

TITLE:

The Problem: One Professor, Two Campuses, 600 Square Miles
The Solution: A Simultaneous Hybrid Classroom

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ABSTRACT

Graduate courses offered on both main and satellite campuses serve a widespread student population. In smaller programs enrollment in just one of these courses often will not support the cost of an instructor, whereas the combined enrollment of both sections usually will. In addition, many of the graduate students in these courses prefer traditional face-to-face classrooms while others prefer cyber classrooms and distance learning. What is one way to offer flexible course delivery for small enrollment classes? A Western Washington University professor created the simultaneous hybrid, teaching a single graduate course in the classroom and on-line at the same time!

BACKGROUND AND PURPOSE

Small graduate programs often face the challenge of scheduling enough courses for their students to meet the program's requirements while maintaining sufficient enrollment to pay the courses expenses. Cancellation of courses can occur due to low numbers of registrants, forcing students to drive long distances to a distant campus or to wait until the following year until the course is offered again at a closer campus. The issue becomes even more daunting when the program has two campuses, and 600 square miles for 1 instructor to cover.

This article documents how one professor and a graduate assistant solved the enrollment problem by confronting separate but equal student assignments, transfer of learning and instructor workload, developing a practical solution utilizing innovative procedures and readily available technology. The solution accommodates a diverse student preference for delivery of courses while maintaining quality of education and the personal sanity of the instructor.

SETTING

Western Washington University (WWU) has approximately 75 students in a Continuing and College Education (CCE) master's degree program. All are adult students and equally divided between the WWU main campus in Bellingham and a smaller campus in Everett, a Seattle suburb. Some students drive 2 hours from south Seattle to the Everett campus while others drive 2 hours from Canada to the Bellingham campus. Students typically drive to the closest campus directly from work for evening classes; it was a hardship when the course needed for graduation was on the more distant campus, a 4-hour drive each way.

In 2003, increased numbers of traditional CCE graduate courses employed a multi-mode delivery strategy with the course management system Blackboard. Students quickly embraced the flexibility and convenience of attending class each week face-to-face (F2F) and using a distance-learning (DL) portal to pick up class material and submit assignments. The popularity and success of the multi-mode course led to the idea of a simultaneous hybrid (SH) course to address the issues of enrollment, student commute time and delivery preference. This new course strategy would enable one instructor to teach the same course to both F2F and DL students at the same time.

INSTRUCTIONAL PLAN

It appeared that a simultaneous hybrid course could be successful if the instructional plan could: use virtually identical course material for both F2F and DL students, minimize instructor workload by streamlining tasks and create the proper learning environment for both F2F and DL students. If the planning were successful, the F2F and DL students would have equal course work and a similar transfer of learning without a doubling of the instructor's workload.

CLASS ORIENTATION

A week before the first F2F class meeting the instructor sent a welcoming e-mail to all students that contained a course syllabus, a complete explanation of the simultaneous hybrid course and a short personal questionnaire. Virtually all students replied, answering the brief questions, many attached a small digital picture as requested. An easily accessed "gallery" on Blackboard displayed the students' home e-mail address, telephone numbers and other voluntary information as well as their digital photo.

Instructors presenting DL classes know the value of students meeting one another and getting acquainted the first night of class. Therefore, in this initial e-mail all students were strongly encouraged to attend the first F2F class meeting. Most DL students attended and met the instructor and their on-line cohorts in person. In this orientation, students were encouraged to post questions about class assignments and procedures on Blackboard so all can share in the answers and minimize duplicate effort. The instructor encouraged the use of e-mail for more personal and specific communication between class members and with the instructor.

COURSE STRUCTURE AND MATERIALS

The instructor and all students used Blackboard to exchange ALL course materials, minimizing work and confusion. F2F and DL students used identical procedures for receiving material from and sending material to the instructor. Course material printed to “electronic paper” virtually eliminated document access problems. F2F and DL students downloaded the portable document format (PDF) electronic files and used free PDF reader software to reliably view all course material.

Blackboard areas held all electronic files specific to that week's instruction. PDF versions of Power Point presentations and supplemental reading along with related URLs furthered the student's information of the weekly topic. This modularity assured that F2F students unable to attend class one week could keep up by accessing all the week's materials on-line.

All electronic delivery of class material for both the F2F and DL students with Blackboard required its availability one to two days before the F2F class meeting. This insured that all students had adequate time to print and review the PowerPoint presentation, visit the recommended Web sites and read all the supplemental material for that class.

Simultaneous course activities were carefully set up using one orientation, one set of class activities and materials, and a coordinated lesson plan for each week. The use of multiple learning approaches insured equal transfer of learning for both F2F and DL students. Chart 1 and 2 show that most elements of the course were identical for both the F2F and DL students.

CHART 1: COURSE STRUCTURE

ITEM	F2F	DL
<i>Course description</i>	Identical	Identical
<i>Course Objectives</i>	Identical	Identical
<i>Reading Assignments</i>	Identical	Identical
<i>Writing Assignments</i>	Identical	Identical
<i>Individual Project Work</i>	Identical	Identical
<i>Class Participation Credit</i>	In Class	On-line
<i>Collaborative Project Work</i>	In Class	On-line
<i>Project Presentations</i>	In Class & On-line	On-line

CHART 2: COURSE MATERIAL

ITEM	F2F	DL
<i>Syllabus</i>	PDF	PDF
<i>Class Announcements</i>	In Class	DSS
<i>PowerPoint Presentation</i>	In Class & PDF	PDF
<i>Lecture</i>	In Class	DSS
<i>Formal Readings</i>	Textbook	Textbook
<i>Supplemental Readings</i>	WEB & PDF	WEB & PDF
<i>Student Assignments</i>	RTF	RTF
<i>Group Assignments</i>	RTF, PP & In Class	RTF, PP & QCP

CHART 1 & 2 KEY:

F2F: Face-to-Face Classroom

DL: Distance-learning Classroom on Blackboard

PDF: Portable Document Format document file (electronic paper)

DSS: Olympus Digital Speech Standard (DSS)© audiotape recording (instructor & students)

QCP: Qualcomm PureVoice audiotape recording (students)

Web: URLs to Internet Web Sites

RTF: Rich Text Format electronic files, readable by any word processor

PP: PowerPoint Presentation files, posted as a PDF file

ELECTRONIC RECORDING

The labor cost of video recording the F2F classes for DL students to view was considerable and required extra instructor time to coordinate the process. Moreover, academic video productions often are “talking heads”, encouraging students to listen to the instructor’s voice and take notes, rather than squinting at a tiny face on their computer monitor for 30 minutes.



Figure 1: Olympus DS-330 Digital Voice Recorder (left) with USB cradle

An audio recording solution used the Olympus DS-330 Digital Voice Recorder to record F2F classroom meetings (Figure 1). This tiny recorder blended quality, simplicity, and low cost (\$99) into an easy to use package. Holding over five hours of audio, the DS-330 has no moving parts and connects to a USB cradle where recorded audio files can be downloaded to the computer in seconds. The Digital Speech Standard (DSS) audio file uploaded to Blackboard was immediately available for students to download and hear using free, easy to use player software. Highly compressed DSS audio files require little disk space, sound great and download very quickly. A thirty-minute recording fits easily on one standard floppy disk! A SH instructor can make the distance-learning experience come alive with sound with a modest one-time investment. Recording and uploading announcements and lectures added no more than 10 extra minutes of work for the instructor each week.

WEEKLY ANNOUNCEMENTS

An audio recording of the entire first F2F class orientation insured that both F2F and DL students unable to attend received the same orientation and introduction to the class and fellow students. Recordings of weekly F2F classroom announcements and explanations of assignments kept DL students

well informed. This short recording saved the instructor from typing a duplicate update message for DL students each week and was a great help for F2F students that missed class or arrived late.

WEEKLY LECTURES

A one-hour weekly lecture followed the class announcements. The instructor recorded the lecture with the DS-330 recorder and uploaded the audio file to Blackboard the following morning. F2F students asked questions during the lecture; the instructor repeated their question before answering to improve the quality of the recording. DL students downloaded and listened to the DSS file as they viewed the accompanying PowerPoint slides, closely recreating the F2F classroom lecture at home. Synchronization of slides to the instructor's lecture was very simple and required no extra work. The instructor simply read the title or number of the new slide when presented, making it easy for the DL student at home to follow.

The PDF handout version of the PowerPoint presentation had three slides per page and space next to each slide for notes and questions for use by both F2F students in the classroom and DL students at home. DL students were encouraged to post their lecture questions and comments in their weekly discussion forum on Blackboard for all students to share.

COURSE PRESENTATIONS

As in most graduate courses, students in the F2F section made assigned presentations to the rest of the class. Audio recordings of the presentation as well as associated PowerPoint and other presentation materials posted on Blackboard allowed the DL students to hear as well as see their F2F cohorts work.

It was just as important for F2F students to hear and see the same assigned presentation from their DL cohorts. Some DL students simply purchased the Olympus DS-330 recorder to record their presentations and post the audio file and presentation material on Blackboard for all to see and hear. Other students chose not to purchase a recorder; for them the free Qualcomm PureVoice recorder software was perfect. The DL student used this software, a computer, and microphone to record a tiny digital audio file of their presentations at home for upload to Blackboard along with their presentation material. Both F2F and DL students used the free Qualcomm PureVoice player software to listen to these DL student presentations.

Effective use of simple technology enabled all F2F and DL students to present to all other F2F and DL students with minimal extra work for the instructor.

COURSE ACTIVITIES

The second part of the F2F class was an activity, usually a small group discussion on pertinent topics. A recording was not made of this portion of class for the DL students. Instead, the DL students use a similar discussion topic posted on Blackboard one day after the lecture audio. This twenty-four hour delay encouraged the DL students to listen to the lecture before discussing on-line and allowed adjustment and clarification to topics based on the success in the F2F class. Often, F2F student participated in the Blackboard DL discussions, enriching the discussion with ideas and opinions from the F2F class.

The problem based learning exercises presented in the second half of the F2F and on-line in the discussion forum gave the students a chance to put theory into practice. Experimentation quickly showed that certain discussion scenarios work better in a F2F setting, while others work better in DL format. Finding similar but equal discussion topics for both groups was a significant challenge at first. Fully understanding the differences between F2F and DL student discussions was key to finding similar topics that worked well for both groups; whether it was the F2F students discussing issues with full eye contact or the DL students discussing issues asynchronously in a cyber classroom.

F2F and especially DL students report that the group activities are valuable but time consuming. Collaborating entirely on-line can be quite a challenge and many DL students found that meeting at convenient times on weekends with their groups was a more efficient way to work on group assignments.

A blend of individual and group work for both the F2F and DL sections proved to be a highly effective way to maintain interest in the class material.

TRANSFER OF LEARNING AND ASSESSMENT

A combination of humanist, behaviorist and constructivist approaches were used to prepare material for the SH class. All students are involved in weekly discussions so the instructor can assess that learning is taking place. The instructor closely monitored the situated, or context cognition in both the DL discussion forum on Blackboard and the F2F group discussions. This feedback often resulted in course content adjustments that would better foster the generation and construction of new information from previous experiential knowledge.

All carefully crafted exercises were open-ended and had no one correct answer. No definitive solution typically created spirited discussions for both the F2F and DL students. Certain action verbs such as *identify*, *compare*, *contrast*, and *explain* framed the discussion exercise, helping students develop answers more thoughtfully.

The instructor provided many varied resources to both the F2F and DL students, encouraging the view of the problem from a variety of viewpoints. Blackboard provided equal access to these resources for both F2F and DL students as they tackled similar problems. These “discovery” or “just-in-time” learning resources were in as many different multimedia formats as possible to appeal to a wide range of learning styles, including newspaper and journal articles, web pages and audio/video material. Students were encouraged to provide their fellow students electronic resources that supported their position. The instructor evaluated these student provided resources for reuses in future courses.

Thorough testing of students in both the F2F and DL sections showed that there was no significant difference of scores on the final tests between the two groups. The workloads of both F2F and DL students were the same and students evaluated the simultaneous hybrid classes with high marks.

INSTRUCTOR'S WORKLOAD

The instructor's workload did not increase significantly with the simultaneous hybrid class. All the major elements of SH classes are the same: class preparation, material, activities, assignments, and delivery. The only additional work came from holding a second discussion on-line for the DL students after the F2F class. Participating in the DL discussion allowed the instructor to clarify points made in the recorded class lecture more thoughtfully, often leading to additions and improvements in future presentation of the same material.

SUMMARY

The use of a simultaneous hybrid course model in adult education courses at Western Washington University has proven to be a great challenge both pedagogically and technically. The experiment has proven that it is possible to conduct the same course simultaneously for both F2F and DL students while maintaining both the quality of instruction and instructor sanity. Before attempting to use a simultaneous hybrid course plan, it is important to fully understand both the differences and similarities in F2F and DL learning environments.

Often it is difficult for the instructor to accept that in technology enhanced education they are less the “sage on stage”, and more of a “guide on the side”. However, it is equally important for the instructor to remember that high technology resources replace paper, not the teacher and the need for sound teaching practices. The simultaneous hybrid is a good solution to the problem of small class sizes, limited course schedules and delivery preferences; everyone wins!