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Classroom websites

Angela A. Zimmerer
Regis University

Regis University
School for Professional Studies Graduate Programs
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CLASSROOM WEBSITES:

AN AUTHENTIC WAY TO INTEGRATE TECHNOLOGY

INTO THE CURRICULUM

by

Angela A. Zimmerer

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ABSTRACT

Classroom Websites:

An Authentic Way to Integrate Technology into the Curriculum

The purpose of this research project was to provide teachers with a fast and efficient method of developing a classroom website. In addition, the author strove to convince teachers that their initial time commitment would result in a product that would enhance both communication and student learning. In the Review of Literature, research is presented about classroom websites, the effects of the integration of technology, and the digital divide. The project, *A Teacher's Handbook for Developing a Classroom Website*, provides step by step instructions, illustrations, and numerous ideas for authentic integration of technology. Peer assessment as well as informal feedback suggest that classroom websites can be valuable tools for the improvement of communication and learning.

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Chapter 1

INTRODUCTION

Although many districts have yet to establish technology standards, research by Bruce (2003 a-d) and Hyun and Davis (2005) and studies cited by Karchmer (2001) and Swain and Pearson (2003) support the value of integrating technology into the elementary school curriculum. Although many possibilities exist for an effective integration of technology, Moskowitz (2004) and Washenberger (2001) reported that teachers who developed websites for their classrooms often found this to be a versatile way to do so. Currently, many elementary school teachers have developed websites, found that it was less complex than they had expected, and discovered that classroom websites can be utilized in numerous ways. Teachers can use their websites to foster a sense of partnership in the classroom, with parents, and with the community. They can improve communication as they publish: (a) class calendars, (b) newsletters, (c) announcements, (d) student work, and (e) Web based resources. A classroom website can be the starting point for several types of distance education, including WebQuests, virtual field trips, and access to assignments for the absent student. Considering the many applications of a classroom website, it can serve as an authentic vehicle for the integration of technology.

Statement of the Problem

A classroom website has many practical applications which teachers can use to improve communication, enrich instruction, and motivate students; all are authentic means to integrate technology into the curriculum. However, even teachers with strong computer skills might dismiss the suggestion to develop a classroom website, in the belief that this would require extensive technical skills and a considerable time commitment. In order for more teachers to develop classroom websites, this author believes they need to be provided with a simple and efficient method to do so.

Purpose of the Project

The purpose of this research project was to provide teachers with a handbook that describes how to develop and maintain a website with a minimum time commitment. It includes step by step directions as well as suggestions for effective website design. This author discusses a variety of ways that a classroom website could be used to: (a) integrate technology into the curriculum, (b) teach information literacy, (c) differentiate instruction, (d) communicate with parents, (e) publish student work, and (f) explore distance education options.

Chapter Summary

This researcher's position is that classroom websites are an asset for teachers in the 21st C., and that increasingly, parents and students will appreciate the improved communication and access to curricular materials that websites can provide. Instructional computers and Internet access are nearly universal in U.S. schools, allowing teachers to develop classroom websites as a means to integrate technology. However,

despite the pedagogical advantages of doing so, most teachers are inadequately trained to integrate technology into the curriculum, much less to develop a website.

In Chapter 2, the Review of Literature, this researcher presented the background material that supports the integration of technology into the curriculum. Although research on the applications of classroom websites is just beginning, the results of several studies are presented. Additionally, a discussion of the digital divide and how classroom websites can bridge this inequity is presented. In Chapter 3, Method, the procedures to develop the proposal are detailed in order to develop a handbook for teachers that provides several methods by which to develop a classroom website and numerous authentic applications for the website. A Glossary is provided which contains terms that are used throughout the project.

Chapter 2

REVIEW OF LITERATURE

The use of classroom websites can be an excellent way to integrate technology into the curriculum. With a minimal time commitment, even a teacher with only basic technical skills can develop a website and realize numerous beneficial applications both in and out of the classroom. Initially, many teachers develop classroom websites in order to improve communication with parents and students (Goldberg, 2002; Washenberger, 2001). After the initial time commitment required to build and publish a website, frequently, teachers increase the content on their site once they discover the advantages for parents and students (Moskowitz, 2004). Still, many teachers resist the idea of website development in the belief that it will require technical skills that exceed their ability, or that it will be time consuming to develop and maintain. However, Washenberger listed a multitude of reasons why teachers should put their classes online: (a) enhance home school communication, (b) provide a venue to publish student work, (c) build classroom community, (d) link to online resources, (e) provide access to class assignments and downloadable documents, (f) teach information literacy, and (g) incorporate technology into the curriculum. Website development can be quite simple to accomplish, and maintenance can be as infrequent as monthly. When teachers use familiar software applications to assemble content, they can easily construct websites. Alternatively, several companies host classroom websites, where they provide

templates into which teachers can easily upload their own content. In the upper grades, students may serve as assistant webmasters who provide content and even upload it to the website. However, until teachers grasp the value of publishing their own classroom webpages, they will be unlikely to spend the time to do so (Shaw, 2003). The goal of this author is to provide a handbook for elementary school teachers which shows how to develop a classroom website within 2 hours and to detail the many compelling reasons why teachers should do so.

Historical Background of Classroom Websites

To date, almost no research has been conducted on classroom websites or the ways in which teachers use them to integrate technology into the curriculum. Although this author found some elementary classroom websites, their development does not appear to be a priority in most school districts or schools. Aside from the occasional staff development project (Moskowitz, 2004), most classroom websites exist merely due to the interest and willingness of individual teachers to invest their own time.

Karchmer (2001) collected data about Internet use in the classroom by teachers who had been identified by their peers as exemplary in their use of technology in teaching. The majority of the elementary teachers who participated in the study felt that publishing student work on the Internet was an important use of technology, and several of these teachers used their own classroom websites as the vehicle to do so.

Although not immediately of benefit to teachers or their students, educational research can be facilitated by the utilization of classroom websites. According to Karchmer (2001), websites provide windows into classrooms for researchers to study the

effect of technology on: (a) literacy, (b) instruction and learning, (c) collaboration, and (d) communication with parents and the community. Researchers are no longer geographically limited, and thus, they have access to a wider target population.

Teacher Attitudes Toward Integration of Technology

"Pedagogy is no longer merely a process of teacher-student interaction, but a complex process of interaction between teacher, student, peers, family and technology" (Lewin, Mavers, & Somekh, 2003, p. 28). The pervasiveness of Information and Communication Technology (ICT) in personal and work lives has changed how people communicate, work, and learn, which has impacted the goals of education. While most parents, school administrators, and employers expect to see ICT employed in schools, teachers need to know the most effective pedagogical methods for doing so. Moskowitz (2004), Director of Technology in Brewster, NY, introduced classroom websites to teachers as an authentic method to increase their literacy of technology. He found that the majority of teachers in his district believed that the use of technology would enhance education and were interested in improving their technological skills. However, they did not understand how a classroom website could be a way to integrate technology into the curriculum. Once Moskowitz's team focused their training to show teachers how to make curricular connections, teachers began to appreciate that a website was a tool worthy of the time required to build it. Teachers learned how to post relevant resources to their websites and to upload any type of file including documents, images, and videos. Also, they found that they could use the website to create and share lessons with students.

As is true with most new skills, the teachers who participated in Karchmer's (2001) study reported that the use of the Internet to plan lessons and find appropriate and relevant sites required more time than when they used print based resources. If teachers must spend more time in order to integrate technology, then they must be convinced of the importance of doing so. If the integration of technology is to be a priority, teachers will need training as well as the time to learn and employ new strategies.

The elementary teachers in Karchmer's (2001) study reported that they spent more time finding appropriately leveled reading materials on the Internet than those in print, as few Internet sources are leveled. Several teachers of primary students reported that they looked for sites with features that would support their emerging and beginning readers, including: (a) embedded textual aids, (b) less text, (c) large graphics, and (d) pages where little scrolling was required. These teachers pointed out that, when they could not find appropriate sources on the Internet, they chose traditional print materials instead, a reminder that the Internet is not always the best place to find information and resources.

Technology Standards

Pianfetti (2001) quoted Jordan and Follman (1993) who stated that "Technology alone cannot restructure schools, but neither can schools successfully restructure without incorporating technologies that have become the basic tools of business, industry, and communication (p. 23)" (p. 256). No longer can teachers afford to exclude technology from the curriculum, or to include it only when and if time allows. Current students will enter a world in which technology pervades all aspects of personal and professional life.

In order to prepare them for the multitude of ways that technological skills and information literacy will be required, the curriculum must be fundamentally changed to ensure that they acquire the requisite skills. The authors of the National Science Education Standards (NETS) believe that, in order for students to be "informed, responsible, and contributing citizens" (International Society for Technology in Education, n.d., p. 1), technology must be an integral part of learning standards in every content area, and they have developed these standards.

The NETS (International Society for Technology in Education, n.d.) authors wrote standards specific to the study of technology, rather than combine them with science standards, as is often the case. Zemelman, Daniels, and Hyde (1998) clarified the distinction between technology and science: "Technology addresses problems of human adaptation in the environment, while science attempts to answer questions about the natural world. And each, of course, influences the other" (p. 119). The technology NETS for students include: (a) basic operations and concepts of technology; (b) social, ethical, and human issues; (c) technology productivity tools; (d) technology communications tools; (e) technology research tools; and (f) technology problem solving and decision making tools. In addition, they have written separate standards for information literacy.

As of 2006, the Boulder Valley School District (BVSD) in Colorado does not have dedicated technology standards. Technology is partially integrated into other standards, such as science standard five: "Students know and evaluate interrelationships among science, technology, and human activity and how they can effect the world"

(BVSD, 1999, p. 24). The science benchmarks for Grades K-4 include "recognizing the role and use of technology in their personal lives" (p. 24) and "identifying careers that use science and technology" (p. 24). For Grades 5-8, one science benchmark is "describing advantages and disadvantages that might accompany the introduction of a new technology (e.g., mountain bikes, cellular phones, pagers)" (p. 24). In language arts standard five, it is stated that, "Students apply research skills to locate, select, and make use of relevant information" (BVSD, 1998, p. 48). The language arts benchmark 5.6 for Grades K-4 is "Using organizational features of electronic media to locate information" (p. 48), while benchmark 5.9 includes multimedia as an appropriate presentation media. The Colorado Model Content Standards (Colorado Department of Education, 2006) were written similarly, with technology integrated into other content standards. Although educators and policy makers in Colorado recognize a need to integrate technology into the curriculum, the standards that they wrote do not provide the specificity or thoroughness of the NETS.

Need for Training

An important note to administrators and policy makers is that, if they want their teachers to implement technology standards, then teachers must receive the necessary resources to do so (Swain & Pearson, 2003). Staff of the U.S. Department of Education (1999, as cited in International Reading Association, 2002) recommended that 30% of the technology budget for a school district be allocated for staff development; however, training budgets average 6% nationwide (CEO Forum, 1999, as cited in International Reading Association). Swain and Pearson advised that the administrators of school

districts should provide: (a) technology training, (b) current computers and software, (c) a low ratio of instructional computers to students, (d) fast Internet connections, and (e) ready access to technical assistance. In addition, they must make it a priority to rewrite curriculum for a seamless integration of technology into all subject and skill areas.

Repeatedly, researchers have pointed out the need for teacher training if teachers are to integrate technology into the curriculum (Cunningham, 2001; Hyun & Davis, 2005; International Reading Association, 2002; Karchmer, 2001; Swain & Pearson, 2003; Trotter, 2002). Bruce (2003c) advised that, if educators and administrators add technological devices and capabilities to classrooms without the necessary training, they will not produce meaningful changes. According to the Pew Internet and American Life Project (2002, as cited in Hinson, 2005), many middle and high school students use the Internet effectively at home to work on school work, but their teachers rarely integrate Web resources into instruction, and when they do, the quality of these assignments is poor. Bruce (2003a) noted that the integration of technology takes time, as teachers and learners alike explore new capabilities and experiment with different ways of teaching and learning.

The authors of a survey in *Education Week* (Trotter & Zehr, September, 1999, as cited in Cunningham, 2001) reported that teachers in their first 5 years of teaching are no more likely to integrate technology into their instruction than teachers with 20 years of experience. Cunningham suggested that teacher training has not kept pace with the advances of technology and the potential applications in the classroom, since even new

teachers fail to use technology innovatively. Perhaps many teachers believe that their other responsibilities are a higher priority than the integration of technology.

Rowand (2000) and Swain and Pearson (2003) found that teachers who receive professional development on the use of technology are more likely to integrate technology into the curriculum. Moskowitz (2004) observed that, after teachers learned how to create a website, they tended to gain a level of technological competence which facilitated a more sophisticated level of integration into instruction. For instance, websites can become the starting point for web based activities such as WebQuests, research, and long distance collaboration with content experts and other classes.

Numerous researchers (Bruce, 2003a-d; Carroll, 2004; International Reading Association, 2002; Karchmer, 2001; Lamb, 2005; Oseas & Wood, 2003; Thakkar, Hogan, & Williamson, 2003) have studied the interrelationship between technology and literacy. Karchmer proposed that teacher training should integrate literacy, literacy instruction, and technology so that teachers can see how the three areas are interconnected. Literacy and technology have become inextricably bound; teachers who continue to teach them as separate disciplines fail to help their students achieve full literacy in a digital age.

Integration of Technology into the Curriculum

According to Parsad and Jones (2005), in 2003, 82% of schools or school districts offered professional development to teachers on how to integrate the use of the Internet into the curriculum. Despite this widespread availability of training, most teachers still do not practice meaningful integration of technology. Bruce (2003a) proposed that

teachers must first believe that technology skills are an integral part of literacy in the 21st C. before they will integrate them into the classroom. Although technology cannot replace good teaching, it can be a medium that supports inquiry, as students use it to access and process much more information than ever before (Bruce, 2003b). Learners have an innate desire to interpret information and use resources in the way that uniquely benefits them; teachers can capitalize on this and use technology to differentiate instruction for their students.

Many advocates of the integration of technology believe that students will need strong ICT skills in order to gain employment (Bruce, 2003b). Although this may be true, students stand to gain additional life long benefits because of: (a) the ability to fluidly access information about any topic, (b) enhanced literacy from the use of multiple modalities, (c) an increase in the scope of their ability to communicate, and (d) their fuller participation in society.

Cunningham (2001) proposed a vision of technology integration which would require fundamental changes in the way teachers have traditionally viewed their roles. Teachers would assume the role of problem posers, while the students would use the vast reservoir of information and ideas contained on the Internet to solve those problems. Students would: (a) find relevant information, (b) evaluate it for accuracy, (c) seek patterns of similarity and differences, and (d) compare their hypotheses with students from around the world. Technology would cease to be an add on and, instead, would become an integral part of learning.

Mulligan, Strong, Crabbe, and Steen (2006) described a collaborative, Web based project that students and teachers in an Illinois school district developed in an effort to integrate the NETS. For their unit study, they chose the American Revolution which both third and seventh grade students studied; additionally, the third grade teachers had wanted to increase their resources for this particular unit. The main goals were to:

1. have the seventh grade students create a WebQuest with a time line that would be appropriate for third grade students;
2. align the curriculum with Illinois Learning Standards and NETS; and
3. help students make connections between the classroom, media center, and computer lab. (p. 14)

The seventh grade students gained skills in: (a) research, (b) writing, (c) collaboration, and (d) Web design as they consulted with the third grade teachers about the needs of their students. The third grade students benefited from individualized attention as they paired up with the seventh grade students and enjoyed success in their research. Students and teachers alike experienced the satisfaction of learning new skills as they studied a topic with the use of new methods and resources.

Research on Integration of Technology in Elementary Education

According to Bruce (2003a), programmers developed educational applications of technology as early as the 1960s, as many people assumed that computer technologies could be used to improve education and learning. However, the benefits of the integration of technology must be weighed against the drawbacks, cautioned Wayne (2000), as he proposed further research of both aspects. Despite the fact that school administrators continue to buy computers and connect them to the Internet, critics believe

that an early introduction to computers may interfere with healthy cognitive, physical, and social skills (Alliance for Childhood, n.d., as cited in Wayne).

To say that technology does or does not positively affect learning fails to address specific applications of technology (Bruce, 2003a). When researchers and educators evaluate the integration of technology, they must first answer the question of whether students study technology as a phenomenon of its own, or whether they use it as a tool to accomplish other tasks, including learning. Next, they must consider whether students use technology to develop higher level thinking skills, or as a tool to practice basic skills. While some students are permitted to use computers for drill and practice programs or to type written work, others are encouraged to explore the Internet for project resources or to utilize word processors to facilitate the entire writing process. Researchers must conduct studies about specific integrations of technology in order to learn exactly how and where it enhances learning, as well as to learn about any drawbacks to its use.

The findings from several studies (Berson, 1996; Chessler, Rockman, & Walker, 1998; Scardamalia & Bereiter, 1996; Wenglinsky, 1998; all cited in Swain & Pearson, 2003) indicated a stronger development of higher level thinking and problem solving skills in students who used computers as compared to students who did not. The results from other studies (Cognition and Technology Group at Vanderbilt University, 1994; Coley, Cradler, & Engel, 1998; Kulik, 1994; Mann, Shakeshaft, Becker, & Kottkamp, 1999; Sivin-Kachala, 1998; Wenlinsky; all cited in Swain & Pearson) were indicative of higher scores on achievement tests for students who used computer technology.

Reinking and Rickman (1996, as cited in Karchmer, 2001) researched the effect of electronic texts as compared to print based texts on the achievement scores of sixth grade students. Vocabulary scores were higher for students who read electronic texts with hyperlinked definitions. Anderson-Inman and Horney (1993, as cited in Karchmer) found that students scored higher on comprehension tests after they read electronic texts with digitized pronunciations and pictures vs. print texts. The teachers in Karchmer's study reported higher engagement and comprehension when students read electronic texts.

Karchmer (2001) found that elementary students were more motivated to write when their work was published on the Web. In addition, students who had difficulty with the physical act of writing frequently demonstrated more enthusiasm and a greater ease of composing on a computer.

Research over the past 2 decades has shifted from the study of whether young students should use technology in the classroom to how to apply technology most effectively (Hyun & Davis, 2005). Hyun and Davis's study focused on the discourse patterns that emerged in a technology rich, kindergarten classroom where students learned how to make a map with the use of computer software. The researchers observed that the students displayed exploratory talk with teachers and peers as they posed questions and shared observations about software capabilities. They formed purposeful questions in order to gain understandings that would allow them to use the programs by themselves later. The students demonstrated: (a) problem solving, (b) collaboration, and (c) emerging technological skills.

Integration of Technology Supports a Constructivist Pedagogy

Constructivism is a philosophy of learning in which people construct their own understandings of the world, due to their innate curiousity (Brooks & Brooks, 1993). As opposed to a passive acceptance of information, students actively incorporate new experiences into prior knowledge. In a constructivist classroom, teachers emphasize the acquisition of higher level thinking and problem solving skills rather than learning isolated facts. Cadiero–Kaplan (1999) theorized that teachers who integrate technology into the curriculum support a constructivist pedagogy. Teachers and students learn side by side, where the teacher assumes the role of facilitator and resource provider. When teachers integrate technology, particularly the use of the Internet as a resource, they encourage students to construct their own knowledge as they: (a) pose questions, (b) search for answers, (c) evaluate information, (d) synthesize solutions, and (e) present and apply their findings.

Bruce (2003b) examined the ideas of John Dewey (1956, as cited in Bruce), which contributed to the current philosophy of constructivism, in an effort to determine whether he would have approved of the integration of technology into modern education. Dewey believed that doing things was far more valuable than merely reading about them: "The map is not a substitute for personal experience. The map does not take the place of the actual journey" (p. 202). Bruce proposed that Dewey would have inquired about the purpose of technology integration; does it simply replace other modes of learning, or does it lead to places previously inaccessible? Educators must think about whether their use of technology improves education, or whether technology is implemented just

because it can be. Consistently, teachers must focus on the learning that will take place, not on the technology.

The Integration of Literacy and Technology

Historically, literacy has always been tied to the most current form of technology, whether it was cuneiform, papyrus, the printing press, or the Internet (Karchmer, 2001). Each technology has an effect on who has access to information based on: (a) a literacy of the symbols used to communicate, (b) how widespread its dissemination is, and (c) a knowledge of how to use the medium. Thus, literacy, technology, and literacy instruction have always been closely related. Changes in ICT have changed profoundly the ways in which information is presented and disseminated. On the Internet, readers encounter numerous features that books cannot provide; they view the multimedia of: (a) animated graphics, (b) audio and video presentations, (c) audio pronunciations of words, (d) links to definitions, and (e) endless links to related topics. The Internet is both an incredible resource and a potentially overwhelming source of sensory and information overload. In order to harness its power, students need explicit modeling on how to effectively navigate and filter all that they encounter when they embark on a search for information.

Multiple Symbol Systems

As children develop various literacy skills, they learn to interpret many types of symbols, including: (a) letters and punctuation marks, (b) numbers and mathematical symbols, (c) musical notation, and (d) pictures (Carroll, 2004). When they encounter computer based symbols, they gain yet another code from which to construct meaning.

Cambourne (2001, as cited in Carroll) described how, in the development of literacy, the manipulation of multiple symbol systems is more effective than the use of only one system. Eisner (1978, as cited in Carroll) elucidated that each symbol system offers a different perspective on knowledge. One can describe autumn quite differently through the symbols available in painting than those of music or poetry. The creator of each description employs a distinct set of symbols, each of which describes the same topic in a different way. When students use computers, they are exposed simultaneously to multiple sets of symbols within the same program or document; this may improve learning, as different learning styles can be accommodated.

When students assume the role of author, they have at their disposal numerous options with which to express themselves. Carroll (2004) described how her students wrote poetry with the use of a writing program where they could experiment with many symbols that include: (a) font, (b) graphic symbols, (c) layout templates, (d) animated graphics, and (e) music. The possibilities are far extended from what is possible with paper and pencil alone.

The New Literacies

Today, the definition of literacy, often referred to as the new literacies, has expanded to include to include the ability to learn, comprehend, and interact with technology in a meaningful way (Selfe, 1999, as cited in Pianfetti, 2001). Digital literacy requires the ability to follow a nonlinear format, as the reader follows hyperlinks to various webpages, most or all having a different structure (Landow, 1994, as cited in Pianfetti). New skills are required from those used in reading text in a paper format, as

the reader uses hyperlinks to decide which path to follow in the construction of meaning (Bruce, 2003d). Essentially, the author and reader become collaborators in the construction of the text.

As part of the new literacies, teachers have begun to assign multimedia presentations and the creation of websites to their students (Kapitzke, 2003). To complete these digital assignments, students must interweave many literacies, both technological and informational. Students must be able to locate and retrieve information with the use of: (a) online databases, (b) catalogs, and (c) search engines. They need to have or develop a working knowledge of software and Internet manipulation such as the ability to: (a) download files; (b) drag and drop text; (c) create or insert backgrounds and borders; (d) make hyperlinks; (e) import audio or video clips; (f) name, save, and retrieve files; and (g) transfer files to a server. In addition, students should understand how the following issues determine what they can publish: (a) copyright protection, (b) plagiarism, (c) accuracy of information, and (d) the rights and responsibilities of system access and security.

The members of the International Reading Association (2002) developed a position statement on the development of the new literacies.

> We believe that students have the right to:
> 1. teachers who are skilled in the effective use of ICT for teaching and learning;
> 2. a literacy curriculum that integrates the new literacies of ICT into instructional programs;
> 3. instruction that develops the critical literacies essential to effective information use;
> 4. assessment practices in literacy that include reading on the Internet and writing using wordprocessing software;

5. opportunities to learn safe and responsible use of information and communication technologies; and
6. equal access to ICT. (para. 1)

Other researchers (Bruce 1997a; CEO Forum, 1999; Means et al., 1993; Mikulecky & Kirkley, 1998; White House Panel on Educational Technology, 1997; all cited in Karchmer, 2001) have emphasized that critical aspects of the new literacies are the ability to: (a) collaborate, (b) communicate, (c) find and evaluate information, and (d) solve problems.

Information Literacy

Information literacy is defined as "the ability to locate, evaluate, use, and communicate using a wide range of resources including text, visual, audio, and video sources" (Lamb, 2005, para. 4). Information literacy is such a broad topic, that most information specialists agree that it should be integrated into all subject areas (Kapitzke, 2003).

Librarians have observed a transformation of library skills as information literacy evolves from its print based origins (Kapitzke, 2003). For example, frequently, the hierarchical organization of information does not exist in cyberspace. Information seekers quickly move from one website to another and jump between disparate bodies of knowledge, with fact and fiction one click apart. No longer are the stacks of books, organized by the Dewey Decimal System, relevant when one searches the vast reservoir of the Internet. Additionally, students discover that they can access all or most of what they seek online, but they need guidance to find accurate sources of information and to know what can be accessed only in hard copy. Often, students who are familiar with the

use of the computer to search for information do so exclusively through a search engine such as Google. Information literacy includes learning about all of the available resources for information, such as online encyclopedias and subscription databases (Anderson, 2003).

Information literacy includes the subtopic of media literacy, which is the ability to sort through a continuous bombardment of media messages (Tallim, 2006). Students need to learn to distinguish between those messages intended to inform, entertain, persuade, or sell to them. Another critical aspect of media literacy is the ability to evaluate the quality and authenticity of information found on the Internet (Karchmer, 2001); the International Reading Association (2002) emphasized the necessity to teach students to be critical consumers of information. Because anyone can publish anything on the Internet, it can be difficult to determine the validity of the information on a website, as many websites with questionable content appear to be authentic. An excellent example of a hoax is Way's (2006) Dihydrogen Monoxide website, where the dangers of water as a chemical are described in depth. The author of this site maintains it as a hobby and states in small print at the bottom of the homepage that "content veracity is not implied" (p. 1); few sites will offer this disclaimer. Teachers can use sites like this to emphasize the importance of using a variety of sources in their research in order to help verify the accuracy of online or print information.

Bridging the Digital Divide

The digital divide is defined at the Digital Divide.org (n.d.) website as the gap between those who are able to benefit from digital technology and those who are not.

Further, the authors of Digital Divide.org and Morse (2004) distinguished between those who have direct access to ICT, and those who possess the knowledge of how to use and benefit from it.

Statistics on Computer Use and Internet Access

"It [the digital divide] is the next - the present - equity issue in schools and larger society with enormous social justice implications" (Gorski, 2002, as cited in Morse, 2004, p. 266). As the following statistics indicate, access to computers and the Internet is not universal; in particular, a disparity exists between students with differing socioeconomic backgrounds.

Access at School

In 2003, nearly 100% of U.S. public schools were connected to the Internet, with access available in 93% of their instructional rooms (Parsad & Jones, 2005). Of schools with Internet access, 95% had a broadband connection. Nationwide, the ratio of students to instructional computers with access to the Internet was 4.4:1; the ratio was 5.1:1 in schools with the highest concentrations of poverty. Parsad and Jones found that, in 48% of public schools with access to the Internet, staff and administrators offered access to computers for students outside schools hours, with secondary and larger schools most likely to do so.

Access at Home

In 2003, Cheeseman, Janus, and Davis (2005) found that 62% of U.S. households had one or more computers; 55% of those households had Internet access. This statistic varied widely among some groups, as: (a) 45% of African American and Hispanic

American households, (b) 48% of single parent households headed by a male, (c) 45% of single parent households headed by a female, and (d) 28% of households with less than a high school education had a computer with Internet access. In households with a child age 6-17, 76% owned a computer; of these households, 67% had Internet access. In households with family incomes above $100,000, 95% owned computers; 92% of these households had access to the Internet. In households with incomes below $25,000, 41% had computers; 31% of these households had Internet access.

The Hidden Curriculum

As just presented, access to a home computer with a connection to the Internet is not universal, especially among students from lower income and minority families (Cheeseman, Janus, & Davis, 2005). Even when these students gain access at school, frequently, their teachers do not offer them the same opportunities to use computers to develop higher level skills as their peers from more advantaged backgrounds (Moore, Laffey, Espinosa, & Lodree, 2002; Brown, 2000, as cited in Morse, 2004). Partly, this is due to the fact that many teachers are ill prepared to integrate technology. Moore et al. found that teachers of at risk students tended to use computer time only as a reward for good behavior, and that the most common computer activities consisted of a skills and drills approach to develop basic academic skills. Swain and Pearson (2003) cited several researchers (Becker, 2000; Office of Educational Research and Improvement, 2000; Wenglinsky, 1998) who found that, although students of low socioeconomic status spent more time in the use of computers than students of higher socioeconomic status, they used it primarily for skills and drills activities. Wenglinsky even found a negative

correlation between the amount of time spent in computer use and the students' mathematics scores on the National Assessment of Educational Programs.

Brown and Colleagues (2001, as cited in Morse, 2004) described how the ways in which computers are used in school amounts to a hidden curriculum where students learn that they can have a "servant or master relationship with computer technology" (p. 272). When students use computers to play games or to engage in drill and practice, the computer is in control of the learning. However, when students use a computer while engaged in problem solving, they learn that it is a tool that they can control to extend their learning. Swain and Pearson (2003) proposed that the official curriculum could be improved by the implementation of technology standards that address the specific skills for students to acquire and, thus, help to close the digital divide.

Classroom Websites Can Help Narrow the Digital Divide

Students must acquire a basic knowledge of computer technology and information literacy in order to fully participate in society today (Morse, 2004). Potentially, teachers can narrow the digital divide through an effective integration of technology. Although policy makers and educators have begun to discuss options for the provision of universal Internet access to students in their homes (Hinson, 2005), most educators cannot undertake this task; rather, they can focus their efforts on the provision of meaningful access to their students while at school.

Classroom websites can be utilized by teachers to provide authentic interactions with ICT (Moskowitz, 2004). They can be used to narrow the digital divide when utilized in class, whether the teacher projects the computer screen for all to see, or

whether each student works on individual computers and uses the website as a departure point for assignments on the Web. Classroom websites that showcase student work can help students develop a sense of classroom community and pride in their work, as the products of their learning are published to a world wide audience. Students who lack access to the Internet at home can experience substantial benefits in their classrooms.

Chapter Summary

This chapter includes the historical background of classroom websites, research on teachers' attitudes toward the integration of technology into the curriculum, and how classroom websites can be an authentic means of integration. Technology standards are presented, as well as the documented need for further teacher training on the effective use and integration of technology in order to implement those standards. Research was presented on how technology affects learning and how it may support constructivist pedagogy and the development of literacy. Finally, statistics on computer ownership and access to the Internet are presented, followed by a proposal to narrow the digital divide through the use of classroom websites. Presented in Chapter 3, Method, is the proposed development and goals of the applied project: to develop a handbook for teachers that provides several methods by which to develop a classroom website and numerous authentic applications for the website.

Chapter 3

METHOD

Numerous opportunities exist for teachers to improve: (a) communication, (b) accessibility to instruction and materials, and (c) learning opportunities for their students, when they effectively integrate Information and Computer Technology (ICT) into the curriculum. Nearly all U.S. schools are connected to the Internet and provide instructional computers to students (Parsad & Jones, 2005). However, most teachers are not well trained to integrate technology into the classroom, even when high quality equipment and facilities are available for their use. This researcher proposes that teachers develop a classroom website as a means to improve their technical skills and to learn authentic ways to integrate technology. This Internet presence will be an ideal starting point for exploring the plethora of learning opportunities made possible by effective use of technology.

The purpose of this project was to develop a handbook for teachers, titled: *A Teacher's Handbook for Developing a Classroom Website*, which provides the instructions for the development of a classroom website with a minimal investment of time. Two options for development, including illustrated examples, are provided. Additionally, authentic applications of the website are presented, with the goal to convince teachers that a classroom website is well worth the time to create and maintain.

Target Population

The intended group or individuals who would be interested in this project are teachers who want to learn how to develop a classroom website. In addition, administrators may find this project to be a resource to offer to their staff, as they encourage them to establish a Web presence and effectively integrate technology. Finally, ICT specialists may find this to be a resource that they can recommend, as increasing numbers of teachers express an interest in developing a classroom website.

Procedures

For part one of *A Teacher's Handbook for Developing a Classroom Website*, this researcher investigates at least two methods by which a teacher with limited technology skills could develop a classroom website. Information on website development is gathered from: (a) online resources, (b) ICT specialists and, (c) print resources. Step by step instructions are provided in the handbook, including: (a) contact information for web hosts, (b) online website building resources, (c) software recommendations, (d) suggestions for content to include, (e) design recommendations and, (f) illustrated examples.

In the second part of the handbook, numerous applications of the classroom website are presented along with illustrated examples and resource recommendations. The applications include: (a) ways to enhance communication with students, parents, and the community; (b) methods to provide remote access to curriculum and class materials; (c) ideas for publishing student work; (d) suggestions on how to involve students in the

provision of content and maintenance for the website; (e) WebQuests and virtual field trips and, (f) collaboration with other classes, scientists, writers, artists, and experts.

Goals of the Project

There will be two main goals of the project titled: *A Teacher's Handbook for Developing a Classroom Website*. First, teachers will learn how to develop and maintain a basic website in 2 hours. Second, they will learn about many beneficial applications of their website, including: (a) enhanced communication with students, parents, and the community; (b) a new venue to publish student work; (c) increased access to assignments and curricular materials; and (d) authentic methods to teach students about Internet and information literacy.

Peer Assessment

The author selected two people to review *A Teacher's Handbook for Developing a Classroom Website*. One reviewer is an ICT specialist, who assessed and made recommendations on the appropriate use of terminology as well as the applicability of the instructions for the development of a website. The second reviewer is a teacher who is willing to read the handbook as well as develop a basic webpage. Their feedback is discussed in Chapter 5.

Chapter Summary

The researcher presents two methods by which a teacher could develop a basic classroom website. In addition, various authentic applications of this website are outlined. Both sections of the handbook are intended to increase a teacher's technological literacy and to provide authentic means in which technology can be

integrated into the curriculum. Chapter 4, Results, consists of the project titled: *A Teacher's Handbook for Developing a Classroom Website*. In Chapter 5, Discussion, the focus is on: (a) Contributions of this Project, (b) Limitations, (c) Peer Assessment, (d) Recommendations for Further Development and, (e) Project Summary.

Chapter 4

RESULTS

Introduction

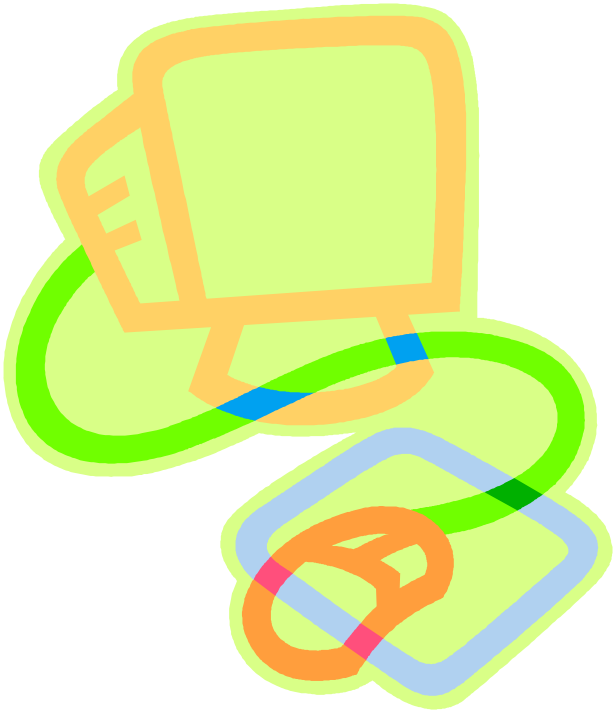
In this day when so many communication, education, business, and leisure pursuits are technology driven, solid Information and Communication Technology (ICT) skills are an essential outcome for students. The definition of basic computer skills has grown to include the ability to: (a) locate, evaluate, and retrieve information; (b) read and construct meaning in a hypertext environment; (c) create documents and presentations using a variety of software and multimedia applications; (d) manage and transfer files to a server; (e) understand and apply a knowledge of copyright laws and; (f) apply all of the above skills to solve problems. Additionally, researchers support the value of the integration of technology and literacy instruction, as they learn more about the new literacies. If students are to acquire the technical skills necessary for successful living and working in the 21st C., then their teachers must be able to model and teach practical applications of technology in the classroom.

The author's first goal in this research project handbook, titled: *A Teacher's Handbook for Developing a Classroom Website*, is to provide classroom teachers with a method of publishing their own websites in 2 hours or less. Two resources for doing so are described and illustrated with examples that show how to enter and edit the content of the webpages; suggestions are made in order to reduce the time required to maintain the

website. Illustrations of the author's published webpages are included. Additional suggested resources are listed for teachers who would like to explore further options.

The second goal is to describe for teachers the numerous authentic applications for their classroom website that will allow them to model effective uses of technology and integrate it into the curriculum. Although it is possible to use many of these applications and integrations without a classroom website, a website does provide an ideal place from which to store and launch these learning adventures.

A Teacher's Handbook for Developing a Classroom Website



by Angie Zimmerer

Table of Contents

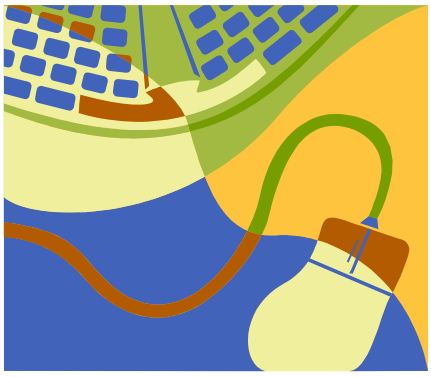
Introduction

Classroom websites provide windows into classrooms for parents, students, and community members. They enhance communication between school and home, allowing parents who are unable to spend time at school to better understand their child's educational experience. A classroom website can offer absent students the opportunity to keep on top of work while away from school. The website can be an exciting venue on which to publish students' work and achievements. It also makes a perfect starting point for embarking on virtual field trips, WebQuests, and collaborative studies with other classes and experts in various disciplines. I believe that a classroom website is a valuable tool that more and more teachers will be required to build and maintain in the years to come. At the present time, developing a website is still optional for most teachers, but well worth the effort. My goal is provide you with an easy way to begin your first classroom website, and to show you how to update it with a minimal investment of time. Knowing that teachers never have enough time to do all that they want to do, I will show you how to maintain your website by working smart -- not by working harder or longer.

At the start of this project, I had never developed a website and didn't know exactly how to proceed. Because numerous people had advised me that it is not difficult, I began a search for a simple method that would result in an attractive and practical classroom website. I believe that my lack of Web authoring experience at the outset of this project has helped me write a handbook at an appropriate level, given that my background knowledge was probably similar to yours as you begin reading this handbook. I am assuming that you will have many of the same questions that I did when developing my first website, and that many of you may even feel that your technical skills are not adequate for creating a website. Stick with me, and I'll have you online in less than 2 hours.

One of the first decisions I made was that the methods described in this handbook would not require teachers to learn HTML, which is the language used to create Web documents. This was due to my belief that most of you do not want to learn code or how to use a new software package in order to create your website. There are many Web resources and books that are devoted to learning HTML quickly; several are even intended for children. Still, this will require time that you may not have. There are high quality software packages that you can use to create a website, but I didn't want teachers to have to purchase or learn how to use a new program either. I began by looking for a method to get our classrooms online quickly, inexpensively, and without having to spend much time learning new skills.

The reality is, that having a working knowledge of HTML offers a website author far more flexibility and creativity than using a template, which is what I demonstrate in this handbook. For those of you who wish to delve more deeply into creating your site, I have provided recommendations for other resources that will allow you to do so. No matter how you put your site together, I have devoted the second part of this handbook to outlining authentic ways for you to integrate technology into the curriculum by using your website. Once you are online, I think you'll agree that your initial time spent will have revealed new possibilities and will whet your appetite for using technology in the classroom.



Part 1:

How to Publish Your Classroom Website

As I began my search for a quick and easy method to develop a website, I compiled a list of my most important criteria. I didn't want to have to buy a domain name for my Web address or have to figure out how and where to store my webpages so that visitors to my site could access them. As I mentioned in the introduction, I didn't want either of us to have to learn about HTML or a new software package. I was looking for a template, preferably with an educational theme, so that all I had to do was insert my own content --- most of which already existed in files on my computer. Therefore, I decided that a webhosting service was the preferred way to get started on my first site. A webhost stores your webpages, makes them accessible through the Internet, and often provides webpage building tools. A quick Internet search resulted in many options; many webhosts exist and some are even free. However, I quickly learned that the free

webhosts are often quite limited in the options available to you. For instance, a free site may allow only one webpage or restrict access to the most appealing features; frequently, these webhosts hope to attract you to their site, and then convince you to subscribe to a paid plan once you realize that you can't build the site you had wanted. Also, I had been warned by several tech savvy friends that free sites have a tendency to disappear suddenly from the Internet, along with your entire website. I decided that in order to meet my (and hopefully your) needs, a webhosting service should offer the following options/capabilities:

- ✓ easy to learn process for entering and editing content
- ✓ education specific templates, clipart, and features
- ✓ ability to create at least ten webpages and a menu
- ✓ viewable by both PC and Apple/Mac users
- ✓ a calendar
- ✓ option to provide links to outside resources
- ✓ ability to upload existing documents and photos
- ✓ ability for students and parents to download documents
- ✓ less than $50 per year to subscribe

Next, once our basic sites exist, we should have the ability to upload animated graphics, video, and audio files. I like the idea of adding a webcam at some point, as well. A counter, which tallies visitors to your site, is a useful way to know if anyone actually visits your website. Ideally, the website would be ad free, which is usually the case with a paid subscription. Although I considered it

optional, I really like the fact that some sites offer tools for creating WebQuests and blogs. Another plus with many webhosts is that they offer a 30 day free trial period in which you can build your site and see if you like it before you have to pay.

In choosing a webhost for your website, usually you do not get to choose your domain name, such as

Zimmerer@Gillaspie.edu

Instead, your name will be tucked behind the webhost domain name as in

teacherweb.com/CO/GillaspieAcademy/AngieZimmerer

and accessed by the following URL:

http://teacherweb.com/CO/GillaspieAcademy/AngieZimmerer/index.html

which makes for a long string of characters! The fact is, visitors to the two websites that I developed can either bookmark the URL after they type it in for the first time, or better yet, enter the site by accessing it on the homepage of the webhost by searching for me by name. I didn't consider this to a be a problem. However, if it is important to you to choose your domain name, some webhosts will allow you to pay extra and purchase one.

After I experimented with several webhosts, I decidedly preferred the ones that cater specifically to the needs of educators. I chose two different webhosts to create my website, in order to compare and contrast them. In Part 1 of this handbook, I explain how you can use either one to create your own website, and include illustrations of my own webpages for you. At the publishing of this

handbook, both sites will be online for viewing. However, by the time you read this handbook, they may no longer exist. You will though, assuming the webhosts stay in business, be able to view their demonstration websites.

One detail that needs to be highlighted at this point is that you will want to check in with your principal and/or district office to see what guidelines they have established for classroom websites. Some districts already have an account with a webhost, which will determine where you build your site. Other districts, such as Boulder Valley School District in Boulder, Colorado, require that all school and teacher websites be stored on their in-house servers. This means that you will need to develop your website using a website design package such as Microsoft FrontPage or Adobe Dreamweaver. It will take a little time to learn the software, but I understand that both products are easy to use once you do. Your district or school may already own the software. If you're adventurous, you might decide to delve into learning HTML, which is beyond the scope of this handbook. In any case, make sure that you will be allowed to use an out-of-district webhost before you spend the time developing your site at one.

It is equally important for you to review the technology guidelines established by your district so that you will know what is and is not permitted on your website. Schools and districts will typically have a policy where parents must give written permission for their child's photo to be published in any school or district publication, including those that are electronic. Your district may also have a policy that prohibits publishing student work that identifies that student as the

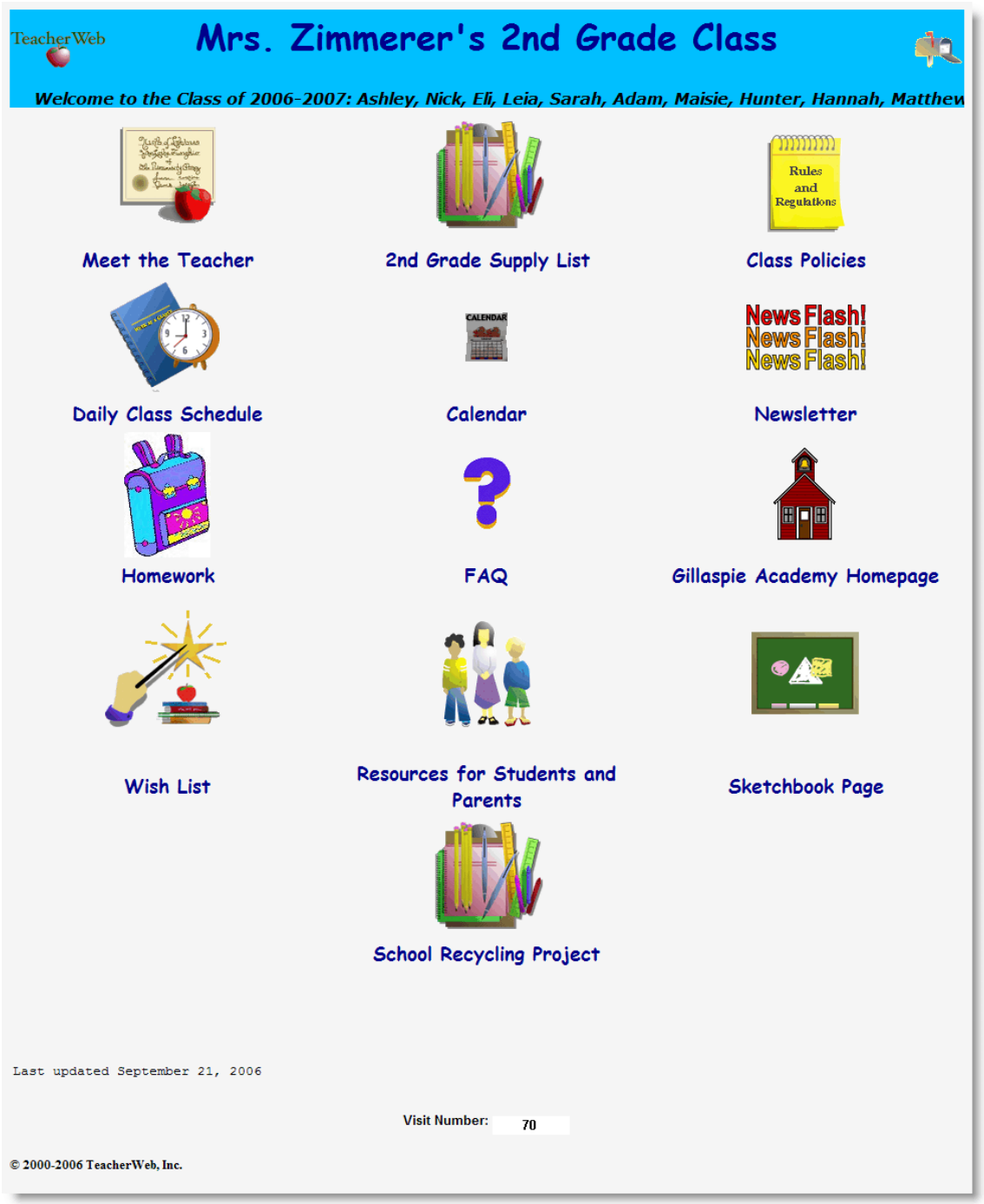
author. In most buildings, the principal will want to review your website before you publish or advertise it.

The other reality that I would like to acknowledge is the perpetual shortage of time for teachers. Some of you are undoubtedly thinking, "I just don't have time for this!", or "OK, so after I get this website up and running, when am I going to have time to maintain it?" Fair enough. As a fellow teacher, I understand your concerns. Therefore, I thought about this dilemma as I created each page of my own website. Some of our pages will need to be created only once, such as Class Supplies or Meet My Teacher. Therefore, those pages can be used year after year with minimal to no changes. As for pages that need frequent updating, such as a calendar or a newsletter, you can get in the habit of creating these changes once -- directly on your website. Don't type out a newsletter and then transfer it into your website; type it into the website and then print out any hard copies that you need. A properly maintained website should not require more than a few minutes per day or week. If you are fortunate enough to have parent volunteers, you may be able to assign updating duties to one of them. Do you have students that could add content? This could qualify as an enrichment activity.

OK then. Let's get started with that website! You might find it helpful to sit at your computer so that you can log onto each webhost as I lead you through the steps of creating your own website. I found that both of these webhosts provide a reasonably comprehensive help page for users. In addition, they offer a

product tour and demonstration of how to enter and edit the content of your pages. Because of this, I will limit my explanation to getting you started, showing you my own sites, and offering a few tips that will save you time when you begin and maintain your site. I would suggest that you first browse through the illustrations of my webpages as they appear at the two webhosts on pp. 44 & 53-65 and pp. 66 & 76-84 in order to get a feel for which format you prefer. Then you can begin immediately in the appropriate section of this handbook as you begin your website. Or, because you can try both webhosts for 30 days, you might want to open a trial account with each in order to decide which website you prefer.

TeacherWeb



This is the homepage of my website as hosted by TeacherWeb.

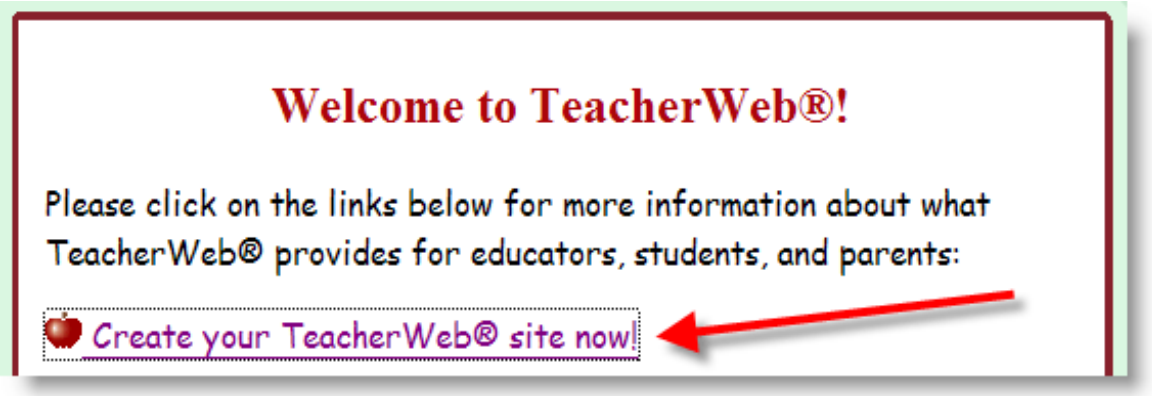
The first webhost that we'll take a look at is TeacherWeb. As you can see from the illustration of my homepage, the site map is laid out in icons. By clicking an icon, the user is taken to the webpage indicated by the accompanying label. You have the option here of displaying text, a graphic, or both as shown on my homepage above. You may choose your own graphics from the TeacherWeb library, or upload other graphics or photos. This style of page is the trademark of this webhost, although they do offer the choice of showing a more typical navigation menu along the side of the page. Numerous options are available for your webpages, including:

- ✓ text formatting
- ✓ the ability to turn graphics, photos, and images into live links
- ✓ tables and schedules
- ✓ a calendar page
- ✓ a Frequently Asked Questions (FAQ) page
- ✓ a links page - ideal for resources related to the curriculum
- ✓ grades pages that parents or students can access with a password
- ✓ response pages where visitors can submit information or take a test
- ✓ slate pages where students can use the mouse to draw images
- ✓ gallery pages to display photos
- ✓ an email distribution list associated with the NewsFlash page
- ✓ a word search generator and
- ✓ a template to create WebQuests.

The yearly fee for hosting your website at TeacherWeb is $27, and they offer a 30 day free trial where you can try before you buy. Although they don't advertise "unlimited pages", you can add a large number of webpages – probably much more than you'll ever need. I did find that there were some features unavailable to the trial subscriber such as: uploading graphics, photos, or music to the webhost. However, I feel that I was able to build a satisfactory website with the tools available to me during the trial period.

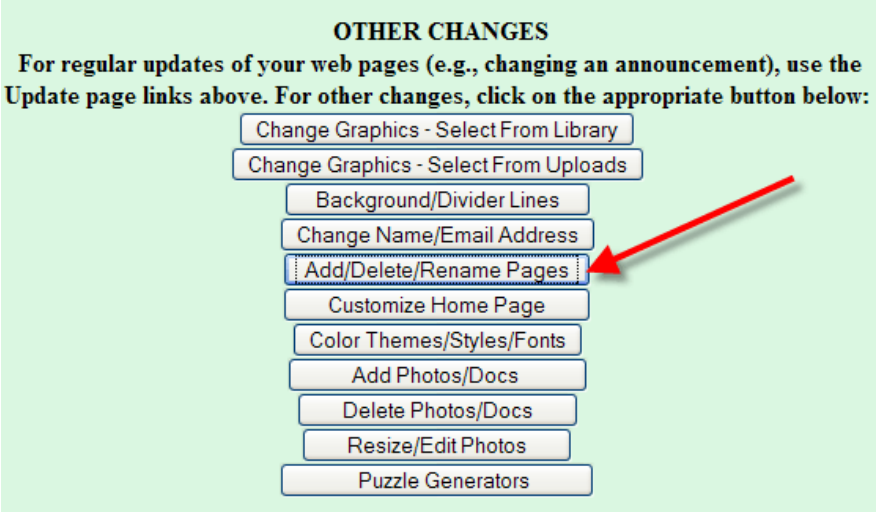
Let's walk through the process of setting up your own website. First, go to TeacherWeb's homepage at http://www.teacherweb.com/ . Next, click here:

The next page has quite a few links to product tours and information, some or all of which you may wish to read before you click here:

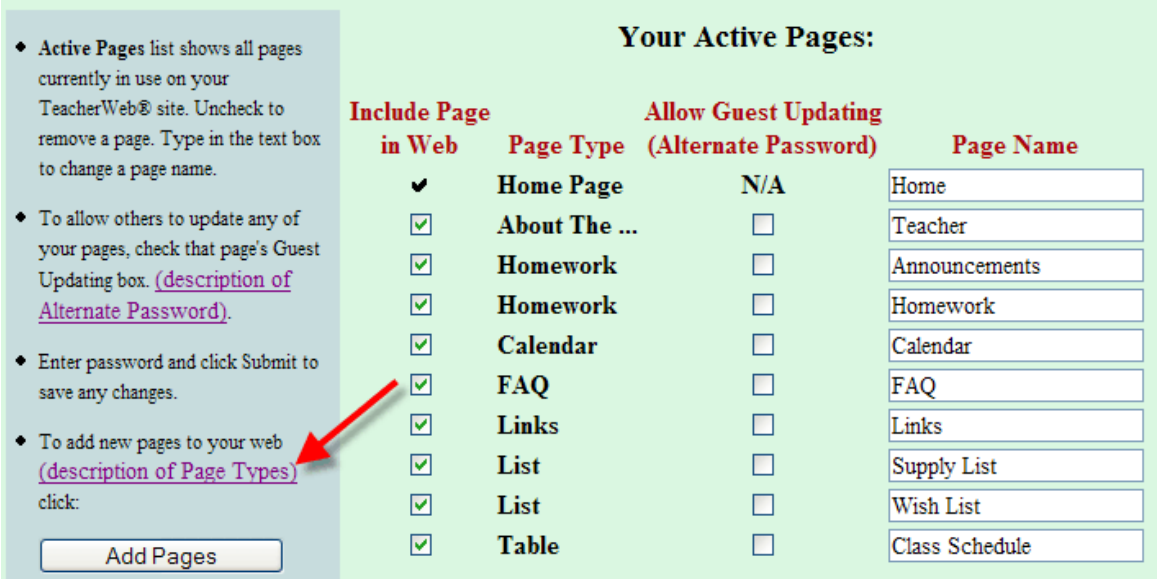


At this point, you may read about the payment options and sign up for a free trial. Once you have entered the required information, you will be taken to a page where you will choose a customizable template, color theme, and page dividers. You have many choices here, with the ability to preview them. Once you make your selections and enter in a password which gives you access to edit your website, you will go to a page that you are asked to print for future reference. This page explains how you have two page dividers on each of your webpages (excluding your homepage). Page dividers are not only attractive, but they serve a critical function. You will click on the top page divider when you want to update individual webpages, and you will click on the bottom page divider to make changes to the homepage or to the entire website. Now, click on the link to your website near the top of the page and you will be taken to your homepage. You've done it! Here is the start of your first website!

Now you need to decide what content you would like to have on your site, as well as the page types. Although you can always make changes later, it makes sense to review the pages on your default template and make any changes before you enter your content. Some page types are designed for basic text entry only, while others are designed for more versatility. Simply click on any icon to go to that webpage, and then click the bottom page divider to go to TeacherWeb's Update Index Page. You'll want to familiarize yourself with the options available here, then scroll down to "Other Changes" and click here:



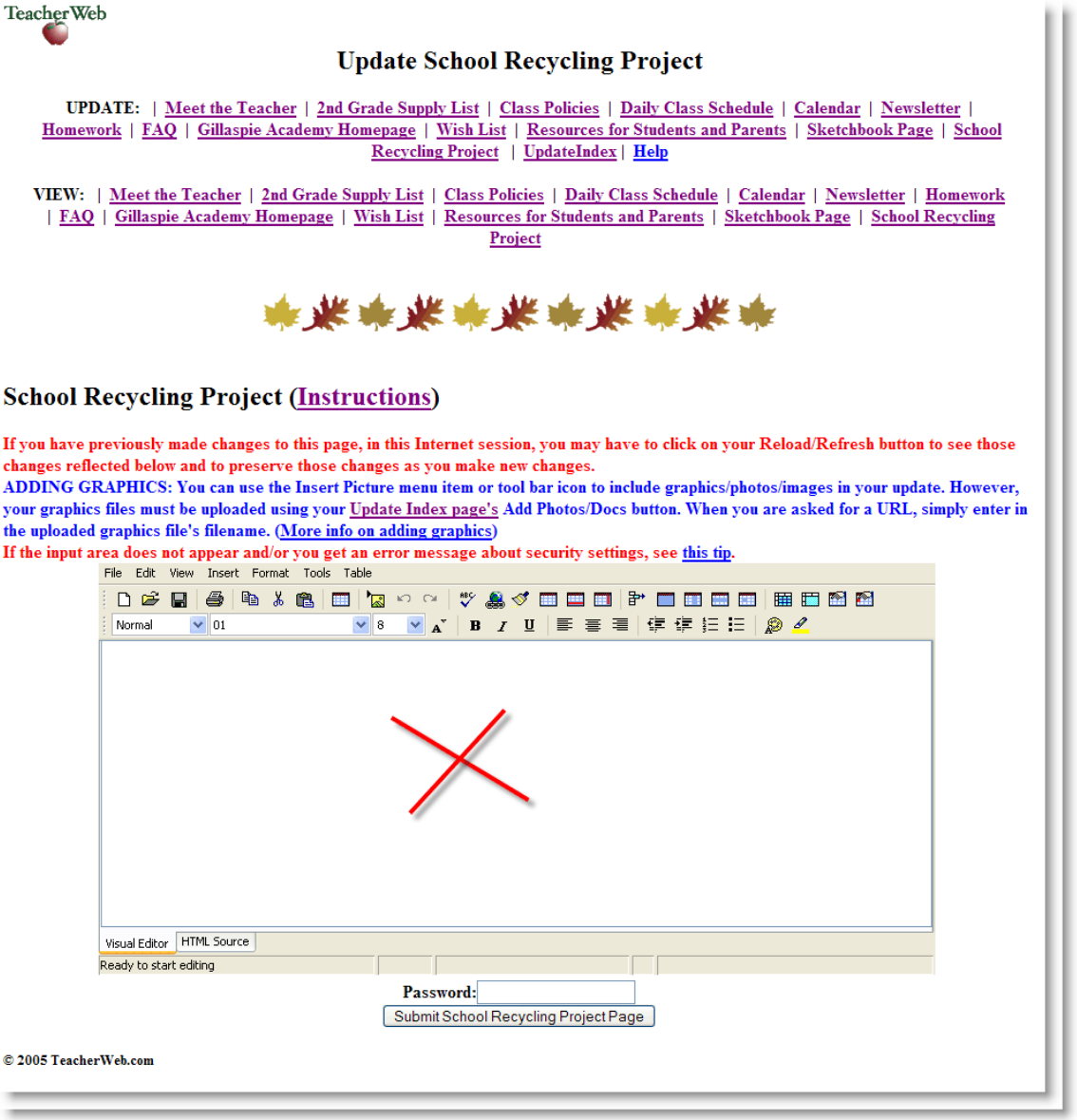
Then, click here to view the different choices that you have for your webpages:



For my purposes, I found that the All Purpose Page allowed me to type or paste in the information that I desired for most pages. The other options will allow you to have a calendar, tables, lists, links, photos, and specialized functions such as the slate pages or newsflash. Once you return to the Add/Delete/Rename pages, you can decide whether you need to make changes to the default page types. This is also where you can rename each page if you want to name them something different than the default. You may return to this page at any time to make changes, so don't worry about getting it perfect at this time. **In order for your changes to take effect in editing mode, it is essential that you save before you leave the page.** Just type in your password where prompted at the bottom of the page and click "Submit Page Changes". I found that I could save a little

time here by clicking "OK" when asked by the browser whether I wanted it to remember my password when at this site.

Now you are ready to begin adding your content to the various webpages. Click the icon for the page on which you would like to enter content. Next, click on the top page divider to go into editing mode. Here is an All Purpose webpage ready for content:



To enter your content into the editing frame (see the red X), you can type, copy and paste from elsewhere, or upload an existing document. The help menu suggests that if you have the option to do so, you may want to convert uploaded files to HTML so that they can be read directly on the webpage. Otherwise, your website visitor will click a link and the document will open in another window. Again, once you are done entering your content, you'll need to enter your password and submit your changes.

I found that with a little experimentation and the use of the help menus that soon I was able to put together a website that included all of the information that I'd want to convey to students and parents. Although different webhost templates will require you to learn your way around, once you get started you should find that updates are quite painless. After you publish your website, you can add more content and features as interest or needs surface. My goal is to help you get your site up and running within 2 hours, without getting too technical. In the event that you encounter technical limitations or problems that the FAQ do not address, you can send an email to TeacherWeb from the information page (accessed from the homepage) or at:

http://teacherweb.com/Intro.htm

On the following pages, you will find the webpages that I created with TeacherWeb. The long screens show all of the content on a page where the user needs to scroll down in order to view everything. These pages may give you some ideas for the type of information that you would like to include on your

website. You can also gather excellent ideas by browsing the Web for other classroom websites using the search terms: "Teacher Websites" or "Classroom Websites".

TeacherWeb

Mrs. Zimmerer's 2nd Grade Class

Meet the Teacher

NAME: Mrs. Zimmerer

SCHOOL: Gillaspie Academy

CLASS: 2nd Grade

SCHOOL PHONE: 303-123-4567

About The Teacher

My name is Angie Zimmerer, and I have been teaching 2nd grade for 3 years. I love it! This is such a great, curious age and I am constantly learning things along with my students.

I'm married to "Mr. Z", and have two children in school, ages 10 and 12. We live in Boulder.

I am a native of Colorado, and have attended Colorado College, CU-Boulder, and Regis University. I used to teach high school science and math, until I decided to stay home for a few years to raise my children. While I was home, I decided that I really wanted to teach again, but in a classroom with younger children. So... began the process of learning to be an elementary school teacher.

When I'm not at school, I spend time helping my own children with homework, surfing the Internet and learning more about making websites, gardening, reading, quilting, riding my mountain bike, and skiing. Although my husband is my primary technical support guru, sometimes I actually teach him something new!

MyTeacherWeb

Last Modified: Thursday September 14 2006

TeacherWeb

Mrs. Zimmerer's 2nd Grade Class

2nd Grade Supply List

- 1 box crayons, 24 count
- 2 Pearl pencil erasers
- 1 pair pointed Fiskar scissors
- 3-ring binder, 1" diameter, hard cover
- 1 box fine tipped markers, colored, 8 count
- 4 glue sticks
- 1 box Crayola colored pencils, 24 count, sharpened
- 1 box Prang watercolor paints, 16 count
- 2 black sharpies
- 1 box #2 pencils, 24 count, sharpened
- 2 plastic folders, with pockets, no holes
- 2 paper folders, with pockets, with holes
- 2 boxes of Kleenex tissues
- 2 rolls 3M brand scotch tape, ¾" wide

MyTeacherWeb

Last Modified: Thursday September 14 2006

TeacherWeb

Mrs. Zimmerer's 2nd Grade Class

Class Policies

Virtue of the month for September: Honesty

Mrs. Zimmerer's 2nd Grade Class Rules

1. Listen to the teacher and follow directions the first time.
2. Keep hands, feet, and mean words to yourself.
3. Raise your hand to speak.
4. Work quietly to respect others' worktime.
5. Be quiet in lines, hallways, and restrooms.
6. Always be neat in your work.
7. Do your best - even if it's hard!

MyTeacherWeb

Last Modified: Thursday September 14 2006

TeacherWeb

Mrs. Zimmerer's 2nd Grade Class

Daily Class Schedule

From-To	Monday	Tuesday	Wednesday	Thursday	Friday
8:30 - 9:00	Morning Routine	Morning Routine	Morning Routine	Morning Routine	Morning Routine
9:00 - 10:00	Math	Math	Math	Math	Math
10:15 - 10:30	Recess	Recess	Recess	Recess	Recess
10:30 - 11:15	Reader's Workshop	Reader's Workshop	Reader's Workshop	Reader's Workshop	Reader's Workshop
11:15 - 12:00	Writer's Workshop	Writer's Workshop	Writer's Workshop	Writer's Workshop	Writer's Workshop
12:00 - 12:45	Lunch	Lunch	Lunch	Lunch	Lunch
12:45 - 1:00	Read Aloud	Read Aloud	Read Aloud	Read Aloud	Read Aloud
1:00 - 1:30	Music	Computer	Music	Art	Music
1:30 - 2:00	P.E.	Computer	P.E.	Art	P.E.
2:00 - 2:50	Science/Social Studies	Science/Social Studies	Science/Social Studies	Science/Social Studies	Class Meeting
2:50 - 3:00	Jobs and Go Home!	Jobs and Go Home!	Jobs and Go Home!	Jobs and Go Home!	Jobs and Go Home!

Printable Version

MyTeacherWeb

Last Modified: Friday September 15 2006

TeacherWeb

Mrs. Zimmerer's 2nd Grade Class

Calendar

August

25	Friday	First Day of School

September

4	Monday	Labor Day - NO SCHOOL
13	Wednesday	Back to School Night - 6:30 - 8:00
15	Friday	All School Assembly 9:00 a.m.
19	Tuesday	Field Trip to Downtown Boulder

Printable Version

MyTeacherWeb

Last Modified: Friday September 15 2006

TeacherWeb

Mrs. Zimmerer's 2nd Grade Class

Newsletter

April 14, 2006

Dear Second Grade Parents,

We are back in the swing of our regular routine after spring break. The children are doing well ◆ I can tell they are getting close to third grade! They have completed two major writing projects recently, and the handwriting, quality of composition, and use of descriptive language are impressive! These are on the bulletin boards ◆ stop by to see them if you get a chance.

Reminders:

If you have not done so yet, please submit your $7 check for the owl program tee-shirts as soon as possible, made out to Gillaspie Academy.

The Second Grade Owl Program dress rehearsal is on Tuesday at 1:00 p.m. The evening program is at 7:00 p.m.

The new Scholastic book orders are due Thursday, 4/20. This will be the last order of the year, so think about stocking up on some great summer reading!

NO School on Friday, 4/21, due to staff development.

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New homework: I have sent home a packet for your child to practice capital letters in cursive. I suggest they work 5-10 minutes a night. Please return when complete.

Have a super weekend!

Angie Zimmerer

MyTeacherWeb

Last Modified: Friday September 15 2006

TeacherWeb

Mrs. Zimmerer's 2nd Grade Class

FAQ

Frequently Asked Questions

Why does my child need 48 pencils?

Not only will your child keep pencils in his/her own desk, but the class maintains a jar of sharpened pencils for so that the children don't need to sharpen during quiet times.

Back to Top

Where do I send lunch money?

Have your child hand it to me in the morning, and I'll send it to the office.

Back to Top

When can I begin volunteering in the classroom?

I welcome volunteers, but don't begin having them come in until the beginning of October. I'll make the sign-up sheets available on Back to School Night.

Back to Top

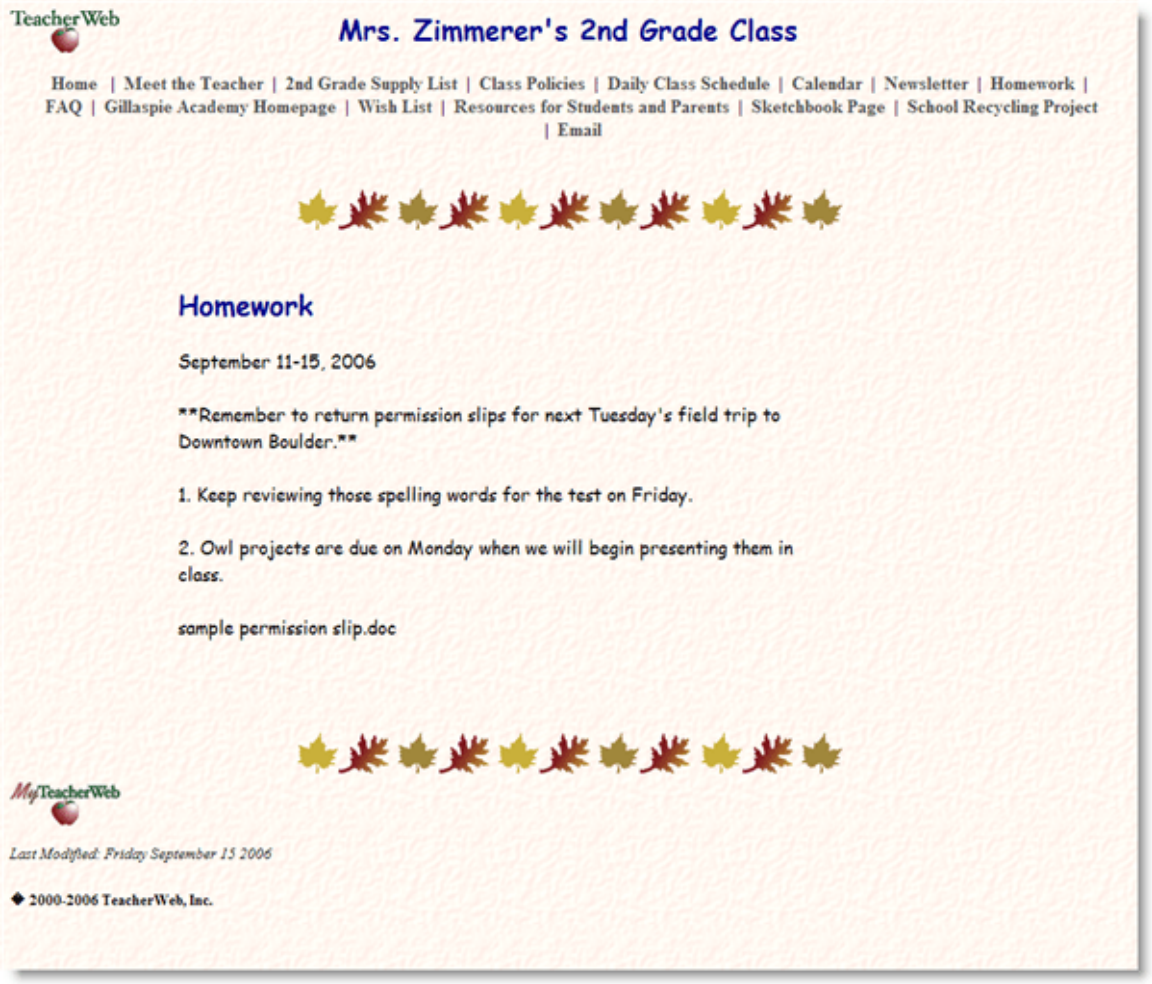
Why does my child have to dissect an owl pellet?

This lab activity is an amazingly effective demonstration of the predator-prey relationships we learn about in our Owl Unit. Most children remember this activity for years to come.

Back to Top

MyTeacherWeb

Last Modified: Friday September 15 2006



TeacherWeb

Mrs. Zimmerer's 2nd Grade Class

Home | Meet the Teacher | 2nd Grade Supply List | Class Policies | Daily Class Schedule | Calendar | Newsletter | Homework | FAQ | Gillaspie Academy Homepage | Wish List | Resources for Students and Parents | Sketchbook Page | School Recycling Project | Email

Homework

September 11-15, 2006

Remember to return permission slips for next Tuesday's field trip to Downtown Boulder.

1. Keep reviewing those spelling words for the test on Friday.

2. Owl projects are due on Monday when we will begin presenting them in class.

sample permission slip.doc

MyTeacherWeb

Last Modified: Friday September 15 2006

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Gillaspie Academy Homepage

MyTeacherWeb

Last Modified: Friday September 15 2006

TeacherWeb

Mrs. Zimmerer's 2nd Grade Class

Wish List

We are always looking for additional supplies and things to furnish our classroom. If you would like to donate any of these items, we would greatly appreciate it. Second-hand items are welcome.

Items with a check mark have already been received. Thank you for your support!

		Magic Tree House books
X	3	small bean bags
	1	new pencil sharpener - hand crank
	1	area rug - 8' x 10' or large oval

MyTeacherWeb

Last Modified: Friday September 15 2006

TeacherWeb

Mrs. Zimmerer's 2nd Grade Class

Resources for Students and Parents

These sites are excellent places to find information related to our studies this year. Most are appropriate places to find extensions of what we are learning in school. Please let me know if you find any broken links.

OWLS
@

Includes interactive activities about owls
Kid Wings

Very extensive source of information
Owling.com

MATH
@

Enter in your data and choose the type of graph you would like to see.
Create a Graph

Inactive math games - super place to practice math facts
Fun Brain

PARENT RESOURCES
@

Information and activities to help you support your child's reading progression
Learning to Read

Over 20,000 web pages on mny subjects. Please email me for the school password
Enchanted Learning

Other Resources

Our literacy library has both decodable and leveled texts available for check-out.
The school library has a wonderful collection of both owl, and weather books that will complement our unit studies this year.

Search

Yahooligans! - Search Engine Designed for Kids. Sites selected by YAHOO! Inc.

Search

MyTeacherWeb

Last Modified: Friday September 15 2006

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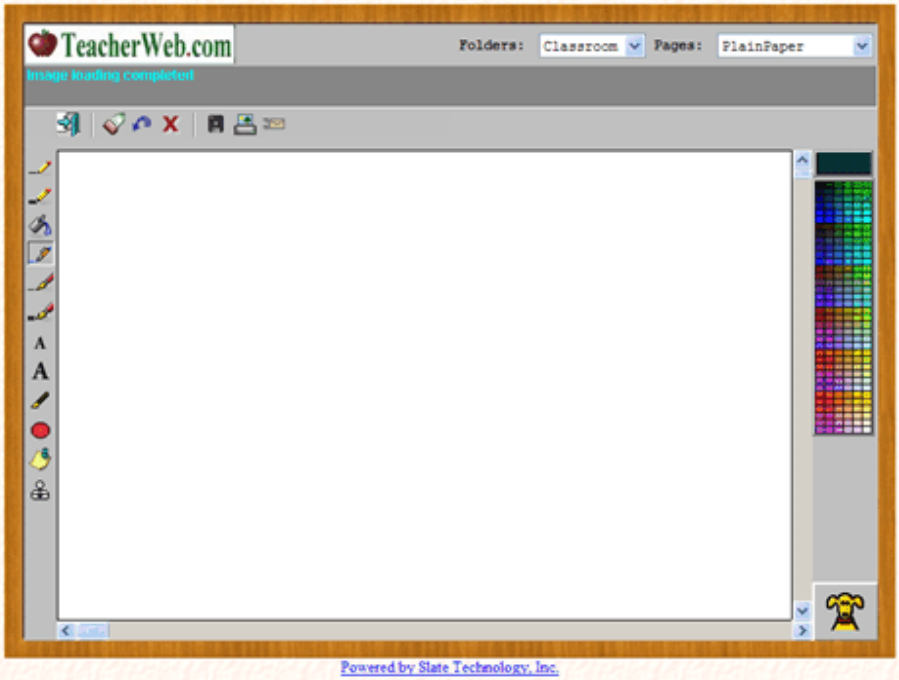
Sketchbook Page

Slate Help

(If the Slate canvas and tool bar do not appear below, you may need to add Java to your workstation by going to http://www.java.com and clicking on the "Get It Now" button.)

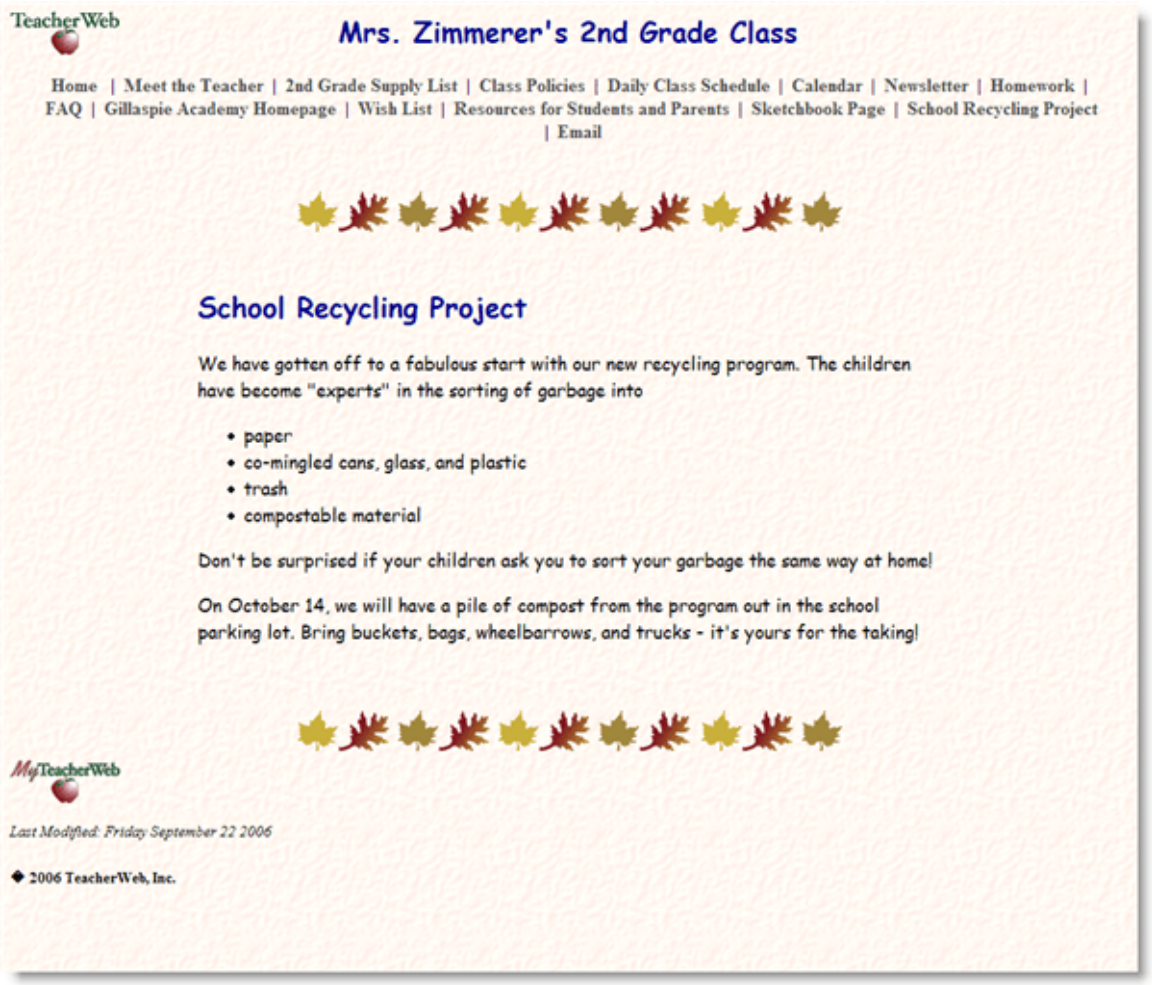
Welcome to the Sketchbook! You may experiment with the tools, save your work, email it to me, and even print it out! Have fun - I look forward to seeing what you do. Soon I will add some worksheets and puzzles for you to complete online.
Mrs. Zimmerer



Powered by Slate Technology, Inc.

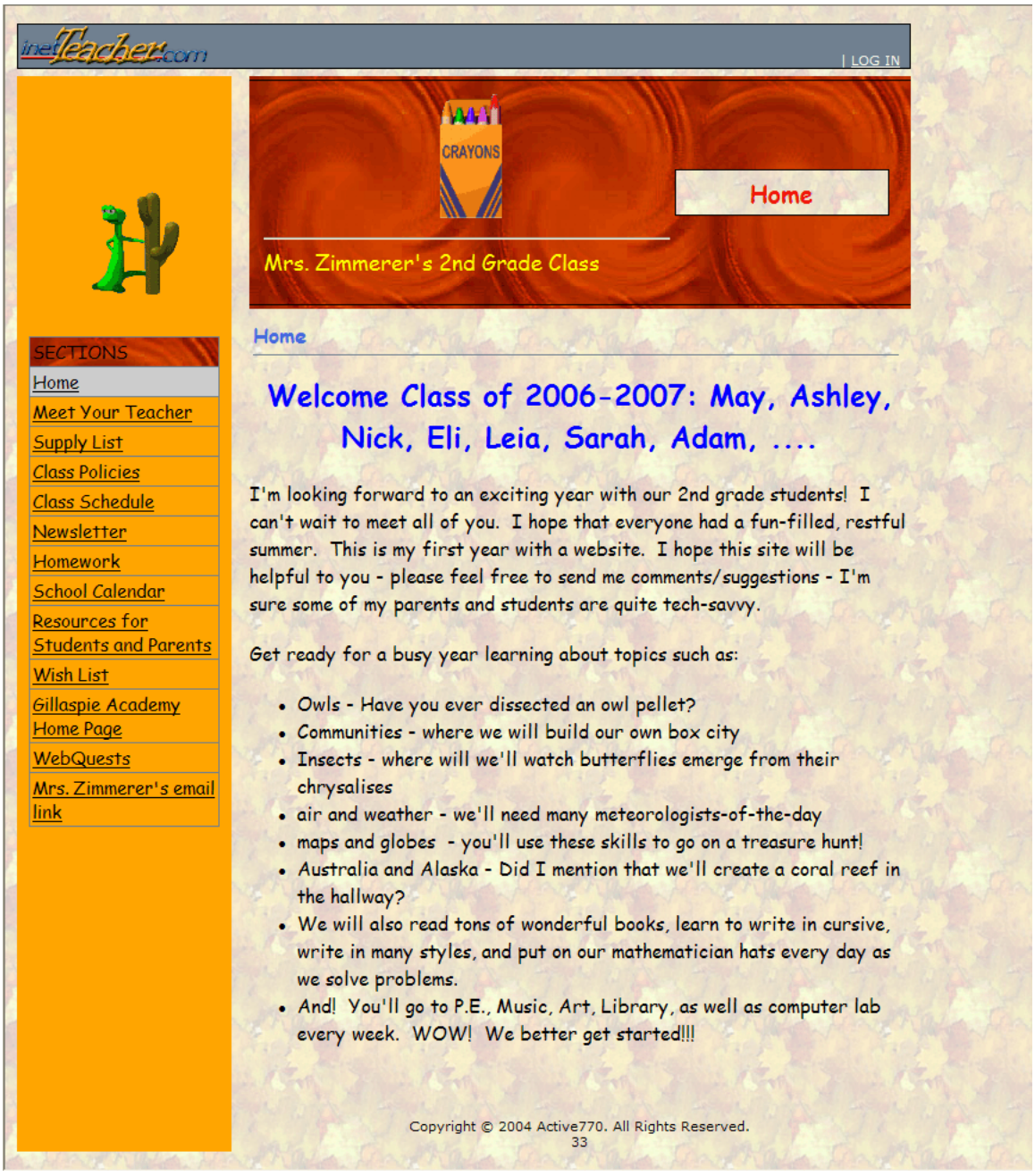
MyTeacherWeb

Last Modified: Thursday September 21 2006



Finally, visitors to your site can send you email by clicking on the mailbox or graphic of your choice -- found on the upper corner of your homepage:

inetTeacher



This is the homepage of my website as hosted by inetTeacher.

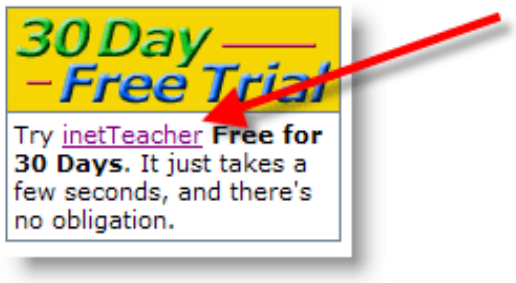
The other webhost that we'll look at is inetTeacher. As you can see from my homepage, the template from inetTeacher is a more typical layout, where the navigation menu is positioned to the side of the introductory information. This same menu is displayed on each webpage as well. With inetTeacher, you get to choose the color scheme and background, as well as the photos or graphics when customizing your webpages. Numerous options are available for your webpages, including:

- ✓ an unlimited number of sections and pages
- ✓ the ability to upload graphics and photos
- ✓ access to thousands of inetTeacher images, many animated
- ✓ the ability to upload all types of multimedia files including PDF, Powerpoint, music and movies
- ✓ two different editing systems
- ✓ outside links control feature – allows you to add links to each page
- ✓ calendar page where entries can roll over to the following year
- ✓ ability to password protect individual sections or the entire website
- ✓ inetGrades which students or parents can access by password (an additional fee applies for this feature)

The subscription price for inetTeacher is $24.95 per year, with the option of adding inetGrades for another $24.95 annual fee. They also offer a 30 day free trial where you can try the service first. Unlike TeacherWeb, I did not encounter any features that were unavailable to the trial subscriber. I believe that

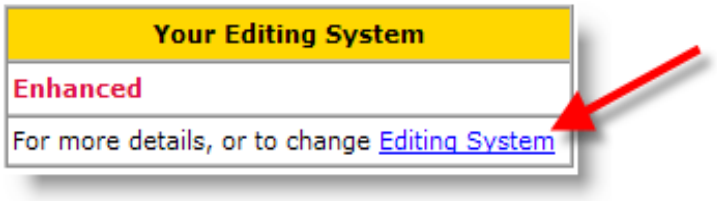
even though this webhost offers fewer features than TeacherWeb, I was able to build a website that includes all of the essential functions identified at the beginning of Part 1. In fact, my experience was that inetTeacher was easier to master due to the fact that they offer fewer types of pages from which to choose; inetTeacher offers just informational, calendar, and grades pages.

Let's take a look at how you can create your inetTeacher website now. Open up a browser window at: http://www.inetteacher.com/default.aspx to access their homepage. Here, you can take a product tour and see a sample teacher website. When you are ready to open your trial or paid account, click here:

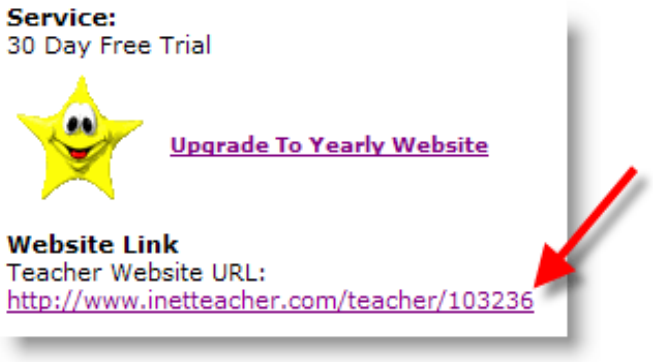


Choose which type of subscription you would like, and click "Continue". Fill in your contact information on the next page, and again click "Continue". You should print and/or save the next page, as it contains your user ID, website URL, and contact information for inetTeacher. At this point, you need to decide which editing system you would like to use, Enhanced or Standard. The default system is "Enhanced Editing System", which I find preferable because it allows you to see exactly how your website will appear as you make changes. **One drawback to**

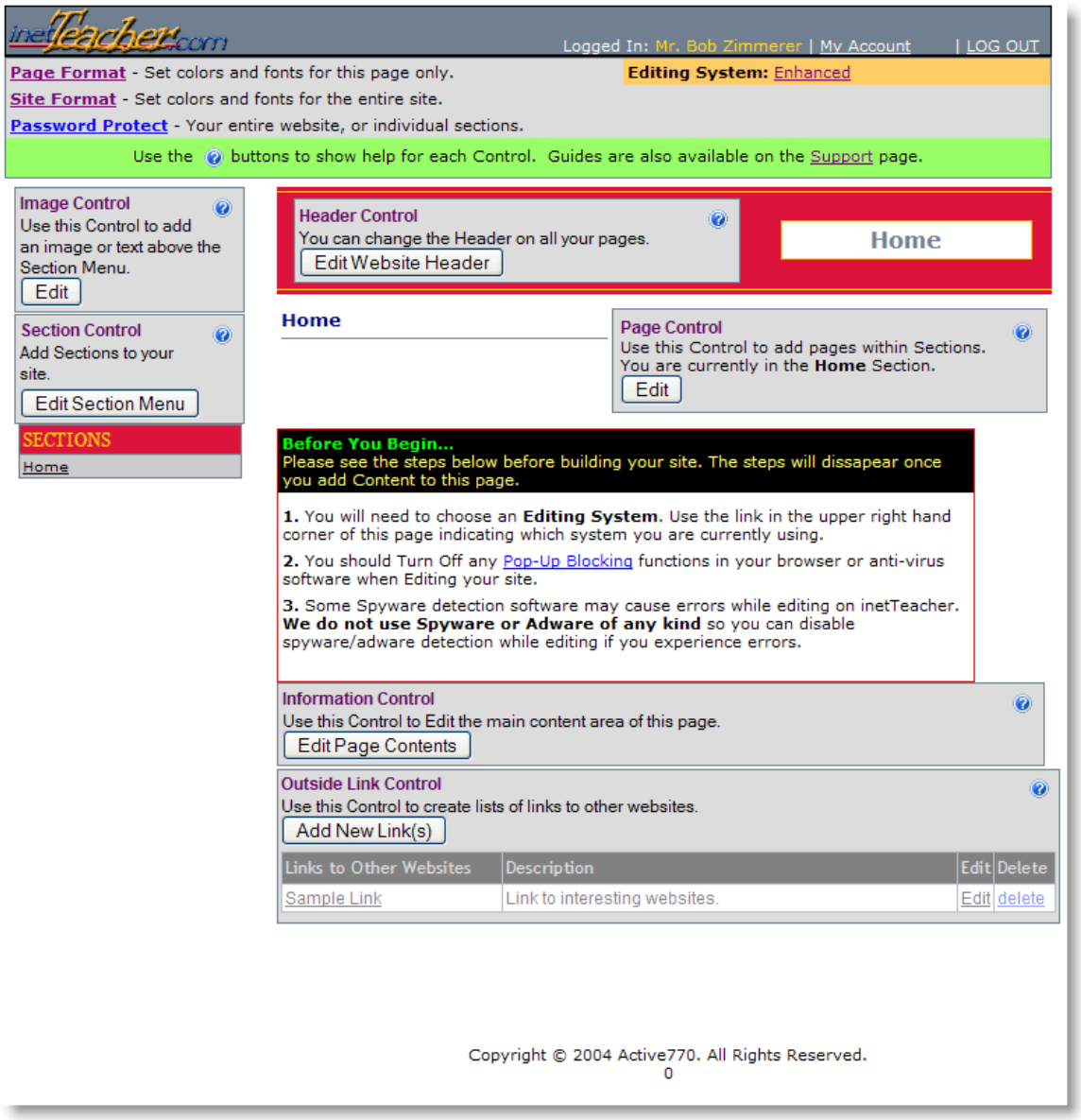
the "Enhanced Editing System" is that it does not work with Macintosh systems. However, you may prefer the "Standard Editing System" as it offers a simple user interface where you can quickly enter text without needing any word processor experience. Also, the "Standard Editing System" works with any browser. In order to see a comparison of the two editing systems, click here:



Once you have chosen your editing system, you can proceed to your new website by clicking here:

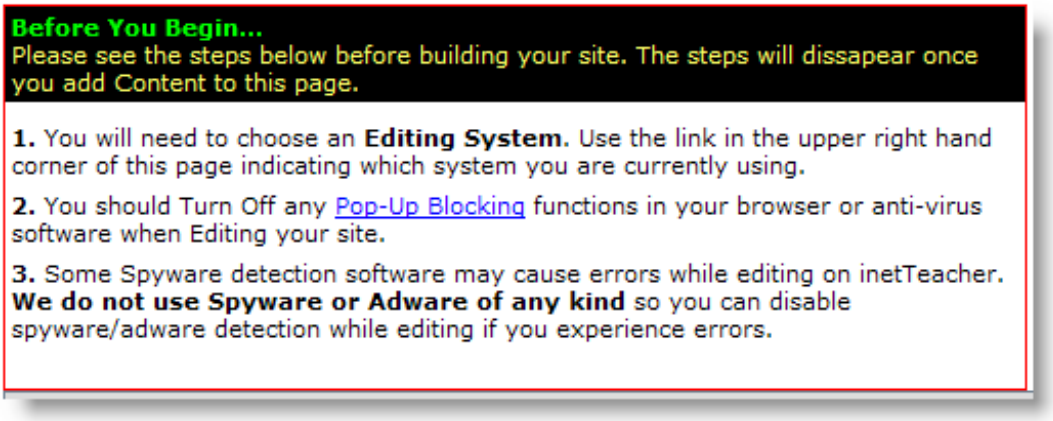


Now you should be taken to a page that looks like this:



Don't panic - even though this page may look complicated, you'll learn your way around in no time. Your website doesn't look like much at this point, because you still need to make the selections to format it. This is where it gets fun -- you get to be creative and make it yours.

You need to read the section in the middle of the page that looks like this before you begin. Note: You may find that you don't actually need to disable your Pop-up Blocking or Spyware detection programs when you are editing.



Now, the gray sections shown on your webpage indicate where you can edit select parts of the webpage. A good place to start is at the top:

This is where you will begin to customize your pages. If you begin by using the Site Format, your website will have a unified appearance with the same color themes and text fonts on every webpage. Any pages that you want to design with a different look than the rest of the site can be formatted using Page Format. This box is also where you will set passwords if you like. Just follow the directions to set your colors, backgrounds, and text fonts. When you are satisfied

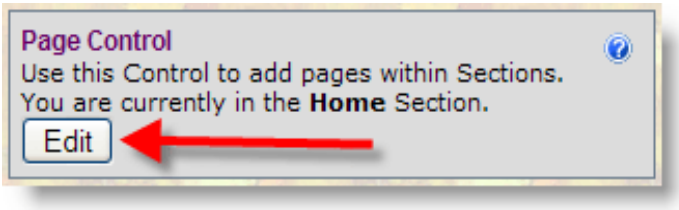
with your selections, click to return to your webpage. If you don't like what you see, you can return to the format editing pages at any time. When you return to your homepage, you should probably decide what sections you would like to have in your website. InetTeacher calls the links that you see displayed on each page's menu "sections". Each of these sections appears as an individual webpage, and can have unlimited webpages grouped under that section. Although your website may start out as one webpage per section, any section can be expanded to include other pages as well. This illustration may help to visualize the website organization:

The section titled Homework has a main page titled Homework, and three other linked webpages:

- ✓ Science Fair
- ✓ Spelling Lists
- ✓ Today's Homework

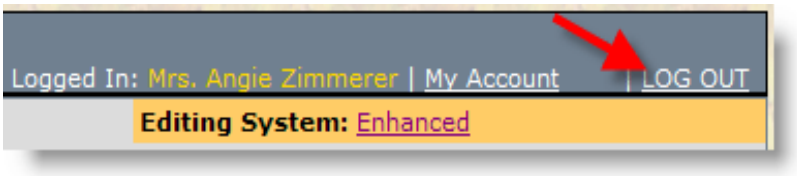
When the user clicks “Homework” on the main menu, the homework page will be displayed, and then there will be a drop down menu where other pages in the “Homework” section can be selected. This is how the drop down menu appears on the main Homework webpage:

To add pages to any of your sections, click here on the corresponding section page:



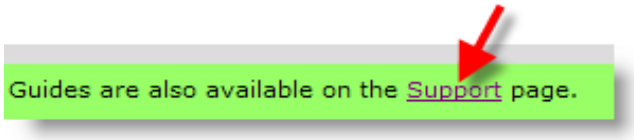
***Key things to note:

#1: If you wish to see what your website will look like to your visitors, you need to log out of editing mode:



#2: Whenever you are in editing mode, you will see these symbols sprinkled around, which are links to the help pages:

You can also access help by clicking here:



#3: You must remember to save your changes each time you change your content or settings.

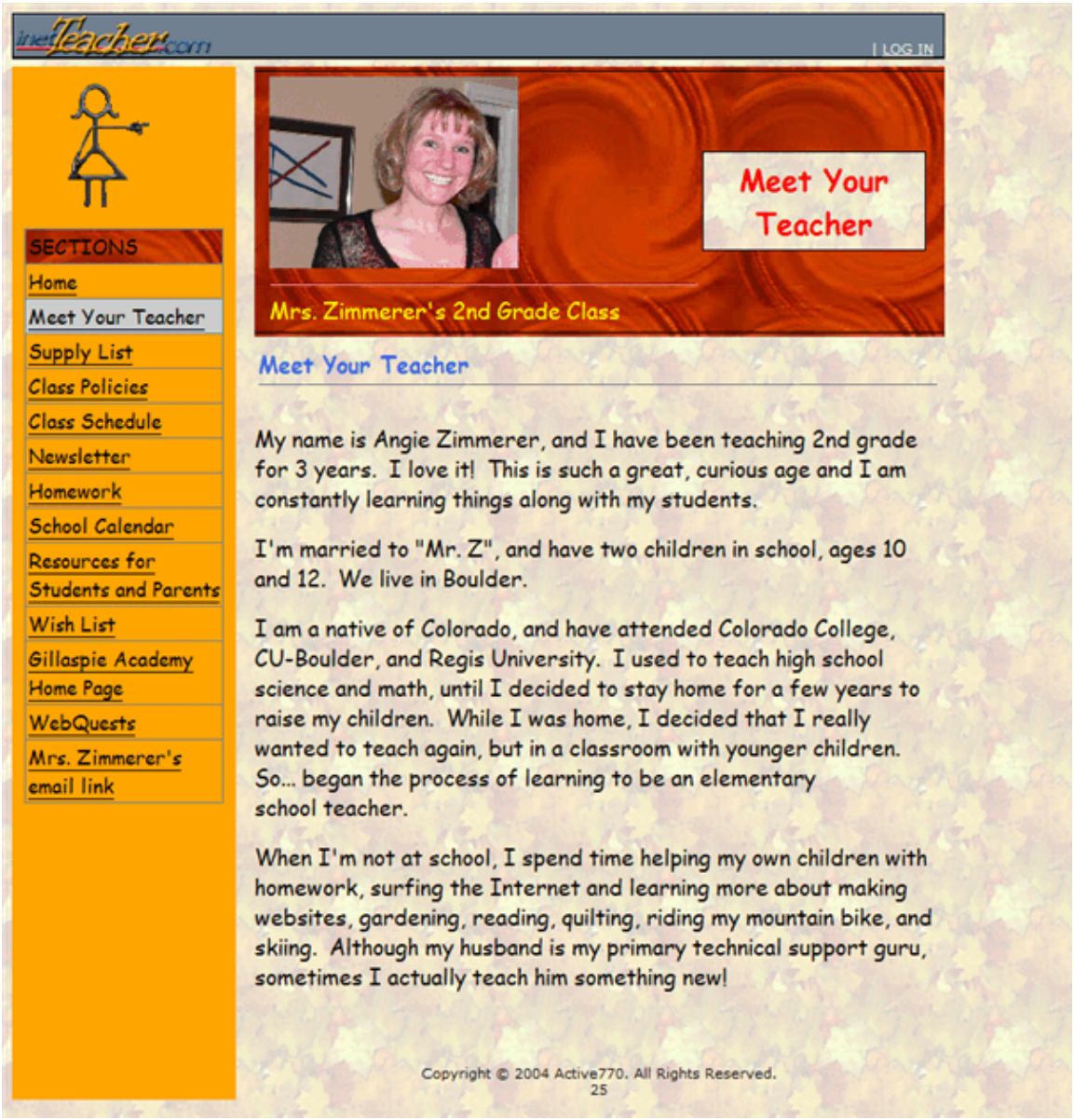
The rest of the gray editing boxes are provided for adding content, images, or outside links. Remember, you can always change anything you don't like. You can even change your colors, backgrounds, and graphics with the seasons. When

you are ready to add text, graphics, photos, or links, you'll see a menu like this in editing mode:

Move your cursor over the various icons to see what each function does. **In order to use the inetTeacher clickart, accessed with this icon:**

you must be working in Microsoft Explorer 5.5 or higher.

On the following pages, you will find the webpages that I created with inetTeacher. The long screens show all of the content on a screen where the user needs to scroll down in order to view everything. My pages may give you some ideas for the type of information that you would like to include on your website. You can also gather excellent ideas by browsing theWebfor other classroom websites by searching for "Teacher Websites" or "Classroom Websites".


LOG IN
SECTIONS
Home
Meet Your Teacher
Supply List
Class Policies
Class Schedule
Newsletter
Homework
School Calendar
Resources for Students and Parents
Wish List
Gillaspie Academy Home Page
WebQuests
Mrs. Zimmerer's email link
Meet Your Teacher
Mrs. Zimmerer's 2nd Grade Class
Meet Your Teacher
My name is Angie Zimmerer, and I have been teaching 2nd grade for 3 years. I love it! This is such a great, curious age and I am constantly learning things along with my students.
I'm married to "Mr. Z", and have two children in school, ages 10 and 12. We live in Boulder.
I am a native of Colorado, and have attended Colorado College, CU-Boulder, and Regis University. I used to teach high school science and math, until I decided to stay home for a few years to raise my children. While I was home, I decided that I really wanted to teach again, but in a classroom with younger children. So... began the process of learning to be an elementary school teacher.
When I'm not at school, I spend time helping my own children with homework, surfing the Internet and learning more about making websites, gardening, reading, quilting, riding my mountain bike, and skiing. Although my husband is my primary technical support guru, sometimes I actually teach him something new!
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| LOG IN
SECTIONS
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Resources for Students and Parents
Wish List
Gillaspie Academy Home Page
WebQuests
Mrs. Zimmerer's email link
Supply List
Mrs. Zimmerer's 2nd Grade Class
Supply List
2nd Grade Supply List
• 1 box crayons, 24 count
• 2 Pearl pencil erasers
• 1 pair pointed Fiskar scissors
• 3-ring binder, 1" diameter, hard cover
• 1 box fine tipped markers, colored, 8 count
• 4 glue sticks
• 1 box Crayola colored pencils, 24 count, sharpened
• 1 box Prang watercolor paints, 16 count
• 2 black sharpies
• 1 box #2 pencils, 24 count, sharpened
• 2 plastic folders, with pockets, no holes
• 2 paper folders, with pockets, with holes
• 2 boxes of Kleenex tissues
• 2 rolls 3M brand scotch tape, ¾" wide
Links to Other Websites
Description
School Supplies R Us
If you wish to purchase a pre-packaged set of supplies for the year, you may go to this site to do so. Ten percent of your purchase will go to the Gillaspie Academy PTO.
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| LOG IN
Class Policies
Mrs. Zimmerer's 2nd Grade Class
SECTIONS
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Gillaspie Academy Home Page
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Class Policies
Virtue of the Month
September: Honesty
Mrs. Zimmerer's 2nd Grade Class Rules
1. Listen to the teacher and follow directions the first time.
2. Keep hands, feet, and mean words to yourself.
3. Raise your hand to speak.
4. Work quietly to respect others' worktime.
5. Be quiet in lines, hallways, and restrooms.
6. Always be neat in your work.
7. Do your best - even if it's hard!
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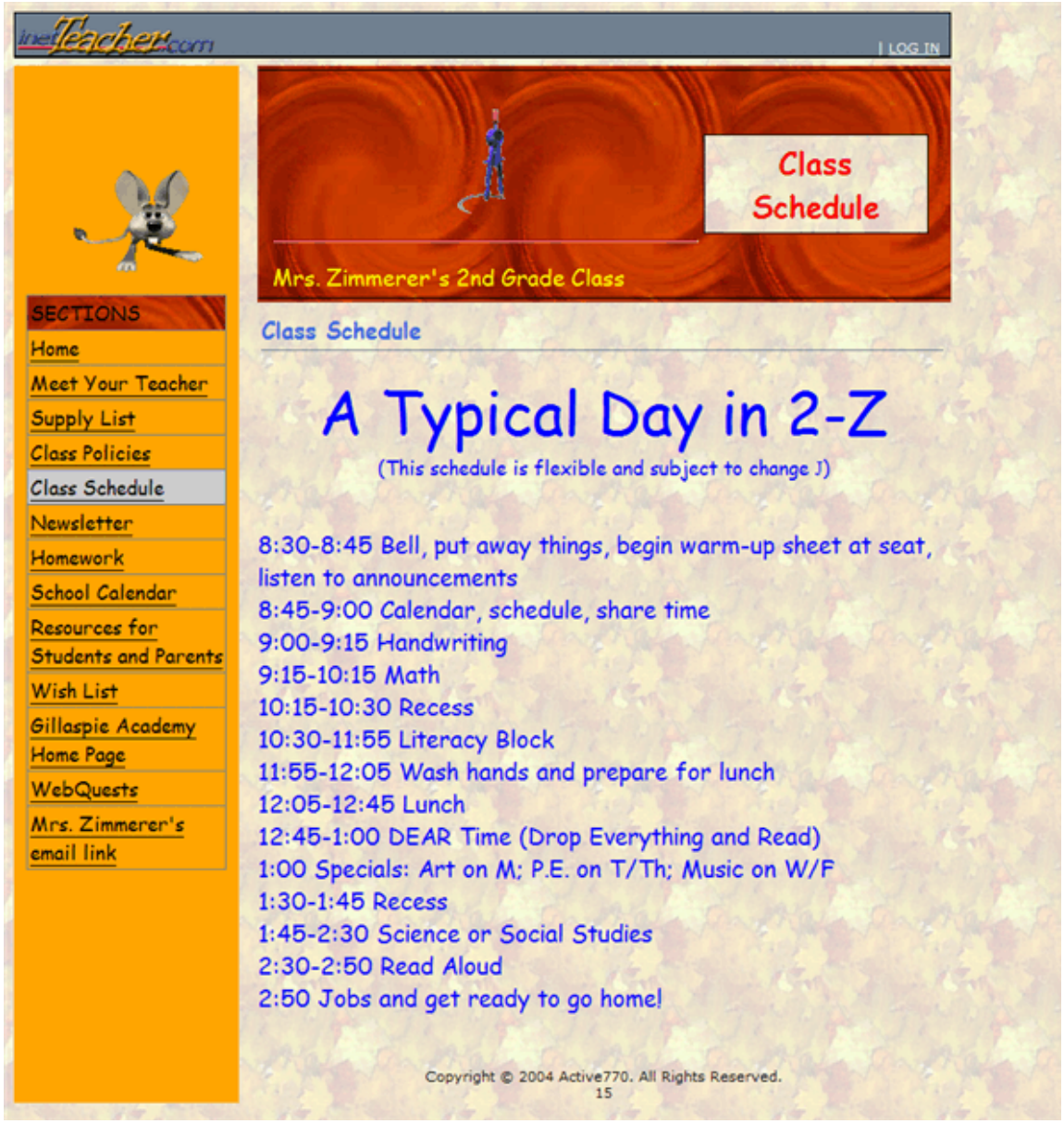
LOG IN
Class Schedule
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School Calendar
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Mrs. Zimmerer's email link
Class Schedule
A Typical Day in 2-Z
(This schedule is flexible and subject to change J)
8:30-8:45 Bell, put away things, begin warm-up sheet at seat, listen to announcements
8:45-9:00 Calendar, schedule, share time
9:00-9:15 Handwriting
9:15-10:15 Math
10:15-10:30 Recess
10:30-11:55 Literacy Block
11:55-12:05 Wash hands and prepare for lunch
12:05-12:45 Lunch
12:45-1:00 DEAR Time (Drop Everything and Read)
1:00 Specials: Art on M; P.E. on T/Th; Music on W/F
1:30-1:45 Recess
1:45-2:30 Science or Social Studies
2:30-2:50 Read Aloud
2:50 Jobs and get ready to go home!
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Newsletter

Mrs. Zimmerer's 2nd Grade Class

Newsletter

April 14, 2006

Dear Second Grade Parents,

We are back in the swing of our regular routine after spring break. The children are doing well – I can tell they are getting close to third grade! They have completed two major writing projects recently, and the handwriting, quality of composition, and use of descriptive language are impressive! These are on the bulletin boards – stop by to see them if you get a chance.

Reminders:
If you have not done so yet, please submit your $7 check for the owl program tee-shirts as soon as possible, made out to Gillaspie Academy.

The Second Grade Owl Program dress rehearsal is on Tuesday at 1:00 p.m. The evening program is at 7:00 p.m.

The new Scholastic book orders are due Thursday, 4/20. This will be the last order of the year, so think about stocking up on some great summer reading!

NO School on Friday, 4/21, due to staff development.

Second grade literacy assessment will begin during the first week of May. Please continue to read with your child in order to help him or her feel confident on "test day".

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Math: We began our study of fractions this week. Most children appear to have a good grasp of first grade standards concepts, so we are building on this. We focus on halves, thirds, and fourths. You can reinforce these concepts by demonstrating fractions at home – particularly in the kitchen.

Science: Your young ornithologists went on a bird watch out on the playground! They carefully observed, took notes in their science journals, and sketched the surprisingly diverse bird population. They also had a spectacular owl day last Friday, when they presented all of those amazing dioramas, posters, and stories. These projects were the result of hard work, thorough research, and enthusiasm. One staff person described them as the "best in years"! Excellent job second graders, and thank you to the parents for your support!

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New homework: I have sent home a packet for your child to practice capital letters in cursive. I suggest they work 5-10 minutes a night. Please return when complete.

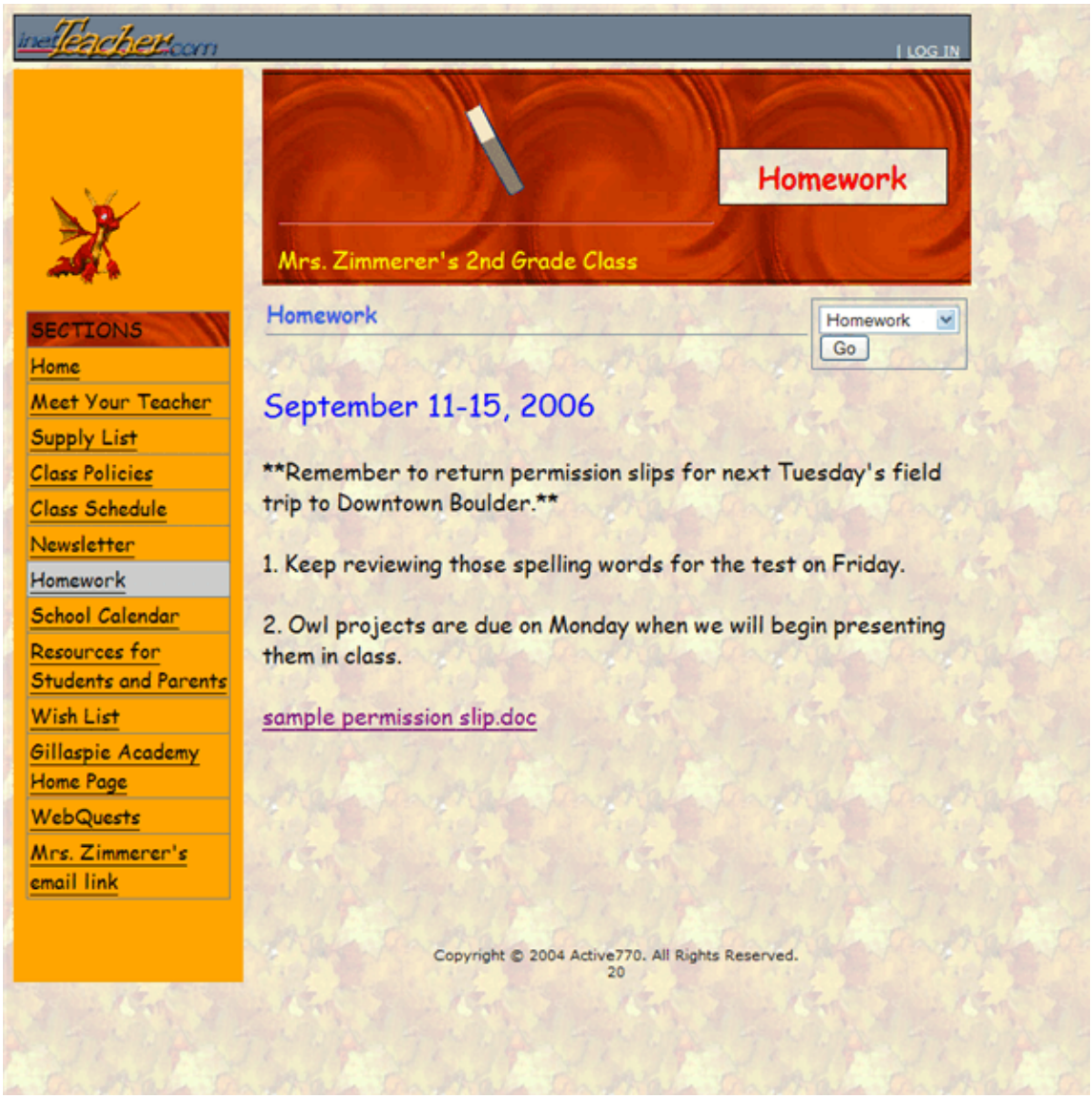
Have a super weekend!

Angie Zimmerer

Here are the 24 owls now decorating our room.

Who's that dressed up for Owl Day?

13


LOG IN
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Wish List
Gillaspie Academy Home Page
WebQuests
Mrs. Zimmerer's email link
School Calendar
School Calendar
Go
Monday, September 25, 2006
Select Calendar Dates to view event information.
August
September 2006
October
S M T W T F S
1 2
3 4 Labor Day NO SCHOOL! 5 6 7 8 9
10 11 12 13 Back to School Night -See above link for schedule. 14 15 All School Assembly - 9:00 a.m. 16
17 18 19 Field Trip to Downtown Boulder 20 21 22 23
24 25 NO SCHOOL! 26 27 28 29 30
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WebQuests

Mrs. Zimmerer's 2nd Grade Class

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Mrs. Zimmerer's email link

My Favorite Owl WebQuest

Title:_____

Name:_____

Group Name:_____

Date:_____

==========

1. Your Challenge:

Introduction – You have just received an official letter from Hogwarts. You know, the famous school where Harry Potter goes! Harry needs your help on a huge homework project. Hmmmm.... Hermione thinks he should try playing less Quiditch! Anyway... back to the challenge. Harry needs to collect information on a variety of owls, to find out which species are best suited to carry mail. He needs help from your entire class. Maybe we could take a class field trip to Hogwarts to take Harry our results!

The Challenge – You will each choose one species of owl to research on your WebQuest. Do research on the Internet to find the following information.

==========

2. Your Journey: Starting You Search

To get more information, visit the sites in the link section. To get even more information, use these key words with search engines:

Owls

Owl pellets

or type in the name of your owl

Links to Other Websites	Description
Enchanted Learning	
KidWings	
Owling.com	
The Owl Pages	

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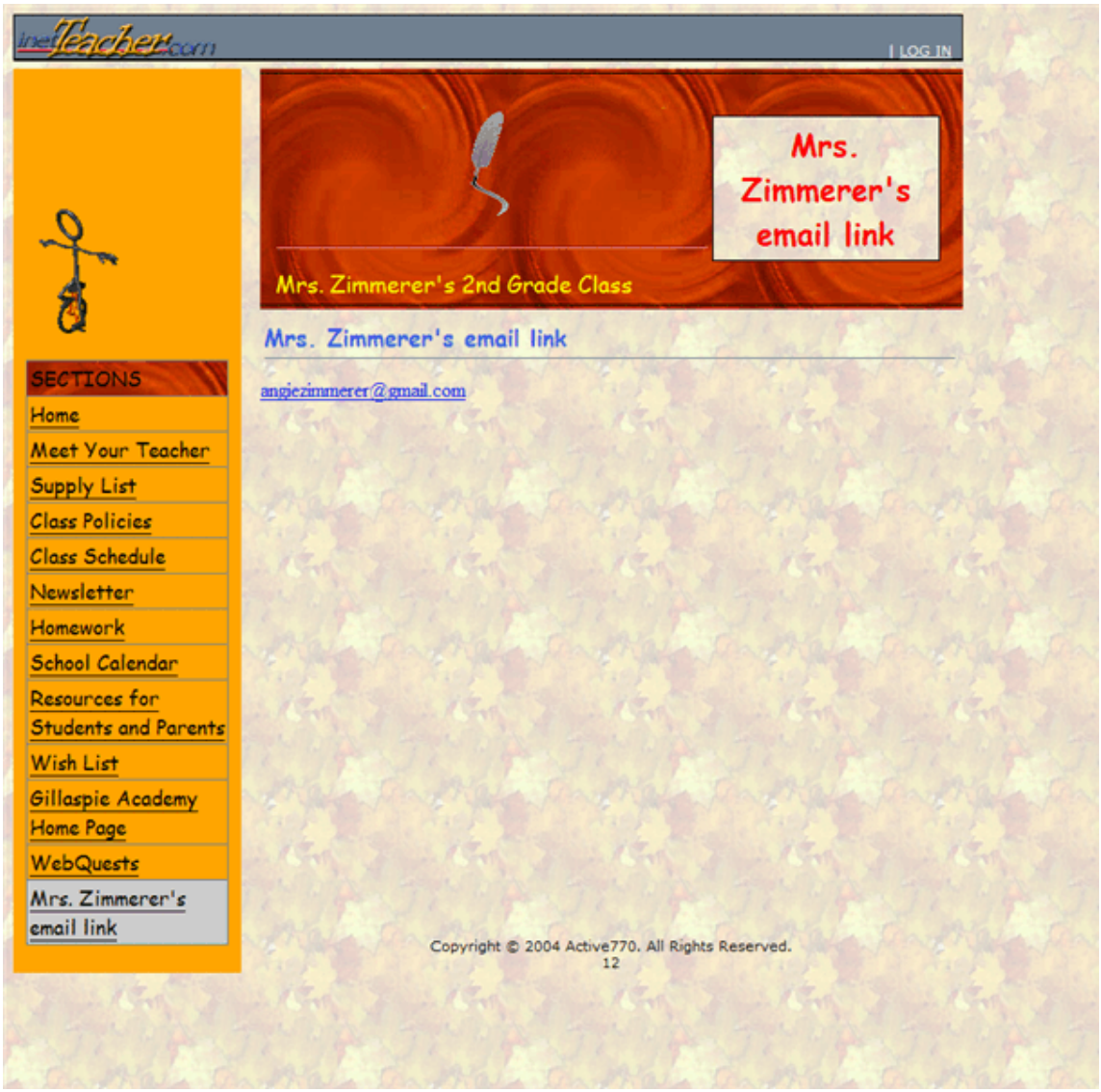
| LOG IN
Mrs. Zimmerer's email link
Mrs. Zimmerer's 2nd Grade Class
Mrs. Zimmerer's email link
angiezimmerer@gmail.com
SECTIONS
Home
Meet Your Teacher
Supply List
Class Policies
Class Schedule
Newsletter
Homework
School Calendar
Resources for Students and Parents
Wish List
Gillaspie Academy Home Page
WebQuests
Mrs. Zimmerer's email link
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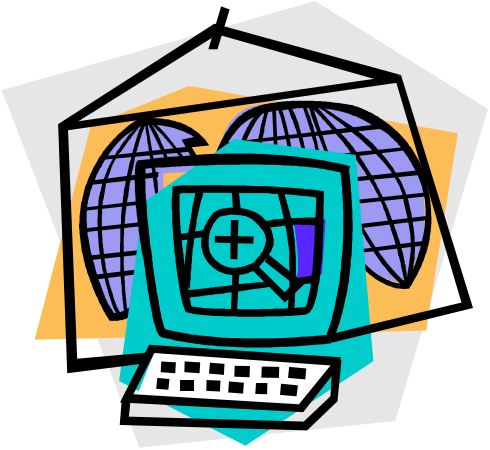
After building my websites at TeacherWeb and inetTeacher, I hoped that I would find they were accessible to both PC and Apple computer users. I was happy to discover that not only was this true, but that the websites also appeared on a handheld PDA/cell phone. I believe the accessibility of your online classroom will be appreciated greatly by busy parents, as well as students who must be absent or who just want to access information out of school hours.

Again, this handbook is not intended to be a complete instruction manual for using the webhosts I have presented. Nor is it intended to help you with technical issues that you may encounter due to your computer system or Internet connection. Each webhost does have a help section, and after having experimented with the templates from several webhosts, I believe that TeacherWeb and inetTeacher qualify as being user friendly for someone who has basic computer skills. Their in-house technical support staff should also be able to help you with any technical issues that you may encounter. In writing this handbook, I hope to convince you that it is worth the time to create a basic website and to demonstrate how simple it can be. I suggest that you first enter in the content you feel is essential for communicating with your students and parents, and then expand your content and features as your interests and needs evolve. Good luck and have fun!



Part 2:

Authentic Applications of a Classroom Website

The existence of a classroom website certainly is not the only means by which you can introduce technology into the curriculum. It does however, provide an authentic and tremendously versatile way to do so. Besides, after building your own website, hopefully you will feel confident enough to expand your educational technology repertoire. A classroom website provides a common base of operations from which to depart, return, discuss and share findings, and publish results. This can be done in a computer lab or in the classroom, perhaps by projection onto a screen where all the students can participate in the journey at the same time. Imagine your students interacting with students from a different

country, expanding their daily weather reports by comparing data from each site and plotting the results on a world map (Grey, 2001). Maybe your class will follow an expedition to Antarctica whose members are sending back photos and updates. You might view live footage of volcanoes, a bicyclist on a cross-country trek, or the new panda baby at a zoo. Or perhaps you like the idea of your students creating a students' encyclopedia or a collection of book reviews collaboratively. Using your own classroom website as a gateway to these activities is a great way to model for your students the use of technology to improve communication and to increase learning opportunities.

Part 2 of *A Teacher's Handbook for Developing a Classroom Website* is devoted to numerous applications that your classroom website makes possible. Again, you can engage in many of these applications without having your own website; they are worthy of consideration no matter what you choose to do. However, a classroom website is a perfect place to organize all of the links and information that you need to begin WebQuests and Internet scavenger hunts. When you and your students return from your online adventures, you can record and publish findings online, and perhaps even share them with other classes. Parents and community members can also check out your website to learn about the exciting and valuable learning activities in which you and your class engage.

Improve Communication

Few people would argue about the value of frequent, clear communication between school and home. However, maintaining communication with parents is sometimes difficult due to time constraints, schedule conflicts, comfort levels, and papers that don't make it from classroom to home (Crippen, 1999). Although teachers host back-to-school nights and send newsletters home to communicate news and expectations, many parents appreciate the availability of a classroom website to find current information and resources that will allow them to better support their children's education throughout the school year (Johnson, 2000). For parents who are unable to spend much time in the classroom, being able to view your classroom online offers an alternative way to participate in their child's learning (Franz, 2003). When students miss school or papers are misplaced, parents can log onto the classroom website to see what their children missed. Your classroom website may start out with basic, infrequently updated information such as:

- ✓ teacher introduction and contact information
- ✓ a class calendar
- ✓ classroom rules
- ✓ a school supply list
- ✓ the scope and sequence for your grade level
- ✓ field trip information

- ✓ volunteer information and
- ✓ links to school and district pages.

Once you become comfortable with the process of updating your website, you might expand it to include:

- ✓ daily assignments
- ✓ project descriptions that include examples of quality work
- ✓ grading rubrics
- ✓ photos of classroom activities
- ✓ student work
- ✓ lists of vocabulary and spelling words
- ✓ mathematical formulas
- ✓ relevant Internet links
- ✓ suggested enrichment activities
- ✓ a webcam
- ✓ student grades and/or
- ✓ a blog authored by you or your students.

Most teachers view their classroom websites as a way to improve communication with parents and to offer another vehicle for participation in their children's education. As most of us are aware, however, many families do not have a computer or Internet access, so it is important for us to continue to send important information home in hard copy to those parents. You could certainly

include printed webpages, especially when they contain photos or information not found elsewhere; some web hosts offer a printer format just for this purpose.

Market Your School

In an era of school choice, many parents are savvy consumers for their child's education. They listen to what parents and teachers have to say about various schools, read school accountability reports, compare standardized test scores, and visit classrooms. Quite possibly, they may even look to see if teachers at the schools they are considering have classroom websites. A classroom website is an opportunity to showcase your class and school. Parents who visit your site can see the wonderful Thanksgiving essays that your students wrote, photos of the students dissecting owl pellets, as well as get a sense of what a typical day is like in your classroom. Many parents are looking for organized teachers who welcome them as partners in education, and they appreciate the information that you place on your website to help them support their children. It also doesn't hurt to project a competency in technology, where your pages are informative, useful, and professional in appearance.

Provide Downloadable Forms

Imagine that your class is going on a field trip tomorrow. One or more of your families has misplaced the permission form. That means you can look forward to students and their parents arriving before school the next day to hastily fill out the forms while you are trying to get everyone out the door. Or does it? Because you have a website now, your students' parents may simply download and print the permission slip from your website the night before. Or, let's say you have a student who has missed school due to illness. He or she is too sick to be in school, but well enough to complete some make-up work. Your student could check the classroom website to find out what homework has been assigned, and check for any worksheets that can be downloaded, printed, and completed at home.

Consider uploading or creating the following documents that can be downloaded by your students and parents:

- ✓ worksheets
- ✓ spelling and vocabulary lists
- ✓ science report forms
- ✓ reading or homework logs
- ✓ rubrics and
- ✓ school forms such as permission slips.

Publish Student Work

Teachers often observe that when their students know that they will publish their work to the Web, they are motivated to produce quality work for a potentially larger audience than the teacher (Karchmer, 2000). One teacher in Karchmer's study paired her class with one in Australia where each class read the writing pieces of the other. The students were inclined to produce higher quality work, knowing that other children would read it. Another teacher asked her students to publish their research on a special project to their own webpages.

Every teacher has students who struggle to write for one reason or another. Sometimes the solution is to change the medium in which those students write, edit, and/or publish their work. Teachers in Karchmer's (2001) study reported that students were more likely to view electronic text as malleable and thus more easily edited than written text. When these students were allowed to produce and publish their work electronically, their work was of better quality and accuracy. Another trick for coaxing the reluctant writer, is to allow your students to author a blog; this can be a valid creative writing exercise.

Build Classroom Community

Most students respond well to the efforts of a teacher to create a positive, safe, and team-oriented classroom community. Teachers do this in a variety of

ways, including holding class meetings and parties, choosing a class name, establishing a climate of respect where all learners are supported, assigning classroom jobs, making time for "share time", read aloud time, and filling the classic marble jar. All of these and many other techniques work to build bonds between students and their teachers, which contributes to a positive learning environment.

Can a classroom website build community? Absolutely! Children enjoy seeing their best work on display in the classroom and in the school halls. They also love seeing it on the Internet. They take pride in seeing their classroom online, knowing that parents and other family members can view it from anywhere. It's exciting to see their work, photos, and even videos of themselves online. Given the opportunity to do so, they also like to contribute content to the class website such as website links or student written newsletters. The key is to share the classroom website with your students frequently – either in the classroom, or in the computer lab. Have them search the classroom website by embarking on a website scavenger hunt (see p. 101 for more about this). They can do this to familiarize themselves with the content and to explore the links that you have provided. Maybe they will even go home to tell their parents excitedly, "We have a classroom website! You've just gotta log on and see it!"

Increase Motivation

Lewin, Mavers, and Somekh (2003) explained how the structure of the Internet offers exciting ways for children to explore all that is available on the Web. They can follow their interests, extend their learning, and be in control of how they do it. Often, Internet based activities alter the traditional roles of teacher as instructor and student as learner, due to rapidly changing technologies and ready access to the vast quantities of information that no one person could possibly master. Hinson (2005) reported that students were more engaged in school, demonstrated more independence, and paid better attention to details when using the Web for assignments.

Add Online Assignments

TeacherWeb offers a Slate Page where students can draw, add shapes, stamps, and text by using their mouse. Students can save, email, or print the work that they create on this page. Slate pages can serve as a blank screen with which students can be creative and experiment with the available tools. You can use it to create or upload existing worksheets, puzzles, or quizzes for students to complete online. Some web hosts even offer a feature where a quiz can be corrected immediately online, offering the instant feedback that is so valuable for learning.

Provide Internet Resources

A classroom website which includes appropriate and relevant links to external websites can serve as a consistent starting point for Web based research. Obviously you will need to preview all of the sites that you add to your list of links. Many school districts have a policy that you must include a disclaimer with your links section such as: "When you click on these links, you are leaving the Oak Valley School District approved websites. Although I have previewed each of these websites, I cannot be responsible for the content, changes, or updates found on external links."

Suggested external links can include resources such as:

- ✓ authors' websites
- ✓ suggested family field trips to extend the curriculum
- ✓ kids' websites for practicing math, reading, and writing skills
- ✓ electronic flashcards
- ✓ websites with information for projects or unit studies
- ✓ gifted and talented links
- ✓ resources for children with special needs
- ✓ parenting websites
- ✓ general search sites such as
    - Ask for Kids
      http://www.askforkids.com/

- Yahooligans
  http://yahooligans.yahoo.com/

- Enchanted Learning
  http://www.enchantedlearning.com/Home.html

Expand Content to Include Audio & Video

Many teachers have learned how to use a data projector or a SmartBoard in order to present the content of the computer screen to the entire class. What a versatile way to upgrade from the overhead projector! Having found and saved links, uploaded images, videos, or audio clips to your website, you could then incorporate them into your small or whole group instruction. Imagine showing a clip of Martin Luther King's (MLK) "I Have a Dream" speech as part of your lesson, clicking on other saved links to show photos of marches, and ending by opening a link that plays the melody for a MLK song while the lyrics display on the screen. You'd probably still want to sit with your students and read that favorite MLK book and complete class projects that have been successful in the past, but you might find that adding content through the use of technology will enrich your existing curriculum. Or take your class on a tour of the Grand Canyon by using Google Earth (2006) which shows satellite images from around the globe. Google Earth would be a fascinating way to introduce the study of communities and maps.

How about podcasting? Many educators have been experimenting with recording lessons or messages in their own voice. These are stored as a file at your web host and accessed by your website visitors by a click of the mouse. Perhaps you could record a welcome message for your Meet the Teacher webpage. All you need to record a podcast is a microphone and your computer.

Operate a Webcam

Setting up a webcam in your classroom is a fun way to get your class online. To send live images of your students would most likely not be permitted for safety reasons, but you could direct the camera at a class pet. Perhaps you would aim the camera at an ongoing science project, which would show daily changes as the students' plants grow, or as they build bridges from balsa wood.

Differentiate Instruction

Once you have some experience in building your own website, you may become motivated to learn even more about building websites. I have viewed several classroom websites that were originally developed using the template of a webhost such as inetTeacher or TeacherWeb. However, once these teachers got their sites up and running, they decided that they were interested in learning how to create a website from scratch so that they would have more creative options

available to them. If you're interested, I have provided an Additional Resources section at the end of Part 2 that you can use to get started. Some teachers introduce their students to website building and learning HTML as an enrichment activity or as part of the regular curriculum. There are many kid friendly resources available to teachers who want to explore this route, even if they are learning alongside the students. You should definitely take a look at Webmonkey for Kids at: http://www.webmonkey.com/kids/ which offers lesson plans for teachers.

Consider the Virtual Classroom

A much more advanced application of classroom websites is the creation of the virtual classroom, where all resources necessary to participate in a class are placed online (Lewin, Mavers, & Somekh, 2003). For most of you, this will not be an application that will apply to your situation. Nonetheless, it is interesting to note how far the concept of an online classroom can be extended. Lesson notes and examples, assignments and materials, useful hyperlinks, graphics, and videos are all available to the student. Lewin, Mavers, and Somekh described how this model of instruction allows students to learn and complete assignments anywhere and anytime, which frees the teacher up during class time to answer questions and provide individualized help. Students are free to progress at their own pace at the

time that works best for them. This model could be applied to the inclusion of students who for various reasons are unable to attend school.

Plan Virtual Field Trips

Field trips can significantly enhance children's classroom studies, but there is never enough time or money to explore all of the places that we would like to visit with our students. The Internet makes possible an alternative way to explore these off-site resources. Barshinger and Ray (1998) investigated the effects on student learning of a field trip orientation conducted by videoconference. Students were given a tour of a museum by a live feed from a video camera, and they were able to ask questions about the various exhibits from their classroom. The researchers theorized that the students would interact with the museum exhibits more constructively after they had received an overview of what the museum had to offer. In effect, some of the novelty of the museum was reduced, allowing the students to identify where they wanted to spend their time and to better focus on the selected exhibits when they arrived for their field trip.

Although the above study was conducted using technology to which you most likely do not have access, you can achieve something similar by projecting images, videos, and webcams from the Internet. Most places that you would be interested in visiting with your class have a website which may offer virtual tours

and ample information to prepare your students for an optimal learning experience.

Another possibility is a total virtual field trip. You may decide that a particular museum or an archeology dig would tie in perfectly with your classroom studies, but that unfortunately, your desired destination is out of state. Again, many sites worth exploring with your students offer engaging and informative websites which could allow you to plan a worthwhile virtual field trip. A quick search of the Internet using the term "Virtual Field Trip" will result in a wealth of places worth exploring with your class. One place you should visit is Virtual Field Trips at: http://www.uen.org/utahlink/tours/ where you can find trips to many online locales revolving around every subject area. Many of the trips are a compilation of several websites. You can even offer to upload a virtual field trip which you and your students have designed for other classes to experience.

Find the Top Ten Internet Sites of the Month

One activity that you can use with your students is "Top Ten Websites of the Month" in order to encourage them to explore the Internet for new and amazing sites. Something you'll need to consider here is the safety aspect of asking students to explore any and all sites that they may encounter. Again, you will want to familiarize yourself with your district's guidelines on technology and

Internet use. You will ask your students to submit one or more websites to you, with the goal of finding the ten best sites to feature that month. This activity is best conducted under the close supervision of an adult, perhaps at home. A great way to culminate this activity is to add or replace links monthly on the classroom website with those websites that your students find. How would you choose the top ten? You could review and choose from the sites chosen, or you might want to post all of the sites, allowing students to vote on them over the period of a week.

Go on an Internet Scavenger Hunt

A great activity for cultivating strong Internet research skills is the Internet Scavenger Hunt. This is where you provide your students with a list of questions and the links where they can find the answers. Often those links are embedded within the questions. You provide enough guidance so that students need not search through the vastness of the Internet, but they will need to be able to follow directions and search carefully through the destination websites. Many Internet scavenger hunts have already been designed, or you may be interested in creating some yourself. See the University of Sioux Falls Internet Scavenger Hunts site for a template: http://www.usiouxfalls.edu/~apeter/scavenger_hunts.htm

Another website that you should visit is Internet Hunt Activities at: http://homepage.mac.com/cohora/ext/internethunts.html where the author,

Cindy O'Hora (2006), has posted numerous scavenger hunts in the form of a list of questions, each with an embedded link to the website where the answer is located. She has authored scavenger hunts for every subject area, including many about computers and the Internet, and some hunts that are seasonal. See the Resources section for other Internet Scavenger Hunt links. Note: An unfortunate reality is that many of the scavenger hunts that you find online may have outdated links. You will definitely want to preview any hunts that someone else has developed. You will even need to preview the ones that you develop each year that you use them.

Introduce WebQuests

As just described, Internet scavenger hunts provide students with excellent practice in searching for information on websites with varying formats. WebQuests are similar, but require students to take more initiative as they focus on the solving of real world problems. Although the teacher provides scaffolding in the instructions and by identifying the necessary resources, students need to make use of higher level thinking skills as they seek, analyze, and synthesize strategies for solving the problem. A well designed WebQuest uses the students' time efficiently by placing the focus on using information rather than searching for it.

Bernie Dodge (1997), one of the creators of the WebQuest activity, lists the six critical attributes of a WebQuest:

1. an introduction to set the stage and provide background information
2. a task that is achievable and interesting
3. a set of information sources located mostly or entirely on the Internet
4. a step by step process that learners are to follow
5. scaffolding such as guiding questions or a concept map
6. a conclusion that summarizes learning and may encourage extensions.

WebQuests can be designed around any topic or subject area. Dodge's website, The WebQuest Page, provides an overview of WebQuests, background information, and a portal to a database of existing WebQuests organized by topic, grade level, and user ratings. A recently added feature of the website is a WebQuest authoring tool and web hosting page where you can create your own WebQuest. Go to The WebQuest Page at: http://webquest.sdsu.edu/ to get started. You may also want to visit WebQwest 101 at: http://www.teachersfirst.com/summer/webquest/quest-a.shtml for another perspective on how to create WebQuests.

The other creator behind the 1995 invention of WebQuests, Tom March (2006), has developed a website that lists the best WebQuests on the Internet. He points out that since WebQuests were conceived, a huge number of WebQuests have been created, some better than others at achieving a

transformational outcome in learning. His website is found at: http://bestwebquests.com/ .

Collaborate with Other Classes and Experts

Some teachers use email as a way to connect their students with communities around the globe (Karchmer, 2000); many refer to these Internet pals as "keypals". When children exchange emails with classes from other cultures and traditions, their perspectives can expand immeasurably. The advantage to having a keypal *vs.* a penpal is that communication is usually more frequent.

One of the great potentials of the Internet is the ability to expose students to global questions and concerns and to collaborate with non-local students and experts in the quest for solutions. Many teachers have initiated a relationship between their students and scientists, writers, artists, or some other expert via email. These connections can connect students with a live resource who students know they can contact for questions or feedback on a project. It could even be the start of a collaborative project.

Thakkar, Hogan, and Williamson (2003) coordinated a Web based interdisciplinary project which involved kindergarten through high school students, an after school science club, a homeschool, undergraduate students, and scientific researchers. The Chickscope Project was an inquiry based approach to studying the maturation of a chick embryo using magnetic resonance imaging

(MRI). During the project, participants studied science, math, economics, and literature. Using a Web browser, the participants in the project could access the scientific instruments from anyplace and anytime. They were able to manipulate experimental conditions, and then view a real time MR image. The researchers answered students' and teachers' questions by email, while data from every classroom was shared with all participants. Thakkar, Hogan, and Williamson observed the positive outcomes associated with students being part of a community of learners. Students experienced respectful interaction regardless of their age, and had the opportunity to use sophisticated scientific instrumentation in conjunction with hands on activities. Teachers created webpages as a means of sharing students' predictions, class data, and research about chickens and embryology.

In response to the teachers' questions about how to design and support further inquiry based learning, educators, learners, professionals, and community members developed the Inquiry Page™: Learning Begins with Questions at: http://www.inquiry.uiuc.edu/index.php . This website provides a discussion of inquiry learning, as well as supporting resources including:

- ✓ a definition of inquiry based learning
- ✓ inquiry workshops
- ✓ links to inquiry articles
- ✓ links to professionals who collaborate with teachers

- ✓ units of study and
- ✓ the resources necessary to develop new units.

Publicize Your Classroom Website

You may want to consider the possibility of promoting your website to a wider audience than your parents and students. Community and business members who can easily learn about what your students are studying may be motivated to offer their time or money to further enrich your program. University faculty and students, including pre-service teachers, may be interested in working online or in person with your class. They might present a lesson that ties in with your curriculum, offer to help your students edit their writing, or collaborate on a class project. Because your website can be viewed worldwide, the possibilities for making exciting connections are unlimited!

How do you get the word out about your classroom website?

- ✓ Ask that your URL be printed in the school newsletter.
- ✓ Request that the webmasters of the school and district websites add your link to those websites.
- ✓ Join an email discussion list such as those found at:

  Yahoo! Groups
  http://groups.yahoo.com/ or

  Teachers.net
  http://teachers.net/mailrings/

- ✓ Let local newspapers and national magazines know what your class is doing and invite them into your classroom.
- ✓ Send emails with your classroom website in the signature.
- ✓ Register your website URL with specific Internet search engines such as:

  Google
  http://www.google.com/addurl/

  or with a service that will submit your URL to multiple search engines such as:

  Submit Express
  http://www.submitexpress.com/list.html

- ✓ Send your URL to popular K-12 websites such as:

  Global SchoolNet Foundation
  http://www.gsn.org/index.html

- ✓ Register at A to Z Teacher Stuff for a:

  "Connecting Classrooms" project
  http://forums.atozteacherstuff.com/

By the time you read this, I hope that you have taken the plunge and started your first classroom website. If so, you probably can appreciate the benefits already, and may want to add more information and features as time permits. If you find that your needs grow and surpass the ability of your host site software, perhaps you will decide to take your website to the next level and design it with a website building software program. Maybe you'll even begin to

learn HTML. I believe that as more people want to build their own websites, the options for doing so will become increasingly user friendly -- perhaps even as commonly used as word processors.

I am truly excited about the learning opportunities made possible by the Internet, having already experienced an enthusiastic response from my own students when engaging in a WebQuest, or when seeing live satellite images of hurricanes. Teachers tend to be creative, always looking for new and better ways of teaching the curriculum. Technology offers a myriad of ways to help your students experience learning at its best.

Additional Resources

Web Hosts

TeacherWeb
http://teacherweb.com/

inetTeacher
http://www.inetteacher.com/

eBoard
http://www.eboard.com/

SchoolWorld.com
http://www.schoolworld.com/classrooms/

MyClass.net
http://www.myclass.net/

Quia
http://www.quia.com/

Webpage Building Software

Microsoft FrontPage
http://office.microsoft.com/en-us/FX010858021033.aspx

Adobe Dreamweaver
http://www.adobe.com/products/dreamweaver/

**Note: I was told by one school district webmaster to be wary of creating webpages with work processing programs such as Microsoft Word. He cautioned that:

1. It makes your web page file about ten times larger than they would normally be, which fills up the server faster.
2. Because your pages contain Microsoft specific codes, they may not display properly on browsers other than Microsoft Explorer.

3. Even for a web programmer, it is quite difficult to decipher the code used to create your webpage and fix problems that may occur.

Learning HTML

Lissa Explains It All
http://www.lissaexplains.com/

WebTech University
http://www.webtechu.com/

Webmonkey for Kids
http://www.webmonkey.com/kids/

Building a School Web Site : A Hands-on Project for Teachers and Kids by Wanda Wigglebits
http://www.wigglebits.com/

Other Teachers' Classroom Websites

Busy Teachers Café has a section with links to P-5 classroom websites
http://www.busyteacherscafe.com/

Tutorials

Learn How to Use a SmartBoard
http://www.kenton.k12.ky.us/SmartBoard/smartboardindex.htm

Eduscapes offers a wealth of ideas for and tutorials on how to integrate technology into the curriculum
http://eduscapes.com/

Inquiry Based Learning

Inquiry Page: Learning Begins with Questions
http://www.inquiry.uiuc.edu/index.php

Virtual Field Trips

Virtual Field Trips
http://www.uen.org/utahlink/tours/

Internet Scavenger Hunts

Internet Hunt Activities
http://homepage.mac.com/cohora/ext/internethunts.html

Internet Scavenger Hunts
http://www.usiouxfalls.edu/~apeter/scavenger_hunts.htm

Scavenger Hunts for Kids
http://www.vickiblackwell.com/hunts.html

Education World
http://www.education-world.com/a_curr/curr113.shtml

WebQuests

The WebQuest Page
http://webquest.sdsu.edu/

WebQuests 101- Putting Discovery into the Curriculum
http://www.teachersfirst.com/summer/webquest/quest-a.shtml

Best WebQuests.com: Celebrating the Best in WebQuests
http://bestwebquests.com/

Chapter Summary

In part 1 of *A Teacher's Handbook for Developing a Classroom Website*, the author describes how to develop a classroom website by choosing one of two featured webhosts. Part 2 details numerous ways to use a classroom website as a vehicle for the integration of technology into the curriculum. A discussion and interpretation of the results, along with suggestions for further research, are presented in Chapter 5.

Chapter 5

DISCUSSION

Classroom websites are an authentic means by which teachers can integrate technology into the curriculum. As discussed in Chapter 2, research (Berson, 1996; Chessler, Rockman, & Walker, 1998; Scardamalia & Bereiter, 1996; Wenglinsky, 1998; all cited in Swain & Pearson, 2003; and Anderson-Inman and Horney, 1993; Reinking & Rickman, 1996; both cited in Karchmer, 2001) suggests that students' learning opportunities increase when technology is employed effectively by their teachers. A teacher's integration of technology can: (a) support constructivist pedagogy, (b) further develop students' literacy skills, (c) improve information literacy, (d) help bridge the digital divide and, (e) teach essential Information and Communication Technology (ICT) skills. The development of a classroom website can serve to increase a teacher's technical competence as well as confidence, so that a multitude of educational applications can then take place. Teachers can use their websites to: (a) enhance communication with students, parents, and the community; (b) publish student work; (c) link to online resources; (d) provide access to class assignments and downloadable documents and; (e) engage in Internet based learning activities.

The problem identified by this author is that most teachers lack the training to develop a website; in addition, many teachers are not convinced of the value of having their own classroom website. It is the intent of this author to provide: (a) a way for

teachers to develop their own website in less than 2 hours, (b) examples of published webpages, and (c) numerous educational applications of this website.

Contributions of this Project

At the start of this project, the author began with scant knowledge of how to develop a website, and thus began an investigation into the various options for doing so. The author believes that the time spent analyzing different methods and webhosts will enable other teachers to develop websites of their own and to utilize strategies for efficient maintenance. Step by step instructions are provided, with illustrations that guide teachers through the entire process. Internet links are embedded within the text, and examples of completed webpages are included to demonstrate design and content. Once a teacher develops a classroom website, many exciting applications are possible. These are described in Part 2 of *A Teacher's Handbook for Developing a Classroom Website,* with suggested resources included.

Limitations

The ability of teachers to fully implement the instructions provided in the handbook may be limited by: (a) their computer systems and Internet access, (b) school and district guidelines, (c) the availability of computers in the classroom or school, (d) the ability of the teacher to communicate with students and parents who are English Language Learners, and (e) the availability of computers and Internet access to students' families. The author of this project intends to pave the way for teachers who would like to or are required to create classroom websites, but do not know where to begin, while

acknowledging that a classroom website may be of limited usefulness in certain situations.

Peer Assessment

The author chose two people to review this project: (a) an ICT specialist and, (b) a classroom teacher. Both reviewers read a printed copy of *A Teacher's Handbook for Developing a Classroom Website* and offered their feedback. The ICT specialist recommended that definitions for acronyms and certain technical terms be included in the text of the handbook as well as the glossary. He confirmed that the instructions were clear, thorough, and accurate and made several suggestions for commonly used technical terms. The teacher advised that the handbook was written with jargon free language, which made it an easy to follow guide. Using the directions in the handbook, she developed a webpage and experimented with the editing features of both webhosts. Her assessment was that teachers with an interest or a requirement to build a website could indeed use this handbook to develop a basic website in 2 hours or less. However, she emphasized the situations discussed in the Limitations section of this chapter; in particular, she was concerned about the usefulness of a classroom website for classes with many English Language Learners and families who lack Internet access.

Recommendations for Further Development

At the time this project was published, little research had been conducted on classroom websites. The author would like to see further study on the benefits of classroom websites and their effects on student learning. In particular, how is the development of literacy affected when technology is an integrated element of the

curriculum? In addition, future researchers should investigate the pedagogical effects of long distance collaboration between students and others members of their learning community.

Project Summary

It is a reasonable expectation that a novice teacher could develop a website within 2 hours. A number of choices exist for a teacher to create an attractive, informative website which will improve communication and access to curricular materials. With a minimum time investment, this website can then be utilized in many beneficial ways. Research indicates that an effective integration of technology benefits students in numerous ways. Teachers who model authentic applications of technology can significantly improve their students' education while they teach them how to harness the power of the Internet and technological innovations.

The purpose of this research project was to provide teachers with a fast and efficient method to develop a classroom website. In addition, the author hoped to convince teachers that their initial time commitment would result in a product that would enhance both communication and student learning. The author wrote *A Teacher's Handbook for Developing a Classroom Website*, which provides step by step instructions, illustrations, and numerous ideas for authentic integration of technology. Peer assessment as well as informal feedback suggest that classroom websites are valuable tools for the improvement of: (a) communication, (b) student learning, and (c) professionalism.

BIBLIOGRAPHY

Abruscato, J. (2004). *Teaching children science: A discovery approach* (6th ed.). Boston: Pearson Education.

Anderson, M. A. (2003). Helping them do it at home. *Multimedia Schools, 10*(2), 19-21.

Ask for Kids website. (2006). Retrieved September 29, 2006, from http://www.askforkids .com/

A to Z Teacher Stuff, L.L.C. (2006). *A to Z Teacher Stuff.* Retrieved September 30, 2006, from http://forums.atozteacherstuff.com/

Barshinger, T. & Ray, A. (1998). From volcanoes to virtual tours: Bringing museums to students through videoconferencing technology. In *Distance Learning '98: Proceedings of the Annual Conference on Distance Teaching & Learning* (pp. 2-8). Madison, WI.

Boulder Valley School District. (1998). *Boulder Valley School District K-5 language arts curriculum*. Retrieved June 29, 2006, from http://www.bvsd.org/C13/ Curriculum/Pages/Language%20Arts.aspx

Boulder Valley School District. (1999). *Academic content standards: Science.* Retrieved June 29, 2006, from http://www.bvsd.org/C13/Curriculum/Pages/Science.aspx

Brooks, J. G., & Brooks, M. G. (1993). *In search of understanding: The case for constructivist classrooms.* Alexandria, VA: Association for Supervision and Curriculum Development.

Bruce, B. C. (2003a). Challenges for the evaluation of new information and communication technologies. In B. C. Bruce (Ed.), *Literacy in the information age: Inquiries into meaning making with new technologies* (pp. 182-190). Newark, DE: International Reading Association.

Bruce, B. C. (2003b). Dewey and technology. In B. C. Bruce (Ed.), *Literacy in the information age: Inquiries into meaning making with new technologies* (pp. 201-208). Newark, DE: International Reading Association.

Bruce, B. C. (2003c). Educational reform: How does technology affect educational change? In B. C. Bruce (Ed.), *Literacy in the information age: Inquiries into meaning making with new technologies* (pp. 191-198). Newark, DE: International Reading Association.

Bruce, B. C. (2003d). New literacies. In B. C. Bruce (Ed.), *Literacy in the information age: Inquiries into meaning making with new technologies* (pp. 14-19). Newark, DE: International Reading Association.

Cadiero-Kaplan, K. (1999). Integrating technology: Issues for traditional and constructivist pedagogies. *Journal of Computing in Teacher Education, 15*(2), 14-18.

Carroll, M. (2004). *Cartwheels on the keyboard: Computer-based literacy instruction in an elementary classroom.* Newark, DE: International Reading Association.

Cheeseman Day, J., Janus, A., & Davis, J. (2005). *Computer and Internet use in the United States: 2003: Special studies, P23-208.* Washington, DC: U.S. Census Bureau.

Colorado Department of Education. (2006). *Colorado K-12 academic standards*. Retrieved June 12, 2006, from http://www.cde.state.co.us/cdeassess/documents/OLR/k12_standards.html

Cooper, G., & Cooper G. (2001). *New virtual field trips.* Englewood, CO: Teacher Ideas Press.

Crippen, K. (1999). From classroom to homepage. *Science Teacher, 66*(8), 50-52.

Cunningham, C. A. (2001). Improving our nation's schools through computers & connectivity. *Brookings Review, 19*(1), 41-43.

Digital Divide.org. (n.d.). *Defining the term: It's not what you think.* Retrieved June 14, 2006, from http://www.digitaldivide.org/digitaldivide.html

Dodge, B. (1997). *Some thoughts about WebQuests.* The WebQuest Page. Retrieved October 2, 2006 from, http://webquest.sdsu.edu/about_webquests.html

Ellis, A. K. (2005). *Research on educational innovations* (4th ed.). Larchmont, NY: Eye On Education.

Enchanted Learning Website. (2004). Retrieved September 29, 2006, from http://www.enchantedlearning.com/Home.html

Franz, K. R. (2003). Building better school-home connections with technology. In D. T. Gordon (Ed.), *Better teaching and learning in the digital classroom* (pp. 51-63). Cambridge, MA: Harvard Education Press.

Global SchoolNet Foundation. (2006). *Global SchoolNet Foundation.* Retrieved September 30, 2006, from http://www.gsn.org/index.html

Goldberg, L. (2002). Web pages to the rescue. *Instructor, 112*(1), 27-29.

Google. (2006). *Google.* Retrieved September 29, 2006, from http://www.google.com/

Google Earth. (2006). Retrieved September 29, 2006, from http://earth.google .com/

Gordon, D. T. (2003). Introduction: Cassandra, Pollyanna, and all of us in between. In D. T. Gordon (Ed.), *Better teaching and learning in the digital classroom* (pp. 3-9). Cambridge, MA: Harvard Education Press.

Grey, D. (2001). *theinternetinschool* (2nd ed.). London: Continuum.

Harvey, G. (2001). *Windows® XP for dummies® quick reference*. NY: Hungry Minds, Inc.

Hinson, J. M. (2005). Investigating the perceptions and behaviors of elementary students and teachers when Internet access is universal. *Computers in the Schools, 22*(1/2), 19-31.

Hyun, E., & Davis, G. (2005). Kindergarteners' conversations in a computer-based technology classroom. *Communication Education, 54*(2), 118-135.

inetTeacher.com. (2006). *Stay connected with students and parents.* Retrieved September 19, 2006, from http://www.inetteacher.com/Default.aspx

International Reading Association. (2002). *Integrating literacy and technology in the curriculum: A position statement of the International Reading Association.* [Brochure]. Newark, DE: International Reading Association

International Society for Technology in Education. (n.d.) *National Educational Technology Standards*. Retrieved June 12, 2006, from http://cnets.iste.org/ currstands/

Inquiry Page™. (n.d.). *Learning begins with questions.* Retrieved June 24, 2006, from http://www.inquiry.uiuc.edu/index.php

Johnson, D. (2000). Teacher web pages that build parent partnerships. *Multimedia Schools, 7*(4), 48-51.

Kapitzke, C. (2003). Information literacy: The changing library. In B. C. Bruce (Ed.), *Literacy in the information age: Inquiries into meaning making with new technologies* (pp. 59-69). Newark, DE: International Reading Association.

Karchmer, R. A. (2000). Understanding teachers' perspectives of Internet use in the classroom: Implications for teacher education and staff development. *Reading & Writing Quarterly, 16*, 81-85.

Karchmer, R. A. (2001). The journey ahead: Thirteen teachers report how the Internet influences literacy and literacy instruction in their K-12 classrooms. *Reading Research Quarterly, 36*(4), 442-466.

Lamb, A. (2005). *Information inquiry for teachers: The evolving definition of literacy.* Retrieved June 16, 2006, from http://eduscapes.com/info/evolve.html

Lewin, C., Mavers, D., & Somekh, B. (2003). Broadening access to the curriculum through using technology to link home and school: A critical analysis of reforms intended to improve students' educational attainment. *The Curriculum Journal, 14*(1), 23-53.

Lycos. (2006). *Webmonkey reference glossary.* Retrieved July 13, 2006, from http://www .webmonkey.com/webmonkey/glossary/

March, T. (2006). *Best WebQuests.com: Celebrating the Best in WebQuests.* Retrieved October 2, 2006 from, http://bestwebquests.com/

Martin-Kniep, G. O. (2000). *Becoming a better teacher: Eight innovations that work.* Alexandria, VA: Association for Supervision and Curriculum Development.

Moore, J. L., Laffey, J. M., Espinosa, L. M., & Lodree, A. W. (2002). Bridging the digitial divide for at-risk students: Lessons learned. *TechTrends, 46*(2), 5-9.

Morse, T. E. (2004). Ensuring equality of educational opportunity in the digital age. *Education and Urban Society, 36*(3), 266-279.

Moskowitz, S. (2004). Template-based teacher web pages: Scaffolding teacher technology skills through the use of easy-to-use web templates. *Learning & Leading with Technology, 32*(2), 40-43.

Mulligan, A., Strong, M., Crabbe, J., & Steen, P. (2006). Paving the road to technology integration. *Learning & Leading with Technology, 33*(8), 14-17.

Ross, S. T. (2004). *Netdictionary.* Retrieved July 13, 2006, from http://www .netdictionary.com/

O'Hora, C. (2006). *Internet Hunt Activities.* Retrieved September 30, 2006, from http:// homepage.mac.com/cohora/ext/internethunts.html

Oseas, A., & Wood, J. M. (2003). Multiple literacies: New skills for a new millenium. In D. T. Gordon (Ed.), *Better teaching and learning in the digital classroom* (pp. 11-26). Cambridge, MA: Harvard Education Press.

Parsad, B., & Jones, J. (2005). *Internet access in U.S. public schools and classrooms: 1994-2003 (NCES 2005-015).* U.S. Department of Education. Washington, DC: National Center for Education Statistics.

Peterson, A. (2005). *Internet scavenger hunts*. University of Sioux Falls Education Department. Retrieved September 29, 2006, from http://www.usiouxfalls.edu/ ~apeter/scavenger_hunts.htm

Pianfetti, E. S. (2001). Teachers and technology: Digital literacy thorough professional development. *Language Arts, 78*(3), 255-262.

Rowand, C. (2000). *Teacher use of computers and the Internet in public schools: Stats in brief.* Washington, DC: National Center for Education Statistics.

Shaw, T. (2003). An easy route to a classroom web presence. *Multimedia Schools, 10*(5), 47-48.

SMART Technologies. (2006). *SMART™ Board interactive whiteboards.* Retrieved July 13, 2006, from http://www2.smarttech.com/st/en-US/Products/SMART+Boards/ default.htm

Submit Express. (2006). *Submit Express.* Retrieved September 30, 2006, from http:// www.submitexpress.com/list.html

Swain, C., & Pearson, T. (2003). Educators and technology standards: Influencing the digital divide. *Journal of Research on Technology in Education, 34*(3), 326-335.

Tallim, J. (2006). What is media literacy? *Media Awareness Network: Media and Internet Education Resources for Teachers.* Retrieved June 16, 2006, from http://www.media-awareness.ca/english/teachers/media_literacy/what_is_media_literacy.cfm

Teachers.net. (2006). *Teacher mailrings*. Retrieved September 30, 2006, from http://teachers.net/mailrings/

TeacherWeb, Inc. (2006). *TeacherWeb.com.* Retrieved September 19, 2006, from http://teacherweb.com/

Techterms.org. (2006). *Techterms.org.* Retrieved September 19, 2006, from http://www.techterms.org/definition/webhost

TechWeb. (2006). *TechEncyclopedia*. Retrieved July 13, 2006, from http://www.techweb.com/encyclopedia/

Thakkar, U., Hogan, M. P., & Williamson, J. (2003). Extending literacy through participation in new technologies. In B. C. Bruce (Ed.), *Literacy in the information age: Inquiries into meaning making with new technologies* (pp. 264-275). Newark, DE: International Reading Association.

Trotter, A. (2002, September 4). Internet access has no impact on test scores, study says. *Education Week,* p. 10.

Utah Education Network. (n.d.). *Virtual Field Trips.* Retrieved September 30, 2006, from http://www.uen.org/utahlink/tours/

Washenberger, M. (2001). Classroom web sites and student success. *T. H. E. Journal, 29*(2), 18-20.

Way, T. (2006). *Dihydrogen monoxide homepage*. Retrieved June 26, 2006, from http://www.dhmo.org/

Wayne, R. E. (2000). The promise and perils of e-learning. *Theory and Research in Social Education, 28*(4), 482-492.

Yahoo! Inc. (2006). *Yahoo! Groups.* Retrieved September 30, 2006, from http://groups.yahoo.com/

Yahooligans website. (2006). Retrieved September 29, 2006, from http://yahooligans.yahoo.com/

Zemelman, S., Daniels, H., & Hyde, A. (1998). *Best practice: New standards for teaching and learning in America's schools* (2nd ed.). Portsmouth, NH: Heinemann.

APPENDIX

Glossary

GLOSSARY

blog: short for Web Log; a list of journal entries posted on a webpage (Techterms.org, 2006)

broadband connection: a high speed Internet connection using DSL, cable, wireless, fiber optic, or satellite means of transmitting data; a high speed network connection with data speeds in excess of 200 kilobits per second (TechWeb, 2006).

browser: software that provides a frame and navigational tools on the World Wide Web and other Internet resources (Ross, 2004).

cyberspace: a term coined by science fiction author, William Gibson, commonly used to refer to the Web or the Internet (Bruce, 2003d).

domain name: an organization's unique name on the Internet, such as Google.com (TechWeb, 2006).

homepage: the first page retrieved when a user accesses a website; usually outlines the contents of the website (TechWeb, 2006).

host: a computer connected to the Internet with a registered name, such as http: //google.com (Bruce, 2003d).

HTML: hypertext mark-up language; the language used to create web documents (Grey, 2001).

hyperlink: a "hot link" on a web page which, with the click of a mouse, connects the user to another page, sound, image, or video (Bruce, 2003d).

Internet: the global communications network of networks connected by servers that supports the World Wide Web (Bruce, 2003d).

PDA: Personal Digital Assistant; a handheld computer that can include a database with names and addresses, a calendar, lists, email, a Web browser, and phone service (TechWeb, 2006).

server: computers that are linked to the Internet; information is stored on a server as websites composed of webpages (Grey, 2001).

SMART Board™*:* an electronic, interactive whiteboard onto which users project a website and then click through the site by tapping on the board (SMART Technologies, 2006).

URL: Uniform Resource Locator; the unique address which routes to a webpage stored in a file on a computer; the domain name is embedded in the URL (TechWeb, 2006).

Web: short for World Wide Web (WWW) (TechWeb, 2006).

webcam: a video camera attached to a computer which is used to send real time images over the Internet (Grey, 2001).

webcast: when live audio or video programming is transmitted over the Internet (TechWeb, 2006).

webhost: a company that stores all of the pages of a website and makes them accessible through the Internet; many of these web hosts provide webpage building tools including templates *(*Techterms.org, *2006).*

WebQuest: a discovery project for students that requires the use of Internet resources; phases include: (a) the challenge, (b) the journey and, (c) the report (Abruscato, 2004).

webmaster: the person responsible for maintaining and updating a website (TechWeb, 2006).

webpage: a document coded in HTML or XML which is on the Web; websites consist of webpages (TechWeb, 2006).

WWW: World Wide Web; a subsystem which uses the infrastructure of the Internet to send multi-media files; information is held on servers that store websites composed of web pages; now incorporates e-mail, telephone, recorded movies and music, radio and television (Bruce, 2003d).