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ABSTRACT

A Web site called the "Teachers Lounge" was created to enable group assignments for distance education students taking a televised teacher education course on collaboration and consultation in special education. The primary component of the Web site was case studies of four fictitious children in various grades whose teachers were seeking advice or information. Students participated by contributing to the Web site at least four times. A survey about their Internet use was returned by 53 students. The majority of students reported using online services at least several times per week, but most had never taken a course with an Internet or Web site component. The vast majority of students reported little or no anxiety about the Internet component of this course, although three students had very high levels of anxiety about using the site. A survey evaluating the Web site was returned by 51 students. Results found that students enjoyed the realism and quality of the vignettes and the comparing of others' perspectives on the situations to their own. Students wanted more frequent updates of information or more vignettes to respond to, and noted difficulties in accessing the site at various times. The bulletin board component of the Web site was not accessed as often as the vignettes. Thirty-seven students indicated that the activities increased their comfort about using an interactive Web site. Suggestions for improvement include additional collaboration among academic disciplines, students in related fields, and students from other regions.



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COMBINING DISTANCE EDUCATION AND WEB APPLICATIONS FOR A COURSE ON **COLLABORATION IN SPECIAL EDUCATION**

The field of special education is currently faced with shortages of trained personnel, and federal projections do not see this need diminishing in the near future (Boe, Cook, Bobbitt, & Terhanian, 1998; Office of Special Education Programs, 1998). Rural school districts, in particular, find it difficult to recruit and retain teachers of students with both high and low-incidence disabilities.

In an effort to meet the needs of children with disabilities for well qualified teachers, colleges and universities are using a variety of course delivery options to prepare preservice teachers and to provide continuing professional development to those teachers already in the field. Televised distance education courses are commonly used to support the preparation of special education teachers who live and teach far from university campuses (Spooner, Spooner, Algozzine, & Jordan, 1998). In addition, many teacher education programs are incorporating web-based or web-enhanced courses in an attempt to reach non-traditional students and/or practicing teachers interested in developing skills in special education. Web components of courses also are seen as methods of introducing teachers to the power and potential of the Internet as a resource for their teaching.

A further trend in recent teacher education literature in special education is the use of case-based teaching, similar to that used in medical and business colleges (Anderson & Baker, 1999; Elksnin, 1998). Such case studies may focus on a child with disabilities and ask prospective teachers to make decisions about the child's education. Others take the perspective of a teacher who is grappling with a decision or issue related to a student, a class of students, or an aspect of working with other professionals or parents. Case-based teaching is thought by professionals to be an effective way of enhancing the preparation of special education and general education teachers (Elksnin, 1998).

This article describes efforts to unite the three, above-mentioned methodologies of televised distance education, web-enhanced course components, and case-based instruction in the delivery of a course in special education. The section that follows describes the development of a web site called the "Teachers Lounge." Also presented is information describing the effectiveness of the site as assessed through student surveys prior to the introduction of the web component, as well as summative student evaluations of the web-based activities. The final section of the paper describes what was learned as a result of the collaboration involved in developing the site: ways of improving web activities and the potential of web-enhanced instruction in courses such as the one described.

Conceptualization of the Teachers Lounge Web Site

In the spring semester of 1999, I taught a course on collaboration and consultation in special education via televised distance education. The course was dual-listed at the graduate and undergraduate levels; therefore, it could be taken by preservice seniors or by practicing teachers. While the largest group of students in this televised course was in the on-campus class, there were also students in five remote sites throughout northern Nevada. In past semesters, group as well as individual assignments had been required for this course. Group assignments had not posed a problem when the course had been taught in a traditional, on-campus format. However, the logistics of offering such a course via distance education meant that students attending class at "Site A" could only collaborate with the other students in "Site A." There would be no practical or economical way for



them to collaborate in any meaningful way students in the campus-based section or with those at "Site B," unless some non-traditional means of collaboration were developed.

I began the search for a method of enhancing the course with only vague notions of a web site. In retrospect, there would have been many ways to accomplish this goal, including the use of an e-mail based chat room or a listserve. However, I was interested in experimenting with enhancing the course through the use of the Internet.

In examining professional web sites related to special education, it seemed that many of the sites could be described as "a book with a different cover." The sites appeared as text information with links to additional text information. Largely, these included re-formatted flyers, brochures, or books. Graphics on many of the academic web sites consisted of clip art. They added color or interest to the sites, but they were not well integrated into the actual function of the sites (in contrast to many commercial or educational sites for children).

With a vague desire to use graphics in an integral way, I determined that the theme of the web site in the collaboration course should be a "Teachers Lounge." This is where teachers often gather and discuss students, instruction, and other issues facing education. It is where collaboration, especially informal collaboration, occurs at many schools. Collaboration could center on a number of case studies or vignettes related to children, and that these cases could grow or change over the semester. In addition, the site might be used to post class information or exchange general views not related to particular cases.

In order to develop the web site, I enlisted others with the technical and graphics expertise. We combined a series of introductory pages with a <u>FileMaker Pro</u> database in order for students to both enter and access their contributions to the case studies or vignettes. Interested readers are encouraged to visit the site in order to understand more fully its workings and its limitations. (Go to http://134.197.92.43/CI473/index.html).

Creating Teachers Lounge Web Site

The database side of the Teachers Lounge web site was created by Dr. Michael Warner (professor of special education) using <u>FileMaker Pro</u> software (FileMaker Inc., 1998). The database contained the following fields: date, time, student name, E-mail address, vignette selected, subject, and the message. Each time someone made a contribution, a new record was created and stored in the database.

The entry pages for the course web site were created using <u>HomePage 3.0</u> (FileMaker Inc., 1998). This HTML editor was chosen because of its ease of use and because it was designed to be used in tandem with <u>FileMaker Pro</u>. Specifically, <u>HomePage</u> allows the user to write tags in HTML code that support communication between the web page (front end) and the database (back end). When the initial set of pages was completed, the pages (as HTML files) were imported into <u>GoLive Cyberstudio 4.0</u> (Adobe Systems Incorporated, 1998). Dr. Dainn Laing (instructional developer and graphic designer) developed the supporting graphics.

The final design of the homepage presented a door with the words "Teachers Lounge" above it. Banners on the wall beside the door were buttons that, when clicked, opened other pages, such as the university homepage and the page for other databases within the College of Education. Posted on the door of the Teachers Lounge was a notice that invited members of the class to READ. Directions for understanding the site navigation and site logistics were given in the READ notice. Passing the cursor over the notice caused the hyperlink hand to appear. Clicking on the notice brought up a new page with site instructions. Information at the end of the READ notice gave the reader instructions for entering the Teachers Lounge (the next page). It was not necessary for the user to go to the READ notice each time. Clicking on the doorknob at any time permitted entry into the lounge.

The next page was a photograph with graphic enhancements of the university instructor and a colleague sitting at a table in a real teachers lounge. Pictured behind them in the lounge were a <u>bulletin board</u> (real) and a



graphically inserted <u>file cabinet</u>, drawn to look as if it were part of the lounge setting. Passing the cursor over either of these two objects caused a web "rollover" to occur where text information appeared identifying the object as well as the traditional hyperlink hand. Clicking on either the <u>bulletin board</u> or the <u>file cabinet</u> brought up additional pages.

Clicking on the <u>file cabinet</u> resulted in the appearance of four file folders, each with a name of a fictional student name. Clicking on a file folder tab took the user to the content information for that vignette. Each vignette page had a drawn graphic that portrayed the student who was the focus of the case study. In order to give students at all six distance education sites focus for their collaborations, the fictitious vignettes or case studies were created about four children at different grade levels: kindergarten, fourth grade, seventh grade, and eleventh grade. Two of the children were specifically identified as having disabilities, while two were described as having difficulties but here not specifically mentioned as disabled. Class participants selected one vignette to respond to over the course of the semester. The vignettes were written from the perspective of a school professional who was concerned about the student and who came to the Teachers Lounge to seek advice or information.

Four times during the semester, the vignettes were updated. These updates consisted of the school professional receiving a phone call from a parent, the results of testing, or of some school occurrence that led to more questions or concerns. In this manner, the students had reasons to add contributions to the web site throughout the semester.

As part of the course requirements, students were asked to contribute to the web site at least four times. Five points could be earned for each contribution (up to four); therefore, participation with the web site amounted to only about 4% of the students' grade for the course.

In addition to updates and student contributions, other professionals were invited to add their perspectives to the discussions of the vignettes. For example, the director of the university's Office of Student Support Services made comments related to the case of the eleventh grade student with multiple disabilities who wished to go to college. A professor of literacy studies commented on the instructional approaches that might be taken with a fourth grade student with specific learning disabilities.

Student Reactions to the Teachers Lounge Web Site

A total of 56 students were enrolled in the course at all six sites. The demographics of the students are presented in Table 1. Students were asked to complete a brief survey about their use of the Internet prior to the launching of the web site. Fifty-three students (95%) completed the anonymous survey. Students were evenly divided on whether they would be accessing the web site at home, at school (computer lab or library), or at both places. It was more common for the on-campus students (who were largely undergraduates) to use their personal computers, rather than those at a school, lab, or library. Practicing teachers were apt to use their classroom computers, if these computers were connected to the Internet. The majority of students reported using on-line services daily or several times per week for E-mail, research, and/or services such as banking or travel. Most students had never taken a course that had an Internet or web site component. However, the vast majority of students reported little or no anxiety about the Internet component of this course, although three students stated they had very high levels of anxiety about the using the web site.

At the end of the semester, students were asked to anonymously evaluate the web site component of the course through a questionnaire. A total of 91% of the students completed this evaluation. Several major themes emerged, defined as similar comments mentioned by three or more students. The evaluations was divided into questions about the vignettes, the bulletin board, and changes in the students' level of comfort or anxiety about using an interactive web site.



Table 1
Demographics of the students enrolled in the collaboration course

	On-campus	Site A	Site B	Site C	Site D	Site E	Total
Distance from campus		80 mi.	165 mi.	130 mi.	30 mi.	60 mi.	
Students Enrolled	27	9	5	3	9	3	56
Preservice teachers	24	0	0	1	3	2	30
Practicing teachers	3	9	5	2	6	1	26

The questions about the vignettes revealed that approximately equal numbers of students responded to each of the four vignettes. One student chose to respond to all four vignettes and one student reported reading but not responding to any of the vignettes. The students also were asked to comment on the most interesting or effective aspects of the vignettes; the least interesting or effective aspects of the vignettes; and their suggestions for improvement of the vignette activities. Several positive and negative themes emerged from these questions.

On the positive side, students enjoyed seeing others' perspectives on the situations and comparing them with their own. Students commented about the interest, realism, and quality of the vignettes. Additionally students enjoyed the comments made by professionals from outside the class and recommended adding more of these.

On the negative side, students wanted more information to react to through more frequent updates of information or having more vignettes to respond to. On a related note, they also disliked having to read all of the other students' comments (due to the large number of students enrolled in the course and the small number of vignettes). Additionally, comments were made about difficulties in accessing the site at various times over the semester.

Questions about the bulletin board component of the web site indicated that these class announcements were not accessed as often as the vignettes. Almost 40% of the students reported that they either never checked the announcements or checked them three times or less during the semester. Eleven specific suggestions were made for improvements to the bulletin board; however, only two of them (posting reminders about assignments that were due, and announcing events related to special education that were occurring throughout the area) were suggested by more than one person.

Thirty-seven students indicated that the activities increased their comfort about using an interactive web site or made general positive comments about the site. Twelve students reported that the assignment did not change their level of comfort, while one student indicated that this was a very difficult and uncomfortable activity.

Suggestions for Improving Web-Based Course Components

Web-based course components, such as those described here, have a great deal of potential as enhancements to distance education courses in special education. Case studies seem to be an effective focus for web-based interactions of students in a course such as the one described. However, it is vital that the cases or vignettes created for the web site be interesting, realistic and dynamic. The drawings of the fictitious students were appreciated, but other elements such as student records, test results, and Individual Educational Plans would have enhanced the cases. Two of the practicing teachers enrolled in the class reported that collaborating on a



fictitious case was not helpful to them when they were faced daily with real students. Others, however, reported that the cases helped them make applications to their own students.

Students were asked to respond to the vignettes at least four times during the semester, but no other parameters were put on this requirement. As a result, some students reported that they often forgot to check the site regularly. About six students (all preservice teachers) made all four of their responses within the last two weeks of the semester, obviously not appreciating the collaborative emphasis of the activity. In the future, additional guidance will be given to the students, including more discussion of the site and written suggestions/guidelines for the students' responses.

The original goal for the web site was for it to negate the barrier of distance among the members of the class. Soon it became clear that the site had much more potential. The most obvious extension of the site is to use it for collaboration among the members of more than one class, in more than one academic discipline. Currently, plans are underway for graduate students in a course in school counseling to also contribute to the site. It is not much of a stretch to include students in a variety of related fields such as general education, school psychology, educational administration, speech pathology, etc. In this manner, professionals of varying perspectives are involved in collaborations centered on students with special needs.

Since location is not a limiting factor in the use of a web site, students from other universities or regions of the country could also be involved. This would enable students to hear voices that reflect diversity not represented in a local community. Former students or practicing teachers who are not enrolled in the course could contribute to the case studies or be asked to relate the vignettes to situations in their own schools. The authors of the course texts, nationally known authorities in relevant subjects, and policy makers can all be invited to contribute to discussions on a course web site.

In conclusion, as we experiment with this powerful new technology, many of us will need considerable support to be able to realize our visions. The creation of the Teachers Lounge web site was a collaborative effort, and it would not exist without the work of several persons. As colleges and universities make more use of the Internet for the complete or partial delivery of courses, instructors must have access to other professionals with supporting skills. The most effective and rewarding components of the development of this web site came as a result of the collaboration, brainstorming and speculating that came from working with other professionals.

References

- Anderson, P.L., & Baker, B.K. (1999). A case-based curriculum approach to special education teacher preparation. <u>Teacher Education and Special Education</u>, 22, 188-192.
- Boe, E.E., Cook, L. H., Bobbitt, S. A., & Terhanian, G. (1998). The shortage of fully certified teachers in special and education. <u>Teacher Education in Special Education</u>, 21, 1-21.
- Elksnin, L.K (1998). Use of the case method of instruction in special education teacher preparation programs: A preliminary investigation. <u>Teacher Education in Special Education</u>, 21, 95-108.
- FileMaker Pro 4.0. [Computer software]. (1998). Santa Clara, CA: FileMaker, Inc.
- GoLive Cyberstudio 4.0. [Computer software]. (1998). San Jose, CA: Adobe Systems
- HomePage 3.0. [Computer Software]. (1998). Santa Clara, CA: FileMaker, Inc.



- Office of Special Education Programs (1998). <u>Twentieth annual report to Congress on the implementation of the Individual with Disabilities Education Act</u>. Washington, DC: U.S. Department of Education.
- Spooner, F., Spooner, M., Algozzine, B., & Jordan, L. (1998). Distance education and special education: Promises, practices, and potential pitfalls. <u>Teacher Education and Special Education</u>, 21, 121-131.

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