## California State University, San Bernardino

# **CSUSB ScholarWorks**

Theses Digitization Project

John M. Pfau Library

2001

# Improving parent-school communication through the development of a Sky Country School web page

Kathleen Mary Clark

Follow this and additional works at: https://scholarworks.lib.csusb.edu/etd-project



Part of the Educational Technology Commons

#### **Recommended Citation**

Clark, Kathleen Mary, "Improving parent-school communication through the development of a Sky Country School web page" (2001). Theses Digitization Project. 4508.

https://scholarworks.lib.csusb.edu/etd-project/4508

This Project is brought to you for free and open access by the John M. Pfau Library at CSUSB ScholarWorks. It has been accepted for inclusion in Theses Digitization Project by an authorized administrator of CSUSB ScholarWorks. For more information, please contact scholarworks@csusb.edu.

# IMPROVING PARENT-SCHOOL COMMUNICATION THROUGH THE DEVELOPMENT OF A SKY COUNTRY SCHOOL WEB PAGE

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
Kathleen Mary Clark
September 2001

# IMPROVING PARENT-SCHOOL COMMUNICATION THROUGH THE DEVELOPMENT OF A SKY COUNTRY SCHOOL WEB PAGE

A Project Presented to the Faculty of California State University, San Bernardino

by Kathleen Mary Clark September 2001

Approved by:

Amy Leh, Ph.D., First Reader

P - 21 - 01Date

Sylvester Robertson, Ed.D., Second Reader

© 2001 Kathleen Mary Clark

#### ABSTRACT

The purpose of this project is to improve the communication between parents and the faculty and staff at Sky Country Elementary School through the development of an interactive school Web page. In particular, keeping parents aware of school activities and achievements that their children are involved in. The project was developed based on the needs of the parents, teachers and staff at Sky Country Elementary School. The research looks at how schools are currently communicating with parents and how better home/school communication increases parent involvement which leads to higher student achievement. The last element of research looks at how to properly design a Web site. The Web site is composed of pages that were indicated by parents and teachers to be of value: school calendar, news, curriculum, bus and lunch schedules, link to staff, and P.T.A. pages.

#### ACKNOWLEDGMENTS

There are many people who made it possible for me to receive this degree. First, I would like to thank my husband who has put up with a lot of nights alone with the kids in order for me to attend classes. He also had to endure many nights in which I was up to all hours typing and finishing projects. I would also like to thank all of my friends and family for their support, especially my parents who have done so much in helping me to achieve my educational goals. Without their help and support, I do not think I would be where I am today. Thank you Mom and Dad. I also have to thank my sister who helped take care of my children when I had classes to attend. Thanks Jen! Lastly, I would like to thank the instructors and fellow classmates who guided me through times when I unsure of what to do next. Thank you everyone!

# TABLE OF CONTENTS

ABSTRACT ii:
ACKNOWLEDGMENTS i
LIST OF FIGURES vi:
CHAPTER ONE: INTRODUCTION
Statement of the Problem
Project Goals
Significance of the Project
Project Objectives
Project Overview
CHAPTER TWO: REVIEW OF THE LITERATURE
Introduction
Internet Use in Education 9
Parental Involvement
Traditional Forms of Home-School Communication 18
New Forms of Home-School Communication 22
The Effects of a School Web Page on Home-School Communication
Design and Development of a Content-Rich School Web
Development 32
Design 30
CHAPTER THREE: DESIGN AND DEVELOPMENT
Statement of Purpose 45
Analysis 46
Design and Development of the Project 52

Formative Evaluation 59
Strengths 61
Limitations 62
Future Plan 64
CHAPTER FOUR: CONCLUSION
Recommendations for Future Projects 66
Conclusion 67
APPENDIX A: PARENT SURVEY ON WEB SITE 69
APPENDIX B: TEACHER SURVEY ON WEB SITE 72
APPENDIX C: SAMPLE PAGES OF SKY COUNTRY SCHOOL WEB SITE 75
REFERENCES

## LIST OF FIGURES

Figure	1.	Results	of	Teac	cher	Surve	∋у				 	48
Figure	2.	Results	of	Comp	uter	and	Inte	ernet	Acc	cess	 	50
Figure	3.	Outline	of	Web	site			• • • •			 	53
Figure	4.	Diagram	of	Web	site			• • • •	<b>.</b>		 	54
Figure	5.	Example	of	Page	·			• • • •			 	55
Figure	6.	Storyboa	ırd	of W	leb P	ages					 	57

#### CHAPTER ONE

#### INTRODUCTION

Many schools across the country have already established school Web sites as a way for schools and teachers to communicate with busy parents who work full time and find little time to keep up with school events and their child's performance in the classroom. Research by Pryor (1995) showed that the more parents are aware of school events, the more they get involved. Also, research done by Freedmon and Montgomery (1994) showed that the more parents are involved in their child's school and education, the better their child does academically.

In this chapter, I will discuss the current problems at Sky Country that have created a need to develop a new form of school-home communication, the goals of this project, it's significance to Sky Country, and a brief overview of the project.

### Statement of the Problem

In today's schools there is a growing need for the improvement of parent-teacher, or parent-school communication. In most households today there are two parents who need to work to support the family. In other cases, there is only one parent who is working to support

. a family. Due to this fact, many parents do not have the time to communicate with their child's teacher about how their child is performing in school. Also, parents do not have the time to keep up with school events and be involved with their child's school.

The parents at Sky Country Elementary School are no different. The amount of parent involvement at Sky Country has dropped significantly over the last few years. For example, Sky Country holds Parent Education Nights three times a year. This year there were no more than a dozen parents at any of these events.

Currently flyers go home with the students to inform parents of such events. The flyers, which are stuffed in backpacks and folders are hardly recognized by busy parents trying to sort through all of the other pieces of paper their child's teacher sends home. Only about 5% of the parents attended PTA meetings last year, and even less attended School Site Council meetings. Also, the community itself is not as involved with the school as it used to be. There was a significant need for better communication between the school, parents and its community.

#### Project Goals

The goal of this project was to create a school Web site that would help communicate information about Sky Country Elementary School to its parents and to its community. The goal of the Web site was also to help increase the amount of parental involvement at the school, which had declined in the last few years. Research (Freedmon & Montgomery, 1994; Lazar & Slostad, 1999; Pryor, 1995) has shown that parental involvement leads to academic achievement, which is the goal of any parent for their child and any teacher for their student.

This Web site is a catalyst for encouraging parent participation through one of the fastest growing tools, the Internet (Dunman, 1998). The Web site provides parents with round-the-clock access to a variety of school information. Parents can access the site at their convenience to find any information they need, and they do not have to depend on their child for bringing that same information home.

Internet connected families are looking for more personal and interactive communications with schools, (Revenaugh, 2000). Parents must feel like they are part of the decision-making. Parents need to have a say in the content that is provided to them on the school Web site. A

survey was designed for this project to determine the needs and wants of what parents would like to see on the school Web page (See Appendix A).

As already stated, the ultimate goal of this project was to provide another medium for schools to communicate with parents and the community, and for parents and the community to communicate with the school. Interaction must be present on the Web page to ensure this. The Web page should either have a page for the user to provide feedback, or an e-mail address.

### Significance of the Project

Parental involvement is now recognized as one of the most critical factors influencing student achievement (Lazar, Broderick, Mastrilli, & Slostad, 1999). According to Ginnow (1998), the overall greatest weakness in our educational structure is the lack of parent interest and parent support. This is why it is so important that schools try to create new ways to communicate with parents. The Sky Country School Web site was intended to give teachers and administrators the ability to communicate conveniently with parents and notify them of any special concerns or school issues.

The Sky Country School Web site is also important because it gives the parents another tool they can use to keep up-to-date with their child's education. This tool can give parents the ability to check information such as important events, bus and lunch schedules, staff information, curriculum information, and P.T.A. information 24 hours a day, seven days a week. Parents do not have to wait for office hours to gather the information they acquire. Instead, now that information is just a click away. This is especially helpful for busy parents who do not have time during their workday to call the school.

Another important aspect of the Sky Country School Web site is the effect it has on the community. According to Simkins (1996), Web sites can be a wonderful public relations tool. The Sky Country School Web site promotes the school's dedication to learning and highlights the achievements of its students and faculty. The site invites community members to share in the celebration of the school's achievements and invites its support in the continuing efforts of improving the children's education.

#### Project Objectives

The main objective of this project was to increase the amount of parental involvement at Sky Country Elementary School. Providing parents with up-to-date school information via a school Web page was intended to do this. Parents, students, other teachers or principals can view information about the school 24 hours a day. As previously stated, parents do not have to wait for office hours to check for information they require. Along with calendars and basic school information, curriculum standards are presented on the Web site to inform parents of the type of information their children will need to learn for any particular grade.

A second objective of this project was to increase community involvement at the school. "A school Web site can be a wonderful public relations tool" (Simkins, 1996). This school Web site was designed to showcase Sky Country School, letting the community know it's educational goals and practices. Any educational awards awarded to a school are also a nice way to show the community how hard its students and teachers are working.

#### Project Overview

This project was designed to fit the needs of the parents at Sky Country Elementary School. The purpose was to increase school-home communication at our school. I also felt that a Web site would help to increase the parent involvement at our school, which as already stated, had declined in recent years. I asked the parents to fill out a survey on what they would like to see on the school's Web site. Another purpose of the survey was to find out how many parents had access to the Internet, either from home or from work to enable them to make use of the Web site. The survey helped to indicate what features I needed to add to the Web site to make it useful from the parents' point of view. The survey also asked the parents how they were currently finding out about school events and if they felt a Web site would be beneficial in communicating important information about school events.

Before giving or making up the survey for the parents, I sent out a survey to the teachers at the school. The purpose of sending out a survey to the teachers was to find out how much they were willing to put into the Web site and what things they would like to see on it. It was important that the teachers and principal at the school had input into the way in which it was designed

because they were the ones who could also use it as a way to communicate to their students' parents.

Based on the results of both the teachers' and parents' surveys, the next step was to create a Web site for Sky Country Elementary School that informed the parents, in order for them to become more involved in the school itself. Some of the categories of the Web site include: upcoming events at the school and in individual classrooms, information on district standards categorized by grade level, school calendar, lunch and bus schedules, and other links for parents to Web sites that helped them with their child's education.

#### CHAPTER TWO

#### REVIEW OF THE LITERATURE

#### Introduction

Several different aspects of research are reviewed for this project. The use of the Internet in education is the first thing to be considered. Next, this project's goal is to increase parental involvement through the school Web site, so research is reviewed on the importance of home-school communication as well as the traditional forms of home-school communication. Next, is to look at research on using the Web as a communication tool. Lastly, attention needs to be given to how to design and develop a successful content-rich school Web site.

#### Internet Use in Education

Before discussing the effectiveness of school Web sites, attention needs to be given to the use of the Internet in general. The Internet was originally set up by the Department of Defense in the 1960's. ARPANET was set up to link military contractors and universities that conducted military research (Galbreath, 1997). According to Galbreath, in his Article, The Internet: Past, Present, and Future, this initial net led to other types of networks. NSFNET was another network that consisted of

five US university supercomputers built in the late 1980's. These were the first steps to the development of the Internet as we know it today.

Another big change that led to the growth of the Internet was the lifting of the ban of commercial use on the Internet. After this change the Internet was no longer just used for communication purposes, but for commercial ones (Galbreath, 1997). The Internet is growing at a 100% annual growth rate (Galbreath, 1997). For example in 1996, according to the Keenean Report, the number of US businesses with fewer than 10 employees and less than 3 million dollars in annual income that sell goods and services over the Internet was 200 (Galbreath, 1997). Today that number has grown to over a million.

The Internet has revolutionized communication in America (Balajthy, 1997). Today, people are shopping online, banking online, and communicating with friends and relatives due to the growth of the World Wide Web and Internet. More than 32 million parents and 25 million children are online in America (Grunwald Associates, 2000).

Unfortunately our schools have not kept up with the technology that has invaded our businesses, marketplace, and homes (Isernhagen, 1999).

During his state of the union address in January of 1996, President Clinton set an impressive goal—every American classroom would have Internet access by the year 2000 (Sunal, Smith, Sunal, & Britt, 1998). It is now the year 2001 and not every classroom has access to the Internet. Schools are falling farther and faster behind when it comes to technology. In the early 1990's, schools were actually considered up-to-date when it came to technology (Mason & Dralle, 1999). Schools were using computers for word processing and drill and practice. Now some schools are not integrating technology at all, while others using it to its fullest potential (Mason & Dralle, 1999).

With the incredible explosion of the Internet affecting so many aspects of society, harnessing the network's power in meaningful ways will increasingly pose challenges for educators (Deal, 1998). The challenge is that many educators have not been trained on how to productively integrate technology into their curriculums. According to the article, <u>Using the Internet to Create</u>

<u>Meaningful Instruction</u>, Internet use by classroom teachers can be divided into five levels (Sunal et al., 1998). At level 1, Internet resources are used by the teacher to gather content information. When this information is

shared by the teacher to their students, the class has reached level 2. Level 3 is achieved when the teacher incorporates Internet information directly into a lesson. At level 4, the teacher acts as a learning facilitator in student-directed projects that use a variety of Internet materials. Lastly, level 5 has been achieved when then students directly plan and implement their use of the Internet. The study also states many teachers are only at level one due to the fact that schools do not have enough computers in every classroom, if they have computers in the classroom at all. Also, many teachers do not have any training to develop a lesson that could be any higher than a level three (Sunal et al., 1998).

The Internet, and particularly the World Wide Web, has been hailed as having the potential to transform teaching and learning (Zhoa, 1998). It has been found through research that the integration of technology including the Internet has increased the levels of achievement among students. For example, studies have shown that telecommunications can enhance student's understanding and respect for cultural differences (Gersh, 1994), provide students with authentic learning experiences (Barron & Ivers, 1998), increase students' inquiry and analytical skills (Honey & Henriquez, 1993),

and improve students' attitudes and communication skills (Barron & Ivers, 1998). According to Agarwal and Day, in their article, The Impact of the Internet on Economic Education, "The point of using the Internet is to add value to the classes that we teach and allow us to meet the challenges of teaching" (1998, p. 8).

#### Parental Involvement

The very purpose of this project is to increase the amount of parental involvement at Sky Country Elementary School. Therefore, it is important to look at why parental involvement in schools is important. Parent involvement is now recognized as one of the most critical factors influencing student achievement (Lazar & Slostad, 1999).

The face of the American family has changed significantly over the past 20 years, which has had a direct effect on the educational process (Freedmon & Montgomery, 1994). These changes have caused a greater need for parents to become involved in their child's education. Many of today's homes have either just one parent, or a combination of two parents who have to both work full-time to support the family. Most parents have little time to keep up with what their child is doing at school, or how they are doing in school. Also, most

parents when they ask their child, "What did you do at school today?", find the likely reply to be, "Nothing" (Clevenson, 1999). In many broken homes and dysfunctional families, educational values are just not a high priority (Ginnow, 1998). Some parents view schools as a terrific baby-sitting arrangement (Ginnow, 1998).

There is a lack of parent involvement, parent interest and support, familial support, and parental rights and responsibilities in today's schools. Who is responsible for changing this lack of support? Teachers? Although some teachers have welcomed parent participation and used it effectively to motivate students, other teachers have not felt secure enough to have parents in their classroom (Pena, 2000).

It is very important for teachers to establish parent-teacher collaboration. Teachers also need to see parental involvement as a primary means of helping children to achieve in school (Lazar et al., 1999). Teachers provide an important "relationship" process for parents, potentially supporting them in dealing with the various issues and challenges of parenting (Swick & Broadway, 1997).

Recent research shows a positive relationship between parent involvement and a host of outcomes for students:

higher grades, long term academic achievement, increases in student attendance and retention, improved student behavior, and enhanced motivation and self esteem (Henderson, 1988a; Freedmon & Montgomery, 1994).

In 1994, California came up with a policy on parent involvement in schools. The California state board of education said that parents should be involved at all grade levels in a variety of roles. The state requires schools and districts to have a comprehensive plan for parent involvement that encompasses the board's six goals: Those efforts should include:

- Help parents develop parenting skills to meet the basic obligations of family life and foster conditions at home that emphasize the importance of education and learning.
- 2. Promote two-way (school-to-home and home-to-school) communication about school programs and students' progress.
- 3. Involve parents; with appropriate training in instructional and support roles at school and in other locations that help the school and students reach stated goals, objectives and standards.

- 4. Provide parents with strategies and techniques for assisting their children with learning activities at home that support and extend the school's instructional program.
- Prepare parents to actively participate in school decision-making and develop their leadership skills in governance and advocacy.
- 6. Provide parents with the skills to access community and support services that strengthen school programs, family practices, and student learning and development.

According to Freedmon and Montgomery (1994) authors of, <u>Parental Education & Student Achievement</u>, parental education is the key to effective parent involvement. The word parent itself is defined as guardian or protector.

"Education is a life-long process that needs to be encouraged for all children and their guardians or protectors" (p. 42). Also in their article Freedmon and Montgomery discuss how the Sacramento Unified School District developed a parent education program to help increase parent involvement. In this program parents had an opportunity to learn skills such as:

- Basic parenting;
- Effective home/school communication;

- Academics:
- Social activities; and
- School governance

Also a parent training and assistance center was established. A director and four parent advisors staff the center. The parent advisors work directly with the school site personnel and other parents to address the needs at each site. Achievement rankings in the district schools that have this program have increased.

Many positive benefits from increased parent involvement also exist for the school. Those schools that encourage parent involvement of parents outperform schools with little or no parent involvement (Henderson, 1988b). Schools with long-lasting and comprehensive parent programs are more effective than those without such programs (Rioux & Berla, 1993). Parent involvement also provides valuable resources in terms of volunteer time.

Besides the students and the school, parents themselves also benefit from through their increased involvement at a school (Henderson, 1988b). When low-income parents are trained to work with children, they develop better attitudes, become more active, and help support school activities. They also begin to seek additional education for themselves (Henderson, 1988b).

Some parents are eager to volunteer at a school, but do not because they feel threatened by the power of the school or the teacher. Parents want to be invited, given constructive suggestions, and informed about the school's needs (Pryor, 1995). A study done by Pryor (1995) shows that the way in which a school practices to involve parents and it's conveyed attitude toward the parents are critical factors that influence how parents respond.

Providing youths with an education that prepares them for the future is a shared responsibility. Parents, students, and teachers need to strengthen their relationships and work together as a team to assure that learning takes place (Pryor, 1995).

# Traditional Forms of Home-School Communication

It is important to look at traditional forms of home-school communication to assess how well they are functioning and if there is a need for another medium in which schools should communicate with parents. The most traditional way in which schools communicate information to parents is though newsletters. As a teacher and a parent I know the number of newsletters or papers that are sent home each week. The paper, usually announcing such

things as: lunch schedules, calendars, events going on at the school, flyers from gymnastics, football, baseball, the YMCA, the PTA, and everything in between. It seems as though daily the students are taking home at least 2 or 3 flyers at the least. It is difficult for a busy parent to weed through these to distinguish which flyers are the ones to read and save and which go straight into the garbage. Another problem with flyers and newsletters is the fact that they may never make it home, and the parent is not the wiser. It is not hard to figure out then why so many school events have such low turnouts, or why 20 kids are calling their parents from the office on a minimum day (Scott & Cantor, 1996).

The messages that are sent from school to home are important because they help shape community perspective about what schools are doing and how well they are doing it (Hanson & Henry, 1992). Hanson and Henry conducted a study over a 6-month period of school communications from nine schools. They found that the communications were functional, in the sense that they relayed their purpose, however the items were rated as typically dull, devoid of interesting style and creative language. They also found that the communications were almost all written in exclusively English, and far as the newsletters were

concerned, targeted toward a generic, upwardly mobile, White, middle-class parent.

Another concern of the communications was how were they sent out? Students carried home 52% of written documents, 40% were mailed, 13% were posted some place in the community, and 16% were published in the newspaper. It was also found that the elementary schools rely on sending messages home with the students, while the high school rely more on mailings. When asked, teachers had no idea what communications were being read, if any (Hanson & Henry, 1992). In conclusion, Hanson and Henry found that if schools district want to more effective at communicating to their communicate the information.

A second traditional type of communication that is regularly used by today's schools is the telephone. The telephone is not used by schools near as much as a flyer might be, but it is there. As mentioned, school and home relations are a growing concern for teachers and parents alike (Cameron & Lee, 1997). The telephone is an easy way for a teacher or a parent to make a quick call to ensure communication either from home to school or school to home. But is the telephone so easy? A telephone call can last anywhere from just a few minutes to hours. Teachers

may spend more time than they wish in making that quick call to a parent. Time constraints sometimes prevent the timely, helpful contacts that enhance the mutual home and school connection of a child's academic progress (Cameron & Lee, 1997).

Another drawback of the telephone is the fact that parents cannot always get in touch with the teacher.

Usually, unless the school has voice-mail, the communication may be more of a hassle than a written communication.

The introduction of voice-mail in schools has done great things. Secretaries no longer have to take messages for teachers; they can just simply patch the call to the teacher's voice-mail without disturbing the class. Another benefit of voice-mail is that messages can be sent anytime (day or night), messages can be accessed from any telephone, messages can be edited before being sent, and delivery can be monitored (Scott & Cantor, 1996). What Scott and Cantor did discover from their study on the use of voice-mail as a communication tool in schools was that parents in the younger grades preferred written communication, while upper-grade parents liked using the voice-mail system.

#### New Forms of Home-School Communication

Due to the lack of parent involvement in school events, other forms of communication have been considered. One school in Arlington, Virginia tried a new approach to improve home-school communication. Gunston Middle School knew that almost every family in their school had a television and VCR in the home, or at least access to one. In the article entitled, <a href="Picture Perfect Communication">Picture Perfect Communication</a>, Rhonda Clevenson discusses a new way in which her school tried to improve home-school communication.

The Homevisions Program was based on the idea that most families spent more time watching television than talking about school with their children. The goal of the school was to use this interest in television to increase the information that families received about school. They wanted families to watch and talk about television shows starring their own children and the staff at the school (Clevenson, 1999).

More than 200 videos, produced primarily by students, were made to be circulated to families during the 1997-1998 school year. The videos showed students and teachers in action, an opportunity parents rarely got to see. The videos also included valuable information: how

parents can help their child be successful in school and descriptions of special programs and curricular units. Due to the fact that many of the students speak other languages besides English, many of the videos were translated into different languages.

This project was an example of how this school was trying to enhance the amount of parent involvement at their school. The project worked for them and the greatest benefit was the joy it gave the students and staff.

Another new medium being used by schools to improve the communication between home and school is e-mail. Many universities have already discovered that e-mail is a powerful, dynamic medium that can transform the manner in which people interact, especially in educational settings (Bernstein, 1998). E-mail is not only powerful, but also very cost effective compared to sending the same information via a newsletter or flyer.

The expectation of universities today is that once you become a part of the university community you will have the capacity to communicate via e-mail, as required (Bernstein, 1998). A question presented to Allen Bernstein was why if institutions of higher education have integrated technology into their communities, and done so

successfully, are primary and secondary levels lagging so far behind?

In his article, <u>Using Electronic Mail to Improve</u>

<u>School Based Communications</u>, Bernstein writes about a project started at Salem High School in 1997. The goal of the project was to create an electronic mailing list of as many parents as possible so that school administrators could communicate with them on a regular basis and keep them informed of school related news and information. The purpose was not to replace the traditional methods of communication, but to supplement them with an additional medium.

The school found e-mail to be speedy, informal, and a cost-effective way to ensure that parents obtain information they might not have received through traditional channels of school communication. Mail sent electronically is quick to compose, easy to send and even faster to read (Bernstein, 1998). A second observation made by the school was that e-mail ties into the larger aims of both promoting positive public relations and increasing the responsiveness to the community. Salem's e-mail list included not just parents, but central office personnel and other interested community members who wanted to keep abreast of school events.

One criticism of the e-mail project was that it was empowering those that were already empowered and not reaching out to those who had been traditionally disenfranchised. Internet-based projects such as Salem's are said by critics to be widening the gap between the haves and the have-nots (Bernstein, 1998). On the other hand, according to Bernstein, the hope is that the price of computers and fees for Internet access will decrease enough over time to make it accessible to more parents.

Using electronic mail to communicate with parents clearly had a positive impact on the school and community. After using the e-mail as a communication tool, the parents wanted the school, the district, or their children to create a Web Page to have better access to the Internet.

### The Effects of a School Web Page on Home-School Communication

Parental involvement has been shown to play a vital role in any child's education. As seen, educators are continually searching for new ways to encourage parent involvement. One of the newest tools being used to improve communication between families and schools is the Internet (Dunman, 1998).

As we move into the 21<sup>st</sup> century, more and more schools and homes will be connected to the Internet (Ivers & Barron, 1999). Also millions of American families now use the Internet from home, work, or school (Grunwald Associate, 2000) Currently, there are over 8000 K-12 school Web sites registered, according to Web66 an international Web site registry developed by the University of Minnesota

(http://Web66.coled.umn.edu/schools.html). Half of the 8000 plus school Web sites are elementary school Web sites. Web sites, e-mail, and other Internet-based technologies are standard issue for today's most progressive school systems (Carr, 1998). No longer just consumers of online resources, educators have begun to design their own School Web pages. Many realize they can use the Internet for many things: displaying student work, providing information about their schools and programs, sharing resources, and developing partnerships for collaborative Web projects (Barron & Ivers, 1998).

A Web site can do wonderful things for a school. The Web site can be a wonderful public relations tool (Simkins, 1996). "For teachers and administrators at Walton High School in Marietta, Ga., informing students and parents of changes in class assignments or school

events is just a click away" (Web site keeps teachers, 2000, p. 98). They are using a new on-line community to provide round the clock access to a variety of school events, administrators and teachers have been able to save a tremendous amount of time and energy updating busy parents with constantly changing school events, and as previously shown, improving relationships with parents can increase the learning experiences of students (Web site keeps teachers, 2000).

The school had found that "In the past it took a considerable amount of administrative time to write and distribute memos or newsletters to the students. Then, we never really knew if the announcement made it into the hands of the parents, or if was left on a bus or in a child's backpack," says John Flatt, principal of Walton High (Web site keeps teachers, 2000).

The school had decided in the fall of 1999 to begin looking for a solution to increase communication among parents and teachers, while decreasing the paperwork associated with it (Web site keeps teachers, 2000). With 2,500 students and more than 4,500 parents, the school recognized a frustration level from teachers who could not easily communicate with parents on certain issues. Parents expressed concern about not being fully informed about how

their children were doing in class and what was going on at school. The school decided to use eHomeRoom.com. The teachers were trained to use the system, and now they can conveniently communicate with parents and notify them of any special concerns or class issues. Since the school has been using the site, it has received a great deal of positive feedback from parents and students. "Parents would rather log onto the site and have an instantaneous answer than receive a busy signal or wait on hold for several minutes," says Flatt (as cited in Web site keeps teachers, 2000, p. 99). This is a very positive example of how the Internet can be used to improve home-school communication.

School Web sites are not only a great way to communicate with parents, but they are also an avenue schools can use to inform the community about itself (Charland, 1998). According to Jamie McKenzie, author of "Why in the World Wide Web?", there are four primary goals of a school Web site.

They introduce visitors to the school-its mission, its character, its look, its offerings to children, its stance on new technologies and its overall spirit.

- 2. They point to excellent information on the larger Web - identifying the best resources the Web has to offer an educational family, those most likely to support the curriculum and the kinds of investigations likely to be undertaken by staff and students.
- 3. They offer an opportunity for the publishing of student works to both a local and global audience - whether those works be art, music, or writing.
- 4. They provide rich data locally collected on curriculum related topics (such as local history), whether these collections take the form of data warehouses, virtual museums, or virtual libraries.

Besides just school Web sites, many teachers have developed their own classroom Web sites. Classrooms Web sites serve a similar purpose as school Web sites in providing parents and students with key information. A classroom Web site is also beneficial to students because it can provide links to resources that are curriculum related (Charland, 1998). A classroom home page also allows a teacher to post student work in front of a worldwide audience.

Another impact of creating a classroom homepage is that it is a way to get not only parents, but also students more involved. Students can personally contribute to some of the information that is put on the classroom homepage (Charland, 1998). The classroom homepages can help motivate students in learning.

One problem with using the Internet as a communication tool is the fact that not all parents or students have access to the Internet from home or work. This problem is disappearing day by day. The number of kids online has tripled since 1997 (Grunwald Associates, 2000). Also, there has been a 165% increase in the number of parents online since 1997 (Grunwald Associates, 2000). Many parents report that education is the key driver for family Internet use today (Grunwald Associates, 2000).

Design and Development of a Content- Rich School Web Site

Before creating a school Web site there are lots of things to keep in mind. Creating an effective educational Web site is an exciting process, but teaching teachers and students how to do it is not as easy as many people believe (Bailey & Blythe, 1998). A Web site can be a wonderful public relations tool. Anything a school

currently publishes on paper, from the school handbook to the football schedule can easily be posted for instant access on your site (Simkins, 1996).

According to Kathleen Schrock (2000) these are qualities of a content-rich school Web page

- 1. It includes information useful to others.
- 2. It contains pictures and/or illustrations.
  Remember a picture is still worth a thousand words!
- It offers links to related sites created by others.

Do not try to build the Web site on your own. Gather a team to plan your site. Include a teacher, a parent, and a student or two (Simkins, 1996). According to Nora Carr, "Teams can also help ensure that the Web site is maintained regularly. Keeping sites fresh, interactive, useful and entertaining, basic criteria for a quality Web site, requires many hands and many hours" (1998, p. 31).

According to Michael Ruffni, in his article <u>Blueprint</u>
to <u>Develop a Great Web Site</u>, a site requires a blue print
(2001). The blueprint has two components: Systematic
Planning and Design and Development. Systematic Planning
can ensure a quality Web site, save time and make the
content of the Web site easy to navigate. The design and

development of a Web Site encompasses the elements of the site's navigational structures, design principals, homepage and page construction and graphics.

According to Bailey and Blythe (1998) to create a good Web site, three basic conditions must be satisfied. The designer; 1) must thoroughly understand the information that will be conveyed, 2) be skilled in organizing that information, and 3) adhere to the principals of good design. "Many sites look good without being good" (p. 6).

# Development

A review of middle school Web sites in the article, "Catching Parents in a Web", suggests 10 broad categories of Web-based information that can enhance the sense of community among teachers, students and family, which is the goal of this project.

# 1. Welcome

First impressions are as important in the virtual world as in the real one. The homepage sets the tone and promotes further exploration of the site. Photographs of the school, its students, or the school mascot usually adorn this first page. A greeting by the principal, a mission statement, the instructional philosophy, and educational

awards bestowed upon the school may also be considered part of the introduction.

# 2. Frequently Asked Questions

These pages offer general information for parents about day-to-day school activities. Sites offer various types of information, such as school hours, school calendars, school handbooks, supplies needed at the beginning of the school year, how to contact staff members via phone, fax, and e-mail, lunch menus, bus schedules, and links from the middle school site to the school district site if additional information is needed.

# 3. Faculty and Staff Showcase

Photographs of teachers and administrators are popular, as evidenced by the frequency they are found on school sites. Teachers' daily schedules, their e-mail addresses and Web sites, if applicable, and biographical information may be provided.

## 4. Student Showcase

Everything from student Web pages to electronic art is displayed with both pride and satisfaction. Students' writings also have a chance to shine, and it runs the gamut from poetry to electronic

portfolios and school newspapers. There are also photographs of completed science and history projects, and meticulous listings of students' favorite Web sites.

## 5. Library/Media Center

Educational resources are identified, and media specialists encourage their use. Other sites provide reviews of new book titles that rival the electronic bookstores ofAmazon.com or Barnes and Noble (http://www.barnesandnoble.com). Sometimes, electronic databases can be searched from home as well as in the media center, and parents are given virtual tours of the library and how it is used. Parents are also asked to volunteer in the library.

## 6. School Curriculum

Course outlines, recommended readings, weekly homework assignments, homework hotlines, and Internet sites all work to help the student successfully complete assignments. Other sites offer sample papers, sample tests, and lesson plans for both students and parents to review.

## 7. Cocurricular Activities

Almost every imaginable school-sponsored club and athletic activity is represented somewhere on a school Web site. Detailed sports calendars, lists of meeting times, team members, and team/club sponsors all compete for electronic attention.

## 8. Parent/Teacher Groups

No matter what it is called, the official parent/teacher group is an important player in building a sense of community between families and the school. Pages dedicated to this group offer meeting dates, minutes of previous meetings, and the agendas of future meetings. Also included are special projects and fund-raising activities.

## 9. Community Information

Knowing about the community in which a school is located can be particularly important for new arrivals or families considering a move into the community. Information about city government, local businesses, the school system, geography, weather, cost of living, and other pertinent facts demonstrates how the school interacts with other groups in the community.

# 10. Special Activities

What is special? Just about anything a school wants to assign that definition, including class trips, festivals, championship playoffs, or band performances. Faubion Middle School in McKinney, Tex., highlights an annual fundraiser, Partners in Progress Golf Classic, with a series of photographs taken at the event. (Dunman, 1998)

This list is great to follow when creating a school Web site.

## Design

After considering your audience and deciding the content you will place on your Web site, you must design it using three separate but related steps:

## 1. Outlining

Organizing information for publication on a Web site is essential. Beginning Web-site creators, however, frequently forget about Step 1 in the entire process: making a basic content outline of their information.

An effective outline will summarize the information they have found by using headings and subheadings. It should answer five basic questions:

What main concepts will be found at the Web site?

;

- 2. What is a logical order for the information?
- 3. What are the main and secondary ideas and themes?
- 4. What does the user or reader need to know?
- 5. What would be good but not critical for the reader to know?

As Web site designers assemble their information, they can correlate various Web elements such as sounds, video, text, and graphics with content.

Some designers find the traditional content outline too sequential or linear and instead want to promote a freer flow of ideas. Inspiration Software by Engaging Minds may be more useful to these designers; the program is designed to stimulate the mind mapping process and thus generates major concepts and related ideas.

## 2. Diagramming

As the content outline of the Web site unfolds, one main question arises: What kind of organization best suits this information?

This is Step 2 in the process: diagramming the Web site to develop the larger "picture." Five subordinate questions need to be answered:

- 1. What is the main question that the Web site will answer--and where should this information be placed?
- What is the purpose of the Web site--and where should this information be placed?
- 3. Who is the intended audience (teachers, administrators, parents, students, community leaders, etc.) and what are its needs—and where should this information be placed?
- 4. What is the nature of the content (i.e., technical or conversational, complex or simple) and how will this influence the Web site's organization?
- 5. What are the natural connections between and among the concepts?

Three Major Designs. Web sites can be diagrammed as linear, hierarchical, or nonlinear.

1. Linear Web sites are sequential and designed like books. They are excellent for presenting a series of steps or tracking a process from start to finish. This simple design keeps users moving in a predetermined sequence, usually with clickable buttons that allow them to select

- their direction of travel: for example, "Next Page," "Previous Page," and "Back to Home Page."
- 2. Hierarchical (or tree-design) Web-site design uses a single home page as a table of contents for other pages at the site. In other words, it offers users more than one path and allows them to jump or branch from one point to other points in a site with the click of a mouse. A hierarchical structure also can link one home page to different Web pages with related information, thus allowing people to connect many different ideas quickly. The structure can be confusing, however, to people who do not keep track of where they have been, are now, or may be going.
- 3. Nonlinear or branch-design Web-site design allows users to jump--that is, branch--from a central home page and along a series of linked pages; sometimes they can jump to another branch. Most designers have trouble designing branched Web sites. The trick is making sure that users do not get lost.

Here are two ways to learn more about diagramming Web sites:

- 1. Conduct a search on a topic of interest and diagram several of the Web sites that are found. Determine whether they have linear, tree, or branch designs, and whether their developers followed the rules of effective Web-site design described in this article.
- 2. Identify both well-designed and poorly diagrammed Web sites. Which designs promote easy navigation?

## 3. Storyboarding

Storyboarding is Step 3 in the Web-site design process. In essence, it is the detailed planning of information that will be placed on each Web page, including type (text, audio, video, and graphics) and style (typeface, color, spatial arrangement, and so on). The storyboard is designed to present a clear and detailed page-by-page image of the information that will be delivered.

The storyboarding process should bring specific answers to these eight questions:

1. What links should be on each Web page?

- 2. What kind of clip art or graphic items should be on each page? How do these images relate to the message being conveyed?
- 3. What text should be on each page? How much will be needed to convey the message? Will other media such as audio, video, or graphics buttress the text message or add information? How can other media convey the information without text?
- 4. What typefaces, type sizes, and colors should be used? How will these decisions affect most users?
- 5. Is the text scrollable, transparent, or hidden?
  Why is the text field important to consider?
- 6. What kind of buttons (icons, names, etc.) will be on each Web page and why?
- 7. What sounds should be added to the page? What is their purpose and value?
- 8. Should video be included? If so, what is its purpose and value?

Here are several tips to follow when storyboarding.

- \* Use "stickies" or note cards to position each page in the Web site.
- \* Place the text for each page on each stickie or card.
  - \* Place graphics on the stickies or cards.

- \* Draw the navigation tools that will be placed on each Web page.
- \* Rearrange the stickies or cards to determine their most logical placement.
  - \* Have other people review the storyboard.

Storyboarding presents interesting challenges to educators. Organizing the written word is what teachers have best learned to do during their education.

Assembling and organizing text with graphics, audio, and video in a cohesive and holistic fashion, however, is a higher-level skill that few people have been trained to do, thought about, or experienced.

An equally complex and formidable challenge to the novice is creating information through graphics, audio, and video without text. This is an emerging skill in Web-site design and information literacy that will evolve and be widely discussed in the next few years.

Essentially, the challenge is to convey something meaningful in any technology-related medium and to create and present information that does not depend on text. Is another medium more powerful than the common text-based format? (sited from the article "Outlining, Diagramming, and Storyboarding, Or How to Create Great Educational Web sites" Bailey & Blythe, 1998)

There are many Web editors to consider when creating a Web page. The following Web editors will help to create a well-designed Web page or an entire Web site (O'Donovan, 2000).

- FrontPage by Microsoft
- GoLive 5 from Adobe Systems
- Apple's itools HomePage
- Macromedia's Dreamweaver
- Allaire Corporation's Home Site 4.5

After having created a school Web page, the next thing to do is find a way to get people to your site. One way is to register your school Web site online at http://Web66.coled.umn.edu/schools.html. Send a letter home to parents introducing the school site and it's uses. Also send your Web address to district personnel, corporations in the community, and local newspapers. Others ways to get people to visit your site are presented by Kathleen Schrock in her article, <u>Building a Content-Rich School Web Page</u> (2000). Schrock suggests finding portals and related pages dealing with your topic and sending the Webmaster a note, explaining your rationale for the creation of your project and ask them to create a link to your page. A second way Schrock suggests is to submit the URL of your Web page to all the major

search engines. Lastly, post a note to a listserv or news group, such as Classroom Connect, letting other educators know about you site.

#### CHAPTER THREE

## DESIGN AND DEVELOPMENT

In this chapter, I reestablished the purpose for designing and developing a Web site for Sky Country

Elementary School. I also analyzed the need for a Web site at Sky Country through the implementation, collection, recording and calculating of surveys given to the parents and teachers at Sky Country. I then went through the Development and Design process of the project and lastly list it's strengths and limitations.

## Statement of Purpose

According to Web 66, in 2001 there were 8,841 school Web sites registered in the United States alone. Of these 8,841 school sites, 4,124 were elementary school sites. Sky Country Elementary School was interested in adding to this growing number. "With more and more schools gaining access to the Web, the use of the Web is becoming a viable tool for exchanging and displaying information among schools" (Ivers & Barron, 1999, p. 181).

Due to the fact that Sky Country's parental involvement had seen such a decline in recent years, there was also a need to use the Web as a new tool to help encourage parent participation and increase communication.

In this project a Web Site was being used to increase and improve communication between families, schools, and the community. The Web site contained the following information for parents and the community to access:

- A calendar. To keep parents and community members abreast on upcoming events.
- 2. Connections to bus and lunch schedules.
- 3. Curriculum. What curriculum is taught at each grade level.
- 4. Access to Sky Country Staff.
- 5. P.T.A. news.
- Links to individual classrooms.

Lastly, parents can join a mailing list to receive up-to-date information via e-mail, and ask any questions or provide any comments they might have.

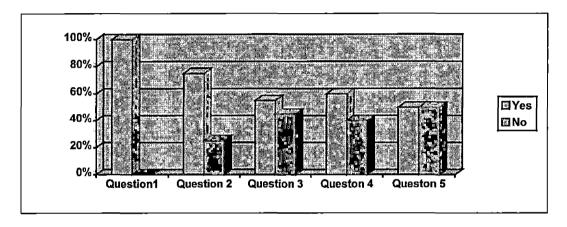
# Analysis

The first step in the development of this project was to find out what parents and teachers at Sky Country would like to see on the Web site. According to Carr (1998), faculty members, students, parents and the community all play a critical role in the development of an effective school Web site. Therefore, first the teachers at Sky Country were surveyed to find out what they would like to

see on the Sky Country site, and what efforts they were willing to give in helping to enhance the site (see Appendix B). I sent out 28 surveys to the staff at Sky Country. Of those, only 20 were returned. Out of the 20 completed, 100% felt that a Web site would be helpful to parents and the community to access information. Seventy-five percent said that the Web site would be helpful for them to use as a communication tool. An overwhelming comment written about this question was that they would like to use it as a communication tool, but they needed to be shown how. Thirdly, 55% stated that they would like to have a classroom page in which information about their class could be accessed, but again the overwhelming comment was that they needed to be shown how. Some of the teachers, who stated no, felt that it was too much work to keep up a classroom page and they did not know how. Regarding whether or not teachers would like to receive e-mail from parents via the Web site, 60% said they would not mind, but wanted to know if they would have a school account. Forty percent of the teachers did not want to use e-mail for parent communication, because as one teacher stated, "it is too much of a hassle". The last question asked the teachers if they would be interested in posting student work to their home page, if they wanted

one. Fifty percent said yes, commenting they would need to be shown how.

Figure 1.
Results of Teacher Survey



At the end of the survey, I provided teachers with a list of elements I was planning on implementing to Sky Country's Web site. I asked the teachers to add to the list if they felt there was another element of importance, and cross out any element on the list if they did not think it was important. Of the twenty teachers that returned the survey, only three teachers crossed anything off the list. The items that were crossed off were e-mail and links to classrooms. On the other hand, many teachers added elements to the list. Some ideas that were added include: parent links, student links from classroom home pages (that are curricular in nature), links to academic

journals, links to academic games for students, and a link to both California state and Jurupa Unified standards.

Overall, from the survey, teachers seemed pretty excited about having a school Web site. Some also inquired about workshops to teach them how to develop their own classroom home pages.

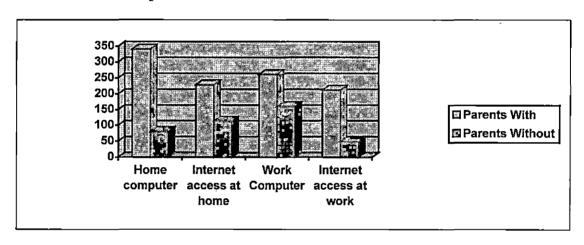
The next step in this project was to send home a survey about the Web site to the parents at Sky Country (Appendix A). It was important to get their feedback on the development, since it was being built as a resource for them. I sent out a survey to find out what the parents at Sky Country would like to see on the site. Over 900 surveys were sent out to parents. Multiple students in one family were not taken into consideration. For example, if one family had three students in the school the parents probably received three copies of the survey, but were only asked to return one.

I asked teachers if they would help me by giving their students an incentive to bring back the survey. With the help of the teachers, 421 surveys were returned. I took the 421 surveys returned and recorded the results. After recording the results of the surveys, I calculated the percentages. Out of the 421 completed surveys, it was shown that 81% of students had home computers. Sixty-seven

percent of the homes that had a home computer were connected to the Internet. It was also found that 62% of the parents, who completed the survey, had a computer at work. Of those 261 parents who had a computer at work, 212 had access to the Internet (81%).

Figure 2.

Results of Computer and Internet Access



The next question in the survey dealt with how parents found out about upcoming events. The parents could check more than one category in this case. "Reminders from Office", received the highest amount of checks (54%). The rest were as follows: School Calendar (38%), Newsletter (31%), Teacher Letter (19%), and P.T.A. meetings (11%).

Next parents were asked if they would like access to Sky Country Curriculum, such as state and district standards. Thirty-seven percent of the parents who

returned the survey strongly agreed, 34% agreed, 18% chose to neither agree or disagree, 8% disagreed, and 3% strongly disagreed.

The next question asked parents whether or not they thought a Web site would be helpful in finding out about upcoming events. Of the parents who returned the survey, 68% strongly agreed, and 20% agreed that a Web site would be useful in finding out about upcoming events. That meant of the parents surveyed, only 12% of the parents did not feel like a Web site would be useful to them.

In finding out whether parents would be interested in being on a mailing list to receive e-mail to update them on news at Sky Country, 61% strongly agreed with the idea. Ten percent agreed with the idea and 12 percent neither agreed nor disagreed. This meant that only 17% of parents surveyed did not agree with the idea of being on a mailing list. In question 9, 82% either strongly agreed or agreed with the idea of accessing things such as bus schedules, lunch menus, and P.T.A. and Staff Information.

The last question was of the greatest help to me in deciding on elements that would be placed in the Web site. The most important element parents wanted on the school Web site was school news. The second highest ranked element was classroom information, consisting of specific

information about their child's classroom and teacher. Third was a school calendar and the forth-highest ranked element was information concerning curriculum. Fifth highest ranked was staff information, sixth was lunch menu, seventh was P.T.A. information, eighth was mailing list, ninth was a link to the district site, and tenth was the bus schedule.

I ranked these elements based on how each individual parent ranked them in order from 1-10. One limitation of this survey might be that I did not offer parents a place on the survey to provide comments, which could have also been helpful in analyzing their needs.

# Design and Development of the Project

According to Bailey and Blyth, "The process of creating an effective educational Web site has three separate but related steps: outlining, diagramming, and storyboarding" (1998, p. 7). The first thing I did when I sat down to design my Web site was outline it's contents (Figure 3). I knew from the research what elements were important to put on a school Web site, and I also knew from the surveys what elements the teachers and parents felt were important to put on the site.

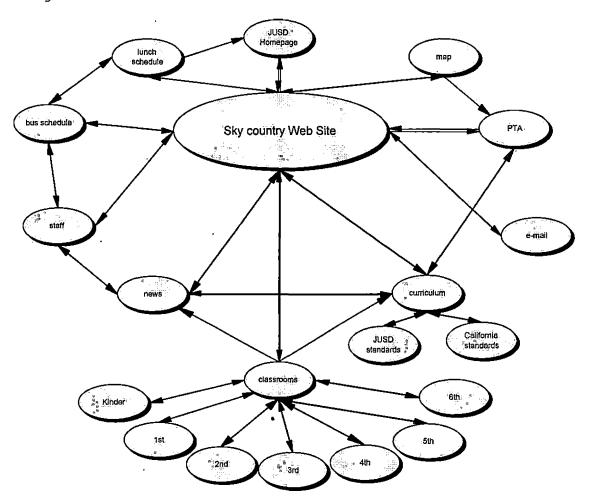
Figure 3.
Outline of Web site

I.	Home	Page	
		A)	Link to Jurupa Unified Home Page
		B)	Calendar
		C)	News
		D)	Curriculum
			1. Jurupa Unified Standards
			2. California State Standards
		E)	Bus Schedule
		F)	Lunch Menu
		G)	Staff information
		H)	P.T.A. Information
		I)	Classroom
			1. Kindergarten
			2. 1st Grade
			3. 2nd Grade
			4. 3rd Grade
			5. 4th Grade
			6. 5th Grade
			7. 6th Grade
		J)	Map to Our School
		K)	Join the Mailing List
		L)	E-mail Connection

After outlining the site I decided to make a graphic organizer to diagram the navigation of the site (Figure 4). I wanted to make sure the site was easy to navigate. On the left side of each page is a navigation bar that

leads the user to every other page on the site. The user does not have to go back to the home page to find the menu, because the menu is on every page (Figure 5).

Figure 4.
Diagram of Web site



The diagram shows how the site can be navigated. Whoever uses the site will have the freedom to navigate to whatever page he or she needs.

The pages of the site are set up very similarly. All the pages have the navigation menu on the left. They all have the same background, use similar fonts, and have similar colors and graphics (Figure 5).

Figure 5.
Example of Page



When deciding on the look of the site, I wanted something nice to look at, but not overwhelming to the viewer with moving graphics and text. I decided to keep the color scheme simple and pleasing to the viewer. Figure 5 is the home page for the Sky Country Elementary School site. The page is welcoming and makes the user want to explore the site further. "The homepage sets the tone for further exploration of the site" (Dunman, 1998, p. 42). I used the home page as a template for creating further pages.

After outlining and diagramming, I created a storyboard outline for each page (Figure 6). According to Bailey and Blythe (1998), storyboarding is step 3 in the Web site design process. "In essence, it is the detailed planning of information that will be placed on each Web page" (p. 10).

Figure 6.
Storyboard of Web Pages

	- · · · · · · · · · · · · · · · · · · ·		
I Hom	e Page		
A)	Name of school, school address and phone number		
В)	Name of principal (linked to his e-mail)		
C)	Welcome		
D)	Letter to parents (philosophy and academic goals)		
E)	Visit Our Classrooms (link to grade level classrooms)		
	1. Kindergarten		
	2. First Grade		
	3. Second Grade		
	4. Third Grade		
	5. Forth Grade		
	6. Fifth Grade		
	7. Sixth Grade		
	<ol> <li>Navigation Menu (links to all of the pages in the site, including a link to Jurupa Unified's Home Page)</li> </ol>		
F)	Map to Our School (map to Sky Country)		
	<ol> <li>Navigation Menu (links to all of the pages in the site, including a link to Jurupa Unified's Home Page)</li> </ol>		
G)	E-Mail (place for users to make comments or ask questions)		
Н)	Join the Mailing List		
I)	Navigation Menu (links to all of the pages in the site, including a link to Jurupa Unified's Home Page)		

## II School Calendar

- A) Year Calendar
- B) Monthly Calendars

## III School News

- A) Latest News of happenings at Sky Country. Also including upcoming events.
- B) Navigation Menu (links to all of the pages in the site, including a link to Jurupa Unified's Home Page)

## IV Curriculum

- A) How Sky Country's curriculum came about.
- B) Links by grade level to Jurupa Standards
- C) Link to California State Standards
- D) Navigation Menu (links to all of the pages in the site, including a link to Jurupa Unified's Home Page)
- V Bus Schedule
- VI Lunch Menu
  - A) Monthly Lunch Schedule

## VII Staff

- A) Links to Sky Country Staff by grade level
- B) Navigation Menu (links to all of the pages in the site, including a link to Jurupa Unified's Home Page)

#### VII P.T.A.

- A) P.T.A. news and updates
- B) Calendar of meetings
- C) Navigation Menu (links to all of the pages in the site, including a link to Jurupa Unified's Home Page)

The Web site was developed using Homestead. By going to <a href="www.homestead.com">www.homestead.com</a>, any user can set up a free account with Homestead and have the ability to create and post Web pages to their server. I paid to upgrade my account, so that I could have the ability to download Homestead Web Builder and create my Web pages without having to be on-line. Another nice feature was that I could now download my Web pages, save them to disk, and have them uploaded to any other server. Without having upgraded my account I would not have had the ability to do this. Currently the URL for the Sky Country Web site is <a href="http://www.skycountry.homestead.com/home.html">http://www.skycountry.homestead.com/home.html</a>.

I chose to use Homestead as my Web building software, because I knew Homestead was very user friendly. I liked Homestead, because it used the click, drag, and drop method, which allowed me the freedom to click, drag, and drop objects and text anywhere on the page. This method made it very easy for me to add or change the Web page with very little effort.

## Formative Evaluation

I had several parents and teachers test out this Web site to see if it fit their needs. I also wanted them to be sure that all of the links were working and valuable. I

had 10 parents and 5 teachers view the Web site to find specific information. The information they wanted to find was different in each case. For example, one search was for the curriculum of what one of the parents upcoming forth graders would be learning in Social Studies.

The parents said they were able to find the Web site fine, and able to connect to find the information they were looking for with no problems. All the comments that I received from parents and teachers were very positive.

Many parents and teachers especially commented on the appealing look of the site. Many said, "It is so cute." I only had one user that had a problem. The problem though was when she linked to the Jurupa Unified site. When she did this, she got a flashing screen. No other user reported this problem.

All the parents and teachers that tested the site were very impressed. They said they found the information useful, and were excited to check back for up-to-date information. Many of the teachers were excited and wanted me to teach them how to create their own site, because they thought it would be very useful to their parents.

There were many positive aspects of doing this project. Not only did my school come away with a great interactive Web site, but also I got the parents and

teachers at my school motivated to use technology more in their lives and their curriculum. Having a site, which was liked by parents, increased their tendency to use it to keep abreast of school events and become more involved in their child's education.

## Strengths

Sky Country is only the second elementary school in the Jurupa Unified School District to have a school Web site. Many schools as well as the Jurupa Unified School District will be looking to Sky Country as an example of what a School Web site can be, because it only one of a very few that the district's schools have created.

Another strength of this project is that it also provides an opportunity to display a positive report about education to the public. This is very important in today's society with all of the scrutiny on public education. Hopefully, by community members and parents becoming more aware of what is going on at Sky Country, they will become more involved.

Lastly, this Web site has motivated many of the teachers at Sky Country to try their hand at using the Web as a communication tool. I have had many teachers come up to me to ask for help in creating their own Web pages to

service the parents and students in their class. Not only, has it motivated the teachers to create Web sites, but it has also motivated them to use technology more in the classroom in general.

## Limitations

One limitation of this project was the limitations associated with the survey that was sent out to parents (Appendix A). The first limitation of the survey was the fact that multiple children at the school were not taken into consideration when the surveys were sent out. This meant that possibly more than one survey could have been returned from one family. It was instructed for the parents to only return one copy of the survey, but if parents received more than one copy they may have returned more than one copy. The effect of this could be a slight skew of the results of this survey.

A second limitation detected in the parent survey was the fact that there was no place in which parents could make comments. It would have been nice for parents to write in any comments they may have had about the design and development of the Web site.

Another limitation to this project is the maintenance of the Web site. Currently, Sky Country or the Jurupa

Unified School District does not have an employee on staff to help schools with the creation or maintenance of their school Web sites. The district itself has just created it's own Web site. The Web site will require updates and changes to keep it fresh and keep the parents and community interested.

Also, the site is limited in the amount of specific classroom information that maybe useful to parents and students. The Web site should be expanded to meet the individual needs of all the teachers and their particular classes. Teachers at Sky Country will have the responsibility of creating their own class Web sites. The purpose of this project is only to do a school site. I feel that all teachers should create their own class Web sites, but currently most of the teachers at Sky Country are not trained in doing so.

Another limitation of this project is the fact that not all parents have access to the Internet. If parents do not have access to the Internet from either home or work this line of communication cannot benefit them. The price of computers has gone down and now many subscribers offer free Internet service. The small percentage of parents who do not currently have access to the Internet may dwindle even farther in the next few years. According to Allen

Bernstein, it would be foolhardy to wait until everyone is online before undertaking Internet-based projects such as this one (1998). He states that we do not discontinue Open Houses because some people do not own cars (1998).

#### Future Plan

The Sky Country Web Site is only in its infancy. So much more can be done to enhance the site. For example, teachers need to develop their own classroom Web sites. A plan needs to be implemented by district and Sky Country School administrators to train teachers in doing so.

Also, I would like to help the P.T.A. in developing their site, which is connected to Sky Country's Home Page. I would also like to add pictures of the staff and students at work. I feel this would give visitors more of a visual image of what is going on in Sky Country classrooms.

The challenge now for Sky Country is to continue to motivate its teachers to use technology and keep up the communication with its parents. Currently I am one of two people that share the job of Technology Coordinator. Until now the person who had this job, basically did nothing because nothing was expected of them. Now, It will probably be my job to keep up this Web site for my school.

I have seen from the development that this is a lot of work if you do it right.

#### CHAPTER FOUR

### CONCLUSION

### Recommendations for Future Projects

A recommendation to someone who is planning on creating a school Web page is to consider working with someone else to help them with the project. Creating a Web site is a big task, and to make the Web site beneficial the developer must add many features and information. This is a lot of work for one person.

Also, make sure that there is someone, or more specifically, a group of people who are willing to upkeep the site. Having more than one individual to split up the work would make the Web site more manageable to design and up keep.

Lastly, a recommendation for an interesting study would be to compare two schools, one with a Web site and one without a Web site (the schools should have similar demographics). The study could determine how effective a Web Site can be at communicating vital information to it's parents and community versus traditional forms of school communication.

### Conclusion.

This project was a lot of work one that I would not wish for anyone else to do alone. The Web site, as said before, is still in its infancy stage with plenty of room to grow. The site will continue to grow as long as teachers and administrators keep up their enthusiasm towards developing a more comprehensive site.

It will be interesting to see how the entire student body and its parents react to the site at the beginning of the 2001-2002 school year. Teachers and students at Sky Country have become more and more involved with using technology every year. This year with the introduction of the Sky Country School Web site should be no different. I expect for the amount of technology use to grow higher this year even more because of the Web site and the motivating effect it has had on parents, teachers, and administrators.

It will also be interesting to also see how the site will increase the communication between Sky Country and it's parents and community. The community needs to become more involved in their support of the school. Now that Sky Country has a new way in which the community can receive information about the school and upcoming events, I

foresee the amount of community support increasing significantly.

This project was very fun and exciting to do. It is especially exciting to see that this Web site is inspiring the teachers at Sky Country to integrate the use of technology into their curriculum. Hopefully the site will also inspire the parents and the community of Sky Country to become more involved in their children's lives.

## APPENDIX A PARENT SURVEY ON WEB SITE

May 14, 2001

Dear Parents,

My name is Kathy Clark and I am a third-grade teacher here at Sky Country Elementary School. I am currently working on a Masters in Instructional Technology through Cal State, San Bernardino. I am developing a Web site for Sky Country as my Masters project. The goal of the Web site is to increase home-school communication by giving you and the community another tool in which to communicate with Sky Country. You will therefore, be able to access important Sky Country information about school events, curriculum, bus and lunch schedules, etc. In order for me to do this, I need to find out some information from you. The information I gather in this survey will be used in my thesis and in the designing of this Web site. Please take the time to fill out the survey, even if you do not have a home computer. There is no need to put your name on the survey. I am just looking for information on types of things parents would like to see on our school's Web site. Please return all surveys to your child's teacher by Friday, May 18. Your time and effort are much appreciated!

Sincerely,

Mrs. Kathy Clark

\_\_\_\_\_\_

### Parent Survey

### Designing a School Web Site

1. Do have a home computer?	Yes	No
2. If yes does your home computer have access to the Internet?	Yes	No
3. Do you (or spouse) use a computer at work?	Yes	No
4. If yes, do you (or spouse) have access to the Internet at work?	Yes	No

5. How do you currently f	ind out about upcomir	g events (i.e. Back-to-School Night)?
Check whichever applies		
1. Newsletter	2. School Calend	lar 3. Teacher Letter
4. PTA Meeting	5. Reminders fro	m Office 6. Other
6. Do you think a Web sit	e would be more help	ful in finding out about upcoming
events?	,	
(Check one)		
Strongly Agree	Agree	Neither Agree/Disagree
Disagree	Strongly Disagree	•
		ulum, such as State and District
Standards?		
(Check one)		
Strongly Agree	Agree	Neither Agree/Disagree
Disagree	Strongly Disagree	•
8. Would you like to be o	n an e-mailing list, to r	eceive messages about upcoming Sky
Country events?		
(Check one)		
Strongly Agree	Agree	Neither Agree/Disagree
Disagree		
9. Would you like access	to bus schedules, me	nus, P.T.A. and Staff information?
(Check one)		
Strongly Agree	Agree	Neither Agree/Disagree
Disagree	Strongly Disagree	<del>)</del>
10. On a scale of 1-10. 1	being the most import	ant and 10 being the least, rank in
order elements most imp	ortant to you on a sch	ool Web site.
School Calendar	Lunch menu	Bus schedule
School News	P.T.A informa	tion Staff information
Link to District Site	Classroom in	formation Mailing List
Information concerni	ng curriculum	

## APPENDIX B TEACHER SURVEY ON WEB SITE

To: Staff

From: Kathy Clark

Re: School Web Page

As many of you know, I am completing a Master's of Education Degree in Instructional Technology. In the next couple of months I will be developing a school Web site for Sky Country for my Master's project. Before I start the development of the site, I would like to get some input from you on types of things you would like to see on our school Web site. The purpose of the site is to increase the communication and involvement between Sky Country and it's parents and community. Please fill out the survey below and return it to my box no later than April 20. Thank you for help!

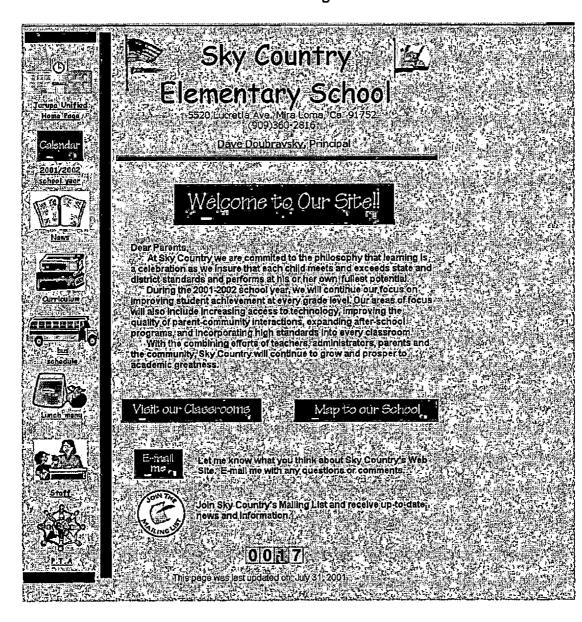
Kathv

Please read the questions below and answer yes or no. There is also a place for
comments if you have any.
1. Do you think a Web site would be helpful to parents in accessing school
information? Yes or No
Comments:
2. Would a Web site be helpful to you as a communication tool? Yes or No
Comments:
3. Would you like to have a classroom page in which information about your class
can be accessed? Yes or No
Comments:

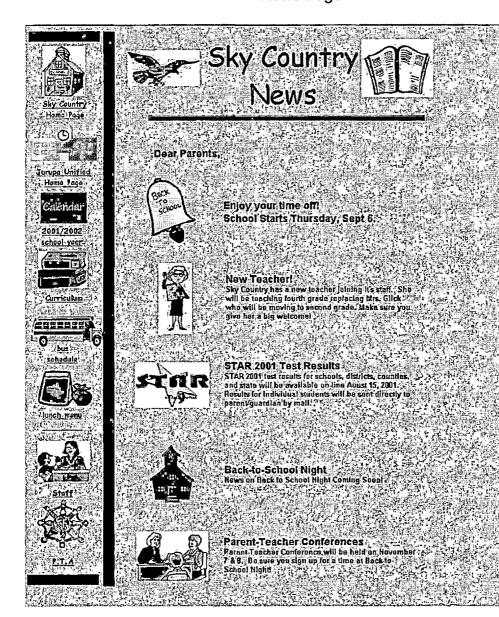
4. Would you like a place where parents can e-mail you? Yes or No					
Comments:	<del></del>				
5. If interested in having a cla	assroom page, would you be inter	ested in posting			
student work to your classroo	m page?				
Yes or No					
Comments:	<del></del>				
These are some features or	· links I was planning to incorpo	rate into the			
school's Web page. Please add to the list if there is something else you feel is					
important to include on Sky	/ Country's Web Page, and also	feel free to cross			
out any item on the list if ye	ou feel it not of importance.				
School Calendar	School News	Lunch Menu			
Buds Schedule	Links to Grade Levels	Links to Standards			
PTA Information	Staff Information	Curriculum			
Map to School	Mailing List	Link to JUSD Home			
Links to Classrooms	Link to STAR Results	Philosophy Statement			
Statement of Academic Goals	School Address & Phone Number	E-mail			
Comments:		<u> </u>			

# APPENDIX C SAMPLE PAGES OF SKY COUNTRY SCHOOL WEB SITE

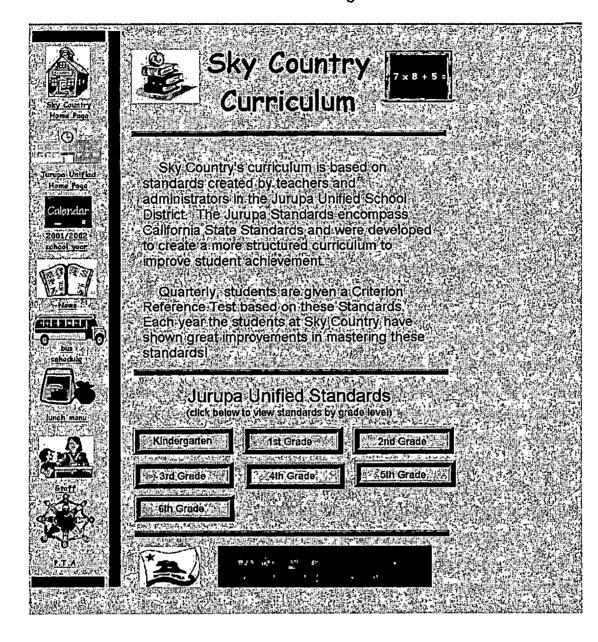
### Home Page



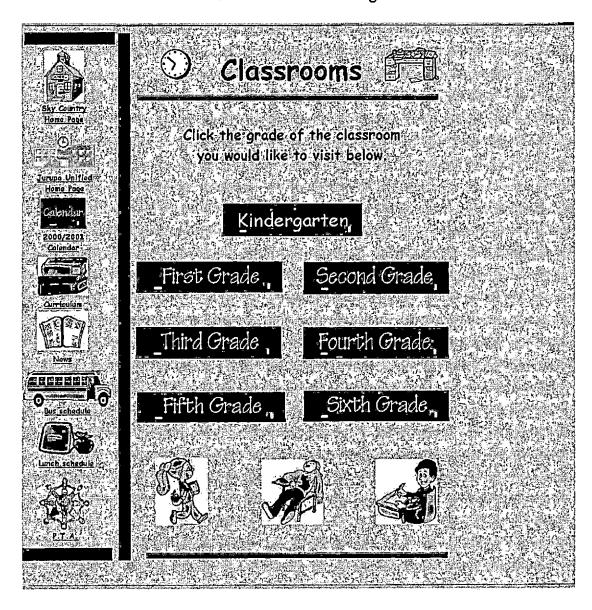
### **News Page**



### Curriculum Page



### Link to Classrooms Page



### REFERENCES

- Agarwal, R., & Day, E. (1998). The impact of the internet on economic education. <u>Journal of Economis Education</u>, 29(2), 99-111.
- Bailey, G., & Blythe, M. (1998). Outlining diagramming & storyboarding, or how to create great educational Web sites. Learning and Leading with Technology, 25(8), 6-11.
- Balajthy, E. (1997). Impact of the internet. Reading & Writing Quarterly, 13(3), 293-301.
- Barron, A., & Ivers, K. (1998). Who's doing what on the internet? A descriptive study of K-12 Web pages.

  Learning and Leading with Technology, 26(2), 37-42.
- Bernstein, A. (1998). Using electronic mail to improve school-based communications. THE Journal, 25(10), 58-60.
- Cameron, C. A., & Lee, K. (1997). Bridging the gap between home and school with voice-mail technology. <u>Journal</u> of Educational Research, 90(3), 182-191.
- Carr, N. (1998). Spinning schools onto the Web. Techniques, 73(6), 30-32.
- Charland, T. (1998). Classroom home page connections. THE Journal, 25(9), 62-64.
- Clevenson, R. (1999). Picture-perfect communication. Educational Leadership, 56(5), 66-68.
- Deal, N. (1998). Getting teacher educators caught in a Web. THE Journal, 26(1), 50-53.
- Dunman, S. (1998). Catching parents in a Web. Schools in the Middle, 8(3), 42-45.
- Freedmon, E., & Montgomery, J. (1994). Parent education & student achievemnet. Thrust for Educational Leadership, 24(3), 40-45
- Galbreath, J. (1997, Nov/Dec). The internet: Past, present and future. Educational Technology 39-45.

- Gersh, S. (1994). The global education telecommunications network: Criteria for successful e-mail projects. T.I.E. News, 5(4), 10-11.
- Ginnow, M. (1998). My view on woes of modern schools. The Delta Kappa Gamma Bulletin, 64(2), 57-58.
- Grunwald Associates. (2001). Children, families and interent 2000. Retrieved July 26, 2001 from the World Wide Web: http://grunwald.com
- Hanson, M. E., & Henry, W. A. (1992). School-to-community written communications. <u>Urban Education</u>, 27(2), 132-141.
- Henderson, A. (1998). Good news: An ecologically balance approach to academis improvement. Educational Horizons, 66, 60-62.
- Henderson, A. (1998). Parents are School's Best Friends. Phi Delta Kappan, 70(2), 148-153.
- Honey, M., & Henriquez, A. (1993). <u>Telecommunications and k-12 education: Finding from a national survey.</u> New York: Center for Technology in Education, Bank Street College of Education.
- Isernhagen, J. (1999). Technology: A Major Catalyst for Increasing Learning. THE Journal, 27(1), 30+.
- Ivers, K., & Barron, A. (1999). The presence and purpose of elementary scholl Web pages. <u>Information</u> Technology in Childhood Education, 1999, 181-191.
- Lazar, A. M., Broderick, P., Mastrilli, T., & Slostad, F. (1999). Educating teachers for parent involvement. Contemporary Education, 70(3), 5-10.
- Mason, C. L., & Dralle, A. (1999). Yesterday, today, and tomorrow: The history and social science classroom. Journal of Educatiom, 181(3), 1-112.
- McKenzie, J. (1997). Why in the world wide Web? <u>Technology</u> and Learning, 6(6), 12-16.
- O'Donovan, E. (2000). The Web builder's toolbox. Technology & Learning, 21(12), 38-40.

- Pena, D. (2000). Parent involvement: Influencing factors and implications. <u>Journal of Educational Research</u>, 94(1), 42-55.
- Pryor, C. (1995). Youth, parent, and teacher views of parent involvement in schools. Education, 115(3), 410-420.
- Revenaugh, M. (2000). Toward a 24/7 learning community. Educational Leadership, 58(2), 25-28.
- Rioux, J. W., & Berla, N. (1993). <u>Innovations in parent</u> and family involvement. Princeton Junction, NJ: Eye on Education.
- Ruffini, M. (2001). Blueprint to develop a great Web site. THE Journal, 28(8), 64-73.
- Schrock, K. (2000). Building a content-rich school Web page. Technology & Learning, 21(12), 38-40.
- Scott, E., & Cantor, J. (1996). Gotta tell somebody. Thrust for Educational Leadership, 26, 38-41.
- Simkins, M. (1996). Spread your good news with a school Web site. Thrust for Educational Leadership, 26, 13.
- Sunal, C. S., Smith, C., Sunal, D. W., & Britt, J. (1998). Using the internet to create meaningful instruction. The Social Studies, 89, 13-17.
- Swick, K., & Broadway, F. (1997). Parental efficacy and successful parent involvement. <u>Journal of Instructional Psychology</u>, 24(1), 69-76.
- Web site keeps teachers, parents, and students on track. (2000). THE Journal, 28(3), 98-99.
- Web66. (2001). A k12 world wide Web project. Retrieved July 26, 2001 from the World Wide Web: http://Web66.umn.edu
- Zhoa, Y. (Spring 1998). Design for adoption: the development of an integrated Web-based education environment. Journal of Research on Computing in Education, 30(3), 307-329.