Transitioning from Brick and Mortar to Online: A Faculty Perspective

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Introduction

As an institution of higher learning in healthcare, the Medical College of Georgia (MCG) has turned to distance education as an opportunity to increase enrollment and deliver high-tech education to its students. This viable solution was used by MCG to address the need to stay abreast of the many technological changes in healthcare delivery and the increasing demand for more healthcare practitioners (Carroll-Barefield, 2004).

As a dual-mode institution, MCG offers primarily traditional on-campus programs with the addition of numerous distance education programs and courses. The School of Allied Health Sciences (SAHS), one of five schools within MCG, is an institutional leader in offering degree programs in Allied Health disciplines and for-credit and continuing education courses via a distance education format. These programs and courses are delivered using a variety of modalities including GSAMS, a real-time two-way interactive compressed video and audio network, and online using WebCT, an online course management software package (Carroll-Barefield, 2004).

Planning for instruction at a distance is a multi-faceted process (Simonson, Smaldino, Albright & Zvacek, 2003). Faculty participating in this transition must be knowledgeable in content areas as well as the instructional design process. Transitioning from a traditional to online program is not cut-and-dry. It requires the cooperation of a team of educators, administrators, and designers (Carroll-Barefield, 2004).

This article will present faculty perspectives and experiences in transitioning a traditional brick-and-mortar program to an online degree program.

The Transition

In 2002, the Department of Health Informatics (DHI) recognized the need to offer its Bachelor of Science (BS) degree in Health Information Administration (HIA) online. This was evidenced by the number of requests from program applicants and the shortage of Registered Health Information Administrators (RHIAs) to fill health information management (HIM) positions. The

U.S. Department of Labor (2003) has projected that approximately 6,000 new HIA workers are needed each year to fill new and vacant positions. A 49% increase in growth is projected for the number of health information administrators (HIAs) by 2010.

The existing traditional BS program has a long and rich history. It was founded in 1962 and to date has graduated 451 students with a degree in HIA. It is one of only 46 accredited bachelor's HIA programs in the United States . According to the American Health Information Management Association (AHIMA) (2002), only 2,000 new graduates enter the HIA field each year. Considering the need for HIAs and the small number of students graduating, this justified the Department's need to expand its offerings.

As with any system change, much planning and assessment was required for the design of the new online program. Once approval was received from the State of Georgia Board of Regents (BOR), the transition to online began. Basing the plan on a systems approach, the DHI decided that a transitional, phased process would be used on a course-by-course basis. Phase one included teaching traditional courses with a variety of web-enhancements and the second phase included the roll-out of a fully online program.

Brick and Mortar

The HIA program was originally offered only in a traditional campus setting. The traditional program is similar to a cohort in design since all students begin the program together, take all classes together, and complete the program together.

Students were required to attend class sessions during normal working hours, typically Monday through Friday. All class sessions were held in classrooms equipped with computer workstations. Lectures were delivered in the "sage-on-stage" format. Student labs were equipped with computers and simulated HIA work areas. All testing and assignments were completed in the traditional paper format.

Brick and Click – Phase One

The first year of the transition was an experimental phase, converting the curriculum to a hybrid program. This involved combining both online and face-to-face activities (Ko, 2001). The transition from the brick-and-mortar program to the hybrid program occurred over a two-semester period. This process included approximately 15 courses per semester for a total of 30 course conversions. The hybrid program allowed the faculty and students to become familiar with the WebCT technology and to resolve any issues before implementing a fully online program.

As many faculty are aware, creating online courses is not just a matter of dropping existing materials in to an online environment. This time-consuming process included the training of faculty in various technologies, the education of faculty in the use of online teaching methodologies, and the design, development, and maintenance of online course materials. Due to the time-intensive nature of the conversion process, the DHI hired an educational specialist to assist faculty with the design and maintenance of all Web-based courses. The educational specialist's duties included:

- Converting documents into html and pdf formats;
- Converting lecture materials, comprised of Powerpoint and audio voice overlays, to a streaming format;
- Creating html templates for each course (example: homepage, course materials, lectures);
- $\circ~$ Uploading and linking files to the appropriate WebCT courses;

- Adding and removing student access to each course;
- Backing up completed courses at semester end; and
- Administering course surveys and collecting and compiling survey results.

A structured process was used to determine the needs for the program and to develop a plan for the curriculum conversion. The process involved analysis of the curriculum to determine the appropriate conversion process, design of a curriculum conversion plan, development of online course materials, and implementation of the plan.

The first step was to analyze the curriculum to determine which courses would take priority in the conversion process. Next, a conversion plan was developed which included the order in which each course would be converted and the deadline for the conversion. Each faculty member worked with the educational specialist to determine individual course needs and to deliver materials that were ready for conversion. During the course development process, the goal was to make all course syllabi, outlines, lectures, calendars, and assignments available in an online format. Once all curriculum materials were converted, the educational specialist was responsible for uploading the items to WebCT.

Tutorials, seminars, and individualized training sessions were provided to faculty to assist them in mastering the use of various distance education tools. In addition, students attended a one-hour orientation to WebCT on the first day of class; the orientation included hands-on experience in the computer lab.

This transitional stage also allowed the faculty to utilize the assignment and testing tools in WebCT. Some faculty had students submit assignments electronically via WebCT. The testing tool was used to test students in the traditional environment; this hybrid approach to testing required the students to take the online test in a supervised classroom.

Overall feedback for Phase One from both the faculty and students was positive. Faculty recognized the benefits of having all the course materials readily available to the students in an online environment. They also found the assignment and testing tools to be helpful in streamlining the grading process. Students commented that they enjoyed being able to access information from home, work, or school as needed. Initially, some students expressed their uneasiness with the online testing environment. However, with experience, students commented that they preferred it over paper tests.

Online – Phase Two

The second year of the transition resulted in a fully online program. The previous year had been used to transition all course materials into WebCT. Many courses had face-to-face components that had to be converted to an acceptable online format. Faculty worked with the educational specialist to convert class discussions and hands-on lab experiences.

Following the initial conversion of courses, the challenges of accepting students into the online program were addressed in phase two. Students were interviewed via the telephone rather than the traditional face-to-face method. Faculty utilized a survey tool to assess the students' readiness for an online environment (Table 1). The assessment was also used to measure the student's motivation level and learning style. Simonson et al. (2003) noted that it is important that students are motivated and choose to be in a distance education environment. In addition to Institutional admission requirements, faculty used the scoring of the student assessment and the interview results to determine student eligibility for the online program.

Table 1 . Student admission survey tool (sample items)

1. My need to enroll in an online program:

- High. I need to enroll immediately for a specific goal.
- Moderate. I can take it on campus later.
- Low. It could be postponed.

2. I would classify myself as someone who:

- Often gets things done ahead of time.
- Needs reminding to get things done on time.
- Puts things off until the last minute or doesn't complete them.

3. Considering my professional and personal schedule, the amount of time I have to work on an online course is:

- More than enough for an on-campus course.
- The same as for a class held on campus.
- Less than for a class held on campus.

4. Coming to campus on a regular schedule is:

- Extremely difficult for me. I have commitments during times when classes are offered.
- A little difficult, but I can rearrange my schedule to allow for regular attendance on campus.
- Easy for me.

Since online students would never come to campus, they needed orientation to the program and WebCT. A "Welcome" video, created by the DHI faculty using a digital camera and Windows Movie Maker, and an introduction on "How to Log in to WebCT", using PowerPoint, were created and burned to a CD. The orientation CD was mailed to all new students two weeks prior to the beginning of class. The CD was used to replace the traditional one-day program orientation received by all new HIA students.

Students also needed an extensive orientation to the use of WebCT. The Office of Educational Design and Development (OEDD) created a comprehensive orientation of the WebCT tools within the software. Once students logged into WebCT, the orientation was available on the student My WebCT homepage, for accessing as often as needed.

All online courses were uniform in appearance and navigation. Consistency in course format was a key factor in ensuring the ease of navigation for students. A template was used to create course uniformity (Figure 1). Each homepage included Course Information, such as the syllabus, course rules, course outline, and a welcome page. Course dates or deadlines were included in the calendar function. Students could also use the calendar to maintain personal dates. Course Lectures included the unit outlines, viewable lectures and presentations, as well as printable notes. Lecture videos were created utilizing PowerPoint, Impatica, Camtasia, and Tegrity (Table 2). Links to pertinent online readings and PDF documents were also available in the unit outlines.

Figure 1. Course homepage template

WebCT	myWebCT Resume Course Course Map Check Browser Help		
Control Panel	HIM3206: Introduction to Health Information Management View Designer Options		
- Course Menu -	Homepage		

HIM 3206 Intro to Health Information Management



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Table 2 . Software for streaming videos

Impatica	Camtasia	Tegrity
 Allows for the compressed conversion of PowerPoint presentations Converts audio and video overlays 	 Creates full motion video tutorials and presentations Captures screen shots and real-time demonstrations Allows for audio and video components 	 Records live classroom PowerPoint presentations with audio and video Records whiteboard annotations Creates screen recordings of real-time application demonstrations

The WebCT Assignments function was used to allow students to submit homework and lab exercises electronically. Testing included study quizzes and graded tests. Since students would not be on campus to complete the tests, security measures were included, such as random question assignments and timed completions. The Student Tools function was used to provide email, bulletin boards, chat rooms, software downloads, helpful hints, and the WebCT Gradebook. The chatroom and bulletin board functions were used to replace the classroom discussions that were an essential part of the traditional, brick-and-mortar program.

One significant change for the online format was the completion of labs and rotations that traditional students complete at area hospitals. This was not something that could be resolved in WebCT. Instead, online students were required to arrange and coordinate required practical experiences in their local communities.

Lessons Learned

The most important lesson learned in this process was that a phased-approach was key to the success of implementing an online program. Faculty support was also a significant requirement and the educational specialist played an important role in assisting faculty in the design and development of courses.

Faculty Time and Effort

Converting a traditional course to an online format requires much time and effort. As Carroll-Barefield and Murdoch (2004) noted, the conversion of a one-credit hour course resulted in a 75% increase in design and development time and 125% increase in the time to maintain the online course. An additional 80 hours of support was received from an instructional designer.

Not only must instructors maintain updated course content, they must also learn new technologies to make the course content fit the online environment. Therefore, online educators need to be competent in using technology as a means for effective instruction. For example, DHI faculty were trained in the use of technologies, such as Tegrity and Camtasia, to create an enhanced and interactive online learning environment. These technologies allowed the faculty to manage the course by engaging the learners and encouraging active learning.

Faculty members are faced with many new situations when developing an online course versus a traditional one (Levy, 2003). Additional planning, including faculty time and effort, is required to make traditional face-to-face assignments work effectively in the online environment. Not only has the transition been one of environmental changes, it has also resulted in a shift in enrollment. With the addition of the online program, student enrollment has doubled and faculty workload has increased proportionately.

Teaching an online course is more time intensive than that of a traditional course. Often, online instructors are inundated with emails from students asking questions about assignments and tests when the answers to their questions are offered very prominently within the online course materials. This was also an issue noted in the hybrid program because students who often ask many questions in the classroom or had little to say in the classroom now had access to an additional means of communicating with the instructor.

Engaging online students as active learners is essential to a successful online program. Instructors must make use of tools such as bulletin boards and chat rooms to replace the traditional face-to-face classroom interactions. These require additional time to monitor the activities, and in some instances grade these activities through the use of a rubric. DHI faculty used activities such as creative learning assignments, case studies, and group bulletin board discussions to foster active learning and develop critical thinking skills.

Orientation

Student orientation was essential during the hybrid and online phases of the transition. Even though students participating in the hybrid courses were in the traditional classroom, they still needed hands-on orientation to the WebCT technology. The online students needed orientation, not only in how to use WebCT, but also how to get started in the online program. The orientation for online students had to be more comprehensive and detailed; therefore, it needed a personal and human touch because the student would never come to campus.

Contacting Online Students

Initial contacts with online students were an important factor in breaking the ice and ensuring the students that they were not alone in their educational experience. The faculty used a variety of

communication tools to correspond with students. An introductory bulletin board posting was required in most courses to allow students to introduce themselves to their classmates. Faculty created welcome pages and videos for their respective courses to add a personal touch. Instant messenger software was used to provide students with the opportunity to communicate daily with faculty and classmates, as well to allow faculty to establish available online office hours for students.

Tracking Student Participation

While the courses followed a uniform format and were visually attractive, they did not allow for effective student tracking by faculty. Tracking abilities are invaluable in helping to assess student participation (Ko, 2001). Faculty noted that new online students were "missing in action" and were unable to determine what areas of the course students had accessed. To resolve this issue, all courses were redesigned to allow for tracking of students throughout the entire course. This conversion allowed faculty to determine the level of student participation within all components of each course.

Student Resources

Shortly after the online program began, faculty and staff realized the need for an online format to deliver general departmental information for potential students and online resources to all enrolled students. The department website offers information about the informatics program and profession (<u>http://www.mcg.edu/sah/DHI</u>), while the DHI Student Center was created to offer an online resource for enrolled students. This Center included departmental items such as the DHI Student Handbook, departmental calendars, schedules, booklists, and advisement resources. Additional resources included tutorials on WebCT and the library, as well as FAQs for troubleshooting common problems with the use of WebCT and other online tools. The DHI Student Center is also a central communication area where students can communicate with each other via email, bulletin boards, or chat rooms. Students may also use this Center to email DHI faculty or staff.

Future Improvements

Although this has been an overall positive experience and there have been many lessons learned, several improvements are slated for the future. Enrolling students in an online program can be challenging when other campus components, such as Admissions and the Registrar, do not offer online student services. To overcome this obstacle during Phase Two, online students enrolled via the telephone. However, future plans include implementation of the Banner system, which is a University System of Georgia information system that includes online student registration as one of its main components.

SecureExams for Testing

Testing is an area that can always use improvement. Even though WebCT allows faculty to limit test-taking times and password protect tests, there is still volatility in the student's ability to print some test materials. A new software product, Secure Exams, will be used to prevent this from occurring. Students will be required to use a special browser for test taking. This browser is used in association with set-up software which faculty can use to ensure the security of tests in an online environment. The associated set-up software automatically puts a password into the WebCT online test that prevents students from using their regular browser, such as Internet Explorer, for test completion. While taking a test utilizing the SecureExam browser, students are only able to access the online test and, therefore, are unable to print the test or access other

applications. Use of this SecureExam browser is expected to enhance the integrity of online tests.

Tegrity Live

Faculty will begin using a new live classroom tool, Tegrity Live, to allow for interaction with and presentations by online students. Tegrity Live allows online students to participate in real-time class sessions. It allows for audio, video, whiteboard, and Instant Messaging communication with the instructor and students. There are also several seminar courses in which Tegrity Live will help to bring together the students in the traditional classroom with the online students for group presentations.

HIM-specific Applications

The HIA program is accredited through the American Health Information Management Association (AHIMA). One of the requirements for accreditation is that appropriate hardware and software be made available to students. Online students are required to have minimum hardware and software, in addition to an Internet connection, for acceptance into the program. However, HIM-specific applications, such as medical record chart tracking, chart completion, and coding/encoder software, are also requirements. The DHI makes use of Websites that have downloadable HIM-specific software for review and analysis. AHIMA is also currently negotiating with healthcare software vendors to provide online resources to all HIM programs. These additional online resources will richly enhance courses in the program and aid with compliance for future accreditation.

Assessments

As the program continues to evolve, assessments of each course will occur on a semester basis. Students are requested to complete course evaluations that include questions regarding their experience with respective online courses. In addition, all new incoming students will be surveyed at the end of the first semester and again at the end of the program to address specific distance education issues. The DHI faculty will incorporate needs and suggestions into the program on an ongoing basis, as continuous quality improvement is crucial to the continued success of the program.

Conclusion

Distance education has come to the forefront of program planning and educational offerings as MCG and the DHI strive to increase program enrollment and fulfill the demand for more HIA professionals. However, transitioning from a traditional to an online program is not a simple task. It requires much planning by administration, faculty and developers with the best approach as a transitional process.

Through teaching online courses at MCG, the DHI faculty members have discovered it takes a great deal more time and effort to develop and teach a course online than it does for a traditional course. Therefore, faculty support in the design and development of online courses is a critical factor in the successful transition to an online environment.

Overall, the experiences of the DHI faculty have been positive. But, one must always remember that with changes comes more change. In an online environment, faculty must be willing to make modifications and adjust the environment to meet the needs of the online student.

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