**A Blended Approach: Non-Traditional Delivery Methods in the College Environment**

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Over the past few years, research has shown a beneficial effect arising from presenting college- level material in both an online and/or blended delivery format. Studies have shown that these delivery formats bring higher levels of achievement and better long-term retention levels than more traditional models (Johnson and Johnson, 1996).

Interest in adapting blended learning practice in the academic and corporate environment is rapidly increasing. Studies over the past decade have shown a doubling of training programs in the United States that utilize blended learning techniques. Technology-based delivery methods have become the standard for the global workforce as a result of fast-changing job requirements and expectations. Today’s college students need to be exposed to this style of learning to maintain their competitive advantage in tomorrow’s workplace. Kim, Bonk and Zeng (2005) predict that eighty to ninety percent of all college courses and training programs will contain some aspect of blending within the next decade, and that over one billion people worldwide will be learning in a blended environment.

Blended learning can be defined as a combination of traditional delivery (i.e. class room setting) methods with online or technology-driven delivery methods. Collaborative elements are a key focus of the blended learning pedagogy. Blended learning is a mixture of any number of the following traditional and interactive forms of teaching. This mixture includes the use of multimedia, virtual classrooms, email, online technology, and video-conferencing, together with classroom training. Collaborative learning involves social processes in academic problem-solving situations (Dennen, 2000).

The benefits of collaborative learning methods have been well documented; they include increased problem solving skills as well as improvements in communication and critical thinking areas. Additionally, collaborative learning leads to increased learner satisfaction, greater achievement with course objectives, and changes in learning practices (Ruiz, Mintzer, and Leipzig, 2006). The learning process is broadened in scope by the collaborative process as it exposes students to each other’s perspectives. The online element facilitates the exchange of such perspectives.

Instructors, both online and traditional, also benefit from the collaborative learning process. Senior faculty can share their experiences and techniques with junior faculty. There is also an opportunity to employ what is known as reciprocal mentoring, which is where a pair of faculty members complements each other regarding factors such as pedagogy, technology, teaching philosophy and course assessment (Gabriel and Kaufield, 2007). This reciprocal mentoring helps solve some of the age-old online issues that some instructors face in terms of the sacrificing of course content to technology related issues. These technology issues can be experienced at either the faculty or student end. First-time instructors to the blended learning environment will need training to assist them in areas such as collaborative techniques, resource access, and encouraging online communications both with the instructors and among the students. If an international component is present additional technological support may be needed.

Online courses, by nature, are specifically offered and taken for the flexibility that is inherent with the format. Teachers can experience a set of challenges that may dampen the learning experience in a blended environment. Instructors should not have great expectations for all students to be available at proscribed dates or times. Assignment parameters should build in extra time to develop team based communication.

Sustaining deep discussions, even when mandatory, is a challenge to the online instructor. Students typically post the minimum amount of discussion context that is enough to secure the desired grade and rarely develop a true collaborative effort (Dennen, 2005). Inconsistency of postings, fragmentation and/or moving off target, and lack of depth of analysis all point toward more instructor involvement in the online forum.

Instructors also have motivation issues, and need incentives to produce a quality product in a blended environment. Universities and colleges vary widely on reward structures for online work. Some schools provide graphic and instructional designers along with other IT support, while other schools require the instructor to possess the entire skill set for delivery. This dichotomy is further compounded when attempting to transfer these skills to a different school. Few colleges have fully developed online programs, and most tend to place more value on face-to-face skills over online skills (Oslington 2005).

Intellectual property rights may also inhibit instructor’s motivation to develop online skills. While most schools have little or no restrictions on the transfer of face-to-face lecture material, there is typically a formal documentation requirement which limits the ability to transfer online materials.

Students also face challenges in a blended learning environment. Those who have been educated throughout their academic careers using traditional, rote-style pedagogy typically lack the information-seeking skills that are essential in the critical thinking process. This less-developed skill potentially slows down the initial collaboration/communication process, which in turn weakens the effect of online learning. Faculty will need to provide assistance to students in terms of course initiation, collaborative techniques, and even specific online platform skills to facilitate the learning process.

Another potential challenge to students in an online or blended environment is the lack of identity or individuality. The need to cooperate toward group goals and achievements has the potential to create tensions in terms of individual learning abilities and desires. This problem can be further exacerbated by the insistence in some groups for equal participation. Collaborative group results can lack coherence with this insistence on equal participation. When these types of emotional issues interfere with the group process, the faculty member should work to identify them and turn them back to the group for resolution (Smith, 2008).

An important issue confronting faculty who wish to employ a blended learning approach is how to coordinate the two types of delivery methods so as to enhance collaboration. The dilemma is whether the online approach should replace or support the traditional delivery of information. According to Suthers (2006), online delivery cannot succeed in replicating face-to-face interactions in most situations. Therefore, a blended approach needs to focus on the ‘best of both worlds’ approach, where the two systems complement each other. Regarding online learning, flexibility and time-efficiency were most often cited as the advantages of this portion of the blended approach. (So and Bonk, 2010). Conversely, faculty classroom authority and the ability to express individuality were most often cited when considering the traditional approach (Smith 2008).

So the question becomes: what combination of processes creates the best blend? Singh and Reed (2001), Troha (2003) and Verkroost, Meijerink, Linsten, and Veen (2008) all look at different dimensions to construct the optional blended learning model. These dimensions are identified as structured versus unstructured, individual versus group, face-to-face versus distance, and teacher-directed versus student-directed. While the internet is relatively easy to use, its lack of structure can lead to mixed results.

Jonassen (1990) argues that unstructured learning, where the students determine their own pace, brings greater levels of learning effectiveness. A number of studies point out that a collaborative learning system leads to better academic performance than an individual system (Slavin, 1991). Others suggest personality may play an important role in the preference of classroom versus online methodology, where extroverts prefer a face-to-face environment and introverts prefer the anonymity of using the internet. Kulik and Kulik (1991) suggest that some learners are more able to excel in a self directed learning mode, however consideration must be given to proven student maturity levels regarding the ability to sustain self-motivation and responsibility prior to allowing student to self-regulate their own learning process.

There are two facets to consider when designing the optimal blend of learning, asynchronous and synchronous. Synchronous learning takes place when communication occurs simultaneously among members and instructors can be accessed instantaneously. Video conferencing, live online courses and line time chat rooms are examples of synchronous.

Asynchronous learning occurs when learning does not happen simultaneously. Self paced courses, independent studies, and some forms of distance learning fit into this type. However asynchronous communication models may hinder the back and forth dialogue necessary in difficult negotiations that require immediate action. Breaks in communication whether deliberate or not, can result in lags between initial postings and responses. In this situation such as an on- line class discussion forum, short, timed responses usually work best.

Asynchronous designs present a unique challenge to the online instructor. Van Der Merwe (2007) notes that motivation and self-direction are essential to create and sustain student interest. This is best observed by having the students take an active role in the learning process. When using multimedia as a delivery tool for the course material, Astleitner and Wiesner (2004) suggest four main motivators: activities must be challenging, they must excite curiosity, they must allow the student to exert control over the process, and there must be an element of fantasy.

However, the collaborative learning process must be presented in a synchronous manner to maximize its effectiveness. The best way to synchronize the process is through the use of well- defined lesson plans. These plans need to include specifics on group formation, collaboration methodology including specific time references, and problem solving factors (Kobbe, 2007).

Carman (2002) suggests that synchronous multimedia tools should be used to deliver key elements. Carman also notes five keys to success when constructing a blended learning environment: self-paced learning modules, collaboration among students, ‘real-time’ discussions or chat room scenarios, support materials such as links, and some type of assessment. While this works best when limiting the technological ‘blend’ to quantitative problem solving, the classroom model is superior in terms of feedback, rewards systems, or instructional support (Youn and Lim, 2007).

Hewitt (2005) experienced what he termed ‘single–pass strategy’, where online discussions gradually die out due to student’s focus only on the most recent postings. Hewitt argued for a specific communication design that emphasizes progressive knowledge building in the discussion area where students are forced to review prior posts. Low participation rates were also found to exist in non-mandatory settings. So (2009) found that asynchronous forums favored lower level tasks such as planning or organizing duties, while face-to-face meetings were required for higher level tasks involving critical analysis. Pasole and Awalt (2008) suggest when adapting a team-based blended learning approach, organizations and instructors should pay attention to the following ideas:

1. Plan assignments well in advance, including submission dates and times. This mitigates the tendency for online portions to morph into a one-on-one independent study type of learning environment. It also increases the likelihood of interaction among students.
2. Be as detailed as possible. Try not leave online assignments open to interpretation as this reduces the ability for students to have meaningful interactions.
3. Initiate a low stress team building exercise early in the process. This ice-breaker assignment should have some value to the class in terms of future, higher value assignments, and should be designed to facilitate back and forth communication among members.
4. The instructor should post answers to student’s inquiries in the public forums, not as an individual response. The chances are very likely that other members of the learning community will have the same questions/problems.
5. The instructor should promote and reward peer assistance. This serves the dual purpose improving collaboration among members as well as providing additional instructor members.
6. The instructor should provide a reflective assignment at the conclusion of the learning session. This assignment should place and emphasis on contextual material as well as a focus on the results of a team-based learning exercise.

Stakeholders must be considered when implementing a blended approach to learning environments. The organizational goals, culture, and philosophy, the instructor’s expertise and willingness to participate, and the recipient’s ability to utilize the technology coupled with a high degree of self distinctiveness must all be taken into account.

Instructors can implement several strategies to facilitate and enhance team based exercises in a blended learning environment. For the orientation portion of the session, instructors should place an emphasis on full discussion of topics where every opinion is important. Ground rules concerning frequency and types of responses missed deadline or late work submissions, as well as potential group problems regarding disagreement or inactive members should be addressed in the orientation/syllabus. Feedback designed to encourage self reliance is another strategy for instructors. Examples of this can include providing links to various websites to allow for further analysis or encouraging applications of the actual material to real world situations.

Blended learning is and will remain a key component in how teaching and learning takes place. Collaborative efforts and international offerings will become more and more the norm in the educational process. Learning has always been a social process, and the internet has expedited the facilitation of new methods of learning. Students understand the benefits of blending online with face-to-face integration, and in most instances prefer some combination of the two. Instructors need to design and prepare pathways that promote collaborative learning. These pathways should come with full explanations of the quantity and quality of student interaction. Social negotiation and reflective exercises should complement whichever mode is chosen as the dominant one, and should also be part of the overall assessment of each student. Web based learning environments initiate the student into the professional world. Innovative teaching methods that employ available technology are core of the redesign and rethinking of the student-teacher relationship. Blended learning requires strategies that acknowledge the importance of collaborative efforts by establishing a sense of community among students with appropriate tasks.

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