Instructional Design Processes and Traditional Colleges

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Abstract

Traditional colleges who have implemented distance education programs would benefit from using instructional design processes to develop their courses. Instructional design processes provide the framework for designing and delivering quality online learning programs in a highly-competitive educational market. Traditional college leaders play a pivotal role in the implementation of instructional design processes into their distance education course designs. Leaders must have a communicated and shared vision for their distance education programs and how instructional design processes can help the organization achieve that vision.Traditional college leaders must advocate and implement effective change processes that will ensure that instructional design processes will become part of the organization's culture.

Introduction

Students have a plethora of online higher education choices today. According to Bailey, Badway and Gumport (2001), educational markets are extremely competitive with traditional colleges competing with for-profit schools for student dollars. The abundance of television and internet advertisements for both traditional and for-profit schools emphasizes the highly competitive nature of higher education. Students can shop for the programs that meet their scheduling and learning needs.Therefore, courses must be designed to meet the learning needs of a diverse body of students with speed-to-market. Instructional design processes are a best practice in distance education that provides the framework for building efficient online programs that can be maintained on an ongoing basis (Sims & Jones, 2002).

In traditional college settings, the instructional method and activities are most often determined by the classroom instructor and can be modified based on student responses during the class. However, in online environments much of the instructional methods and activities are determined prior to the start of the course and cannot be changed during the course.Therefore, effective upfront design of distance education programs is essential to ensure student learning.

Efficient online programs are not built by happenstance.Traditional college leadership must have a clear vision for their distance education programs and knowledge of best practices in distance learning to ensure quality online programs. Designing online programs requires a team approach comprised of faculty, instructional designers, administrators and other support personnel such as technology specialists. Collaboration amongst skilled personnel in the instructional design process is essential to the success of online development projects (Sims & Jones, 2002). Implementing collaborative instructional design processes for distance education programs requires leadership and vision at all levels of the institution.

Why Instructional Design (ID) Processes are Needed

Process-oriented instructional design provides the framework for responding to the needs of students, faculty recommendations and other factors impacting online course design in an organized but rapid manner. Traditional colleges could take a lesson from business on the need to deliver quality products speedily. According to Akgun and Lynn (2002) "speed-to-market is cited as being vital in today's competitive, uncertain and turbulent environments" (p. 117). Traditional colleges must not be viewed as "Goliath" entities that are slow to change, move and respond to changes in the educational landscape. As MacDonald and Thompson (2005) asserted, the ability of institutions to produce and ensure quality

distance education programs offers a competitive advantage in attracting learners.

Traditional colleges offering online programs are operating in dual-mode as they must design courses for both their on-campus and online courses. Fabry (2009) indicated that traditional classroom courses tend to be revamped for use in online environments. However, the courses often lack in quality as the "linear-designed instructional framework" is not suited to online collaborative environments (Fabry, 2003, p. 253). On-campus courses migrated to online environments without proper consideration and implementation of online pedagogical principles and technology can result in ill-structured design and didactic courses which hinder student learning (Power, 2008).

Further, courses that are not designed with careful attention to media considerations and online pedagogy can be frustrating to students (Fabry, 2009). Paulson (2002) stated that "Traditional institutions potentially can produce more effective learning environments by parsing out and valuing all instructional activities and the people who accomplish each of them" (p. 34). Part of the process of instructional design is to ensure that the right resources are working together to design quality online programs. Quality online programs are characterized by forming a partnership between: (a) technical and administrative personnel, (b) instructional designers and faculty, and (c) decision makers who allocate fiscal and human resources to the project (MacDonald & Thompson, 2005). Instructional design processes can provide the evidence-based methodologies for implementing quality online programs based on solid pedagogical principles and collaboration.

Those familiar with technology development projects understand that there is a systematic development process. There also tends to be multiple releases to correct defects or improve functionality. Development cycles generally include design, development, testing, and implementation. Changes often revert back through the cycle. Instructional design processes facilitate the iterative nature of technology oriented development. Sims and Jones (2002) indicated that course design using instructional design processes includes both instructor and learner feedback, and is modified as required to meet learner needs.

Instructional design processes may seem cumbersome and inflexible, as the very term may invoke a negative connotation, especially if one is only familiar with seemingly over complicated instructional design models. However, Silber and Foshay (2010) asserted that instructional design is about principles and not procedures. Understanding the principles of instructional design frees instructional design teams to implement the best learning solution for students independent of a particular model. Silber and Foshay outlined a series of principles of instructional design that should not all be use sequentially at all times, but applied pragmatically. Silber and Foshay's principles of instructional design relative to higher education instructional design are:

1. There must be a clear idea of what learners are to learn. Congruency must exist between objectives, learning activities and assessments. For example: In an introductory computer applications course where the learners must use the appropriate Microsoft applications for given situations, the objectives, activities and assessments must support this learning goal.
2. Design decisions should be based on research and theory. Reverting to principle number one, there must be a clear understanding of what learners must know or do, then the appropriate design applied based on research and theory.
3. Take time to analyze the learners who will take the course. For example: In an introductory computer applications course, it cannot be assumed that all learners are novice computer users. Designs may need to accommodate varying learner skills levels. This also implies that designs need to be flexible in order to change and adapt to the learner population.
4. Design lessons based on the principles of Attention Relevance Confidence and Satisfaction (ARCS).
5. Activate the learner's prior knowledge on the subject and create authentic learning experiences that learners can translate to their work or professional lives. For example: A lesson on Microsoft Excel could activate learners' prior knowledge of basic arithmetic principles and calculator functions. The lesson could also help students identify uses for Microsoft Excel in their personal lives and future careers.
6. Include worked examples and guided practice for novice learners as well as support and guidance for more experienced learners. According to Clark and Mayer (2010) worked examples, guided practice and consistent feedback promote learning in novice learners. Clark and Mayer also pointed

out that sequenced lessons, worked examples and guided practice may actually increase extraneous load in expert learners. Therefore, expert learners should be provided the support and guidance needed; however, guidance should be retracted when no longer required.

7. Assessments should evaluate learners' problem-solving skills and their ability to apply what they learned to authentic situations.

The principles outlined are not exhaustive, but form a basis for instruction that promotes learning. Incorporating the principles into an instructional design process provides the framework for developing effective online programs while utilizing instructional resources to produce the best learning outcome for students. Molenda (2010) asserted that instructional design processes provide the best option for the development and delivery of the highest quality educational solutions.

Implications of Implementing ID Processes

Implementing instructional design processes in traditional college settings has implications. Traditional colleges, who may have maintained a static organizational structure since their beginning, need to change their structure based on their online instructional design process (Levy, 2003). Leaders may find that their structure will need to align with their goal of offering quality online course offerings, facilitated by solid instructional design processes.

Society will expect more from distance learning institutions in terms of quality and course offerings (Levy, 2003). Students are no longer limited by geography in terms of their educational options. Students can compare schools and even transfer between terms if their current program does not meet their needs. Levy (2003) stated that there is intense competition and commercialism in higher education. This competition and commercialism means that schools must have the vision, processes and resources in place to respond and remain competitive in the midst of intense competition and society's increased expectations on quality and ranges of programs.

The role of instructors in traditional college settings will also be impacted with the implementation of instructional design processes. The traditional role of instructors in designing and delivering courses will need to be unbundled with different people doing the work of traditional instructors (Levy, 2003; Yick, Patrick & Costin, 2005). Faculty instead of designing courses in a silo will become part of a team. Instructional designers, instructors, program chairs, advisors and all those involved with distance education should work together to ensure that programs meet the needs of students and is consistent with guidelines offered by their accrediting bodies.

Paulson (2002) indicated that traditional colleges should determine based on the institutions mission, the unique contributions of each faculty member. Course development, media selection and text/graphics design should be performed by the instructional agents who are best suited to perform the activities in a manner that will lead to optimal student learning and organizational effectiveness (p. 130). Paulson (2002) further stated that unbundling faculty roles in the design and development of distance education programs provides traditional college administrators the opportunity to distribute the workload to increase quality and efficiency. While instructors tend to be subject matter experts for the courses they teach, they may not be knowledgeable of common instructional theories such as behaviorism, cognitivism, connectivism and constructivism which form the foundations of instructional design practices. Understanding the theories and how and when to use each of them is essential to effective instruction. However, effective instructional design practices alone does not ensure the success of distance educational programs.

Leadership is Key

Traditional college leaders must have a vision for their distance education programs that is in line with the overall institutional vision. The vision should be clear and provide a view of the organization's future direction, provide harmony amongst the team and empower them to act according to the vision (Reimers-Hill & King, 2009). Miller and Schifman (2006) concluded that in order for online learning to be mainstreamed within an organization vision and leadership are required on both the administration and academic sides of the organization. Some questions to consider are: Which degree programs or parts of degree programs will be offered online? Will full degree programs be offered online and in the

classroom? Will students have the option of taking both online and classroom-based courses? Will hybrid courses be offered and if so why and for which courses? These questions are by no means inclusive of all the factors that must be considered when implementing a distance learning program; however, represent the planning that should take place in order to ensure synergy of online programs with the traditional offerings.

Reimers-Hill and King (2009) suggested that traditional colleges offering online programs would benefit from encouraging their faculty, staff and administrators to be entrepreneurial. Entrepreneurial leadership is characterized by continuous innovation and change (Reimers-Hill & King, 2009). In order to foster an entrepreneurial culture, traditional colleges need to clearly communicate a shared vision, empower others to act on the vision and employ the right people to do the right jobs (Kouzes & Posner, 2007). Otte and Benke (2006) asserted that institutions whose mission is about outreach and service are harmonious to the start and growth of online learning programs. Traditional colleges must determine how distance learning programs fit into their organizational mission and goals. For example: Is the mission of the organization to provide educational offerings to students across the country and/or internationally? Is the mission to respond to the needs of adult learners through interactive, challenging and authentic educational experiences in varying delivery methods? Does the mission statement articulate a commitment to online course delivery? If the goal of traditional colleges is to grow their online learning programs then their vision and mission must be conducive to that growth.

Traditional college leaders must challenge existing processes involving online development projects to ensure they are in sync with organizational vision, contemporary pedagogy and available skilled resources (Sims & Jones, 2002). "The processes and resources applied to the development of online teaching and learning resources must be consistent with the institutional framework, the teaching and learning environment and the technological infrastructure" (Sims & Jones, 2002, p. 2). For example: If the classroom teaching and learning environment is based primarily on behavioral teaching methods but constructivist methods are implored for online courses, the pedagogy would differ between the two modes of delivery. Students could not expect compatibility between online courses and ground courses.

Traditional colleges must pay attention to the need to acquire professionals who can support instructional development in varying modes of delivery. Leadership must consider all aspects involved in providing a quality learning environment for students, which is more than just putting ground classes online (Levy, 2003). Otte and Benke (2006) asserted that traditional college leaders must advocate the practice of sound pedagogy and quality in distance education programs. Traditional college leadership must be committed to continued growth and innovation in distance education programs facilitated by solid instructional design processes.

Guidelines for Leadership

Successful distance education programs must have leadership. Traditional colleges implementing distance educational program need an established, clear and shared vision for their distance education programs that will enable them to remain competitive in the educational market. Further as Ottie and Benke (2006) asserted, traditional college leaders must have a vision for how their distance learning programs will fit into their organizational mission down the road.

Kouzes and Posner (2008) indicated that exemplary leaders are forward looking. Exemplary leaders are able to "develop an ideal and unique image of the future for the common good" (p. 105). College leadership carries the heavy responsibility of developing programs for the common good of its students but ultimately the world impacted by those students. Courses designed to educate those who will change our world should be based on sound principles and best practices in the educational field. To support this effort, instruction should be based on authentic learning experiences.

Implementing instructional design principles into traditional college settings requires a vision and plan (Levy, 2003). Further, traditional college leaders must determine based on its institutional mission, what role faculty should play in the instructional design process (Paulson, 2002). Kampov-Polevoi (2010) indicated that in traditional college settings, faculty
develop their courses mostly non-collaboratively. However, the project-based approach is becoming more

the standard for online course development.

Even institutions who determined that their online courses will be developed primarily by their faculty, acknowledge that there is a benefit to working with an instructional designer (Kampov-Polevoi, 2010). Developing online courses requires knowledge of the target media, online pedagogical principles and in some cases web design. Traditional college leaders should build an instructional design process that combines the skills of people who can bring the highest value and learning productivity to their institutions (Paulson, 2002). Professionals, who are technically adept, schooled in online pedagogy and instructional theory should be part of the instructional design team along with faculty, technical support personnel and stakeholders.

Traditional college leaders must also recognize the possible concerns of traditional college faculty thrust into porting ground courses online. Brooks (2003) indicated that lack of support, increased workloads, lack of salary increases consummate with increased workloads and lack of technical background, impact faculty willingness to engage in online course development efforts. Leaders need to ensure ongoing training and support for the instructional design team (Levy, 2003).

Courage to Change

Traditional college leaders who are not currently using instructional design processes may find that implementing the changes required challenging. Resistance to change can be expected. Distance education programs represent a change to the established course offering, design methods and instructional practices. Heifetz and Linsky (2008) indicated that change "demands that people to give up things they hold dear: daily habits, loyalties, ways of thinking" (p. 448). Faculty who solely designed and delivered their ground classes may be reluctant to the concept of unbundling. The concept of instructional design teams may cause consternation in those who may be fearful of the ramifications of changes to established processes.

Traditional college leaders may also have some concerns about implementing instructional design processes. Leaders must be clear about the vision and goals for their distance education programs and how instructional design processes can help realize those goals and bring the vision to fruition. Competitiveness in the higher-education market requires traditional schools to increase their course offerings and their ability to respond to change (Bailey et al., 2001). This means that traditional colleges leaders must be continually evaluate their course and processes to ensure that their courses meet student needs. This includes serving the needs of the increasing adult student population who want authentic learning experiences, flexible course schedules, consistent term-by-term course offerings, and shorter completion times.

Traditional college leaders have the opportunity to grow, change and improve their online course offerings by implementing instructional design principles into the course design process. "Online instruction is a growth area that can never simply maintain, but must perpetually grow and develop" (Otte & Benke, 2006, p. 24). Leaders must be diligent and courageous in managing the changes necessary for their distance education programs to succeed and flourish in the highly competitive educational market.

Changing the Process

Change is inevitable but managing change is a choice. Implementing instructional design processes into traditional college settings will require a managed change process. The process must account for growth in student populations, support services and all functions related to the distance education programs. Further change and growth must be viewed as a foreseen outcome rather than an unexpected shock (Otte & Benke, 2006, p. 24). The changes required to implement instructional design processes into traditional college setting must be anticipated and managed effectively.

The six-step model of change outlined below includes elements necessary to implement instructional design processes into a traditional college setting.

1. Distance education leaders need to develop a strategic plan for their online programs.

2. Leaders must acquire skilled resources to implement their online programs. Those unfamiliar with instructional design processes need to develop the competencies required to fulfill their respective roles in the new online learning environment. Further, they need to be accountable for using the skills obtained.
3. Educate those involved in distance education development on why instructional design processes are needed, what the changes mean to them individually and collectively, how the changes benefit them and solicit their feedback
4. Implement incentives and rewards for learning new competencies, teamwork, implementing a new course or other milestones and accomplishments.This will send the important message that leadership is serious about change and appreciates the effort involved.
5. Provide performance feedback to those involved in the instructional design process.The process also needs to be evaluated to ensure that program goals are met and areas of improvement in the overall process are identified.
6. Administration, staff, and others who have a stake in the distance education program need to be informed about the progress of the change.
    a. Ensure administrators, support and faculty are onboard with the changes required to implement instructional design processes into the online course development process.
    b. Make the new process familiar without "short-circuiting its transformative value" (Otte & Benke, 2006, p. 24). The process should leverage the organization's prior knowledge of instructional design processes without downplaying the impact of the change.

It would be remiss to provide a change management process for implementing instructional design processes in traditional colleges without providing a warning about potential transformation errors that can derail the effort. Kotter (2008) indicated that drawing lessons from companies who have erred in their efforts to change is relevant in the ever changing and competitive business environment. Traditional college leaders when implementing the changes required to incorporate instructional design processes into their distance education programs should:

1. Motivate their academic and administrative staff to action so that implementing the processes to deliver quality educational offerings with speed-to-market is seen as urgent.
2. Educate themselves on the benefits of instructional design processes and advocate its benefits to their teams.
3. Have a vision for what can be accomplished when instructional design processes are implemented
4. Communicate the vision often to their organizations and listen to their concerns. The vision must be shared amongst all those who will be impacted and responsible for implementation.
5. Actively support the changes required to implement instructional design processes into their distance education course development process. Leaders must listen to the concerns of design teams and actively remove obstacles that hinder the process from being implemented.
6. Develop milestones in the process and celebrate those accomplishments.
7. Evaluate the course designs in terms of learning outcomes and other success factors determined by the organization.The success of the instructional design process implementation should not be measured solely by getting courses up and running. Sims, Dobbs and Hand (2002) indicated that developing distance education material is not a short-term collaboration but a long-term collaborative effort that must be continually evaluated an enhanced.
8. View implementing instructional design processes as a long-term commitment to quality course design. Instructional design processes must become the operating standard for traditional college distance education programs.

Understanding the process of change and the potential pitfalls will help traditional college leaders implement instructional design processes into their organizations and make the process part of the organizational culture.

Traditional college leadership needs to be informed and prepared in order to develop strategic plans for their distance learning programs. As students shop for courses that meet their schedules and circumstances, traditional colleges must be prepared with programs that meet the needs of their learners (Howell, Williams & Lindsay, 2003). Instructional design processes can provide the structure, distribution of resources, online pedagogical principles and enhancement mechanisms to ensure that the courses continually meet organization goals and learner needs.

Howel et al. (2003) asserted that “distance education teams include administrators, instructional designers, technologists, and instructors/facilitators” (p. 4). Distance education leaders need to orchestrate the interaction between players at each level of the organization in order to implement distance education programs (Otte & Benke, 2006). A specific instructional design model is not advocated, but rather a team-based process which uses skilled resources who maintain a shared understanding of the course outcomes (Sims & Jones, 2002). Traditional college leaders must lead the charge in implementing and championing team-based instructional design processes which will help ensure continued growth and quality in their distance learning programs.

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