ADDRESSING INSTRUCTIONAL INTERRUPTIONS IN MILITARY BLENDED LEARNING ENVIRONMENTS

by

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ABSTRACT

September 11, 2001 changed the education methodologies used by instructors of military students. Interruptions for these students are the results of deployment (various stages of temporary duty), injury, military training, and security. This study will provide an overview of course implementation issues and recommendations for change in the instructional approach used by instructors in the blended learning courses, both online and onsite that contain both traditional and military students.

Introduction

Educational methodologies change from time to time based on the needs of students. A unique need arose with the September 11, 2001 tragedy that took place in the United States, a day that changed so very much in the lives of so many. Shortly after that day, war was declared and the on-going war on terrorism has permeated the world and sent our military men and woman to many locations around the world. One thing did not change and that is the desire of military members to pursue and complete their educational degrees. And many are

determined to complete their degrees no matter what circumstances they may encounter.

For military students to be able to complete their educational degrees, some changes have come about to enhance the educational methodologies put forth by Embry-Riddle Aeronautical University (ERAU). These changes and the need for additional on-going changes, by both the instructors and administration, are vital so that adult learning can continue to be appropriately enhanced.

History

ERAU has a proud history of providing quality education for military students since the founding of the university in 1926, and currently has residential campuses in Daytona Beach, Florida, and Prescott, Arizona, and over 130 Extended Campus teaching centers located worldwide. In addition to the many centers, the university also provides a variety of programs, both undergraduate and graduate (in the Masters level), onsite and online. This paper will address issues pertaining to online classes (Masters Degree) and to one special Masters Degree program, the Master of Science in Technical Management that is conducted onsite. In both programs the author is an active participating instructor. Both modes of instruction (online and onsite) have evolved over the past few years in the administrative guidelines and education methodologies of instruction.

Educational Concepts

For clarification from the author's perspective, this paper will address different educational modalities as detailed below.

Online courses are those courses that are conducted on the Internet in some mode of communication, such as Blackboard that is the mode provide by ERAU. According to Aisami (2004), Blackboard.com is an e-learning software platform course management system. Online courses are graded on the interaction online and no onsite face-to-face class-time is required as part of the course grade. Blackboard may be used for discussion forums on specific discussion topics, case studies, or student projects, online library access, online testing, posting of assignments in the digital dropbox, email to the instructor and other students in class, and posting of grades, to name a few of the many options.

Onsite courses are those courses that are conducted onsite, face-to-face, and are graded on the interaction onsite and no online class-time is required as part of the course grade. Hybrid courses are a combination of onsite (face-to-face) and online interaction and the course grade requires student participation in both onsite and online modes.

Blended learning courses are either an onsite course or an online course that uses a multitude of digital technology modes for enhancing the way a student may communicate with the instructor particularly in times of adverse situations. These modes may include: various email addresses, websites, web pages, web blogs (as posted by either the instructor or student), cell phones, or other technology devices such as Personal Digital Assistants (PDAs), BlackBerries, Palm Pilots, and many others, that provide a mode of communication, which is chosen for the best delivery, and ensuring the inclusion of key components of successful instruction: interaction, instructional goals tied to performance, and learner engagement (Douglis, n.d.).

Blended Learning: Why and How

According to Vaughan (2004), many students in higher education are struggling with increased time pressures as they try to balance life situations such as family, work, and military commitments with their studies. A number of educational institutions in North America and Europe have responded to this situation by offering a series of courses in the blended format. The goal of these various courses is to combine the best features of onsite course teaching with the best features of online experiences (and the use of whatever technology it takes) to promote an active learning environment and to reduce classroom seat time.

The concept of blending classroom teaching and learning approaches with the use of various web technologies is currently one of the major topics in e-learning research, both in the educational and workplace environments. According to Derntl and Motschnig-Pitrik (n.d.), one of the most critical factors of successfully blending online learning with face-to-face learning is making situated and targeted, thus deliberate use of the learning technology.

There are three core elements to the concept of blended learning: social, teaching and cognitive presence (Vaughn, 2004), whereby opportunities for blended (face-to-face and online) learning are encapsulated within the teaching presence. The online component of the blended design creates an opportunity to extend and sustain the dialogue and a sense of community whether the student is in Iraq or South Korea, or where ever within the global educational environment.

This reflective nature of asynchronous (time-delayed) online communication puts forth further thought on the written word that the emphasis on the written word

encourages a deeper level of critical thinking on the part of the student. Verhaart and Kinshuk (2004) advocate that from a pedagogical perspective the goal has remained the same: to deliver content in a way that would cater for a variety of learning styles and technological methodologies to be used to supplement the face-to-face delivery.

Technology Issues

Verhaart and Kinshuk (2004) advocate that one particular challenge that educators face in a technologically maturing environment is the use of all types of technology to assist in delivering course material in a way that maintains the benefits of face-to-face teaching while leveraging the advantages of all the various types of electronic delivery media. This puts forth a large variety of electronic tools that students have available today to enable them to continue their coursework where ever they are located.

Technology issues are two-fold concerning technical issues in the use of the computers and websites (oftentimes resolved with the use of the HelpDesk of the university tech support) and issues that instructors need to know not only for what to teach and how to teach it, but also how to utilize web technology efficiently and effectively (Aisami, 2004; Donar, 2004). A socio-technical solution that co-considers educational concerns (from the instructor and administration perspectives) and technical support is needed to promote technology-enhanced educational practices that are as intuitive and close to the students as possible (Derntl & Motschnig-Pitrik, 2004).

It must be emphasized that technology can be used to effectively support students by creating new opportunities for individual reflection and critical discourse, but to achieve this objective, thoughtful and systemic planning is required to ensure that all components of face-to-face and online sessions are successfully integrated. Therefore, without proper planning, technology implementation can become a disconnected add-on, creating a sense of frustration and a loss of time rather than a true learning opportunity for all students and faculty within the blended learning community (Vaughn, 2004).

Online Courses

The author teaches two Masters Degree courses online (MGMT521 and MGMT535). In addition to the courses being set up in Blackboard, the instructor uses many modes of blended learning to communicate with her students, such as two email addresses outside of the ERAU Blackboard, websites, web blogs, cell phone, and telephone, PDAs, Black Berries, and Palm Pilots, and embedded videos in Microsoft PowerPoint presentations, to name a few. It is imperative to have multiple modes of communication when students are deployed (or students are sent globally for their company business).

Furthermore, the courses are set up to run for three months (based on credit hours for the course); but, if due to adverse circumstances at the end of three months and the students have not finished the course, students can receive a grade of N (No grade posted by Instructor), which gives them one more month to complete the course, or they may request a grade of Incomplete from the instructor, which can give them an additional three more months to finish the course.

The instructor stays with the student until the completion of the course and is not compelled to drop the student. In some educational institutions, instructors may be requested to have the student drop the course, (especially if the student is being deployed for an extended time) and this requires the student to retake the course, and the course may end up being with another instructor. This oftentimes is lost educational time, as far as the student is concerned, and many students are on a fast track to complete their Masters Degrees.

Master of Science in Technical Management (MSTM)

The author is a full-time faculty member in the MSTM program. The program is located onsite but in a diversity of sites around the world. The program is conducted on sites that are near the work areas of the students (Boeing, Delta, Gulfstream, Honeywell, Lockheed, NASA, Pratt & Whitney, Sikorsky, United Space Alliance, etc.), including many military bases. Flexibility is available in that the students can take courses and take time off (for deployment) and enter back into the program when the time becomes convenient.

Many of the faculty use multiple modes of communication for students who may have a temporary deployment (and oftentimes many other, non-military, students who are sent by their companies to various countries for global business). Again, the student has the option of a grade of Incomplete with additional time to complete the course and the instructor stays with the student until the completion of the course.

Conclusion and Recommendations

The introduction of blended learning in classes is not a one-time effort. It follows an iterative, incremental process where technology should act as the enabler. The emphasis on this mode of e-learning in the past has been on the technology. There is now a need to shift the emphasis to the learning (Demtl & Motschnig-Pitrik, 2004).

Blended learning enhances instruction that fosters students' critical thinking and enhances their problem solving skills, but of utmost importance to this topic, it provides an alternative means for continuing the class in adverse situations. Increasing a student's capabilities to experience and explore his or her own processes, raises the awareness of meaningful ways of inquiry, in other words, learning how to learn. And this enhances the student's disposition to successful problem solving in new situations such as military deployment (Motschnig-Pitrik, n.d.).

Although it requires more faculty time (and coordination with a very understanding administration) and demands knowledge and understanding and unique capabilities in using not only the web, but also other current and emerging instructional technologies, blended learning provides a means for military students and special needs students to finish their course in a timely fashion. Motschnig-Pitrik believes that congruence, also called realness, genuineness, transparency, authenticity, openness; acceptance, also called respect, unconditional positive regard; and empathic understanding, a deep understanding for the feelings and meaning of the other, must be held or lived by the instructor and communicated to the students in a way that the students clearly perceive the instructor qualities.

Therefore, this can hardly be achieved if an instructor is primarily occupied with lecturing. Research evidence is beginning to show that the use of blended learning has the potential to make education that emphasizes interaction, self-initiated work, authentic problems, and a constructive learning atmosphere, more feasible. Empirical data show that this kind of education is superior only, if instructors are perceived by students as real, respectful and understanding. Otherwise, motivation goes down and students feel they profit less than in conventional courses (Motschnig-Pitrik, n.d.).

It is clear that no single approach or method can achieve maximum learning with a diversity of students and their situations, but a blend of methods can produce the desired learning outcomes (Saunders & Wemer, n.d.). The author concurs with the conclusion of Motschnig-Pitrik that the situated use of technology in thoughtfully designed learning scenarios has the potential to increase students' motivation and make learning meaningful and pervasive, but to add value to blended learning, instructors need to develop interpersonal attitudes such as realness, respect and understanding.

Furthermore, in striving to facilitate learning there are three very important levels: intellect, skills, and intuition that each student needs to have or obtain (Motschnig-Pitrik, n.d.). Blended learning promotes the concept that analysis, synthesis and evaluation occur at a much higher level, often requiring collaboration and interaction. The concepts for success of a blended learning environment are: good practice encourages contacts between students and instructor; develops reciprocity and cooperation among students; uses any active learning technique;

gives prompt feedback; emphasizes time on task; communicates high expectations; and respects diverse talents and ways of learning. Therefore, motivation is needed to continue development of a blended approach to delivery, whereby using the appropriate tools needed to fit the relevant task (Verhaart & Kinshuk, 2004).

There should be no constraints or impossibilities when it comes to helping military (and non-military) students with unique situations to complete their courses and degrees. It is the author's opinion that students should not be forced to drop a course because they are being deployed for military purposes. It is imperative that the university administration provides means for all instructors to use various forms of blended learning and grade and class-time enhancement techniques to permit each student the unique possibility to finish a course in the best timely fashion conducive to the student.

For all educational institutions it is imperative, in this day and age, to consider the special needs of the students, especially those serving in the military through-out the world war scenarios, and to have their respective administrators and faculty implement, in a timely fashion, education methodologies that are conducive for all those students to complete their courses and degrees. Providing these options is vital so that adult learning can continue to be appropriately enhanced in times of war.

Student Testimonials on the Use of Blended-Learning

Technologies and Time Analyses

This paper was not based on research using any questionnaires. Instead, it was a compilation of comments received by many students from around the world in

the online and onsite classes of the author, who has been teaching both online classes since 2000 and onsite classes since 1996 for ERAU.

In the author's respective courses, many interesting circumstances have taken place with many students (especially military students) that required special communication, such as: a special security student on 24-hour notice for deployment, a student working at Central Command (CENTCOM) during the Iraq war, a student caught in the tsunami in the Banda Ache area, a student deployed to the De-Militarized Zone (DMZ) in South Korea, and two injured students in Iraq, to name just a few. Many military students of the author have been located in Bosnia, Afghanistan, Iraq, Italy, Saudi Arabia, Kuwait, Manila, Iceland, and on military ships.

Many military students in the online courses have sent testimonials to the author on the advantages of having had the use of blended learning modes of communication while they were serving in military operations. Students in the online courses have sent many words of praise on their use of blended learning objects, and they have sent pictures of their activities in the fields pertaining to their working on their courses.

In six onsite courses in the MSTM program, students sent testimonials; and, also on a volunteer basis they kept tract of time spent in different blended learning environments. Time spent in blended learning environments ranged from 14 to 92 hours total in the active course time of eight weeks, one night per week for the onsite class time. Some testimonials are included with the names of the students and their respective courses:

"Overall, the use of the blended learning concept is beneficial. No single approach to teaching will be the best-suited for everyone, but blended learning seems to

indirectly teach some important skills and lessons other than those intended by the class material alone." Travis Singleton (TMGT501 and TMGT502)

"No, I don't have any Cons to elaborate on. I'm sold on this concept. I think it is fantastic for someone who must juggle family, work, and school! It allows individuals to stay connected with their class even when they must travel! I noticed this morning that Scott even posted on the Blackboard while he is on his honeymoon! That's dedication!" Shelly McBride (TMGT501 and TMGT502)

"In my opinion, the Blended Learning concept established for the class was very effective because positive qualities of the blended learning environment relate to the current work environments of today. I must state that communication is the key to success in the world as it has always been. Therefore, in the blending learning environment, as in the work environment, the communication channels are expanded to the Internet, email and other forms of electronic means." Chad Kennedy (TMGT501 and TMGT502)

"There are some beneficial things that come from this format. I believe it helps people become more responsible. Help is available, but the majority of the responsibility falls on the individuals themselves." Paul 'Rusty' Daly (TMGT501 and TMGT502)

"The instructor' role in the blended learning program is that of expert, mentor, guide and counselor. Availability of the instructor both in class, via telephone and online 24/7 gives the students ample exposure and opportunity to ask questions, have work reviewed and commented on." Mike Callahan (TMGT501 and TMGT502)

"I have been able to remain in contact with my classmates and professor, stay on pace with my class, perform in and retain a demanding job, participate in business travel, and retain a life balance. As a student I have in fact benefited from the Blended Learning approach. Please continue this program as it is facilitating my ability to be successful in my career, education, and personal life experiences." BRAD LICHTENSTEIN (TMGT501 and TMGT502)

And in conclusion a final series of emails from a military student, on semi-vacation in the middle of a tsunami in the Banda Ache region follows.

"Dear Dr. St Aubin,

Hello again. I'm back online. I am busy going through all of the postings and doing my homework. A couple things I wanted to let you know. Because of the tsunami, I have been unable to do much. As you know, I lost my book. I got one from the Sky Harbor Center just the other day. My plan is to catch up on homework and finish the 2nd and 3rd case studies. In about a week, I'll take the midterm. I should be all caught up by the first week of February. Lastly, I didn't get a chance to respond or give my two additional responses for week six. Can I still post these and get credit? I

will be posting to them anyway. Thanks again.
Michael Prince" (1/26/05)

"By the way, here is a picture of my book on the beach, getting sun in The Maldives. I found it about 200 yards from my room. I was looking for a baby at the time and my passport. We never found either." (1/30/05)

- **From:** Michael Prince
- **To:** staub750@erau.edu
- **CC: Date:** 03/10/05 05:30 am
- **Subject:** Re: 04_W2_MGMT_521_01D4: final grade
- **Attachments:**
- Dr. St. Aubin,
  Thank you so much for the experience. I really did enjoy the class. I had no idea about some of the technology online and in companies today. IT systems are truly amazing. Bill Gates had an interesting article today in The Financial Times. It said that today's technology will seem archaic in five years. Some of the things that will be coming along are just amazing. Thank you for the leniency when I needed it. You take care. Michael Prince

- (Author's note: Michael was in the Maldives when the tsunami struck. He ran with only his pants on and shoes and he carried his laptop! Upon his return, the place he was staying in was gone. Personal communication with Mike when he returned to Phoenix, AZ)

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