

UNIVERSAL COURSE SHELL TEMPLATE DESIGN AND IMPLEMENTATION TO ENHANCE STUDENT OUTCOMES IN ONLINE COURSEWORK

Arthur J. Borgemenke, William C. Holt, and Wade W. Fish

Texas A&M University-Commerce

Instructors are continually looking for means to improve outcomes for students in online courses. This article examines the instructional design of courses to determine if consistent components implemented in a recently established online master's degree program can produce significant student outcomes. The authors detail the construction and implementation of a universal course shell template in an online master's program. The program faculty perceptions about the success of the universal shell in online courses are discussed. The rationale underpinning the template implementation is examined in light of program faculty and student reflections.

INTRODUCTION

According to the U.S. Department of Education (USDE), online learning is one of the fastest growing trends in educational uses of technology (USDE, 2009). While debate continues about the effectiveness of online instruction compared to traditional face-to-face class, this meta-analysis by the USDE of 51 study effects, mostly in older learners, found that students who took all or part of their class online performed better than those taking the same course through traditional instruc-

tion. The study also did not find a significant effect by learner type. While this meta-analysis did not identify online learning as a superior medium, it did note that online learning is much more conducive to the expansion of learning time than is face-to-face instruction.

Educators face new challenges as instruction is increasingly delivered online in asynchronous formats (Dabbagh, 2000). As online instruction expands in scope, instructors search for means to maintain rigor and content via nontraditional course delivery (Cooper, 2000). Online instruction can add another level

• **Arthur J. Borgemenke**, Assistant Professor of Educational Leadership, Texas A&M University-Commerce, P.O. Box 3011, Commerce, TX 75429. Telephone: (903) 886-5179. E-mail: art.borgemenke@tamuc.edu

of cognitive loading if the student must relearn how to access course components as they matriculate through their program of study. Students' cognitive loading may be lessened when course components are presented with consistency and designed with clarity in mind.

PURPOSE

This article describes the implementation of a universal course shell template in a graduate studies program from faculty perspectives regarding improvements in program goals and student outcomes. The authors participated in the migration of a traditionally delivered principal preparation program to full online course delivery. The universal course shell template is reviewed to determine if it benefits students and instructors alike in providing a more user-friendly interface with the professor and the course content. Instructors explore seeing student engagement with the course content taking place sooner because they do not need to relearn the format of the digital learning interface.

RATIONALE

Instructional design is a critical concept in the development of university courses, particularly in intensive and shorter term courses such as those utilized by the Texas A&M University-Commerce Educational Administration program. Chen (2007) found a blended approach of objectivist-constructivist design to be the most effective in these intensive programs. This design encourages the learner to take responsibility for his or her learning while allowing the instructor to serve as facilitator and concurrently set specific learning objectives for the class. Students in this blended approach had a positive learning experience and were highly satisfied with their learning outcomes (Chen). Snyder (2009) suggested that new instructional design theories are needed using the current technologies and web tools available to enhance learning among

adult learners. She combined elements of three fields of study—learning communities, adult learning theory, and constructivism—to propose a new instructional design theory that supports a sense of community and achieves the goals of the instructional program.

LITERATURE REVIEW

It is widely recognized that teaching online requires different skills as opposed to teaching in a traditional classroom. One of those skills is course and program development in the online environment. According to Caplan (2004), online course development is complex and it is not reasonable to expect high caliber online courses to be developed by just one or two instructors. Many universities now bring faculty and support staff together to develop online programs and courses. Hixon (2008) studied four instructor teams collaborating in online course development and identified several important commonalities, including flexibility, ownership of the process, and communication between team members.

Course Quality Design Factors

A number of course design factors can improve student learning and satisfaction in the online environment. Miller (2012) contended that professors can improve engagement, completion, and success by fine-tuning course shells to make them simple to navigate and understand. She also noted that students do not indicate distress when a course works well; the mechanics of course operation fade into the background if they do not present a problem.

Since online instruction is relatively new for many students, it is imperative that clear expectations for the class be established by a number of measures. Dykman and Davis (2008) asserted that many students do not know what to expect or even how to behave in an online course, so the professor must tell them what to do. A well-developed syllabus including the course description, technical

requirements and university policies, and class procedures creates the foundation. These authors also contended the professor should be prepared to answer questions to the entire group in well-thought-out, consistent responses. Careful communication of expectations and documentation right from the beginning are mandatory for effective online instruction (Dykman & Davis).

Another characteristic of quality course development is consistency in design. To increase the comfort level of students, all courses in a program should have a similar look and feel (Dykman & Davis, 2008). This uniformity makes the software much easier to navigate and less threatening or confusing. Online courses are more difficult to change during the term once students have learned the system and expectations. These courses need similar design, organization, and structure across the modules within the course and within the coursework in a program.

In addition to consistency, an established structure of learning such as course modules of defined length helps to simplify course organization for students. Swan (2012) found that using modules was important in navigation of the course. This study found that when modules were consistent within the course, students believed they learned more and were more satisfied. Swan concluded that the nature of online courses makes it more likely students will get lost or confused if the course is not easily navigated.

Component Design Efficacy

How to design quality online courses using available components to enhance learning is a question posed by staff members charged with developing both course content and instructional tools. In a meta-analysis of 99 studies comparing online and face-to-face courses, the USDE (2009) identified several statistically significant characteristics of effective online courses. While the incorporation of multiple media does not singularly enhance learning, the learner's ability to control the learning

media is important. The clearest recommendation for practice came from the incorporation of mechanisms that promote student reflection and self-monitoring of understanding. Simulations and more complex evaluation strategies were also more effective than simple multiple-choice quizzes to enhance learning. Individualization and feedback was found to be effective in some studies also. Group learning may also be more effective as students scaffold for one another to enhance learning (USDE). The following components reflect the findings of the USDE analysis and represent the best practices currently being utilized in quality online instruction.

The homepage often provides orientation to the course. Chen (2007) found that good orientation plays a critical role in an online course. The homepage must be deliberately designed to ensure students are familiar with the learning tools and resources. This feature often contains various components including unit introductions, announcements, and reminders. Miller (2012) found frequent homepage posts improve the appearance of the course and help engage learners. Enhanced homepages are not typically time consuming to professors and lead to improved student success and completion. Homepages may also link to a question-and-answer feature and an announcement board to communicate with all students. Revere and Kovach (2011) contended that status updates—links, pictures, and videos—keep online students connected throughout the course.

Discussion is an essential dimension of human learning. Within asynchronous online courses, the discussion board essentially replaces face-to-face interaction in the brick and mortar classroom. Andresen (2009) contended that, while the online discussion forum has its limitations, it is able to generate the critical dimensions of learning found in the traditional classroom. He suggested the primary goal of the discussion forum is to enhance higher levels of learning. The professor must design and evaluate appropriate participation in the discussion forum to achieve this end.

The role of the instructor must also change from the traditional classroom to facilitate higher order discussion and not simply serve as the sage to answer questions. The research of Nandi, Hamilton, and Harland (2012) encouraged a blended student-centered and instructor-centered discussion format where instructors post answers, guiding questions and hints to encourage deeper learning. Students should be required to participate substantively with specific goals. A grading rubric is particularly important in this feature to set expectations and provide some equity in grading (Fisher, 2010).

The development of group tasks is an instructional strategy to increase interaction among peers and to encourage engagement. Brindley, Blaschke, and Walti (2009) made a strong argument for small group collaborative learning in online courses. These researchers saw a strong relationship between these experiences and teamwork skills as well as deeper learning. They also showed a close link to learner satisfaction and retention. Revere and Kovach (2011) believed collaboration technologies could facilitate synchronous coursework and foster camaraderie. These authors suggested that online environments that encourage sharing of personal information foster cohesion and support both social and cognitive engagement. Even simple posting of introductions allows online students to learn about each other early in the course and to develop a sense of community. A number of collaboration software applications exist to create this environment including Google Docs, Facebook, and VoiceThread.

This component of teaching and learning should be part of any learning process, but is critical in the online classroom to ensure success. Fisher (2010) noted the importance of feedback in guiding the writing process to avoid student confusion and apprehension. He encouraged the instructor to provide detailed syllabi, explicit instructions, assessment criteria, and coaching to enhance learning. Most learning management systems provide multiple venues for information and feedback,

including syllabus, announcements, drop-boxes, and e-mail (Fisher, 2010). Grading rubrics provide a tool that delineates the specific expectations or criteria that will be used to assess a student's performance. Solan and Linardopoulos (2011) believed that rubrics are particularly important in online learning since there is typically less opportunity for the students and instructors to interact one to one. Rubrics reduce the element of surprise for students and allow them time to think about how they will be evaluated and what a completed assignment should look like.

INSTRUCTIONAL DESIGN PROCESS

The first step faculty took toward the universal course shell implementation was to identify features that would be provided within each program's online course. The participants strove to build online courses that provided a standardized and familiar feel for students. This was initiated without neglecting the unique positive attributes of each faculty member that complemented specific learning objectives and instructor strengths in respective courses.

Through input from program faculty, the identified components of this consistent course shell presentation included the course syllabi, course home page, and module agendas. Further uniform protocol that was agreed upon by instructors revolved around assignment submission, discussion forum procedures, and methods for communication between instructor and student.

Universal Course Shell Template Components

Syllabus. One of the most important components of the universal course shell template design is establishing consistent syllabi throughout all courses in the program of study. Students not only find course syllabi within the same location of each program course shell, but all syllabi contain the same sections and section order regardless of the course. Sections contained in all course syllabi within program courses include instructor contact information,

course information, course requirements, course assignments, course calendar, technology requirements, and university specific procedures and policies.

Course descriptions and student learning outcomes are included within the course information section of all program course syllabi. Within the course requirement section of the course syllabus, students are provided with information pertaining to the design of the course and assignment descriptions complemented with specific grading rubrics. While the previously mentioned course syllabi sections are specific to the unique needs of each course, the remaining two sections, technology requirements and university-specific procedures and policies, provide verbiage consistent across all program course syllabi. University-specific procedures and policies remind students about guidelines for the Office of Student Disability Resources and Services, scholarly expectations, dropping the class, incomplete grades, and academic honesty.

Course Homepage. Based upon the notion that “first impression is everything,” our universal course shell template provides a course home page that is student/user friendly, providing relevant information that is easy to navigate without providing too many resources that confuse the learner. Our course shells are designed with the assumption that a learner has never taken an online course before, which caters toward these attributes. Resources included within our universally designed course home pages include a welcome video, links to course announcements, program information, grade book, course syllabus, and technical support.

When students enter their online course shell for the first time, they are prompted to view a welcome video that highlights how to successfully navigate through the course. This video remains on the course front page throughout the duration of the course in case learners need to go back and review instructions.

While not wanting to provide too many announcements in risk of saturating the importance, this method of communication effec-

tively serves as a means to prompt students to proceed to particular agendas in addition to reminding learners about assignment due dates. Course announcements also allow the instructor to communicate relevant modifications to course content and manage “troubleshooting” issues that may suddenly occur throughout the course.

The course homepage within each course shell is a program information link where students can obtain relevant information pertaining to the master’s program that may be beyond the scope of a particular course. Resources within this program information link include our updated student handbook, degree plan, internship packet, upcoming TExES Examination tutoring sessions and graduation application protocol. There is also a discussion thread link where students can ask nonconfidential questions pertaining to these program related items.

A student lounge link within the course homepage provides students an opportunity to become familiar with and practice using the discussion form tool by posting a message introducing themselves to their new classmates. Furthermore, these new learners to a course can practice responding to classmate posts.

Student Grading. The grade book is an essential component of our universal course shell design that allows students to efficiently monitor and manage their course grades. Within each assignment link in the grade book, students are able to obtain feedback by clicking their linked numerical assignment grade. All faculty members within our program strive to provide constructive feedback to students within 72 hours of assignment due dates. Program course grade books are linked to assignment drop boxes, which allow assignment submissions to link directly to the grade book.

Other universal components to the course shell homepage include links to the course syllabus, library, e-mail, student lounge, and technical support. The technical support page is especially important for students if the course

instructor is unable to resolve specific technical situations experienced by the student.

Course Content and Assignments

The majority of our program courses align within a 7-week course format. All weekly course content is housed under corresponding module agenda links. Modules for all courses within our program are designed to begin on a Monday and conclude the following midnight Sunday in order to deter confusion regarding assignment due dates. Within each module agenda, students are able to view a particular module overview, module learning outcomes, module resources and module assignment instructions. This module outline is consistent across all courses.

Multimedia. Our instructors often embed a module video within the overview section where they walk students through important concepts and reminders pertaining to the specific agenda. Reading material and videos are linked within the resources section of module agenda where students are able to retrieve easily.

Student Discussion Responses. A discussion forum link is often provided within a module that allows students to post a response to a designated activity specifically tied to the agenda's learning outcomes. Module discussion forums are often broken into groups of 7 to 10 in order to enhance student-to-student interaction. Students are encouraged to post an initial response to a module discussion question by Thursday of a particular week and provide constructive feedback to at least two of their classmates through the following Sunday.

Student Assignments. Module assignment activity links are also provided within a particular module agenda where students are prompted to submit via a dropbox feature that is directly linked to the course grade book. Grading rubrics are embedded into each module discussion forum and assignment link in order to remind students of the necessary criteria for success. One common practice that aligns with the universal course design is for

assignments to become due at the final date of each module.

Student Q & A. Each module has a module question-and-answer link for students to ask nonconfidential questions, allowing all students to view previous questions and responses within a timely manner housed under one forum. Students are also provided the opportunity to address a classmate's question if they can effectively address the issue.

SUMMARY AND IMPLICATIONS

The graduate program described in this article has had various components of the universal course shell template in place for approximately two years. Direct measurement of the success of the universal course shell template can be difficult to gauge. Anecdotally, students and adjunct instructors report that the courses have a better look and feel. A more practical approach to gauging the effect of this initiative might be examining program goals and outcomes.

The program described in this article implemented the new online compressed model in hopes of increasing student enrollment. The program has experienced explosive student growth since the 2009-2010 semesters. The number of students enrolled and actively taking courses in the program has swelled by more than 400% during that time period. This is a result of a program reorganization that took place beginning in late 2011. The anecdotal faculty perceptions about the reasons for the large increase are many.

- The program was migrated to fully online status and courses were shortened to 7 weeks in length.
- The number of semester credit hours required to complete the master's degree and principals certification courses was lowered from 36 to 30.
- The amount of time that students need to complete the program has been shortened by several months in length.

- The program completion rate has risen significantly.
- The first-time student passing percentage on the state of Texas school administrator certification examination is now greater than 95%.

Using these metrics to gauge the initiative, the implementation of the universal course shell template in the Educational Administrative program can be called at least a promising best practice.

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1. Study. Template source: Elementor Library Ideal for: online course for web designers/web developers Price: Free. Study is a simple one-page template id Keywords: Universal design for learning, online instruction, accessibility, disabilities. Applying universal design for learning in online courses. 167.Â The goal for using UDL in online course design is to reduce the barriers for students with disabilities, but to also maximize the learning for the non-disabled. Therefore, the theoretical framework for this paper includes the work of Rose and Mayer (2008) and their three overarching principles of effective UDL course design: Principle 1, presentation, involves providing learners with various ways of acquiring information and knowledge.Â UDL is not limited to assistive technology; it also enhances pedagogy and instructional practices used for students with and without disabilities (King-Sears, 2009).