Listening to Students: Investigating the Effectiveness of an Online Graduate Teaching Strategies Course

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Abstract

In an effort to meet the increasing needs of the graduate student population at a large southwestern state university, several online courses have been developed and implemented to assist students in meeting the academic requirements for a Master's degree in Education and/or post baccalaureate teacher certification. The purpose of this exploratory study was to gather information on graduate students' perceptions of the effectiveness of an online course designed to teach instructional strategies used in face-to-face (FTF) secondary classrooms, estimate the perceived ease of transfer of the strategies to a FTF classroom, and gain insight into the online graduate student population. Students were administered a web-based survey after they had completed the course. The instrument explored their perceptions on the effectiveness of the various online and fieldwork activities. Findings showed that the respondents rated the field experience activities within the 25-hour practicum among the highest and the routine weekly readings and summaries among the lowest. Implications of these results are discussed.

Keywords: online learning; online teaching; teacher education; instructional strategies; secondary education

Introduction

With the increasing demands to offer quality distance education courses to meet the needs of our expanding graduate student population, this investigator conducted survey research to explore the effectiveness of the learning activities of an online course she routinely facilitates. The results would inform her online teaching practices as well as provide information on ways to improve the quality of the course and the online learning experience for future students (Calloway, 2008; Cuthrell & Lyon, 2007). Another impetus for the study was the Curriculum & Instruction Department's desire to expand its current online graduate course offerings as well as revise existing online courses to improve their overall quality and student satisfaction with the online learning experience. The investigator considered a web-based survey as the most practical approach to efficiently gather data from her students who had previously completed the course. Creating an online survey allowed for a low cost, fast and efficient method of gathering data (Sue & Ritter, 2007). A variety of survey question formats allowed for efficient data gathering.

The purpose of this exploratory study was to gather information on graduate students' perceptions of the effectiveness of an online course designed to teach instructional strategies used in face-to-face secondary classrooms, estimate the ease of transfer of the learned strategies to a face-to-face classroom, and gain useful information about the online graduate student population enrolled in the course. The survey was designed to address the following research questions:

Question #1: How effective were the online instructional activities in learning secondary teaching strategies?

Question #2: What were the graduate students' perceptions of their ability to transfer the learned instructional strategies to a face-to-face classroom setting?

Question #3: What were the characteristics of the graduate students enrolled in this online course?

Literature Survey

According to the Sloan Consortium, institutions of higher education are expanding their offerings of distance education courses to increase access to students, increase graduation rates, and increase enrollment of non-traditional students. "Almost 3.5 million students were taking at least one online course during the fall 2006 term; a nearly 10 percent increase over the number reported the previous year" (Allen & Seaman, 2007, p. 1). Although there has been burgeoning growth in online learning, the actual percentage of college students and faculty affected has been small (Sprague, Maddus, Ferdig, & Albion, 2007). Approximately 8% of undergraduate and 10% of graduate students have taken an online course (National Center for Education Statistics, 2003). According to Saba (2005), designing and facilitating online courses in all fields of study is limited to a small percentage of college faculty (2-12%). It is predicted that this dynamic is about to change. More students and faculty will be involved in online learning due to several societal factors including higher education's competition with for-profit institutions; an increase in nontraditional student enrollment demanding the convenience and flexibility of online courses and programs; an increased demand of online courses in K-12 settings; and "the continued publication of scathing reports on today's teacher education programs" (Sprague, et al, 2007, p. 158).

With the commercialization of higher education, increasing competition, and expanding online enrollment is the growing need for quality assurance (Wang, 2006). Various organizations and accreditation agencies have outlined "best practices" and/or developed frameworks for quality in distance education. These include the Sloan Consortium Quality Framework (Moore, 2002); *Best Practices* by The Council of Regional Accrediting Commissions (2000); *Guidelines for Good Practice* by The American Federation of Teachers (2000); and *Accreditation and Assuring Quality in Distance Education* by The Council for Higher Education Accreditation (2002). Their common emphases include

1. Strong institutional commitment
2. Adequate curriculum and instruction that fit the new delivery medium and match the rigor and breadth of equivalent on-campus programs
3. Sufficient faculty support
4. Ample student support
5. Consistent learning outcome assessment (Wang, 2006, p. 270)

Studies such as this one are needed to investigate and ensure that individual distance education courses support rigorous learning outcomes, effectively use available technology to improve pedagogy, and provide student satisfaction and support. In addition, this study supported the notion of institutional support for faculty in conducting and publishing research related to online learning and teaching.

To ensure sound pedagogical practice, Newlin & Wang (2002) recommend that faculty apply American Association of Higher Education's *Seven Principles of Good Practice in Undergraduate Education* (1987) when designing online courses. The seven principles are

1. Encourage contact between students and faculty
2. Develop reciprocity and cooperation among students
3. Use active learning techniques
4. Give prompt feedback
5. Emphasize time-on-task
6. Communicate high expectations
7. Respect diverse talents and ways of learning

These principles of "best practice" were incorporated into the design of the course. For example, discussion board forums were created each week throughout the semester for dialogue among students and the instructor focusing on the concepts being explored. An "Assignment Clarification" forum was created as a central location for students to pose questions or concerns about assignments, field experience requirements, and other course related concerns. A variety of activities and media were

incorporated into the design of the course to meet the diverse learning preferences of the students enrolled in the course. For example, video clips modeling the implementation of various instructional strategies in the classroom were employed; routine weekly activities included student-produced learning artifacts as demonstration of their learning. The instructor communicated high expectations by providing performance assessment rubrics outlining specific assignment criteria and provided weekly feedback to the students regarding their progress.

Placement of Course in Master's Program

Strategies for Improving Secondary Teaching is a required course for a Master's degree in Education and/or post baccalaureate teacher certification. The course is a prerequisite to student teaching and emphasizes exploration and analysis of research-based instructional practices appropriate for meeting learning objectives and content in secondary education. Included in the curriculum is a 25-hour field internship at a local secondary campus.

Course Development

A subject matter expert in Curriculum & Instruction and an instructional designer in the university's technology department originally designed the online course, founded on a constructivist philosophy of learning (Vygotsky, 1978, 1986). The course objectives were carefully aligned with state educational standards. This C&I faculty member was awarded a one-year course release to develop the course and the university's instructional designer routinely supported faculty in online programmatic course design. This collaborative effort demonstrated the university's commitment to support faculty in developing its distance learning programs as well as the Curriculum & Instruction Department's dedication to ensure that the program and course design resulted in "collegiate level learning outcomes appropriate to the rigor and breadth of the degree or certificate awarded by the institute" (Wang, 2006, p. 268).

Orientation to Course and Groupware

The course was delivered through Blackboard, a commercial/proprietary software program that provides asynchronous web-based course management. The instructional designer created a student orientation to the groupware within the course website with navigational instructions on various elements such as location and access of course documents, discussion board, student homepage, mail tool, online grade book, etc. As the facilitator of the course, this investigator routinely called students on the phone to help them access the course website if they had not logged on to the course site within the first days of the new semester. A course syllabus with clear objectives aligned with the state's educator certification standards was provided, as well as a weekly task summary outlining the semester course activities with their corresponding point values.

Building a Learning Community

Knowing the importance of building an online community (Brown, 2001; McElrath & McDowell, 2008; Silvers, O'Connell, & Fewell, 2007; Wilson, Cordry, & King, 2004), several activities were designed at the beginning of the semester to build cohesion among the class. Students introduced themselves and welcomed at least 2 classmates for their first assignment. Next, they created a homepage, providing academic and personal information, including a current photo. Students then reviewed their classmates' homepages and shared what impacted them the most about each classmate within a discussion forum designated for that purpose. In addition to these initial community-building activities, numerous cooperative learning activities were interspersed throughout the semester to develop reciprocity among the students and engage them in meaningful online experiences (Wenger, 2002).

Discussion Board: The Heart of the Course

To communicate clear expectations of quality online discussions and provide scaffolding, students were provided a copy of *Online Discussion Protocols and Rubrics* document (Dabbagh, 2003), with permission from the author. Weekly discussions were prompted by questions related to the weekly readings. Discussion forums were also created for students to post many of their drafts of their assignments, with instructions to peer edit and comment on at least two of their cohort's postings.

Routine Weekly Activities

Routine weekly activities included reading and summarizing the assigned text. For each weekly summary, students (a) constructed a concept map (http://bubbl.us) identifying the salient points of the reading; (b) included an image that encompassed the main idea of the text using Google Image Search (http://images.google.com) with a description of the significance of the image in relation to the content; and (c) wrote a reflective paragraph describing what impacted them the most from the reading. These summaries were posted to a designated forum, and students were required to review and comment on at least two of their cohorts' artifacts. The purposeful design of these routine weekly activities was to model instructional strategies the students could use with their secondary students in the classroom. For example, the practice of creating concept maps enhanced the graduate students' skill of developing visual aides for their students, as well as providing their students an open source online tool (http://bubbl.us) to create visual representations of their learning.

Cooperative Learning Activities

Students were assigned a "home group" at the beginning of the semester and collaborated within that same group throughout the semester as they completed various cooperative learning activities. Several jigsaws *(*http://www.jigsaw.org/) were conducted over the semester, allowing the group members to experience and explore this cooperative learning instructional strategy (Aronson, 2009). For example, early in the semester, students were required to summarize a lengthy (47-page) article, *Pedagogy Matters: Standards for Effective Teaching Practice* that outlined and explained the Center for Research on Education, Diversity, and Excellence (CREDE) five standards for effective pedagogy: (a) joint productive activity, (b) language and literacy development, (c) making meaning, (d) complex thinking, and (e) instructional conversation (Dalton, 1998). Students were instructed to locate their group's jigsaw discussion forum (5 members) and determine how they would divide up the work, meet the assignment deadlines, and post a seamless final group document that included the key points of the article and non-linguistic representations of the content. The jigsaw activity was assessed on the following criteria as outlined in a performance assessment rubric: (a) delegation of responsibility, (b) group timeline; (c) quality of images; and (d) final group artifact. In addition to their participation in this cooperative learning technique, students' engagement in the weekly discussions enhanced course interactivity, as well as a variety of activities requiring web searches and research within the university library's electronic databases.

Video Clips

Several video clips were incorporated into the course, designed to illustrate various instructional strategies as well as provide some variety in the course. Students were instructed to watch the short clip and discuss various aspects of the instructional strategy in a discussion forum. Under the auspices of the 2002 Technology, Education, and Copyright Harmonization (TEACH) Act , which "expands the scope of educators' rights to perform and display copyrighted works in digital online instruction" (Ashley, 2004, abstract) brief clips were used from the following: *Sister Act*, *Saturday Night Live*, *Good Morning Miss Tolliver*, and the *Emperor's New Groove*. In addition, video footage of the subject matter expert facilitating a "first class day" with his undergraduate students was employed to illustrate building a climate of trust and facilitating cooperative learning activities designed to build class cohesion.

Field Experience

Graduate students were required to complete a 25-hour field experience in a local secondary public school. They completed a district permission form, requesting a district and/or campus in their content area. Upon notification of their placement by the university liaison, students then contacted their cooperating teacher and visited the campus. Requirements included a) a documentation log, verifying the time spent and summarizing the activities for each visit to the school, b) a teacher interview, c) three classroom observations in three different content areas, d) textbook analysis, e) development of a lesson plan, f) video recording (DVD) of a teaching episode, g) a lesson plan reflection, and h) feedback forms from the cooperating teacher. These were assembled into a portfolio and submitted near the end of the semester, constituting approximately 20% of the course grade. Completion of the fieldwork was recorded in the students' teacher education file in the Center for Student and Professional Services, so they were able to enroll in student teaching. The graduate students who were practicing teachers were waived the

25-hour requirement but were required to complete all of the aforementioned activities, excluding the documentation log and cooperating teacher feedback forms.

Method

Context and Participants

The investigator recruited students who had been enrolled in the online course, using class rosters with university e-mail addresses from three previous long semesters (Fall 2006, Fall 2007, Spring 2008) spanning a two-year period. The investigator invited 66 individuals to participate through an e-mail invitation (see Appendix A); seventeen responded. The invitation included the purpose of the research survey, the estimated time to complete it, explanations related to informed consent and confidentiality, and a two-week deadline for completion. Follow-up e-mails were sent twice to non-respondents, each time in two-week time increments. Table 1 summarizes the demographic characteristics of the participants.

Table 1.Demographic Characteristics of Participants (N=17)

Characteristic	**n**	**%**
Age at time of survey (years)		
24-27	6	35.3
28-32	4	23.5
33-35	4	23.5
38-49	3	17.7
Gender		
Female	7	41.2
Male	10	58.8
Ethnicity		
White	14	82.3
African-American	1	5.9
Hispanic	1	5.9
Other	1	5.9

Measures

SPSS mrInterview (4.0), a browser-based authoring tool, was used to create the online survey. The tool allowed respondent data to be exported directly into SPSS, a data analysis software program. Having access to such a sophisticated authoring tool afforded this investigator the opportunity to administer an effective, professional, and respondent-friendly survey.

Although research demonstrates that web-based surveys provide a greater response speed and the same or better quality data, as compared to mail surveys, the response rates are lower (Sue & Ritter, 2007). To compound this unfortunate trend, the students were contacted via their university e-mail address in this study. Several of the targeted students had graduated or were no longer enrolled with the university at the time of the survey administration.

The survey addressed three research questions: (a) How effective were the online instructional activities in learning secondary teaching strategies? (b) What were the graduate students' perceptions of their

ability to transfer the learned instructional strategies to a face-to-face classroom setting? and (c) What were the characteristics of the graduate students enrolled in this online course? Various survey response categories were employed to gather the participants' data. For example, single response, multi-response, and numeric question types were employed to gather much of the respondent demographic information and other general information, such as the type of degree the participants were pursuing, work demands while taking the course, number of semester hours enrolled during the same semester, etc. A categoric grid allowed respondents to quickly and easily rate a comprehensive list of the course activities.

Results

SPSS mrInterview (4.0) automatically calculated the percentages of the survey responses. In addition, frequency counts were conducted on the various survey items. The results are presented in relation to the research questions.

Question #1: How effective were the online instructional activities in learning secondary teaching strategies?

Participants rated each of the weekly activities in response to "How effective were these learning activities in facilitating your learning of instructional strategies?" Point values for the responses were assigned as follows: excellent (4), good (3), fair (2), poor (1), and don't recall was treated as missing information. Means and standard deviations were calculated for each activity. Table 2 presents the effectiveness of the online activities from most effective to least effective as demonstrated by the mean and standard deviation scores.

Question #2: What were the graduate students' perceptions of their ability to transfer the learned instructional strategies to a face-to-face classroom setting?

Question #3: What were the characteristics of the graduate students enrolled in this online course? Table 3 provides participant characteristics.

Table 2 .Rating of Online Activities by Number, Mean and Standard Deviation

Activity	**N**	**Mean**	**Standard Deviation**
Field Experience Portfolio: Interview a teacher	16	3.44	0.63
Field Experience Portfolio: Examine a textbook	16	3.44	0.63
Engaging Students: Create a magazine cover as summary for *Making Learning Real: Engaging Students in Content*	16	3.44	0.73
Cooperative Learning: Design a cooperative learning activity in your content area	16	3.38	0.62
Field Experience Portfolio: Write video teach reflection	16	3.38	0.72
Field Experience: Document classroom observations	16	3.31	0.7
Performance Assessment: Construct extended-type performance task and performance assessment in your content area	15	3.27	0.7
Field Experience Portfolio: Construct portfolio presentation of field experience	15	3.25	0.64
Field Experience: Complete 25-hour observation requirement	16	3.25	0.68
Culture for Learning: Discuss "What is a learning community?"	16	3.25	0.75
Cooperative Learning: Identify key concepts of cooperative learning in interactive activity	16	3.25	0.77
Field Experience: Construct lesson plan for video teach	16	3.25	0.86
Cooperative Learning: Watch *Emperor's New Groove* clip and discuss in forum	16	3.25	0.93

Culturally Responsive Pedagogy: Create Power point presentation on article from *Changing Demographics* special issue of *Educational Leadership*	14	3.21	0.8
Mental Models: Discuss *7 Myths of Learning*	15	3.2	0.68
Questioning Styles and Strategies: Construct a summative exam for content related to your previously constructed cooperative learning activity	15	3.2	0.68
Assessment: Create early assessment	15	3.2	0.77
Active Learning: Watch *Jerry Seinfeld SNL* video clip; identify ineffective practices and post to forum	15	3.2	0.77
Engaging Students: Watch *Newscast* video clip and discuss advantages and disadvantages of strategy	15	3.2	0.77
Student Assessment: Compare strategies of *Today's vs. Yesterday's Classroom* in interactive activity	16	3.19	0.66
Mental Models: View *First Day of Class* video and categorize teaching behaviors	16	3.19	0.83
Field Experience: Record video teach	16	3.19	0.91
Active Learning: Identify the ABCCD components of an objective	16	3.18	0.83
Learning Styles: Complete learning styles online inventory and post results to forum	15	3.13	0.74
Student-Centered Instruction: Watch *Good Morning Miss Tolliver* clip; identify strategies and discuss in forum	15	3.13	0.92
Routine Weekly: Incorporate Google image w/description in weekly summaries	13	3.08	0.86
Learning Styles: Compare results of 2 different online learning style inventories	15	3.07	0.7
Questioning Styles and Strategies: Discuss common questioning errors after taking self-test	15	3.07	0.88
Questioning Styles and Strategies: Complete jigsaw on article *Questioning and Discussion: Creating a Dialogue*	15	3.07	0.88
Motivation: Cognitive Interactions: Post thought provoking questions and responses to *Concepts of Ability and Motivation*	14	3.07	0.73
Building a Learning Community: Review and comment on classmates' homepages	16	3.06	0.68
Performance Assessment: Web search for analytic rubric	16	3.06	0.77
Routine Weekly Activities: Peer edit classmates' work	16	3	0.73
Mental Models: Create a broadcast letter	16	3	0.73
Culture for Learning: Complete jigsaw in cooperative learning group on *How to Create a Learning Community* article	15	3	0.85
Routine Weekly: Incorporate reflective paragraph on impact of chapter content in weekly summaries	15	3	0.85
Building a Learning Community: Create a personal homepage	16	2.94	0.77
Cooperative Learning: Identify PIES in 2 video clips	16	2.94	0.77
Routine Weekly: Rate quality of readings from e-reserve	15	2.87	0.77
Routine Weekly: Rate quality of readings from *Assessment* text	16	2.81	0.75
Routine Weekly: Summarize weekly readings	16	2.81	0.75
Culture for Learning: Watch *Sister Act* video clip and discuss approaches to teaching	16	2.81	0.87
Routine Weekly: Incorporate concept maps in weekly summaries	16	2.75	0.83

Table 3. Responses to Survey Question "Please Rate How Well You Think You Will Be Able To Use The Instructional Strategies That You've Learned In This Online Course In A Face-To-Face Classroom."

Response	**n**	**%**
It will be easy for me to transfer the instructional strategies that I learned online into the classroom setting.	6	35
It will be moderately easy for me to transfer the instructional strategies that I learned online into the classroom setting.	10	59
It will be moderately difficult for me to transfer the instructional strategies that I learned online into the classroom setting.	1	6
It will be difficult for me to transfer the instructional strategies that I learned online into the classroom setting.	0	0

Table 4. Participant Characteristics (N = 17)

Characteristic	**n**	**%**
Bachelor's Degree		
Business Administration	2	12
Education	3	18
Fine Arts and Communication	5	29
Liberal Arts	6	35
Science	1	6
Program		
Masters of Education	11	65
Post-baccalaureate Certification	6	35
Semester Hour Enrollment		
Full-time (9 hours or more)	13	76
Part-time (6 hours or less)	4	24
Employment Status		
Full-time (40 hours or more)	7	41
Part-time (less than 40 hours)	6	35
Not working	4	24
Beginning Technical Skills		
High (extensive computer experience)	12	71
Medium (some computer experience)	4	24
Low (little computer experience)	1	6
Weekly Hours Spent on Online Course (not including the 25-hour field experience)		
0-3 hours	5	29
4-6 hours	7	41
7-9 hours	3	18
more than 9 hours	2	12

Discussion

Effectiveness of online instructional activities

The overall high ratings of the course activities speak to the quality of the original design of this student-centered course, jointly created by a subject matter expert and an instructional designer. Among the active and authentic learning strategies (Brown, Collins, & Duguid, 1988) used throughout the course, was the use of a field experience model which allowed these graduate students the opportunity to bridge theory with practice (Brandsford, Pellegrino, & Donovan, 1999). The activities rated as most effective were those related to the field experience. When given the opportunity on the survey to provide comments about the field experience, one participant said:

> For me the field experience was one of the strongest and most effective learning tools I experienced in this class. I have next to no classroom experience so this exercise really helped to educate me and lower some anxiety on getting involved in classroom interactions. Real world experience can't be learned in a textbook or an on-line video in almost anything (in my opinion). The experience was also valuable in forming real world contacts for me that I have been able to use since.

Another said:

> I greatly enjoyed my field experience. I only wished that more hours were required. Spending time in the classroom, working with my cooperative teacher, helping students, and practicing what I was learning in the course was the most fun I had that semester.

Even though the field experience activities were rated among the highest, some participants reported dissatisfaction with the time consuming procedures involved in gaining access to a campus. Although frustrating, this experience teaches the students about the necessary procedures school districts must follow to ensure student safety. Students were required to complete a district permission request form and a criminal background check prior to making a request for placement in a district. Additionally, there was often a long wait for communication among the university liaison, cooperating districts, the individual campuses, and their cooperating teachers, before students were actually notified that they could begin their placement. Students were then required to initiate contact with their cooperating teacher and campus to begin the 25-hour fieldwork. One participant who had difficulty in the field experience wrote:

> It was really difficult to get started on my field experience due to a breakdown in communication between the school district and the university office in charge of doing the placement. This was a very frustrating part of the experience, and once I was actually in the classroom it made me feel really rushed to finish the requirements for the field experience rather than actually get to take full advantage of the opportunity.

The routine weekly reading activities were scored among the lowest in the course. This may be due to the time and labor intensity of these activities. The weekly routine included (a) summarizing the weekly readings via a textual summary or outline of the content, (b) visually representing the most salient ideas in the reading by constructing a concept map, (c) inserting an image from the Web that represented the overall theme, (d) describing how the image related to the theme, (e) and concluding the summary with a reflective paragraph discussing what impacted them the most from the reading. The visual aspect of the summaries (concept map and Google image) appealed to the students as they frequently commented on the various visual aspects of their cohorts' summaries without prompting. It seems that utilizing multiple representations of knowledge enhanced deep conceptual learning (Jonassen, Carr, & Yueh, 1998) and provided an element of creativity that was appreciated.

Transfer of instructional strategies to a face-to-face classroom

A clear majority of the students (94%) reported that transferring the instructional strategies they learned online into a face-to-face classroom would be moderately easy or easy. This finding could be explained by the students' opportunity to practice many of the instructional strategies in the online setting, as they were actually learning about them in the course. In addition, the opportunity to observe the use of the

strategies by several classroom teachers in their field experience and practice some of the strategies within their internship may also explain their perception of their ease of transfer.

Characteristics of online graduate students

These graduate students were mostly working adults with heavy demands on their time. They had previously earned bachelor degrees in different program areas, ranging in variety from the arts and humanities to business administration. The majority was working full-time or part-time jobs and was full-time graduate students. In this single course alone, 71% reported spending 4 to 12 hours per week in this course, excluding the 25-hour field experience practicum. 65% were working on their Masters in Education and 35% were pursuing post-baccalaureate certification.

Conclusions

This study proved to be informative in identifying those activities that the online graduate students rated as most and least effective in learning research-based instructional practices in secondary education. Further asking the students to identify the most effective and meaningful activities *within* each of the weekly thematic learning modules might help to balance the number of interactions in this web-based course, so that the students and instructor are not overwhelmed with too many interactions that may actually hinder learning (Hirumi, 2003). A future survey that queries the amount of time required to complete each activity would inform effective design of course activities in determining an appropriate amount of time spent weekly on the course activities, as compared to completing similar activities within a face-to-face environment. Time management is an ongoing concern for both students and instructors in distance education (Hirumi, 2003).

This study provided useful information on the perceived ease of transfer of the learned strategies to a face-to-face classroom, as well as insight into the population of students taking the course. The study also provided valuable information regarding areas needing improvement, such as the time required for field internship placement. Delays in placement were frustrating to the students and made some feel rushed in an experience designed to enhance their learning, observation, and practice of effective secondary instructional strategies. In addition to improving the facilitation of student placements in their field experience, exploring the most effective ways to integrate the theoretical concepts and course activities with the students' field internship is worthy of investigation. The comparative lower ratings on the weekly readings warrant further investigation of the texts from which the readings were assigned, as well as the value of the structured activities that culminated from the readings.

The present study investigated students' perceived effectiveness of the instructional strategies utilized in the online graduate course *Strategies for Improving Secondary Teaching*. Findings revealed those practices deemed most effective by respondents, as well as those that need improvement. This valuable feedback will allow the investigator/instructor to modify this and future courses accordingly. With the increasing demand to offer quality online courses, investigation of best practices in the design and implementation of such courses is essential.

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Appendix A

Letter of Invitation to Participate

Dear <Name>:

You are receiving this e-mail because you were enrolled in *Strategies for Improving Secondary Teaching*. Dr. <Name> requests your participation in this online survey designed to explore the effectiveness of an online learning environment to teach instructional strategies to be used in a face-to-face classroom.

The survey should take no more than 20-25 minutes to complete. The results of this survey will be reported in aggregate form only. The resulting data will be analyzed, reported, submitted, and hopefully, published in a scholarly research journal.

Your participation in this research is strictly voluntary. Furthermore, your responses will be used for research purposes only and will be confidential; no effort will be made to track your responses and no records will be maintained on any person completing the survey. Your participation is valuable and important to in accomplishing my research goals. Respondents are requested to report information about the effectiveness of the course; there is little or no risk to the respondents.

Please click on the link below to begin taking the survey. If you need to stop and begin at a later time, simply close your browser and re-click the link when you are ready to complete the survey. You will begin at the point at which you stopped:

<Web Link>

Thank you for your contribution to this project. I would appreciate your response by <insert date>. Please contact Dr. <Name> via e-mail <e-mail address> should you have questions regarding the survey or regarding your rights as a participant in this project.

Sincerely,

Dr. <Name>

Appendix B

Questionnaire for Effectiveness of Online Secondary Teaching Strategies

Thank you for agreeing to participate in this study designed to explore the effectiveness of an online learning environment to teach instructional strategies to be used in a face-to-face classroom. The survey will likely take 20-30 minutes to complete. Only aggregate sums of the measures will be used when reporting the survey results. None of your responses will be connected with you individually, and will only be considered in relation to other participants' responses. All information that you provide will be kept confidential.

Preliminary Information

1. How many online classes had you previously taken before you enrolled in *CI 5363: Strategies for Improving Secondary Teaching?*

   0 1 2 3 4 more than 4

2. What was your employment status at the time you were enrolled in CI 5363?

   Employed full-time
   Employed part-time
   Full time homemaker
   Seeking employment
   Unemployed

3. Please write the number of semester hours in which you were you enrolled at the time you participated in CI 5363, including CI 5363.

   Number of hours total ___ online ____ face-to-face_____

4. What program were you in at the time you were enrolled in CI 5363?

   Post-baccalaureate Certification
   Master's in Education
   Other

5. How would you rate your overall technological skills at the beginning of the semester in which you were an online student in CI 5363?

   1-low technical skills; little experience with technology other than general e-mail and surfing the Web

   2-medium technical skills; some experience with various technologies including e-mail, Web research, downloading programs, using Microsoft Office programs, using Adobe Acrobat reader, etc.

   3-high technical skills; extensive experience with a variety of technologies such as e-mail, Web research, downloading programs, using Microsoft Office programs, using Adobe Reader, downloading programs on the computer

6. How much formal teaching experience did you have when you enrolled in CI 5363?

   None
   Substitute teaching experience (0-1 year)
   Substitute teaching experience (1-2 years)
   Substitute teaching experience (more than 2 years)
   Classroom teaching (0-1 year)
   Classroom teaching (1-2 years)
   Classroom teaching (2-3 years)
   Classroom teaching (3-4 years)
   Classroom teaching (more than 4 years)

7. Please rate the following online activities on how effective you think they were in facilitating your learning of instructional strategies. These are listed in chronological order as they were experienced in the course:

How effective were these learning activities in facilitating your learning of instructional strategies? Excellent Good Fair Poor Don't Recall

Week #1: Building a Learning Community

Create a personal homepage
Review and comment on cohorts' homepages

Week #2: Mental Models About Teaching

Discuss *Seven Myths of Learning*
View *First Day of Class* video and categorize teaching behaviors
Create a broadcast letter

Week #3: Culture for Learning

Discuss "What is a learning community?"
Complete jigsaw in cooperative learning group on *How to Create a Learning Community* article
Watch *Sister Act* video clip and discuss approaches to teaching

Week #4: Assessment: Students

Compare strategies of *Today's Vs. Yesterday's Classroom* in interactive activity
Create early assessment

Week #5: Assessment: Instruction

Massaging the TEKS

Week #6: Cooperative Learning

Watch *Emperor's New Groove* clip and discuss in forum
Identify key concepts of cooperative learning in interactive activity
Identify PIES in 2 video clips
Design a cooperative learning activity in your content area

Week #7: Active Learning

Identify the ABCCD components of an objective
Watch *Jerry Seinfeld SNL* video clip; identify ineffective practices and post to forum

Week #8: Questioning Styles and Strategies

Discuss common questioning errors after taking self-test
Complete jigsaw on article *Questioning and Discussion: Creating a Dialogue*
Construct a summative exam for content related to your previously constructe cooperative learning activity

Week #9: Student-Centered Instruction

Watch *Good Morning Miss Toliver* clip; identify strategies and discuss in forum

Week #10: Engaging Students

Watch *Newscast* video clip and discuss advantages and disadvantages of strategy
Create a magazine cover as summary for *Making Learning Real: Engaging Students in Content*

Week #11: Performance Assessment

Web search for analytic rubric
Construct extended-type performance task and performance assessment in your content area

Week #12: Learning Styles

Reflect on research articles on culturally responsive instruction (e-reserve)
Complete learning styles online inventory and post results to forum
Compare results of 2 different online learning style inventories

Week #13 Motivation

Cognitive Interactions: Post thought provoking questions and responses to *Concepts of Ability and Motivation*

Week #14 Culturally Responsive Pedagogy

Create power point presentation on article from *Changing Demographics* special issue of *Educational Leadership*

Routine Weekly Activities

Peer edit classmates' work
Rate quality of readings from e-reserve
Rate quality of readings from *Assessment* text
Summarize weekly readings
Incorporate concept maps in weekly summaries
Incorporate Google image w/description in weekly summaries
Incorporate reflective paragraph on impact of chapter content in weekly summaries

Field Experience Portfolio

Complete 25-hour observation requirement
Interview a teacher
Document classroom observations
Examine a textbook
Record video teach
Construct lesson plan for video teach
Write video teach reflection
Construct portfolio presentation of field experience

9. Please indicate the number of hours you estimate that you spent weekly completing the assignments and activities in this class (not including the 25-hour field experience requirement).

0-3 hours 4-6 hours 7-9 hours more than 9 hours

10. Please rate how well you think you will be able to use the instructional strategies that you've learned in this course to a face-to-face classroom by choosing one of the following statements that most closely approximates your response:

I think it will be easy for me to transfer the instructional strategies that I learned online into the classroom setting.

I think it will be moderately easy for me to transfer the instructional strategies that I learned online into the classroom setting.

I think it will be moderately difficult for me to transfer the instructional strategies that I learned online into the classroom setting.

I think it will be difficult for me to transfer the instructional strategies that I learned online into the classroom setting.

11. Please provide any comments here you have about your field experience.

12. What was most beneficial to you about the online course?

13. What would you suggest to improve this online course?

14. What other information would you like to share that this survey did not address?

Demographic Information

15. Gender

Male Female

17. Age

18. Ethnicity

19. Previous degrees held

20. Previous work experience

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