthday Celebration

On May 10th, Maples Will have her 30th Birthday Celebration. The evening will be filled with activities and games for all ages. The celebration will begin with a 30th birthday cake and champagne. A commemorative gift bag for guests will be filled with personalized items and small gifts. A live band will entertain the guests, and a photo booth will be set up for guests to take pictures. The evening will end with a fireworks display.

Jump Rope for Heart

Jump Rope for Heart is a national program that encourages students to jump rope for an hour to improve their heart health. The program is designed to promote physical activity and heart health. Students will compete against each other to see who can jump the most rope for 60 minutes.

Fourth Grade Gold Rush

On May 15th, the fourth-grade class will have a Gold Rush Day! This day will be filled with activities that are based on the California Gold Rush. Students will engage in games and activities that are based on the Gold Rush era. The day will end with a gold rush-style treasure hunt, where students will try to find the treasure.
Dear Parents,

Click on any grade level to learn about the district's grade level expectations, and the teachers at Rio Vista Elementary School.

Main Menu

- Kindergarten
- First Grade
- Second Grade
- Third Grade
- Fourth Grade
- Fifth Grade
- Sixth Grade

California State Content Standards

Math

Language Arts

Kindergarten

- Workbooks available
- Writing using shapes
- Language Arts by telling a story
- Language Arts by naming
- Language Arts by listening

Language Arts: Listening, Speaking, Reading and Writing

- Workbooks available
- Writing using shapes
- Language Arts by telling a story
- Language Arts by naming
- Language Arts by listening
- Language Arts by speaking

http://www.rivertonschools.com

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Mathematics
- Use models and strategies to count, compare, and order numbers
- Solve simple addition and subtraction problems
- Identify and classify shapes
- Understand basic geometry concepts
- Use measurement to solve problems
- Develop number sense

Language Arts
- Read and comprehend grade-level texts
- Write clear, organized paragraphs
- Use standard English grammar and mechanics
- Use standard English spelling and punctuation
- Use standard English spelling and punctuation

Science
- Understand the scientific method
- Conduct simple experiments
- Interpret data
- Use scientific notation

Social Studies
- Understand the development of society
- Understand the development of culture
- Understand the development of technology
- Understand the development of art

Computers
- Use computers to create and manipulate data
- Understand basic programming concepts
- Use computer software to solve problems
- Understand basic computer hardware

Arts
- Understand the elements of art
- Understand the principles of design
- Understand the relationship between art and culture
- Understand the relationship between art and technology

Music
- Understand the elements of music
- Understand the principles of music
- Understand the relationship between music and culture
- Understand the relationship between music and technology

Physical Education
- Understand the relationship between physical activity and health
- Understand the relationship between physical activity and performance
- Understand the relationship between physical activity and sport
- Understand the relationship between physical activity and recreation
Fifth Grade

Social Studies

Language Arts, Listening, Speaking, Reading and Writing

Science
Social Studies
- Study basic concepts of social organization
- Learn about the development and evolution of social systems
- Understand the impact of social change on society
- Develop critical thinking skills in analyzing social issues
- Explore various social theories and methodologies

Individual projects:
- Communication
- Critical thinking
- Problem-solving

6th Grade

Great links to check out with your sixth grader:

The Franklin Institute: Science Museum
Ace on the Case: Secrets of Sea
Collapse: Why Do Civilizations Fail?
Ancient Egypt Webquest
REFERENCES


Cafolla, R. & Knee, R. (1996, November) Creating worldwide web sites Learning and Leading with Technology 6-10

Carr, N. (1998, September) Spinning schools onto the web Techniques, 73(6) 34-36

Carr, N. (1998, September) How to shine among 8,000 Techniques, 73(6) 29-32

The CEO Forum on Education and Technology (1997, October) School Technology and Readiness Report—From Pillars to Progress Washington, D.C. Author

The CEO Forum on Education and Technology (1999, February) Year 2 Data Snapshots: The Four Pillar (pg 32-35) Washington, D.C. Author

Clevenson, R. (1999, February) Picture-perfect communication Educational Leadership 66-68

Deluzain, H.E. & Baines, L. (1998, July/August) Coming online: one teacher’s journey to integrate technology into instruction Clearing House, 71(6) 342-344

Dunman, S. (1998, November/December) Catching parents in a web Schools in the Middle, 8(3) 42-45


Hardy, L. (1997, September) Home on the web: how good is your school district’s home page? The American School Board Journal, 184, (9) 37-39


Rutkowski, K. (1998, November/December) Expanding the learning horizons of special needs students Multimedia Schools, 5,(5) 76-89


