

Blended Learning in Higher Education

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### **Introduction**

In the past, formal learning outside the classroom was largely limited to what is now called distance learning. Distance learning methods included correspondence courses, video tapes, and television programming that were completed by the learner independently. The advent of the Internet has changed the landscape of learning beyond the classroom to include courses taught completely online, and courses in which in-person classes are supplemented with materials reviewed online, known as blended learning. These new models allow for interaction with the instructor and other learners, as well as independent study.

One popular definition of blended learning is that “blended learning blends different delivery modes and, in particular, on-line and face-to-face teaching” (Mason, 2005, p. 217). Mason notes that the line between traditional learning and online learning has become blurred, and will continue to change as new innovations in technology are tested in this blended format. Blogging and the use of mobile devices for learning are just two examples of this trend.

According to Kirkwood (2014), traditional models of teaching and learning are no longer sufficient. However, technology will not be effective if it is adopted only to replicate traditional teaching. Technology has the potential to transform learning, but it cannot be used for the sake of adopting technology. To adequately support learning with technology, expanded Information Technology staff is required, as well as an improved infrastructure. Students have to develop digital literacy skills, and teachers must have professional development as well. Collaborative and interactive assessments must be aligned with the new techniques, instead of relying on the traditional assessment methods. Most of all, the implementation of new technology must be grounded in a knowledge of the educational goals of the course (Kirkwood, 2014).

### **Selected Research about Blended Learning**

The U.S. Department of Education conducted a meta-analysis examining over 1,000 studies of traditional learning, online learning, and blended learning. This meta-analysis concluded that blended learning modules demonstrate an advantage over purely online learning and purely traditional learning as far as learning outcomes. (U.S. Department of Education, Institute of Education Sciences, 2008, p. xv).

Bicen, Ozdamli and Uzunboylu (2014) conducted a study in Turkey, during which teacher candidates were randomly assigned to an online course, or to the same course in a blended format. In both groups, lectures were delivered via Facebook and WiziQ. The blended course also met in person several times during the course. The success rates and student attitudes toward e-learning were measured. The blended group performed better and had more positive attitudes toward e-learning. Another finding was that the blended group felt they benefited by receiving immediate feedback from the instructor in the classroom setting (Bicen, Ozdamli, & Uzunboylu, 2014).

Al-Qahtani and Higgins (2013) conducted a study consisting of three groups of students at Umm Al-Qura University in Saudi Arabia. Each group studied the same material, but in a different format: distance learning, blended learning, and traditional classroom, taught by the same instructor. The studies showed a statistically significant difference in learning outcomes between the blended group and the traditional group, and between the blended group and the distance learning group, with the blended group achieving more positive results in both comparisons. The traditional group and the distance learning group did not demonstrate statistically significant differences in outcomes. The conclusion is that blended learning can take

elements of both traditional learning and e-learning, and combine them for a better result (Al-Qahtani & Higgins, 2013).

Dias and Diniz (2014) point out the need to focus on the learner when designing courses using a Learning Management System (LMS). While some instructors use the LMS primarily to replace administrative functions, it is more effective to focus on learner profiles. In a study conducted at the University of Lisbon, Portugal, learners from five different blended learning courses were interviewed, and three key factors in the success of blended learning experiences were identified. These included the interactivity of the LMS, teachers' beliefs, and student training. The study demonstrated the importance of gathering feedback from students to improve teaching.

Zuvic-Butorac, Roncevic, Nemcanin and Nebic (2011) of the University of Rijeka, Croatia, surveyed students in courses which adopted a blended model of instruction, using an online platform to supplement live classroom instruction. Generally, students felt positive about the completeness and organization of the online material, and were positive about the instructor's management of the course and communication. Students were less positive about the quality of multimedia elements and opportunities for collaboration. Students with higher grades had more positive perceptions about online aspects of courses. The majority of students felt online communication with colleagues and instructors was not valuable. The authors noted that blended learning changes how learners learn, but it must also change how instructors teach. Teachers need training in creating effective multimedia elements to enhance courses and in designing collaborative activities (Zuvic-Butorac, Roncevic, Nemcanin & Nebic, 2011).

Pombo, Loureiro and Moreira (2010) conducted a study on student reactions to a blended learning module at the University of Aveiro, Portugal. Students were given the opportunity to

participate in peer assessments and self-assessment within the course module. As a result of these studies, the importance of using a consistent LMS module throughout a course of study was noted. This enables students to become more familiar with how that LMS works. Students must be encouraged to share their reflections openly, which may point out common experiences. Students should also focus on using peer assessment as a learning opportunity, not just a way to tell the instructor what their part of a collaborative project has been.

### **Conclusion**

Blended learning is “an approach that addresses the educational needs of a course or program through a thoughtful fusion of the best and most appropriate face-to-face and online activities” (Vaughn, Cleveland-Innes & Garrison, 2013, p. 9). This includes the need for open communication among all parties. All parties must approach the course with an intellectual curiosity and desire to apply the new knowledge to their previous learning. Both students and teachers must take responsibility for teaching in this environment (Vaughan, Cleveland-Innes & Garrison, 2013).

Each of the studies described above demonstrates the potential for increased student outcomes and satisfaction when blended learning is designed to take the best of the online and in-class worlds, and meld them into a coherent offering. But how do we as educators arrive at this optimal balance? Azaiza (2010) reviewed Garrison and Vaughan’s 2008 book, *Blended Learning in Higher Education*, and noted the need to form a “community of inquiry” to ensure effective blended learning. This community of inquiry includes several major aspects, such as social presence, cognitive presence and teaching presence, all of which are major influences on success. The reviewer also notes the need to shift from a teacher-centered model to a learner-

centered model of instruction. The ultimate goal is to increase student engagement, which will improve outcomes.

Effective educators must approach blended learning in new and novel ways, some of which may not have been discovered yet. Education must shift from a teacher-centric model to a learner-centric model. Teachers will need to develop new assessment tools that are collaborative and interactive. Students will need to develop digital literacy skills. To accomplish these goals, teachers will need support from technology experts, and will require professional development to learn to effectively use these new tools. “In the context of b-learning, a constructive, optimistic, differentiated and proficient approach seems to require teachers with a highly resilient sense of personal and interpersonal awareness and openness to cultural change” (Dias & Diniz, 2014, p. 315). This openness to new technology, creativity, and shared responsibility with students, will help to create a blended environment where students can experience the best of the traditional and online worlds.

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