MANAGING ONLINE TEACHING TO ENHANCE STUDENT LEARNING: A PARADIGM SHIFT

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ABSTRACT

The growth of online programs offered by U.S. educational institutions in the past decade has surpassed expectations. This growth has fueled research in online education, which though diverse does not address management of online teaching. Effective management of online teaching can lead to quality programs and enhanced student learning. In this paper we propose a framework that outlines how the principles of management can be applied to effectively manage online teaching. We believe that application of this framework in educational institutions will lead to quality online programs and sustained success of online programs for the long run.

KEYWORDS: Online learning, management, student learning, learning objectives

INTRODUCTION

The growth and proliferation of online programs offered by U.S. educational institutions in the past decade has surpassed expectations. According to a recent report (Sloan-C, 2008) the increase in enrollment in online education has been faster than the overall higher education enrollments. The report states that more than 20% of all U.S higher education students were enrolled in at least one online course in fall, 2007. It is estimated that there are more than 3.2 million students enrolled in at least one online course at the college and university level and over 96% of the larger universities and colleges offer online courses (Allen and Seaman, 2007). Colleges of business are one of the fastest growing with 43% offering online educational programs (Peltier, Drago and Schibrowsky, 2007). There are many factors that have fueled this rapid growth of online education. The economic recession is one of the factors impacting the growth of online education (Clark, 2009, Sloan-C, 2008). Rising unemployment, higher fuel costs and a demand to retrain or seek advanced degrees have increased the demand for online courses and programs. In an environment of increased competition for students and declining state budgets, online education provides institutions an opportunity to increase their reach globally and to reach more students.

While the demand for online programs is rapidly growing and the institutions are rushing to seize this opportunity, one of the biggest challenges that institutions face is how to sustain the growth of these programs long term. Sustained success of these programs will depend on the quality of these programs and the effectiveness of online experiences. If students don’t get quality learning
experiences, they will be dissatisfied and will drop out of these programs (Kim and Bonk, 2006). There are many cases where institutions despite investing heavily in technology and other resources, have not been successful in online education. These institutions rushed to offer online courses and programs without focusing on the quality and value of these online experiences (Trinkle, 2005).

So how does an educational institution succeed in sustaining its online program offerings and ensure that over time sclerosis does not set in? The simple answer is managing online learning to enhance student learning. While the answer seems very simple, the challenge lies in understanding what and how to manage? Sometimes in a rush to offer online programs, institutions just focus on managing technology. Technology is a key resource required for online teaching but just one of the resources. Online teaching requires business schools to allocate significant resources - people, technology, tools and budget allocations – for these programs. As schools embark on creating, designing and offering online programs they need to focus on the management of teaching in these programs. Effective management of the different aspects of online teaching and learning will determine the quality of these programs.

In this paper, we apply the principles of management to managing online teaching. We propose a framework for effectively managing online teaching leading to enhanced student learning. The specific research question being addressed is the following: how do we manage online teaching to enhance student learning? The paper is organized as follows. In the following section we review the online teaching literature. The next section proposes a framework that can be used as a tool to manage online teaching in schools. Finally, we conclude the paper with a discussion of the implications for schools and administrators of ignoring the management of online teaching.

REVIEW OF LITERATURE

Most of the extant research in the area of online education can be categorized into four main research areas: comparative studies examining student learning outcomes in online vs. face to face course, student satisfaction with online programs, instructor experiences, and examples of challenges/ issues faced in the development and implementation of online programs/ courses. A vast body of research so far has focused on answering one main question: is online learning as effective as traditional face-to-face learning? The finding of most of the studies is that online learning can be as effective as face-to-face traditional classes. Fortune, Shifflett and Sibley (2006) compared student learning in an online and face-to-face course and did not find any significant difference between distance education and traditional education. Similarly, Bernard et. al (2004) based on a meta-analysis of empirical studies reported no significant differences in learning outcomes for traditional and online courses. Allen et al. (2004) examined 39 online programs and reported similar results.

Several research studies have also examined student satisfaction with online courses. Research in this area has reported mixed results. Allen, Bourhis, Burrell, and Mabry (2002) conducted a meta-analysis of 24 articles reporting student satisfaction and found that there was no significant difference in student satisfaction between distance education and traditional face-to-face classes. Other studies have reported higher level of student satisfaction with traditional classes (Ponzurick,
France, and Logar, 2000). Some studies have reported that in online classes students experience isolation, frustration and boredom and due to these factors there is a higher dropout rate in online classes (Kim and Bonk, 2006).

Another theme of research in the area of online education is related to faculty experiences of developing and teaching online courses. Abbott (2005) points out that the instructor’s role changes from “sage on the stage” to “guide on the side” where the focus changes from lecturing to facilitating and managing learning. Individual faculty that have taught online courses have been active in research and have written about first online teaching experiences (Conrad, 2004); motivations and incentives for distance faculty (Parker, 2003); perceptions on preparation times (Pachnowski and Jurczyk, 2003), and challenges faced by faculty in transitioning to the new role of a facilitator leading to student dissatisfaction in online classes (Peltier, Drago and Schibrowsky, 2003; 2007). For example, Copolla, Hiltz and Rotter (2002) interviewed 20 faculty members who were teaching online and asked them about their changing roles and experiences in online classes. The study concluded that faculty roles related to cognitive, affective and managerial activities changed in online environments and emphasize the importance of training faculty for these new roles and pedagogies. A recent study (Wasilik and Bolliger, 2009) examined faculty satisfaction in the online environment and reported moderate levels of faculty satisfaction based on a survey of one hundred and two faculty members. These studies suggest the need for faculty preparation and training to effectively teach and manage online teaching and learning. In addition to the above themes some studies have reported examples of institutions implementing online programs (O’Neill, Singh, and O’Donoghue, 2004) and models and frameworks for designing effective online learning experiences (Alavi and Leidner, 2001).

A consistent finding across all studies is that a critical factor determining the quality of the online experiences is how well the instructor is able to manage the teaching and learning processes in an online environment. In an online environment, the instructor becomes the virtual manager who manages knowledge transfer/creation, interactions, communications, performance, collaboration with a goal to enhance student learning. The issue of management becomes even more critical as some recent studies have reported a high burnout rate among online faculty members (Hogan and McKnight, 2009). Faculty face challenges not because of lack of training in technology, but due to lack of knowledge of how to effectively manage different aspects of teaching and learning in an online environment.

Though the research on online teaching is indeed diverse, it is interesting to note that online teaching scholars have not paid adequate attention to management of online teaching, which is a critical aspect for developing quality programs and to enhance student learning. We are only aware of a couple of studies that addresses the issue of managing online teaching though the scope of these studies is very narrow. Shi, Bonk, and Magjuka (2006) focused on time management issues for instructors when comparing online and face-to-face teaching. Phelps, Ledgerwood, and Bartlett (2000) recommend applying the project management methodology to develop and deliver online programs. In the next section we propose a framework for managing online teaching.
FRAMEWORK FOR MANAGING ONLINE TEACHING

“Shying away from Internet-based education because it is too impersonal to be effective is nonsense. Nothing is easier than building feedback and direct contact into the Internet.”
Drucker (2001)

A framework can be a powerful tool that guides users in determining factors that are important for understanding a concept, phenomenon, methodology or problem. The proposed framework described in this section will help instructors manage the methodology used to facilitate learning in an online environment. Myriad scholars in the discipline of Management have written extensively on managing strategy, resources, people, processes and methods etc. One of the most influential management scholars, Peter F. Drucker, has over the years written extensively on the subject. Drucker over a career that spanned half a century wrote extensively on management thinking and practice and his work has had a profound impact on both management researchers and practitioners. He has written more than 30 books and published 38 articles in Harvard Business Review. The framework that we propose is inspired by Drucker’s work on management. The question that arises is, why Drucker? Drucker, often credited to be the founding father of the management discipline, was not only a management thinker but also an excellent teacher who taught courses in diverse disciplines such as economics, politics and philosophy. His ability to raise thought provoking questions in the management discipline spanning multiple areas distinguishes him from his peers. Most management scholars such as Porter, Levitt, Prahalad etc. have focused on a specific area of management. The breadth of Drucker’s work makes it easy to apply his ideas when discussing any topic that involves management of systems, people or organizations.

Managing online teaching can be viewed using two different lenses, program level or individual course level. The lens we view to discuss the management of online teaching is the individual course. Using this lens the instructor of the online course plays the role of a manager of the course. Drucker (1992 and 1974) has highlighted the significance of the task as one of the most important managerial responsibility. In his classic Management: Tasks, Responsibilities, Practices (1974) he states that a manager’s work involves five basic operations: setting objectives, organizing, motivating, communicating, measuring, and developing people including themselves. In a recent book Drucker (2004) highlights the significance of identifying what needs to be done before a manager explores how it should be done. In the context of online teaching an instructor needs to identify the tasks that are critical and then explore how to manage these tasks. Based on our experience of teaching online courses we believe the most important tasks for managing online teaching include managing course objectives, developing course nucleus, leveraging technology, facilitating interactions, developing peer network and facilitating engagement (ONLINE) for enhanced student learning (Figure 1).
Managing Online Teaching

Objective

“In an ecology, the whole has to be seen and understood and the parts exist only in contemplation of the whole.” Drucker (2003)

An instructor as a manager of an online course should make sure that there is alignment at two different levels. At the first level of alignment the course student learning objectives (SLOs) should be aligned with the overall program SLOs. At the second level of alignment the course SLOs need to be aligned to the course assessment & teaching methods. Caution must be exercised to ensure that schools do not fall into the “alignment trap” (Shpilberg, Berez, Ppyear, and Shah, 2007) by focusing too narrowly on a course and ignoring the program. This narrow focus at the course level may lead to disastrous results.

Nucleus

“Specialized knowledge by itself produces nothing. It can become productive only when it is integrated into a task.” Drucker (1992b)

The content of an online course, its nucleus, is critical for enhancing student learning. An online environment offers an instructor the opportunity to present content in multiple formats. The challenge that arises for the instructor is managing content to ensure that the student is not overwhelmed. It is important to connect the course content to real world experiences so that students understand how to apply concepts. As Drucker (1992b) points out “the purpose and
function of every organization, business and non-business alike, is the integration of specialized knowledge into a common task.” An instructor needs to ensure that they integrate real world experiences (tasks) into the course content. Selecting content that leverages the potential of technology provides tremendous opportunities for online instructors. Multimedia content such as podcasts, webinars, video case studies, simulations, virtual communities (second life) etc. provide excellent sources of content that can be used to integrate knowledge into tasks. These sources also help humanize the online teaching experience as students actually hear and see people talk about issues being faced in organizations.

Leverage

“The biggest impact will be on knowledge industries such as education and medicine, which are in great need of increased productivity. The impact on education will be profound, but first there will have to be a critical mass of technology in the classroom.”
Drucker as cited in Davenport (2007)

Online courses are often delivered using Learning Management Systems (LMS) such as Blackboard and Moodle. It is important for an online instructor to understand that posting powerpoint presentations on a LMS is not online teaching. A LMS provides multiple tools that need to be leveraged for enhancing the student learning process. For example an online instructor can encourage students to use Wimba for collaboration on group projects. What is important is that the instructor themselves uses the technology tools such as Wimba to encourage use by students. Taking another example interactive tools such as blogs, journals, wikis and discussion groups can be very effective for enhancing learning if used in an online course. In addition to tools embedded in a LMS there are multiple other technology tools that can be leveraged in an online course to enhance student learning. Social media technologies such as Twitter, Facebook, You Tube etc. can be effectively used to enhance student learning. Instructors that fail to use technology tools in an online classroom send the message that it is not important and student learning is impacted as they miss out an opportunity to learn the use of these tools. The challenge for an instructor when leveraging technology tools for online teaching is managing their time.

Most technology tools are relatively easy to use though incorporating them in an online course to enhance student learning can be time consuming. As Drucker (1963) says “there is surely nothing quite so useless as doing with great efficiency what should not be done at all.” Faculty can get overwhelmed with the pervasive nature of time in online classes, and students sometimes find it very difficult to adjust their study habits without the physical constraints/structure of time. A proactive approach to time management should be used to manage online teaching when an instructor in attempting to leverage technology tools. Time spent upfront to learn how these tools work and exploring ways of incorporating them in the course could save an instructor hours of frustration during the actual course offering.

Another proactive approach to managing time to deal with technical challenges is for the instructor to request a student account for himself or herself. Since instructors have different account settings it is useful to have a student account to see the problem. It is possible that in some cases instructors may be able to solve the problem. Caution should be exercised when taking on
technical problems that students face. Oncken Jr., Wass and Covey (1999) narrate an interesting story of a manager who took on too many of their subordinate problems overwhelming themselves.

**Interactions**

“The typical business will be knowledge-based, an organization composed largely of specialists who direct and discipline their own performance through organized feedback from colleagues, customers, and headquarters. For this reason, it will be what I call an information-based organization.” Drucker (1988).

In an information-based organization (environment) such as an online class, the instructor needs to be careful in managing interactions with students. These interactions are normally in two forms, instructions & directions related to the course and assessment feedback. The instructions & directions that are communicated by an instructor need to be clear, precise and timely. These directions will help students understand what they need to do to successfully meet the course objectives. As Drucker (1988) points a good manager (instructor) should help students focus their individual skills on learning. To accomplish this an instructor must structure and organize their interactions and feedback in such a way that helps students direct and discipline their learning and performance.

Student-student interaction is a critical component of learning in an online environment and needs to be managed carefully to ensure learning. Students often interact with peers (colleagues) to get information on course policies, assessment criteria and assignments etc. In this role a student acts as a “relay” (Drucker 1988) passing on information to other students. The risk is that noise may be added to the information that is being relayed leading to misinformation being conveyed. As stated in the previous paragraph an instructor by providing clear, precise and timely information can minimize such interactions. Caution must be exercised in this regard as the objective is not to discourage student-student interactions, rather it is to limit clarification-seeking interactions. Student-student interactions that enhance learning such as sharing experiences related to the subject need to be encouraged and promoted. Further whenever students provide feedback on their experiences an instructor should “make sure people throughout the organization hear customers' (students) voices loud, clear, and unfiltered.” (Florida and Goodnight, 2005)

**Network**

“A vocational school might pump out more and more graduates of a welding program, for instance. But if those graduates cannot find jobs as welders, what good is the program? It may be generating impressive outputs without generating any positive outcomes.” (Drucker as cited in Process Excellence Network, 2010)

Instructors teaching online courses in online programs need to make sure that they create a network of industry professionals and other instructors that are passionate about online teaching. The former is needed to place students who graduate from online programs and the latter is important for sharing best practices in online teaching. Often online programs are often not
considered as the same quality as face-to-face programs. This can result in students graduating from online programs struggling to find jobs. Online instructors can play an important role in helping shape industry managers’ opinions on quality of online courses and programs. To achieve this, instructors need to continuously innovate in how these courses are delivered. Sharing ideas, experiences and results with peers teaching online courses an instructor can very easily continually adapt and improve online course offerings. Social media technologies offer opportunities for instructors to create learning communities that can help them excel in designing, developing, teaching and managing online courses.

Engagement

“Knowledge is always embodied in a person; carried by a person; created, augmented, or improved by a person; applied by a person; taught and passed on by a person; used or misused by a person. The shift to the knowledge society therefore puts the person in the center.” (Drucker, 2001, p.287).

In an online course the instructor facilitates the process of teaching and passing knowledge whereas the student embodies, carries, creates, augments, improves, applies, uses or misuses knowledge. To achieve this an instructor has to create a learning environment, which facilitates high student engagement. Setting and communicating high expectations in a course promotes student engagement. An instructor needs to make sure that expectations for an online course are comparable to a face-to-face course and students do not perceive that less work is involved in an online course. The challenge lies in communicating expectations as an online instructor as in a face-to-face class the concept of time is well defined and understood. Weekly class time used for Q&A to communicate expectations is limited to the time that the class meets every week. In an online class this changes, as there is no limit to class time. Students often expect 24/7 availability overwhelming the instructor. An instructor can proactively manage their time by managing expectations. 24/7 does not imply that you have to be logged on 24 hours. An instructor should plan and clearly communicate e-mail response time in their syllabus, e.g., all responses will be within 24 hours. Hussain (n.d.) provides an excellent example of assumptions that can be created by instructors to manage expectations in an online classroom.

Student Learning

Student learning is a process that like any other process needs to be managed effectively. Effective management of different aspects of online teaching will enhance student learning. It should not be assumed that student learning happens automatically by providing a content rich technology enabled environment, it needs to be orchestrated. Just because we design an online course, it doesn’t necessarily mean students will learn as suggested by numerous studies. How well an individual faculty manages the different aspects of online teaching in their course will determine the degree of student learning. We believe that using the ONLINE framework will enhance student learning in an online environment in multiple ways.

Research indicates that each student has different strengths and this determines his or her learning style. Managing online teaching using ONLINE helps an instructor to address the needs of
students with different learning styles. For example, presenting content in different formats and using different methods of assessing performance addresses the diverse learning styles of students. Further, using the proposed ONLINE framework for managing online teaching an instructor can help their students become life-long learners. For example, structuring course content into modules with specific questions for each module helps a learner understand how to manage the overwhelming volume of information that they will be presented with in their careers. SLOs alignment helps students see the “big picture,” they can see how the course relates to the overall program and other courses leading to enhanced student learning. As students experience how instructors manage interactions and information effectively in online courses, they will develop critical learning skills to manage information.

CONCLUSION

Online teaching is a transformation for most schools and faculty that should be managed very carefully. The transformation process is one where significant resources are expended over a period of time. Mismanagement of this process can lead to undesirable results and frustrated faculty and students. Kotter (2007) points out that “shortcuts and critical mistakes” have often led to failures in transformation efforts. Effective management on the other hand can lead to the creation of a successful program (course) that is demanded by students and appreciated by university administrators. For an individual faculty online teaching provides an opportunity to adapt to changing times. As pointed out by Drucker (2005) in his classic paper titled Managing Oneself, “with opportunity comes responsibility.” This responsibility in the context of online teaching is to manage online teaching. When applying management principles to manage online teaching one should always keep in mind that there is a risk of failure. The important thing is to make sure that you have “build the capability to recover when failures occur” (Catmull, 2008). Program administrators play a critical role here. They should promote an instructor’s creativity by recognizing failures as lessons learnt in the process of becoming an effective manager of online teaching.

In this paper we viewed management of online teaching from an individual course perspective. Our experiences of teaching multiple online courses shape our views and helped us apply the principles of management to the discussion of managing online teaching. We do realize that when viewed from a program level new challenges and opportunities may arise that this study does not address.
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