Web development in correspondence to motivating fourth grade students to gain knowledge of California history

Carolyn Eve Ramirez

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WEB DEVELOPMENT IN CORRESPONDENCE TO MOTIVATING FOURTH GRADE STUDENTS TO GAIN KNOWLEDGE OF CALIFORNIA HISTORY

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
Carolyn Eve Ramirez

December 2003
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ABSTRACT

The goal of this project was to determine whether using a web-based project in school can motivate students to want to learn and explore new ways of learning. This project was conducted at a school which is a title one school with many of our students being considered at risk for retention or limited language proficient. My target audience will be fourth grade students. This project will hopefully help educators see if using technology as a teaching tool can help to motivate these students to improve academically. My plan is to work closely with fourth graders. I plan on using a web-based project to teach about California history. I also plan on having the students use different modalities of technology to motivate and enhance their specific topic in Social Studies. Some of these technologies that I will encourage students to utilize will be online quizzes, web designing, PowerPoint, Excel, and other general uses of computer programs that will motivate the students to want to engage themselves in the lesson. I will observe and evaluate student work as they complete it through the use of technology. I will also use a survey at the end of the program to see if students were motivated to learn throughout the whole unit.
ACKNOWLEDGMENTS

I would like to express my sincere gratitude to Dr. Baek for all the guidance and dedication that she provided me with Master's project. I would also like to recognize Dr. Leh for being a great professor and for guiding me in the right direction for the past two years.
DEDICATION

I would like to dedicate this project to my husband, Ray. Thank you for all the love and support that you gave me during my studies.
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CHAPTER ONE
BACKGROUND

Introduction

Motivating students these days can be an extremely difficult task for even the best teachers. There are so many standards to teach and very little time to teach it throughout the day. Teachers must constantly come up with a variety of ways to get these students to learn and master pertinent facts quickly.

Today getting students to want to listen, learn, and respond to what is being taught is challenging. As a teacher you have to find a way to get students involved in the learning while engaging them in activities or projects that they would consider "fun" tasks. Students lose interest very quickly in tasks that they do not consider fun. In turn, they become bored and eventually this leads to the student not completing or understanding their work. This affects the way a student achieves grade level standards at school. When students do poorly in class, they do not successfully achieve grade level standards.

In this project, the goal is to get students to actively get involved in a Social Studies unit through the
use of different technologies. The students will creatively create projects and interact online for the entire unit. Students will also be given a survey at the end of the unit to evaluate their motivation to learn throughout the unit.

Context of the Problem

The context of the problem was to address the constraints of teaching time in the classroom for these types of subjects; it is difficult to get the information to the students, while keeping their attention. Students tend to dislike Social Studies because of the difficulty level of reading, and it is usually not a favorite subject to learn about. Subjects like Social Studies or Science are difficult for many of these types of students as English is not their first language. Therefore, it is much harder for these students to really engage themselves in the lessons when they have a difficult time reading and understanding these subjects. I wanted to create a unit where students would have a chance to be successful in their learning, get to interact with their peers, and be motivated to explore new ways of learning.
Purpose of the Project

The purpose of this project was to motivate and to develop a fun and challenging way to get important historical events out to the students while getting them involved in their own learning. I wanted to teach the important events of California history in a different style of teaching to a group of fourth grade students. Since time was a big concern, I wanted to touch on key concepts that needed to be learned, while keeping this Social Studies unit interesting and user-friendly for the students. Developing a web-based project was a way to get the students motivated to learn and challenge their minds. These students have had minimal use of technology; therefore, using this type of teaching was going to be new for the students.

Significance of the Project

This project was significant because subjects like Social Studies and Science tend to be less exciting for students. It is also significant for teachers who find that they have a limited amount of time to teach history to elementary students, and still keep them motivated about the subject. The goal of this project is to persuade other
teachers, who find themselves with limited time to teach history, to hopefully implement this project in the near future.

This project is significant for both teachers and students. Using technology can be one of the best methods for motivating students today in the classroom; hence, it is believed that motivation is the key to successful teaching and learning.

This project is also important to help teachers and administrators see the importance of using our technology to enhance student learning. Many teachers and administrators alike do not always see a correlation between technology and student achievement. This project will serve as an example of how to use technology as a teaching tool for learning. It will hopefully demonstrate that through the use of technology, we can get the most out of our students. We can get students motivated to learn and achieve success.

Assumptions

The following assumptions were made regarding the project:
1. That all students had a good background of basic computer skills.

2. ELL students would have the most difficulty with the project.

3. Computers would all have the same software programs installed.

Limitations

During the development of the project, a number of limitations noted. These limitations are presented in the next section. The following limitations apply to the project:

1. Time was the biggest factor. With only meeting three days a week for only 35-40 minutes, it was difficult to give the students ample amount of time to complete their work.

2. Also, our technology was not current. We had to work with technology that would not always work well that day.

3. Lack of computers in the classroom made it difficult at times to complete tasks on time. However, since students were working more
independently, they were given time during the day and at home to work on the project.

Definition of Terms

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

- **ELL** is the term used to classify an English Language Learner. This means that a students' primary language in their home is Spanish.

- **EO** is the term used to classify an English Only student. These students' primary language at home is English.

- **Title One** school meaning that at least 50% of the students in the school come from low-income families.

- **ISD:** Instructional System Design is an instructional method designed for a learner-centered approach to learning as oppose to teacher-centered.

- **WBI:** Web-based Instruction is a learner-centered approach where the Internet is used as a main tool for learning.
ADDIE: analysis, design, development, implementation, and evaluation are part of the instructional design approach for learning. It is one of the different methods of instructional system design.

Organization of the Thesis

The thesis portion of the project was divided into four chapters. Chapter one provides an introduction to the context of the problem, purpose of the project, and significance of the project, limitations and delimitations and definitions of terms. Chapter two consists of a review of relevant literature. Chapter three documents the steps used in developing the project. Chapter four presents conclusions and recommendations drawn from the development of the project. Project references follow Chapter Four. Finally, the Appendix consists of the project:

Appendix A consists of a sample online quiz;
Appendix B consists of a website evaluation form;
Appendix C consists of a sample Power Point lesson;
Appendix D consists of a website rubric;
Appendix E consists of a class presentation rubric;
Appendix F consists of a teacher evaluation form for project.
CHAPTER TWO

REVIEW OF THE LITERATURE

Introduction

Chapter Two consists of a discussion of the relevant literature. Specifically, it shows how motivation and technology can be useful in getting students to want to learn. This section also discusses the theory of John Keller’s model of motivation, which is important to student success in the classroom.

Technology, Motivation, and Learning

Computers have become the way of the future in instruction. More and more instructors are using technology to enhance their lessons and to motivate their students with something that is not only familiar to them, but also exciting. Many teachers are now starting to find out that technology does not replace them in the classroom, but only enhances their roles as teachers. Technology has only changed the way one meets the needs of all.

The use of technology in the classroom has served to motivate those students that are bored with learning the traditional ways. Technology should be used to grab students’ attention, and get them to want to explore and
take control of their own learning. Ediger (1996) states that technology should capture student interests and learning activities should be fascinating and should engage student interaction. Ediger (1996) also states that technology may also assist learners to perceive purpose in learning and help students to attach meaning to ongoing study. With Ediger’s statements, one can clearly see how the Keller model of motivation, which will be discussed in detail in later section, fits with the use of technology in the classroom. First, it encompasses attention (capture student interests), relevance (attach meaning), confidence (student interaction), and satisfaction (perceive purpose in learning). Placing these elements together can increase student achievement and the motivation to learn.

In another important correlational study of psychology students’ attitudes and achievement in a technologically enhanced classroom, Forsyth & Archer (1997) state that computer-based teaching methods can improve the transfer of information, increase instructional focus on conceptual and methodological skills, enhance motivation, and stimulate the development of expressive skills. Improving these specific skills should be the key element when implementing the use of technologies into learning.
Utilizing technology with a specific lesson or unit can change the way a lesson is taught and learned. It also changes the attitude of the students participating in the lesson. McGrath (1998) states that technology increases student motivation. Therefore, they are more likely to learn. Technology also promotes collaboration and cooperation among students. Students also become more engaged in the lesson and more probing.

Another aspect of using computers in a lesson to motivate students is to incorporate many different types of technology to expand and challenge the learner’s mind. Students are more involved in their learning when there are new types of technologies that they are able to use in the classroom. This may come in a form of video camera, digital cameras, scanners, and even using different software programs to enhance their projects.

Therefore, when students are given a chance to explore with new technologies within their learning, there is an increase change in attitude, excitement, and motivation about learning.
Web-Based Learning

Motivating students to learn is a task at hand. It is an ongoing concern of seeking many different ways to get our students focused and motivated to learn. Some of the effective ways to get students motivated to learn is to have more project-based activities in the class. Blumenfeld and et. al (1991) state that project-based learning is a comprehensive perspective focused on teaching by engaging students in investigation. Having students engage in taking an important role in their learning gets students involved and motivated to learn. Two important components about project-based activities that Blumenfeld et. al. (1991) discussed are that projects need to have a question or problem that gets the activity started. Second, the activities should eventually be able to lead students to a final product that refers back to the main question or problem.

Using a web-based project in the classroom requires an amount of dedication to getting the most out of a web-based project that will enhance learning and improve skills. Grabe and et. al. (2000) state that the key is to organize existing web content in ways that students of a particular
school or classroom can put to best use. Students need to be guided step-by-step at all times.

There are many design theories in creating an effective web-based project. Jung (2001) states that there are three key elements in WBI. They are content adaptability, content expandability, and visual layout. I found these three elements to be useful when developing a web-based project. Due to the structural flexibility of WBI, course content could be expanded with the outside world and shared with instructors and learner (Jung, 2001). Content adaptability comes from being able to adapt content to individual needs/goals, previous knowledge, or characteristics (Valcke and Martens, 1997). Visual interface plays an important component in WBI as it can affect learning and teaching in web-based instruction. Three main criteria for visual interface were accessibility, interactivity, and attractiveness (Jung, 2001). The accessibility criterion is crucial to student learning and teaching. All areas of a web-based project must be easily accessible to students. Interactivity is the process in which the learner interacts collaboratively, academically, and interpersonally during WBI. Finally, visual interface (or screen design) is an important aspect
that should grab student interest in order to enhance learning and motivation.

Web-based project designs are crucial to achieving student success, as well as teaching success. It is essential to construct a web-based project that can catch student interest, and therefore, motivate them to do their best.

Keller’s Model of Motivation

Motivation is the key to achieving success with students. However, how does one get students enthusiastically involved in their own learning? One theory of motivation is the ARCS model. Created by John M. Keller, there are four conditions that must be met for a learner to be motivated to learn (Fernandez, 1999). These four are as follows: A: attention; R: relevance; C: confidence; and S: satisfaction.

The first step in Keller’s model is attention. Gaining and keeping students’ attention is seemingly an important aspect for student success. Fernandez (1999) states that Keller recommends that teachers and professors change the way the present their lessons to keep students engaged in the learning. In Keller’s model of attention there are six
different strategies for keeping students attentive and motivated. The first one is concreteness, which is where the teacher uses real examples that are real to the students. The second strategy is incongruity and conflict, in which the teacher takes on the other side of a topic to get students to discuss the topic in depth. The third one is humor, getting the students to enjoy and to view it in a different way. The fourth is variability, in which the teacher presents the material differently to the students. The fifth is participation; in this strategy is where the students get involved with the lesson being taught. The final strategy is inquiry. This is the step where the teacher should gain student curiosity by asking questions, or having problems to solve (Wesselfhoff, 1998).

There are many ways to accomplish this specific step in Keller's model. One way is to incorporate project-based activities throughout any unit lessons. Thus giving students a chance for creating and evaluating their own work.

Relevance is the next key element to motivating students to learn. Making something familiar to students will help them to connect better with the topic. Driscoll (1993), states that the more familiar something is, the
more relevant the learner perceives it to be (Fernandez, 1999). One way of achieving this is to have a variety of tasks that students can relate to. There are six strategies for relevance. They are experience, present worth, future usefulness, needs matching, modeling, and choice. Experience is a step in which the teacher discusses how this new topic will use their own past skills to understand the new lesson. Present worth is showing students what is expected of them throughout the lesson. Future usefulness is showing the students how this skill will be useful for them in the future. Needs matching is being able to continue to challenge the students with different activities. Modeling is giving the students opportunities to show or teach their peers. Final step is choice. Choice is allowing students to choose their own ways of organize their work. The teacher can also help out in giving choices that students can choose from (Wesselhoff, 1998).

Relevance is an important step in keeping students' motivated in their own learning because it makes it real to the students. It actually brings the topic to life.

Confidence is Keller's next step to motivation. This is an important element because without confidence,
students lose their motivation and ability to learn. Driscoll (1993) states that students gain confidence in their own abilities when they experience success at challenging tasks. Being able to achieve promotes self-confidence. Therefore, it aids students to want to learn and participate more in class.

There are four steps in building confidence. One step is to make the *objectives* of the lesson clear. Students should know what is expected, what they already need to know, and what they are going to learn from the lesson. Another step is the *levels of difficulty*. It is important to begin the lesson with a simple task and increase in difficulty as it continues. Once the students have felt success with their first task, they will be more confident to continue with more challenging tasks. The next step is *realistic expectations*. Students need to understand that both the learning and the effort they put towards their work are important to success. The last step is the *Learner Controlled Elements*. The students need to feel that they are in control of their learning and of their end results (Robles, 1998).

Keller’s last step in motivation is satisfaction. Students need to feel that the results of their projects or
skill activities are acknowledged and important. Being able to stand back and view the work and project created by their groups was satisfaction in itself. There are three kinds of satisfaction techniques. They are intrinsic reinforcement, extrinsic rewards, and equity. Small (1997) states that intrinsic reinforcement should encourage and support learning experiences, extrinsic rewards should provide positive reinforcement and motivational feedback, and equity should maintain consistent standards and consequences for success. This element of satisfaction can lead students to feel that they have accomplished their learning goals.

In summary, following these components of Keller’s model of motivation in instruction can possibly lead to student/teacher success. It can also make for a better learning environment and better quality of student work.

**Instructional System Design**

Instructional design aims for a learner-centered rather than the traditional teacher-centered approach to instruction, so that effective learning can take place (McGriff, 2000).
The ADDIE model (analysis, design, development, implementation, and evaluation) is an instructional design most often used in a learner-centered environment, including a web-based project.

The analysis stage of the model concentrates on the process of defining what needs to be learned (McGriff, 2000). For example, what will be the outcome of the project, which group is the project going to be targeting, and what will that group do to reach or show competency.

The design stage focuses on the project outlook. McGriff (2000) states that it is the process that specifies how it is to be learned. This is the stage where it is determined what the instructional goals or objectives of the project will be and the sequencing of the project. The development stage is the process of authoring and producing the materials (McGriff, 2000). This stage involves producing materials and creating the information of the project.

This stage should be where one creates interesting interactive lessons that will get the students motivated to search and learn about their topic. The implementation stage is the “try-out” stage. This stage engages the students and teachers to try out the project in a real world environment. This stage requires that the project is
maintained and analyzed throughout the time that the project is being used for learning. The final phase is the evaluation stage. McGriff (2000) states that this is the stage where one determines the adequacy of the instruction. This is where one tests for competency and usage of the project. Two main types of evaluations discussed in the ADDIE model are formative and summative. Formative is the ongoing evaluation that is completed while working with the project. For example, an observation log or quizzes throughout the project would be a formative evaluation. Summative evaluation assesses the overall effectiveness of the project. Using a survey to determine if the project was either successful or not, is an example of a summative evaluation process.

The ADDIE model is an effective method to developing a project that is student-centered and challenging. This type of approach can contribute an effective and meaningful approach to learning.

Summary

The literature important to the project was presented in Chapter Two. The four important literature topics discussed relate to the importance of the web-based
project. Each section was discussed in meaning to clarify how all approaches positively affect learning in a web-based environment.
CHAPTER THREE

METHODOLOGY

Introduction

Chapter Three documents the steps used in developing the project. Specifically, the ADDIE instructional design is thoroughly discussed in this chapter. Each of the ADDIE stages has examples that correlate with each stage. This was done to give an idea on how the project was developed and implemented into the classroom. All stages played a vital part in creating a web-based project. As a result, the ADDIE instructional design approach was used to create a web-based project that best suited the participants.

Another strategy that is discussed in chapter three is the ARCS model of motivation. The ARCS strategy was used in the web-based project in order to get students motivated about their learning. Examples of how some of these strategies were used during web-based learning are discussed in detail in this chapter.

Population Served

The elementary school in Southern California is a title one school. All students that participated in the project were all nine or ten year olds. These students,
were comprised mainly of EL and E0 students. All students were of Hispanic background. More than half of these students were considered low performing in reading and math due to either language or having a learning disability. Therefore, most students were classified for being at risk for retention.

Instructional Design

Analysis

The target audience for this project was a class of fourth graders at an elementary school in Southern California. The fourth grade standard for Social Studies in California is to learn about California history. The following subjects were 28 fourth graders that were divided into seven groups. Each group had a specific part of California history to study. The groups were to learn and become experts on their topic so that they may demonstrate to the class what they had learned.

The overall goals of this project was to get students to learn about a specific historical event, gather information through various resources as a group, collectively put their findings into an organized web
portfolio, and present their findings to the class using their web portfolio or Power Point presentations.

The students will be given a total of eight weeks to complete their work. There will be a total of six lessons that will relate to their topic areas, which they will be using to enhance their final project. Each week groups of students will be turning in parts of their work to make sure that they are on the right track.

Consequently, this specific project was an online learning lesson for the fourth graders. The delivery for this unit was through the use of a web site that contained directions and information about specific historical topics. Students were accessing their weekly projects or activities through this specific web site. Before the students could begin this unit, they first needed to be taught how to use the Internet as a teaching tool. Students were also shown how to use the main web site to get their weekly activities. It was established that in order for this to be easier, the students should have had some background knowledge of the basics in computer skills.

Each group would also be using the Internet as their main tool for gathering information. Groups would begin with a simple task, and as each week passes, the tasks
would become more challenging. Competencies of their skills were measured by their outcome of their web portfolios, quiz, and class presentation.

Design

Instructional Objectives. The instructional objectives were assigned to each group through their related topics in the teaching website (see Figure 1). However, the following instructional objectives serve as an overall objective for the unit.

- Understand key terms that relate to the topic.
- Compare and contrast two historical events.
- Demonstrate an understanding of the information/material gathered from the readings.
- Learn how to read directions given through the teaching web site on their own.
- Present their findings to the class as experts on their topic.
- Demonstrate an understanding of basic computer skills.
- Evaluate different web sites related to their topic.
• Learn to use different types of software (Power Point, Excel, Word) to create various activities.
• Learn to surf the Internet.
• Create a web portfolio with links and backgrounds to include all their work.

Sequencing. The following sequence of the unit was to follow a specific structure. Each new week, a lesson would be presented to the whole class. This lesson would be tied to prior knowledge. The lesson would serve to discuss important learned details on their topic, and to show the students on how to use specific programs in the computer to enhance their final projects or activities.

As each week progressed, the lessons became more challenging. The following is a brief overview on each week’s lesson and their sequencing order.

• Week one served to introduce the key vocabulary words that are needed in order to understand the lesson.

• Week two got students involved in specific readings that related to their topic. This is also where students took an online quiz (see
Appendix A) to check for understanding of the reading.

- Week three showed the students how to evaluate different web sites. Students needed to look and surf through different types of sites that related to their topic. They were to choose at least five sites that they found to be useful for them and for their topic. Students were given a software evaluation form (see Appendix B) to complete for their web sites. They would also be inserting these sites into their web portfolios.

- Week four had the students surfing the Internet to create a collage of images that related to their topic. They inserted these images into their web portfolios where they could link their images to their main home page.

- During week five, the students searched through their readings to find any information that could be put into a graph or chart. This information was also related to their topic. Students used either Excel to create their graphs, or WORD to
create their charts. Again, this information would also be inserted into their web portfolios.

- In week six, the students surfed the Internet to find another state or country that had a similar historical event happen at any given time period. Students compared and contrasted these two events. Student findings were put together in any format that the group chose. Using either WORD or PowerPoint programs were used to produce this activity.

- Week seven served to get the group to collaboratively work together to finalize their projects and prepare for classroom presentations.

- Week eight was used for classroom presentations.

**Development**

**Strategies.** The strategies mainly used for this project was Keller's ARCS model of motivational techniques. The web-based project was created with this technique in mind. Students, specifically the fourth grade students participating in this project, are inclined to need a lot of stimulation while learning. Some of the strategies were
used to promote interest and motivation in relation to participating in web-based learning.

First strategy of the ARCS model is attention. To seek much interest and attention from this group, technology was used at the beginning of each lesson to motivate students to want to learn and be excited about their project. Furthermore, the "inquiry and participation" technique was used to stimulate curiosity in the students, and get them to participate by having them work on the computers to explore their new site.

Second strategy is relevance: Trying to make something relevant and important to the students can be difficult. Therefore, most of the relevant techniques in Keller's model were used. For example, the students were told that they would use what they already knew about computers to develop their projects and participate in this unit. Students were told that their computer skills would get better as they work through this unit for a couple of weeks. Another example of relevance used in this project was future usefulness. Students were told that what they learned from this unit would be used in the future; from learning about California history to learning how to create a web page/portfolio. These are fundamental learning
skills that will not only affect academic skills, but also will affect essential technology skills that kids will need in the future as they are growing up in a technologically advanced society.

Third strategy of the model is confidence. Confidence plays a key part in aiding students to reach success in their learning. Students were given clear objectives as to what needs to be learned, and how it will be evaluated. They were given rubrics to show what exactly they needed to complete for an acceptable evaluation. Also, students were given realistic expectations of what was to be learned and produced. For example, the students began their project with a simple task. Each week, the tasks would increase in difficulty. Yet, as students began to see their product develop, the confidence grew within them.

Finally, the last strategy of the ARCS model is satisfaction. Satisfaction in work comes easy when one is given positive reinforcement of their work. Throughout this unit, students were given a lot of positive reinforcement and rewards. For example, groups who were creating their web page or working well as groups were given praise. Some groups that collaboratively worked well in a specific assignment would get to report to the class
and show a piece of their work. Also, rewards were given for groups who would complete their work on time.

Layout/Text. The layout of the project was challenging. The project layout needed to catch the students’ attention (See Figure 2). The text used was a bright yellow to capture their interest. Movement of words and pictures were used to attain their interest.

The text font mainly chosen was Times New Roman for the main page. This made it easier for students to read and understand directions more clearly. Different fonts for titles or smaller paragraphs were used to make the web page more eye-catching to the student. The texts for the group sites were all different depending on the topic discussed. Students seemed to enjoy looking at their site each week to see what was new with their page (see Figure 3). Adding animations, movement, and color to the web-based project greatly increased student motivation in this particular unit.

Message Design. The message in the project was designed with fourth graders in mind. All messages had to be clear and bold. Some of the messages blinked, slid across the screen, or even flipped around on screen. These
messages were to catch student attention and get the students to notice important facts or announcements.

Navigation. The navigation of this web-based project was made simple for the participants. Each of the groups had its own separate section of their topic. Each section had six different smaller boxes that were hyper linked to each of the activities for the week (see Figure 4). This made it simple for the participants to clearly see where to click for their weekly activity. Each weekly page had a “home” button that was hyper linked to the main page. This was done to create an effortless way to get back to the main home page.

Implementation

The implementation of the project was based on material that was already in use in the classroom. The teaching resources used for this unit was the teaching web site and resources from the Internet that served to guide the students in creating their projects. The activities were all based on student interests and ease.

Each week there was a brief lesson (see Appendix C) using computer-based instruction that was introduced to the students before starting the new activity. The learning
outcome was given at the time of the lesson. This ensured that all students knew what was expected of them at the end of the week.

There were four main assessments that were looked at carefully. The assessments were broken down into three main parts that covered important subjects to be learned from this project. They were subject matter, web portfolios, and final projects. The first assessment was intended to check for group understanding of the material read (see Appendix A). The second assessment was the group web portfolios. Students were given a rubric for creating a web (see Appendix D). Third assessment was their overall final project (see Appendix F). Last assessment was a rubric for their classroom presentations (see Appendix E).

The web-based project was implemented in the classroom with all students through the use of computers to get students excited about this project. Website was shown to the students to show them how to navigate around it and to discuss what they would all be doing for the next couple of weeks. Students at first were not told which group they belonged to. Groups were already formed ahead of time, but students thought that they were just put into that group
because of the paper strip given to them. Each group was formed with having at least one strong reader, two average readers, and one low (limited language) reader. A paper strip of important information about each topic was given to each student. Once all students received a paper strip of information, they were to all move around the room looking for their group. Although, students were not familiar with the topics, they were able to get clues from one another that helped them find their groups. Students really seemed to enjoy this process, and began actually getting excited about this project. Once the groups were formed, each time we met for 40 minutes in the afternoon, groups were allowed to meet, discuss, and search for their information.

Evaluation

Groups were observed throughout the weeks to see if they were accomplishing their task as a group (see Appendix G). They were also observed to make sure that they were on track and understanding the directions. Due to limited language for many of the students, directions needed to be clarified to some groups.
The evaluation process was done throughout the whole unit. Observations and weekly check-ins were done to ensure that groups were not off course. A summative evaluation was given at the end of the unit to find out what the students thought about this type of learning. It also served to inform me on what needed to be revised.

Summary

In overall, chapter three was one of the most critical components in creating a web-based project. This chapter covered some of the best techniques for getting the most out of a web-based unit or any other lesson being taught in the classroom today. When these techniques are put together, it can create a successful learning environment for both students and teachers. Each of the strategies discussed in this chapter served to construct a project that would be fun, challenging, and a learning experience for those who participated in this specific unit.
HELLO MISSIONERS!

Welcome to the worldwide web of learning! For the next couple of weeks, you and your group will be searching, gathering, and organizing important historical information. Your group will also be creating web pages, graphs or charts, and Power Point slides to present your information. However, you need to understand what your group is responsible for learning and presenting to the class. Please read the lesson objectives below, and make sure that your group learns these objectives. Have fun and continue your journey for learning.

LESSON OBJECTIVES

California Missions: How the missions changed the culture of California.
Father Serra's role in the establishment of California.
Explain the reasons why Spain converted to Catholicism and why they went to settle California.
Know the meaning of semana santa, presidios, and pueblos.

Figure 1. Lesson Objective
Group Site

Figure 2. Home Page of Website
Figure 3. Weekly Group Site

Figure 4. Home Page (Group Sites)
CHAPTER FOUR

CONCLUSIONS AND RECOMMENDATIONS

Introduction

This project was interesting and challenging. We, as teachers, are so often used to teaching in a more traditional style. The traditional way of learning is what most of us are accustomed to. The traditional style is more teacher-oriented rather than student-oriented. In this type of learning, teachers tend to have more control over the learning, rather than the students. Therefore, teaching a specific subject with a web-based project was a new experience for me and for the students that participated in the project.

A summative evaluation in the form of a survey was given to each of the participants (See Appendix H). The survey was created to carefully inform me as to whether the students were motivated by this type of learning. It also served to show me whether or not the students enjoyed web-based learning. There were twelve questions to the survey. Each question directly dealt either with motivation, self-confidence, or usefulness for the future. The results were very interesting and useful for me. These results would
guide me in revising or enhancing the project to better serve the students.

Conclusions

The conclusions extracted from the project follows.

1. The survey showed that most students showed some positive attitudes towards learning in a different style (see Table 1).
2. This project also demonstrated that learning through a web-based project motivated more than half of the students.
3. The one area in the survey that showed a drop in higher numbers was question number three. This question asked the students if they felt that their group stayed on track throughout their learning. Most students didn’t feel quite confident about their group’s effort to always stay on the right track.
4. Based on the results, I would make an attempt to improve the project so that other fourth grade teachers in my school could have an opportunity to use it with their students. This would be a great way of getting students involved in their
own learning and to enjoy what they are learning about.

Table 1. Graph of Survey

![Survey Results](image)

Recommendations

The recommendations resulting from the project follows.

1. One of the recommendations for web-based learning is being able to have good, working computers.

   It is important to have good computers so that student learning is not disrupted.
2. Another recommendation that I felt would be useful is to have a folder for each student with all the contents that they will need throughout the unit. This will keep the students in charge of their own learning at all times, and they will be able to put all their notes and any work in the folder.

Summary

In summary, I found myself pleased with the outcome of this project. The students involved really seemed to learn their topics, and they were excited about their learning. It was interesting to see how different groups reacted towards their learning. Each group was unique in their ways of working to get their work completed. Some groups gave more than others, but nevertheless, there was a positive outlook in what they were accomplishing as a group. Students throughout the unit were honest about their likes and dislikes, which helped me as their teacher to evaluate my role in this new approach to learning.
California Facts

1. What is the capital of California? (2 pt)

2. When did California become a state? (2 pt)

3. What is the state tree of California and the state bird? (2 pt)

4. When was the California state flag adopted? (4 pt)

Check answers
WEB EVALUATION FOR PRIMARY GRADES

Developed by Tammy Payton
http://www.siec.k12.in.us/~west/edu/rubric1.htm

<table>
<thead>
<tr>
<th>Name of Site</th>
<th>Date</th>
<th>Time</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>URL:</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

1 = Poor 5 = Exceptional

### Design
- Can move from page to page easily.
- Good use of graphics and color.

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
</table>

### Content
- Information is useful and will likely be revisited.
- How this website compares in content to similar websites.

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
</table>

### Technical Elements
- All links work.
- Can see meaningful information within 30 seconds.

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
</table>

### Credibility
- Contact person is stated with their e-mail address.
- States the name of the host school or institution.
- Announces when this page was last updated.

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
</table>

Total Possible Points = 25
APPENDIX C

SAMPLE LESSON PLAN
Lesson Objectives

- Understand key terms for related topic.
- Learn to create a web portfolio to put all work into one area.
- Learn to surf the Internet correctly, and to give credit for information taken from the Internet.

Web Portfolios

- How many of you have ever created a website or web portfolio?
- This week your group will be working on creating a portfolio where you can store all your information or work from this unit.
- Web portfolios can be fun to create, but you have to make sure that your group agrees on what is going to look like at the end.
- In a bit, I will show you how to begin creating a web portfolio.

Key Terms

- This week you will be learning specific key terms that will help you better understand your topic and readings.
- Your group needs to define these words and find a creative way to present them.
- What would be good reference tools for finding the definitions for your words?

Internet

- How many of you surf the Internet every so often? How many of you know how to look around the Internet to gather information?
- The Internet has a lot to offer us. We just need to learn to use it the best way for our learning.
- Here are some tips to using the Internet wisely.
- Make sure you know what you are searching for.
- Ask me if you are stuck or unsure of what to look for.
- Make sure you stay on your topic.
- If you use any information from the Internet, make sure to give credit to the site, or the person who created the site. The same goes with images that your group may want to use for your site.
- What are some other ways to surf the Internet correctly?

At the end of the week...

- Your group must show that you defined the words.
- Your group must also show that you used a computer program to display/show your work to me. This will eventually be in your web portfolios.

Questions!

- If your group has any questions throughout this week, please don’t hesitate to ASK!
APPENDIX D

WEB PAGE RUBRIC
Web Page Rubric
(Portfolio)

1. Make sure you have a "Home Page" with a title and any fun animations.

2. Your page should have a welcoming statement.

3. Include a table that has hyperlinks to the following pages: Key Words, Online Quiz, Graph, Power Point, Collage, Historical Event, Group Members, Acknowledgements, and Final Project.

4. Include pages that enhance your practice.

5. Make sure all pages have a button to return to your home page or "main page."

6. Post your activities/assignments on your web page portfolio. Insert your documents into your web page.

7. Be creative and make this a project that will be helpful for your presentation to the class.

Have fun!
APPENDIX E

PRESENTATION RUBRIC
**Presentation Rubric**

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Organization</strong></td>
<td></td>
</tr>
<tr>
<td>Audience cannot understand presentation because there is no sequence of information.</td>
<td>1</td>
</tr>
<tr>
<td>Audience has difficulty following presentation because student jumps around.</td>
<td></td>
</tr>
<tr>
<td>Students present information in logical sequence which audience can follow.</td>
<td></td>
</tr>
<tr>
<td>Students present information in logical, interesting sequence which audience can follow.</td>
<td></td>
</tr>
<tr>
<td><strong>Content Knowledge</strong></td>
<td></td>
</tr>
<tr>
<td>Students do not have grasp of information; students cannot answer questions about subject.</td>
<td>1</td>
</tr>
<tr>
<td>Students are uncomfortable with information and are able to answer only rudimentary questions.</td>
<td></td>
</tr>
<tr>
<td>Students are at ease with content, but fail to elaborate.</td>
<td></td>
</tr>
<tr>
<td>Students demonstrates full knowledge (more than required) with explanations and elaboration.</td>
<td></td>
</tr>
<tr>
<td><strong>Visuals</strong></td>
<td></td>
</tr>
<tr>
<td>Students used no visuals.</td>
<td>1</td>
</tr>
<tr>
<td>Students occasional used visuals that rarely support text and presentation.</td>
<td></td>
</tr>
<tr>
<td>Visuals related to text and presentation.</td>
<td></td>
</tr>
<tr>
<td>Students used visuals to reinforce screen text and presentation.</td>
<td></td>
</tr>
<tr>
<td><strong>Mechanics</strong></td>
<td></td>
</tr>
<tr>
<td>Students' presentation had four or more spelling errors and/or grammatical errors.</td>
<td>1</td>
</tr>
<tr>
<td>Presentation had three misspellings and/or grammatical errors.</td>
<td></td>
</tr>
<tr>
<td>Presentation has no more than two misspellings and/or grammatical errors.</td>
<td></td>
</tr>
<tr>
<td>Presentation has no misspellings or grammatical errors.</td>
<td></td>
</tr>
<tr>
<td><strong>Delivery</strong></td>
<td></td>
</tr>
<tr>
<td>Students rambled, incorrectly pronounced terms, and speak too quietly for students in the back of class to hear.</td>
<td>1</td>
</tr>
<tr>
<td>Students incorrectly pronounce terms. Audience members have difficulty hearing presentation.</td>
<td></td>
</tr>
<tr>
<td>Students' voices are clear. Students pronounce most words correctly.</td>
<td></td>
</tr>
<tr>
<td>Students used clear voices and correct, precise pronunciation of terms.</td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
</tr>
</tbody>
</table>

**Teacher Comments:**
APPENDIX F

PROJECT RUBRIC
Project Title: _________________________

Teacher(s): Mrs. Ramirez

Project Process
1. Has clear vision of final product
2. Properly organized to complete project
3. Managed time wisely
4. Acquired needed knowledge base
5. Communicated efforts with teacher

Product (Project)
1. Format
2. Mechanics of speaking/writing
3. Organization and structure
4. Creativity
5. Demonstrates knowledge
6. Other:

Below Avg.  Satisfactory  Excellent
1, 2, 3     4, 5, 6     7, 8, 9
1, 2, 3     4, 5, 6     7, 8, 9
1, 2, 3     4, 5, 6     7, 8, 9
1, 2, 3     4, 5, 6     7, 8, 9
1, 2, 3     4, 5, 6     7, 8, 9
1, 2, 3     4, 5, 6     7, 8, 9

Total Score: ________________________

Teacher(s) Comments:

Powered by TeAch-nology.com- The Web Portal For Educators! (www.teach-nology.com)
APPENDIX G

SAMPLE OBSERVATION LOG SHEET
## OBSERVATION LOG
### Week of 2/18-2/21

<table>
<thead>
<tr>
<th>Group Name</th>
<th>Date</th>
<th>COMMENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Missions</td>
<td>2/18</td>
<td>Group seems eager to get started. They seem to be working well together.</td>
</tr>
<tr>
<td>Mexican War</td>
<td>2/18</td>
<td>This group is eager and strong. They have their first week’s words down. They already show that they are going to complete this activity this week.</td>
</tr>
<tr>
<td>Explorers</td>
<td>2/19</td>
<td>Groups got their words and are working well together. This group seems to have a handle on things. They already found their meanings, and they are typing the words into PP.</td>
</tr>
<tr>
<td>Gold Rush</td>
<td>2/19</td>
<td>Slow start, but it seems as though they have a handle on the first week activity. Group really works well together. They compliment one another.</td>
</tr>
<tr>
<td>Railroad Completion</td>
<td>2/20</td>
<td>This group seems slow and not really comprehending what is being asked. They have their words, but having difficulty finding the meanings.</td>
</tr>
<tr>
<td>S.F. Earthquake</td>
<td>2/20</td>
<td>Interesting group, but there are two eager workers. Group got their words, and they are searching for the meanings with eagerness.</td>
</tr>
<tr>
<td>CA Facts</td>
<td>2/21</td>
<td>Group needs guidance due to language. Two members of the group have begun searching for their words.</td>
</tr>
</tbody>
</table>
APPENDIX H

SURVEY
WEB-BASED LEARNING SURVEY  
California History Project  
By Mrs. Ramirez

Circle one number for each statement with 1 being the lowest (not exceptional) and 5 being the highest (exceptional).

<table>
<thead>
<tr>
<th>Statement</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Web-based learning was fun!</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I found this type of learning to be challenging and exciting</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>My group stayed on track the whole time.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>I enjoyed working in groups.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>I felt motivated to learn about my topic, and I enjoyed creating projects about my topic.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>My topic on California history was interesting, and I learned a lot about it.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>I learned how to use different types of computer programs.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>I enjoyed working with computers.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>I enjoyed presenting our work to the class.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>I would like to try web-based learning again in the future.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>I felt good about being a part of this project.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>My teacher was helpful and around for any questions I had during this project.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>
REFERENCES


