BLENDED LEARNING IN ACADEMIA:

SUGGESTIONS FOR KEY STAKEHOLDERS

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ABSTRACT

With the emergence of a new information society, blended learning is enjoying renewed interest. Within academia, faculty, students, and administrators each face their own issues with respect to blended learning. Based on our experiences, we offer suggestions for each of these key stakeholders.

INTRODUCTION

Within the popular press, blended learning is widely portrayed to be the most effective approach to education and training across very diverse organizational settings [12]. Indeed, researchers have reported the success of blended learning in such varied contexts as prison systems [3], firefighting organizations [1], and automotive manufacturers [5]. Undeniably, many organizations are experiencing lower costs, more flexible and consistent delivery, and more timely instruction as result of the blended approach [9]. And, indications are that the blended approach to learning will continue to increase in popularity within the foreseeable future [6].

Blended learning typically refers to the combination of e-learning (i.e., distance training using the Internet) with some other form of learning such as classroom instruction [6]. Yet, the concept of blending learning remains somewhat vague because the degree to which distance vs. classroom learning is incorporated within a course varies greatly. Some studies have concluded that about two virtual modules out of twelve is about right [7], while others have found success offering only 20 percent of a course in instructor-led classroom study [2]. In our own experience, we have observed that some instructors rely totally on on-line modules, while others conduct only one or two classes each semester using Internet-based tools.

Additionally, while blended learning is gaining popularity at many universities, not everyone should be expected to warmly embrace this approach to education. Research suggests that only about two-thirds of individuals prefer a blended learning approach [2]. However, as we evolve into more of an information society and we have more computer-savvy students entering our educational institutions, it is clear that technology will play a larger role. Educators who have relied on traditional classroom methodology for decades, and who may not feel comfortable with emerging technologies, will likely begin to notice they are not meeting student expectations in the classroom.

Universities are already experiencing increasing demands by both students and governing authorities to offer more flexible, on-line programs. However, it is critical that movement toward more blended learning be approached in a systematic, practical manner. Without proper training and planning, it is possible that a more stressful, impersonal learning environment may be created that significantly diminishes the learning experience for all involved.

Based on our experience with blended learning, this paper attempts to capture the unique perspectives of key stakeholders within academia. Specifically, we discuss issues of importance to students, faculty, and administrators.

A HISTORICAL PERSPECTIVE

The blended approach to learning is not new. With the development of video film over 80 years ago, the potential existed to integrate technology with in-class instruction [6]. However, the extent to which technologies such as videos, television, DVDs, and satellite feeds have replaced classroom instruction has been relatively insignificant. While these technologies have served as useful tools to supplement teaching, in-class instruction has remained the dominant means of delivering knowledge and skills in both academia and industry for the past century. Rosenberg [10] suggested that the inability of students to interact with these technologies may have contributed to their inability to replace traditional instruction. But, given the current popularity of blended learning, we must ask, "What has changed?"

Toffler [11] offers one perspective. He suggests that we are experiencing the evolution of a new society – an information society. Toffler argues that for over five centuries we lived in an industrial society. We trained our students to follow well thought-out, proven approaches to problem solving based on relatively static information. However, around 1992, the information society began to emerge. In this new age, technology such as global communications networks, nanotechnology, and robotics dramatically changed the way information was created, revised, and transmitted around the world [8].

In this information society, the World Wide Web and more user-friendly, interactive software has had a dramatic impact on education. Tools now exist that allow students to take an active role in the learning process. And, much of this technology is available at a relatively low cost. Indeed, the idea of blended learning is enjoying renewed interest in today's information society. However, it is crucial that universities approach blended learning in a organized, rational manner. Given the popularity of blended learning, it is possible to overreact and create negative perceptions among key stakeholders. Based on our experiences, we offer suggestions to faculty, students, and administrators that we believe will make this transition more successful.

FACULTY PARTICIPATION

Reactions among faculty have been mixed with regard to blended learning. Faculty who work with changing technology on a regular basis (e.g. MIS faculty) and younger faculty appear to be much more receptive to incorporating technology into their courses. However, there are many faculty members who are approaching these changes with caution. And, this is understandable.

For faculty who have been in academia for 20 to 30 years, change does not always come easy. The thought of students not attending class in person, of exams being given on-line, and communication taking place in chat rooms seems inappropriate. Some faculty have even expressed a concern that, if they move into more blended learning, their student evaluations and merit increases will be negatively impacted. Showing patience and providing support is important with these faculty members.

At our institution, we have set a goal of having at least one section per year of our core courses on-line within the next two years. We are encouraging faculty who are not familiar with technology tools to slowly begin to introduce them into their courses. And, we are attempting to provide training opportunities, incentives, and support systems to facilitate these changes.

Provide Appropriate Training

Our first attempt to provide comprehensive training within the college of business was very much a learning experience. In our college, we have more than fifty faculty members. Sixteen agreed to participate in an eleven-week certification program designed to expose them to different aspects of blended learning in the classroom. In the end, more than half decided to withdraw after only a few weeks into program. In retrospect, there were several issues in the program that may have led to these rather disappointing results.

First, we found that our faculty were at very different levels in terms of their exposure to blended learning and the tools available to them. Some were interested in only a couple of the modules being offered. Yet they were "encouraged" to take the entire eleven-week course to make certain they had received comprehensive training and because each session would build on the previous week's work. Thus, many simply chose not to participate because they felt that much of the program would be repetitive. Future training will likely be more effective if faculty can "pick and choose" the modules that they are interested in.

Second, the program was set up on a rigid schedule. The program was designed for modules to be opened up on Sunday night and to be taken off-line in one week. We quickly discovered that this schedule did not meet with the approval of faculty members. Some faculty commented that in some weeks they had sufficient time to complete several modules, but other weeks were so busy they simply did not have time to participate. Flexibility will be crucial if this program is to succeed in the future.

Third, each week assignments were expected to be completed and grades were assigned to participants. Some faculty observed that being "graded" seemed inappropriate for what should be a more professional experience. In fact, some found themselves completing "busy work" to make a certain grade rather than focusing on the aspects of the training that they were more interested in.

The Distance Education staff at our university who conducted the training are very knowledgeable, patient individuals. And, their efforts at putting together this program were very much appreciated by all involved. However, significant changes will likely need to be considered before the program is offered again.

Establish Effective Incentives

The issue of motivating faculty to established blended and on-line courses has been a hot topic. One colleague recently solicited comments from our business faculty on appropriate incentives and received considerable, but wide-spread, perspectives on the appropriate direction.

Some felt strongly that an incentive, such as a course release or additional travel funds, should be offered each time a traditional in-class course is converted. Others argued that we should reward faculty only when they initially complete formal training to acquire the necessary skills to introduce technology into the classroom. These individuals suggested that providing an incentive for every course is simply too much. Then, there was the feeling of a few individuals that moving toward blended learning is simply part of the job. They felt that it is no more demanding to create an in-class course from scratch than to put a class on-line that has already been taught by a faculty member. Couple these diverse options with those who have already created on-line courses, and feel that they should now be rewarded for their prior efforts, and you have a potentially precarious situation.

There are some real concerns about the unintended consequences of establishing an incentive system for blended or on-line course preparation. First, we do not want to discourage faculty from creating new, inclass courses. We frequently need to introduce these courses into our curriculum. And, based on the type of course, some are more suited to in-class delivery. If the "carrot" is only for blended or on-line courses, it may be difficult to get faculty interested in more traditional courses that are still needed. Second, there is a concern that some faculty will take advantage of these programs. For instance, one faculty member commented that he had comprehensive PowerPoint notes for each lecture and that he could quickly convert these to "pdf files" and post them on-line. He figured if he got a release for each course he converted, he could teach a reduced schedule for several years. Third, it is possible that too much emphasis and rewards for blended learning may motivate some faculty to reduce their efforts in research and service. Again, if individuals value the reward, they will aggressively pursue it, often at the expense of other responsibilities.

Even with these concerns, it is recognized that some incentive program is necessary to sufficiently motivate faculty, who may have spent many years teaching in the classroom, to change their delivery methods. Within our college, this issue is currently being reviewed by the Strategic Planning Committee. It is anticipated that a major incentive will be offered to individuals who gain the skills necessary to introduce technology into the classroom and then successfully implement it the first time. Then, we anticipate offering smaller incentives for subsequent course modifications.

Establish Internal Support Systems

At our university, we have a Distance Education staff that is charged with providing support for on-line learning. And, these individuals are very responsive and professional. However, we have found that having someone close by, who may be familiar with a particular discipline, can be a great source of help as well.

It is important to identify individuals within your department who have previous experience with blended learning and solicit their support. In our department, we are fortunate to have several individuals who have extensive experience integrating various technologies into their courses. We are also fortunate that these individuals are willing to give their time to help colleagues understand tools that are available and may be suited to their particular disciplines.

Within the past year, several sessions have been set-up to discuss tools such as Camtasia, Podcasts, and Wikis. In these small, informal settings, personal help is provided by experienced colleagues that our faculty respect and feel comfortable with. And, because individuals conducting these sessions are just down the hall, follow-up questions can be asked quickly.

STUDENT SUCCESS

Increasingly, students are arriving at universities more technologically-savvy that many faculty members. These students have grown up surfing the Internet, participating in chatrooms, and text messaging friends. They have a comfort level with technology and an eagerness to learn more. Many anticipate using technology in the classroom and are somewhat disappointed when this does not occur. And, they will continue to enter our universities with even greater expectations over the next decade.

One colleague recently observed that his seventh-grade son was actively using the same software that we were teaching our sophomores in college. And, he was correct. Many students are becoming proficient with many types of software at a much earlier age. Unfortunately, not all of our students have the same level of expertise. One neighboring institution found that only two percent of students arriving had the necessary skills to exempt their core Microsoft Windows/Office course.

Regardless of a student's knowledge of technology, we must remember that this does not always equate to success in blended learning environments. Specifically, we have found that it is important to provide students with appropriate on-line skills, to ensure that opportunities are available to meet with instructors, and to make alternative in-class opportunities available for students who feel more comfortable in this environment.

Preparation is Key

While our students are demonstrating higher comfort levels with technology, they are not necessarily prepared for the demands of blended (or on-line) learning. This assumption, however, is made by many key stakeholders. But, we must remember that most of these students come from high schools that used standardized methods of instruction, in a classroom setting, to prepare the students to function in an industrial society that was dominant for over 500 years. In fact, we have found that these students often do not possess the skill set that will led to success in blended learning environments or in an information society.

At our institution, the introductory computer applications course is evolving to help studies learn how to manage their time in self-paced courses, to set up their virtual classroom, to take a proactive role in problem-solving, and to use technology effectively. Each student in the college of business is required to take this course as a freshman or sophomore. Thus, we can reach these students early in the curriculum to help ensure that when they face blended learning in higher-level courses, they are prepared.

Face Time Remains Important

Often the pendulum swings too far in one direction before it finally finds its way back to the middle. We experienced this to some extent with one of our junior-level, core courses that used a blended approach. Initially, the course was about 50 percent in-class and 50 percent on-line. However, it gradually "progressed" to a completely on-line course for most of the sections offered each semester. In fact, because graduate students were assigned to lab sessions, there was only minimal contact between the instructor and the students.

While the job market was likely the primary factor in less students selecting the discipline associate with this core course as their major area of study, some faculty suggested that our less "personal" approach may have been a contributing factor as well. And, in fact, we see many of our undecided business students choose a major after exposure to the junior-level introductory courses in each discipline. Thus, while we all had the best of intentions, we may not have established sufficient opportunities for face-to-face interaction. And, the problem may get worse before it gets better.

Many faculty are now requesting that, since their courses are more on-line, their office hours be "on-line." We have started to experiment with allowing faculty to establish virtual office hours. However, skepticism remains about what will be lost when students have limited opportunities to interact on a personal level with faculty. In our own experience, former professors were instrumental in influencing our careers. Whether through classroom instruction, advising sessions, or office hours, it seems vital that we find ways to allow experienced faculty to serve as mentors.

Encourage Students To Find Their Comfort Level

As noted earlier, only two-thirds of individuals reported that they preferred the blended approach to learning [2]. It is likely that factors such as age, personality, marital status, family demands, and learning

preferences greatly impact one's interest in blended learning. For some individuals, the social aspects of being in a classroom are an important part of the college experience.

It is imperative that both students and universities understand that not everyone is going to be a good fit for courses that are predominantly on-line. While it is important to give students the tools they need to be successful in blended learning environments, it is likewise important to encourage students to find the level of blended learning that fits their own preferences.

While we are moving toward more blended learning at our university, we also plan to retain in-class sections for most of our core courses. We designate levels of blended learning in particular courses with key letters after the course section so that students have some idea of the extent to which classes will be on-line before they register. We also use advising sessions to discuss with students their experiences in previous courses and to advise them on appropriate classes for subsequent semesters.

ADMINISTATIVE APPROACHES

Within our university system, the amount of blended learning has increased significantly. A recent report shows that the number of internet-based courses offered from 2000 to 2005 increased by 479% and that enrollments in eCore courses increased by 2166% [4]. Additionally, the WebMBA program (a joint effort by five universities) has more than doubled in just the past year. There is a demand for blended learning and university administrators are moving to make certain this demand is met.

In a recent State of the System address, the Chancellor of our system left little doubt that we will continue to aggressively integrate technology into the classroom. He noted that the Spellings Report had concluded that academia had not sufficiently invested in technology and that we could not continue to lag behind if we intended to serve our customers and communities.

There is pressure to respond. However, it is important that we not blindly pursue initiatives that may negatively impact the quality of instruction. Based on our experiences with blended learning we believe that administrators should ensure appropriate virtual classroom sizes, find receptive audiences for initial offerings, and focus on recruiting as a way to enhance blended learning.

Virtual Classes Have Limits

About six years ago, one of our introductory courses was converted to a blended course, with most of the course being self-paced and on-line. Enrollments soon grew from about 45-50 students to over 80 students per section. With in-class sections, the number of desks often act to cap these classes. However, in virtual classrooms, there are no limits. It is important that administrators, some of which have no experience with blended learning, understand that the requirements for students and faculty do not decrease with blended learning.

In the face of increasing enrollments and a decrease in faculty (both because of a tight labor market and decreasing budgets for new faculty lines), it is important that administration not view blended learning as a mechanism to increase class sizes. It is possible to free up classroom resources through blended learning. However, there is a real danger of lowering the quality of instruction if class sizes are allowed to grow unimpeded.

Administrators are not only under pressure to increase blended learning, they are also experiencing significant budget cuts and increasing student enrollments. At first glance, the idea of using virtual classrooms to increase class size does appear to solve these issues. However, this may be a risky proposition. As administrators become more involved in blended learning, we are seeing more realistic

expectations. For instance, at our university, over the past several years, the introductory course that once had over 80 students is now back to more manageable levels.

Find a Receptive Audience

Many administrators will be surprised at the extent to which blended learning is already occurring. In certain disciplines, technology is a integral part of the curriculum and instructors have been incorporating it into courses for years. It is with this faculty group that administrators will likely find the most receptive audience. These faculty can serve as champions to promote blended learning, as resources to organize training efforts, and as a great source of expertise.

Within our college, we have two primary disciplines that are experienced with blended learning and proficient with a number of technology tools. And, they have been generous with using their knowledge and skills to help others. It is important that administrators recognize and reward this valuable service.

Recruit Faculty With Blended Learning Skills

We have found that some faculty are simply not interested in blended learning. Despite efforts and incentives designed to encourage the use of more technology, some faculty simply choose to stick to same approaches they have used in the classroom for years. It is unclear exactly what administrators can do with tenured faculty who strongly protest blended learning and who may even use academic freedom as a basis for retaining their in-class methodology. It is, however, very apparent the direction that can be taken in the future.

As part of all job announcements, we now specify that on-line learning experience is desired. And, we actively discuss one's interest in blended learning during their job interview. It is likely that faculty members on the job market will begin realize the competitive advantage that having blended learning experience gives them and continue to hone their skills. It is hoped that faculty reluctant to use technology will begin to see the changes occurring around them and take a more active role in understanding the advantages that can be gained through blended learning.

CONCLUSION

The emergence of the World Wide Web over the past decade has created many opportunities to integrate technology into the traditional classroom environment. And, while a more blended approach has the potential to significantly enhance the learning experience, it is important to understand the perspectives and challenges of all key stakeholders.

Institutions and faculty who have traditionally trained students in a classroom setting to be successful in a largely industrial society must now adjust to more technology-savvy students who will be competing for jobs in a more information-oriented environment. For some stakeholders, this transition will be daunting. However, it is likely that where universities use a systematic approach and devote sufficient resources to blended learning, both students and faculty can be successful.

Blended learning holds the potential to allow educational institutions to prepare students to be effective in an evolving society where information can quickly be obsolete. Using web-based applications, along with appropriate classroom instruction, students can be trained how to efficiently access and process the latest information when making decisions. And, there is increasing evidence that this skill set will be essential to success in the job market. As one author suggests, "The illiterate of the 21st century will not be those who cannot read and write, but those who cannot learn, unlearn, and relearn [11]. Undoubtedly, blended learning will be a key approach in preparing our students to meet the demands of the 21st century.

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