An Analysis of Organizational Approaches to Online Course Structures

Dr. Cheng-Yuan Lee Coastal Carolina University clee@coastal.edu

Dr. Jeremy Dickerson Coastal Carolina University jdickers@coastal.edu

Dr. Joe Winslow Coastal Carolina University jwinslow@coastal.edu

Abstract

The structure of an online course, including the navigational interface, visual design of materials and information, as well as the communication tools to facilitate learning, can affect students, instructors, programs and educational organizations in various ways. This paper examines online course structural issues derived from previous research as well as the authors' collective experiences as instructors, instructors and online learners at multiple universities. Three organizational philosophies of online course structure are analyzed, and ten key components for developing a well-organized online course are presented based on established design principles. This information is intended to help emerging online instructors understand their own organizational culture and to develop a more standardized approach to online course design.

Introduction

What does a student view when they log in to an online course at any given institution? Is it well organized? Is there a consistent overall structure and design with common elements that all courses share in a program? Moving courses online is an institutionally driven process with many implications affecting policy, personnel, and students. The structure and design of online courses can have an impact on student learning outcomes, instructor evaluations, course/program enrollment, and institutional decision-making and reputation. Each time a face-to-face course is converted to an online course, instructors must put in many hours designing and developing content and experiences for students to learn from a distance. As online learning continues to grow, it is important for educational organizations and individual instructors to consider how the overall structure and design of online courses can affect stakeholders in this process.

Not to be confused with course content selection or instructional decision-making, online course structure refers to the standardized layout, design, arrangement of materials, location of information and use communication tools to enhance and facilitate learning and course navigation and ambiance. This paper draws upon the practice of instructional design and online teaching and learning from the varied experiences of the authors. Having worked in both rigidly mandated online academic environments as well as environments with complete course structure autonomy, the authors believe that as more and more courses and programs move online, it is critical for instructors and administrators to understand organizational culture relevant to online course structure expectations. This is important for the sake of quality control, accreditation, instructor evaluation/assessment, the alignment of student learning outcomes, and overall student satisfaction. For the purposes of this paper the term "organization" can be interpreted as and educational entity (university, college, department, program, training center, etc.) as scalable and appropriate to the reader.

Organizations should articulate and clearly communicate their philosophy, perspective, and expectations for online course structure and design. The level of technical specificity may vary, but if the institution does not have a sanctioned policy framework, instructors may design and develop online courses without any reference to peer, administrator and student perceptions and practices. This is important for several reasons. First, learners appreciate continuity in online learning experiences—having similar learning management systems, standardized course structures and interactions helps them feel familiar and comfortable with the learning environment. Secondly, online course structure and design can influence evaluation by peers and administrators, where the absence of structural design philosophy may result in significant variability in instructor evaluations. Without institutional guidelines derived from best practice literature, instructors may receive higher or lower ratings from peers and administrators based solely on individual perceptions and experiences. Lastly, if organizations move forward into large-scale online course delivery without an operational philosophy of online course structure, they run the risk of having inconsistent course and program quality, yielding diminished student learning and negative reputations for the program and faculty. This paper introduces a framework for understanding organizational philosophies of structuring online courses, and presents a set of common elements for standardizing online course structures for a variety of contexts.

Brief Literature

Developing any effective instructional product, either for face-to-face instruction or for online delivery, requires a strong theoretical foundation in instructional design (Smith & Ragan, 2005). Basic instructional design is often assumed as a skillset already possessed by instructors by virtue of their position as an educator. This is potentially problematic in online courses because many instructors have never been trained to teach online, may never have been an online student, and may not have sufficient experience with online learning management systems (LMS). Instructional design theory assists educators in developing a vision of the instruction during the design process (Reigeluth, 1999). Instructional theory assists in translating an instructional plan into instruction through the design and development process (Morrison, Ross, & Kemp, 2004). Systemically designed instruction can greatly affect learning and individual human development (Gagne, Briggs and Wager, 1992). Well-designed course structure is based on a systems perspective, where components are meaningful and interrelated (Dick & Carey, 1996). Course planning is a process that requires time, energy and commitment as well as knowledge and skills (Posner & Rudnitsky, 2001; Draves, 2007), whether the course is face-to-face, online, or a hybrid format. In terms of course planning, a logically sensible organization may help promote favorable student attitudes during instruction and outcomes as a result of the instruction (Gagne, 1975). Course structure and planning is especially meaningful in online courses, due to the need for self-direction by students and a natural unfamiliarity and/or inexperience many learners have with online learning environments. While designing courses for online delivery, Draves (2007) proposes that course content should be structured differently, organized by units or modules, and then broken up into even smaller subunits.

Information technology and distance education has impacted the work of educators, technology specialists, and instructional designers, and often requires the rapid adaptation of instructional resources and the development of new strategies for using technology to improve teaching and learning (Mehlinger & Powers, 2002). The continual growth of information technologies necessitates that educators engaging in distance education look for new methods and theories for designing and delivering effective instruction (Picciano, 2001), as some theories, methods and techniques of traditional face-to-face instruction are limited or ineffective in online formats. E-learning and distance education has helped to increase the need for educators to use solid instructional design techniques to quickly and effectively create instructional materials (Cennamo & Kalk, 2005; Davidson-Shivers & Rasmussen, 2006). Simply posting lectures, notes, presentations, and a syllabus on the web does not constitute the systemic design of an online course (Ko & Rosen, 2004). Online learning needs to be well-structured to help assist navigation and avoid overload by students (Mason, 2001; Clark & Mayer, 2011). Online courses require purposeful screen design for effective interfacing between the learner, instructor and computer. Derived from interactive multimedia learning research, screen design theory suggests that the visual appearance associated with instruction could influence learning effectiveness by focusing attention, maintaining interest, promoting engagement and facilitating navigation (Schwier, 1995).

Organizational Philosophies of Online Course Structures

Should there be a basic (or advanced) series of structural components that instructors use when teaching an online course? Unfortunately, instructors are sometimes asked to teach an online without understanding what is expected, or what their administrators, peers, or students consider to be "good" or the "norm" in terms of course structure and design. Sometimes this is because there is no norm, and other times it is because the expectations are not widely understood or communicated. This paper is not intended to suggest that any particular course structure or design should be adopted by any organization. Rather, it is intended to encourage faculty and administrators to discuss the issue of online course structure expectations and to inspire instructors to examine and determine their organization's functional and operational philosophy before they begin to design, develop, and deliver their online courses.

An organization's philosophy and perspective towards the structure and design of online courses is like a blueprint or basic foundation for all instructors as they begin designing online courses. Whether it is at the instructor's complete discretion or an organizationally mandated series of components and procedures makes a difference to students, instructors and administrators. Online course structure philosophies can vary widely among, between, and within organizations. How can these philosophies be conceptualized? A simple way would be to be to begin with three basic views:

- 1. The Fully Autonomous Approach
- 2. The Basic Guidelines Approach
- The Highly Specified Approach

1. The Fully Autonomous Approach

Some organizations leave all design and development for their online courses up to the instructor, who alone decides how to structure the course without guidance or guidelines from the organization may sometimes "encourage" or "suggest" guidelines, tools, or techniques, but without formal policy delineating course structure and design specifics, it is a fully autonomous model.

Advantages:

- · Popular among instructors because of total control and flexibility.
- Popular among administrators because no policies need to be specified.
- Does not require external personnel for routine supervision or management of course beyond the instructor.

Disadvantages:

- Students will encounter very different and potentially confusing online learning experiences which can lead to issues with satisfaction or performance.
- Instructor observations/evaluations by peers and supervisors can be unclear and even contentious based on different perspectives of what constitutes good overall structure and design.
- Inexperienced online instructors may feel "adrift" in terms of how to design and develop their online courses.
- · Quality and consistency across online courses at the program or institution level could become an issue during external reviews such as accreditation visits and program audits.
- The organization runs the risk of online programs developing reputations of being inconsistent, unorganized and/or unmanaged because of the wide array of instructor interpretations.

2. The Basic Guidelines Approach

Some organizations provide basic or general guidelines for instructors developing online courses. The basic guidelines approach is when minimal design and structure expectations for online courses are adopted by the institution. This is similar in nature to having standardized sectional headings for all syllabi. Examples of basic guidelines for online courses could include each course having a weekly announcements section, up to date grade books, discussion boards, instructor contact information, and/or other components in each course. In this model, students would see these common components when they log-on to every course.

Advantages

- Instructors new to teaching online have a basic framework from which to begin their online course development.
- Instructors still have a high degree of flexibility in terms of course modification.
- Student familiarity in course structure can reduce learning curves for navigation and procedures, resulting in increased student and faculty satisfaction as well as fewer technical support questions.
- Commonalities between course structures can help create a baseline of expectations for course quality control and consistency which assists in evaluations and assessments during internal or external reviews.

Disadvantages:

- Some instructors dislike adhering to course design guidelines (lack of academic/artistic autonomy objections).
- . Opens course to internal reviews by administrators and/or instructional design/quality support teams, which can be uncomfortable for many instructors.
- · Increased organizational cost with the assignment of additional personnel to oversight responsibilities.
- Policy must be written to support the guidelines as a standardizing process for all online courses

3. The Highly Specified Approach

Some organizations implement a highly specified approach to online course structure and design. This means having an extensive series of components and standards that each online course must adhere to whenever they are offered. The highly specified approach may include the components listed in the basic guidelines approach, but also entails more rigorous specifications and mandates such as the use of specific synchronous communication tools, virtual world avatar integration, timed-restricted responses to student emails or posts, multi-modal presentation strategies, multiple assessment techniques, etc. Some organizations adopt this approach as a response to the argument that online courses are often "easier and less involved" than face-to-face courses. This approach also usually involves course design support and management through an online education quality assistance team (beyond the instructor) consisting of instructional designers, media designers, and/or technical support personnel who review the courses before and during delivery. Such teams also are usually asked to collect quality assurance data concerning the course and report issues to organizational administration. Even though less common, this approach is becoming more popular in order to ensure quality and rigor as online programs continue to grow and become more competitive.

Advantages:

- · High-level of structure and consistency to all online courses.
- Highly structured online courses end to build strong, highly structured online programs with good reputations for quality, clarity, and student interaction.
- Instructors and students often feel that their online experiences are as well-planned, rigorous and challenging (or more) as face-to-face experiences.
- Quality management assistance provides expertise in instructional design and technical learning management system tools.

Disadvantages:

- · Requires extensive and articulate policy development and implementation.
- Intense level of course supervision and data collection for rigorous quality control can be interpreted as scrutiny or intrusion by some instructors.
- Instructors could strongly dislike adhering to highly specified course structure mandates (lack of academic/artistic autonomy arguments).
- Opens course to internal reviewers (administrators and/or quality support team), which can be uncomfortable for many instructors.
- Increased organizational cost for additional personnel for design, development and quality management.

Which model does your organization currently use for its online courses? Is it different between colleges or departments within your university? Which model should your organization adopt based on your vision for online courses, programs, or degrees? What does this mean in terms of your faculty and support personnel? These are a few of the questions that help guide decision making for online course development efforts.

$\underline{\textbf{Ten Foundational Components for Standardizing Your Online Course Structure}}$

Even if your organization does not have guidelines or specifications for online course design, instructors can individually benefit from standardizing their own courses. Below are several components that serve as foundational building blocks for online courses and would be suitable in a "Basic Guidelines" approach. Creating standardized structure will improve course navigation, clarity, and consistency for your students and will help expedite new course design and development in the future. This process begins with knowing what you want your course to look like and how you can use and/or repurpose basic components effectively in multiple courses. Some advanced functionalities may not be available in every learning management system (LMS); however, most basic components operate across all major LMS platforms.

The ten components identified below are derived from research on distance education (see Ausburn, 2004; Boettcher & Conrad, 2010; Draves, 2007; Garrison & Anderson, 2003; Hanna, Glowacki-Dudck, & Conceicao-Runlee, 2000; Jiang & Ting, 2000; Stein, 2004) as well as the authors' experiences as instructional designers, online instructors and online students. These components provide a foundation for emerging online instructors or for organizations seeking to create guidelines for their online courses and programs.

1. Announcements – Announcements should be clear, supportive and regularly posted. They should set the tone of your perspective as the instructor, emphasize tasks at hand and serve as a timely reminder the details found in the course instruction syllabus, schedule or other components within the course. Online learners often rank the announcement section as one of the top features of any effective online course (Ausburn, 2004). The announcements section is a chance to address the whole class and instructors should consider doing announcements each week, at the beginning of each new section of work, and/or before deadlines. Announcements should be highly visible in the same location and should be time and date stamped. Special announcements which are emergency notices about an issue and do not fall on a regular posting day should be clearly marked as such and if it is time sensitive, instructors should consider emailing all students the emergency announcement to be sure they get it in their email as well as when they log into the

LMS

- Course Information Course Information should display fundamental details about the course, including the syllabus, schedule, grading policy, or other relevant logistical items that students access repeatedly (Ausburn, 2004).
- 3. <u>Instructor Information</u> Instructor Information should include phone, email, office location, office hours, online chat hours, and social media (Skype, Twitter, etc.) details as appropriate.
- 4. Course Modules Modules are the fundamental organizational vehicles for delivering content within an online course (Draves, 2007; Hanna, Glowacki-Dudck, & Conceicao-Runlee, 2000). The term "module" refers to individual containers of instructional content, including readings, activities, directions and other resources (Hanna, Glowacki-Dudck, & Conceicao-Runlee, 2000). Building the modules in a logical, sequential, meaningful and appropriate manner is often the most time consuming task of online course design and development. Each module consists of four basic elements: introduction, objectives, resources (readings, video lectures, communication tasks, sample files, etc.) and a "to-do" list which directs students over a set amount of time. Each module has a given period of time during which the class is focused on the knowledge, skills or dispositions that the module targets. For each module, students must complete the "to-do" list (assigned readings, assignments, participation opportunities, other) as required.
- 5. <u>Discussions</u> Online interaction, especially synchronous and asynchronous discussion, among students and instructors has been identified as a keystone to online course effectiveness (Ausburn, 2004, Jiang & Ting, 2000). A common practice to facilitate optimal levels of interaction is to provide a direct link on the course navigation bar to all discussion topics for the course. If the discussions are based on the module and are part of an assignment, they should be clearly noted as such, listing a name that corresponds with the module and with a due date. Discussion tools are also effective interactive spaces for technical troubleshooting or clarification of course expectations, and are much preferred over email because information posted is immediately viewable to the entire class.
- 6. Submissions Submissions is a general area where students may submit their assignments or projects for grading. It is good to have all assignments listed here along with deadlines and/or any special submission details.
- 7. Assessments Assessments is a general area where any quizzes, tests or exams and instructions will be posted. Once they go to this area, they should only be able to begin active quizzes or tests that are appropriate for the work they are currently assigned. Other quizzes or tests may be listed, but should not be able to be opened unless it is time-appropriate.
- 8. Grades Grades is an area that should show all of the assignments that a student has submitted and their corresponding grades and feedback details. In general, online learning students desire immediate feedback on their progress (Hanna, Glowacki-Dudck, & Conceicao-Runlee, 2000). Keeping the grades up to date as much as possible will improve student satisfaction (Ausburn, 2004).
- 9. Send email Send email is an area where students can easily locate and send email to the instructor or any other member of the class. This may be a separate system or a system linked into another existing email account. Instructors should check this multiple times daily.
- 10. <u>Course Support</u> Course Support is an area where you should have links to external support mechanisms. If you have technical support offered at your institution, you should definitely have a link and corresponding information listed here. Other support you may want listed here would be links to LMS resources and training, the library, research databases, reference websites, or other helpful links and contacts.

Conclusion

As online learning increasingly becomes a normalized modality, educational organizations need to consider standardization of course structure. Faculty who teach online should understand institutional philosophies and policies before beginning the design and development of online instruction so they may avoid negative evaluations, poor student achievement, and diminished reputations. The authors recommend that in the absence of institutional guidelines, instructors standardize their own online course structures and have a rationale for each component they incorporate. Standardizing the components will facilitate course navigation, promote efficient content reusability, and improve the potential for student success.

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