AN ANDRAGOGICAL APPROACH TO BLENDED LEARNING AT THE UNIVERSITY GRADUATE LEVEL

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ABSTRACT

Based on the principles of Malcolm Knowles, the focus of this paper will be to address the andragogical principles and process of adult learning in educational blended learning delivery modes specifically in graduate education at universities in the United States. Elements of the process to be addressed are climate conducive to adult learning, organizational structure for participative and self-directed learning, objectives and directions of learning, design of curriculum and activities, and the evaluation of outcomes of the programs. An examination of adult learning theory and the evolutionary regard to blended learning will be introduced and then substantiated by the various approaches to blended learning as underpinned by adult learning theory, a variety of theorists’ philosophies on distance learning, and a synthesis of these aspects to capture where we are today in relation to approached universities use in developing and implementing a blended learning curriculum.

Blended learning can be considered both evolutionary and revolutionary. While the basic construct of hybrid learning is not new, the implementation can be considered disruptive innovation. There has been both hype and hope about blended learning at the university level. The keys to success in blended learning will be addressed, which include connecting online and face-to-face learning to deliver deeper learning, guiding self-directed learning, making learning relevant to real-life tasks and situations, creating holistic approaches to learning rather than subject matter learning. The hope of blended learning is engaging students in the learning process and empowering students through technology bringing greater diversity in learning context and improving communication between faculty and students. Blended learning needs to move beyond the hype of the “flipped classroom” to develop its untapped potential to optimize the learning process, create collaborative learning and produce positive learning outcomes.

KEYWORDS: Adult learning, Andragogical approach, Blended learning, Pedagogy, Transformative Learning

ANDRAGOGICAL PRINCIPLES IN ADULT LEARNING IN BLENDED LEARNING

There is evidence in the literature that blended learning practices align with andragogical principles, which enhances effective learning. Blended learning is not without challenges for adult learners; however, the research conducted in recent years is encouraging in the positive outcomes reported from learners in blended learning classes. The purpose of this first section of this paper/presentation is to address the andragogical principles and processes of adult learning from a theoretical standpoint, specifically in graduate education, as andragogy represents participative and self-directed learning, adult learner objectives and goals, curriculum design, and reported outcomes of blended-learning programs.
THEORETICAL FOUNDATION: ANDRAGOGY VS PEDAGOGY

Some of the most brilliant adult education theorists have studied the “art and science” of helping children, also known as pedagogy and/or the “art and science” of helping adults learn, also known as andragogy. Merriam, Caffarella and Baumgartner (2007) contended that a debate continues about these two concepts and this delineation of groups (adults vs. children) is counterproductive in helping anyone learn. Knowles (1996), as cited in Han Henschke (2012), who popularized andragogy as a theory of adult learning, and who was referred to as the Father of Adult Education in the United States, provided guidelines for faculty teaching adults. Knowles asserted that adults need to be self-directed, accumulate experiences that then become learning resources, develop a readiness to learn, initiate problem-oriented learning, and finally they need to increase internal motivation to learn. In order to develop that sense of motivation to learn, no matter the learning environment, according to Knowles (1984) Adults should acquire a mature understanding of themselves. Knowles and many who followed him were convinced that adults learned differently than children do and this sparked the whole body of inquiry about how adults learn versus how children learn. He used andragogy as the mechanism to engage others in this discussion. These discussions were centered around self-concept, experience, readiness to learn, orientation to learning, and finally motivation learn. It is believed that blended learning can provide an additional opportunity to enhance the motivation to learn because of the in-person element for the learner.

LEARNING: THE COGNITIVE FUNCTION IN GRADUATE STUDENTS

According to Squire (1987), learning is a process. It is the process of acquiring new information and this acquisition has the potential to make permanent changes in immediate or potential behavior based on experience. Letteri (1982) isolated four factors and related subscale measures that illuminate the various operations and processes of learning (cognition, environmental, affective, behavior). This information combined with the research on general learning beliefs suggests that cognition supports effects on academic achievement, perhaps more so than those effects from environmental, affective, or behavioral factors (Kuranda, D’Urso, 2001). One could argue that the graduate student is more ready for the blended learning environment and the benefits and challenges that will present that the undergraduate student on many fronts, not the least of which is the potential for graduate student to possess a mature level of cognitive functioning and therefore s/he is ready for the transformational learning process which students are exposed to in this blended learning environment. It is necessary for all students to think critically, reflect, and then engage in subject matter discourse and for those who are more comfortable with online learning, they have that opportunity in a blended learning environment, and for those who are more comfortable with the face-to-face learning, they have that opportunity in the blended learning environment some would say they have the best of both worlds! These characteristics of higher level of cognitive functioning are manifest in both online and face-to-face classroom interactions.
In a study conducted by Kiviniemi (2014), on the effects of a blended learning approach on student outcomes in a graduate-level public health course, blended learning included an in-person and online course component in a single course, and the findings were remarkably in favor of blended learning versus the more traditional course approach as were manifest in a quasi-experimental, non-equivalent control group design with an n= 28 for the traditional student group and n=38 for the blended learning group. There was a statistically significant increase in student performance under the blended learning approach (final course point total d = 0.57; a medium effect size), even after accounting for previous academic performance. Moreover, student evaluations of the blended approach were very positive, and the majority of students (83%) preferred the blended learning approach. While the findings of this one study cannot be generalized beyond the scope of the sample, the author came to the conclusion that “blended learning approaches may be an effective means of optimizing student learning and improving student performance…”.

**TRANSFORMATIVE LEARNING**

Adult learners at a graduate level in a university are curious about making meaning and sense out of their world through the subjects they study. Graduate students approach learning with an advanced level of awareness of their life and have a sense of learning as a catalyst to grow in that they become more inclusive, discriminating, emotionally mature, and reflective (Mezirow, 1996). Mezirow (2000, 1991) provided four components of transformative learning that include experience, reflection, discourse, and action that serve as the impetus for adult learners to achieve masters and doctoral degrees through continual development of critical thinking. It was Mezirow’s belief that reflection was a specific action that adult learners take which brings about transformative effects. In order to have a full-range of experiences, discourse, and action, the adult learner needs some face-to-face contact with faculty and peer learners. Trust and respect can grow faster and with more intensity when faculty and learners are face-to-face, making eye contact, and observing facial expressions and body language. But perhaps more importantly, concepts, constructs, and theories or models can be explained with more clarity and with efficiency of time in the face-to-face classroom.

In most curriculum that is designed for blended learning, there are lectures, exercises, research assignments, and some team interaction that can be done quite efficiently in the online environment. In doctoral residency programs, much of the preliminary work in preparation for the face-to-face session with faculty can be done effectively online. Once the research and write-up have been concluded, then the practice of application live with faculty and peers contributes to a richer, more intense, and potentially very gratifying learning experience. There is a significant potential for retention and retrieval of information because it is thought that the face-to-face or in personal portion of blended learning clarifies and cements concepts, constructs, and theories and models because of the graphics and other visuals and face-to-face discussions and question and answer sessions. The pulse of student engagement in the subject matter discussions can be felt exponentially by most faculty you might talk to about this.
CURRICULUM DESIGN AND PROCESS DELIVERY AND ORGANIZATIONAL
STRUCTURE

There is a sense of immediacy among graduate learners to fulfill their role responsibilities and to achieve advancements in their careers. They give much thought to the program of study and the curriculum design, and the curriculum delivery process then becomes tantamount to their success in the program. Content therefore has relevance to fulfilling their immediate goals which are generally career-based in graduate student thinking. Forrest and Peterson (2006) remind us that adult students return to college “after years of pedagogical conditioning” and this can create some apprehension to the structure of openness and self-directedness of andragogical practices and strategies in both the online and face-to-face portions of the classroom. In this researcher’s experience, this apprehension and anxiety is short-lived. In pedagogy, learners will be more dependent on the instructor and look for guidance and examples and reinforcement that they are doing the right things. In an andragogical classroom, learners will be more self-directed, more confident about their ability to think critically and to reason out assignment details.

IMPLEMENTATION AND PRACTICE

Tom Robinson, President and CEO of AACSB, recently said: “all [MBA] programs will be blended in the future, it’s just a matter of where on the spectrum” (Bahra, 2017, B5). Blended Learning in the integration and reorganization of education aligning face-to-face learning with online technology creating a new level of complexity (Garrison, Kanuka, 2004). Blended Learning is not limited to one definition. Dziuban, Hartman and Moskal (2004) defined it as a pedagogical combination of classroom effectiveness with technology-enhanced learning. Rovai and Jordan (2004) saw blended learning as a hybrid of classroom and online instruction allowing the convenience of online without losing face-to-face meetings. While Blended Learning is not new, it has gone from a predicted trend to a reality in higher education. It requires transformation of the learning environment making implementation the difference between success and failure for faculty and students. In their first blended learning experience students, and often faculty, will be most challenged by the technology. As the student progresses through his/her coursework, the complaints tend to move from technology to curriculum. The challenge of implementation is that faculty cannot deliver the same content in the new medium. Faculty needs to facilitate the learning process focusing on the learner, to develop meaningful learner experiences and to maintain the sense of community created in face-to-face classes. Blended Learning requires a new set of skills and practices for faculty and students for collaborating, discovering, performing and learning in powerful new ways (Kasraie, Alahmad, 2014). The Window on the World (WOW) room at Instituto Empressa in Spain, is a physical space where faculty deliver courses to an audiovisual mosaic wall with students watch on video cameras, while a software app runs an analysis to gauge student reactions giving real time feedback on student engagement (Bahra, 2017). It is intensive interaction and engagement with high-touch technology. According to Poon (2013), blended learning creates new opportunities and flexibility for students
to improve their ability to learn, discover and achieve success. It encourages active learning and allows for diversity in learning styles. Therefore, a flexible approach to teaching is needed to support student learning.

**Teaching Methods**

Blended Learning faculty need to utilize a variety of teaching methods to support different learning styles, supplement traditional learning, integrate technology and promote student ownership of learning. Discussions need to be geared to different learning styles by using different approaches and media. Faculty should provide a variety of questions for students to answer, so all students are not responding the same questions and rehashing information. It is important that faculty be prepared each online week to explain course content, apply theory to the realities of the work environment, make connections to engage students and provide supplemental materials to enhance learning. It is the responsibility of faculty to make the connections from week to week and course to course so students understand the big picture. The more faculty provide relevance, the more students will retain information (Pittenger, Doering, 2010).

Instructor presence and communication are critical to the effectiveness of online learning. Hodges and Cowan (2012) found that timely responses, clear instructions, instructor availability and course design are critical for online teaching as it can be a predictor for student learning and motivation. Instructor presence can be both quantitative and qualitative drivers of student learning. Faculty play an active role in coaching students, keeping them on track and facilitating course content. Faculty are role models for students leading by example for substantive participation, professional communication, relevant research and positive tone. The challenge of Blended Learning is to be a personalized and intensive experience for the students. In a face-to-face classroom, a discussion might last 30 minutes while in the online environment it could last for a week making it critical that faculty connect regularly to coach, direct, facilitate shape and guide the discussion.

**ABC Model**

Faculty participation needs to build on student comments, encourage students to apply course concepts, suggest alternative approaches, ask probing questions, encourage critical thinking, demonstrate content knowledge, share expertise and experience and apply theory to reality. The ABC model suggested by Lim, Cheung and Hew (2011) focuses on three facilitation techniques to encourage critical thinking, improve learning and add value to discussions.

- **Acknowledgment** student comment
- **Build** with personal experience, knowledge, course content and/or relevant research
- **Conclude** with probing (Socratic) question
Online learning is about leading the way by example, modeling best practices in research and communication, professionalism, critical thinking and interaction. To create a dynamic learning environment, faculty should use examples from their own experience, offer opposing views, share examples to support or contradict comments and advance new ways of thinking (Lim, et al., 2011).

Storytelling can be an effective tool for the “Build” element of the ABC Model; it is a way to establish presence and increase personal connections in the online environment (Lowenthal, Dunlap, 2010). Storytelling provides relevant and memorable examples that can bring content and theory to life. Our ability to communicate and convey ideas/concepts is enhanced through storytelling especially if it develops an emotional connection with students. Stories can be used effectively in combination with references combining academic and conversational postings. Effective stories establish context with examples and details then draw conclusions and inspire actions (Nishi, 2013). Probing questions and relevant stories can help students go beyond the obvious in their thinking by encouraging critical thinking which is a cornerstone of the learning process. The more faculty fosters creative and critical thinking the more students will retain and implement class learning on the job proving the value of their education.

Using probing questions to open minds could change student mindsets from fixed to growth. A fixed mindset believes that intelligence, personality and character are inherent; a growth mindset believes intelligence, personality and character are developed. People with fixed mindsets avoid failure, try to look smart, avoid challenges, stick to what they know and consider feedback as criticism. People with growth mindset continue to learn, confront uncertainties, embrace challenges, learn from failure, focus on learning and use feedback to grow (Dwork, 2008). A growth mindset is about having “grit” which means having strategies and tactics to succeed, determination to overcome challenges/setbacks and tenacity to work hard to achieve dreams (Duckworth, 2016).

### Tone

The tone set by faculty during the first days of a class establishes the tone for the course. In Blended Learning courses with a face-to-face first meeting tone can be created with non-verbal communications; this makes the online component a little easier when all communication is through words. The tone for online is a little more challenging. To be effective online faculty need to maintain professional and respectful tone, use natural writing style, write in clear and concise sentences, choose font and colors carefully, use positive and supportive comments and avoid humor that can be misunderstood. The online environment allows faculty the opportunity to take a step back before posting especially with difficult comments. Write a draft that can be reviewed and revised before hitting send. Faculty should read aloud for respectful, professional, constructive and encouraging tone. Words are extremely powerful, especially online when reactions cannot be seen. The quality of interactions between students and faculty impacts satisfaction of both (Picciano, 2002). Tone can help “humanize” and personalize the online environment.
Formative and substantive feedback to monitor and evaluate student progress give students a sense of achievement, which can motivate them to want to learn more. Students need to know if they have made mistakes and need to take corrective action. The shorter the gap between completion of the task and the feedback, the more effective the feedback is for the student. The quality of the feedback impacts student satisfaction. Blignaut and Trollip (2003) suggested a taxonomy of feedback: corrective, informative and Socratic. Goals need to be specific, meaningful and challenging; goals are motivating if learners view them as challenging but attainable (Locke, Latham, 2002). Lock and Latham offered 5 goal setting principles: clarity, challenging, commitment, feedback and complexity. Setting goals is a critical component for achieving success.

Faculty feedback needs to be timely, specific, encouraging and developmental. It is more about coaching to success than focusing on mistakes. One consideration is feed-forward (proactive) rather than feedback (reactive). Feed-forward focuses on goals rather than standards, guides developmental improvement and occurs continuously. Feed-forward to engage students to be successful since we can help influence future work; it is solution, change and developmental-based rather than focused “failure” or mistakes. Feed-forward can improve the quality of communication by ensuring that the right message is conveyed and receivers are more receptive to its content. The result is a much more dynamic, open student reaction that focused on the promise of the future success rather than dwelling on the mistakes of the past (Goldsmith, 2007).

Blended Learning has become more sophisticated and important in higher education. Providing an opportunity for students to meet face-to-face at the beginning of a course establishes the tone and expectations for the online component. During the online meetings students can delve deeper into topics and foster bonds with faculty. Students that like to think more deeply about a topic are not lost in a discussion that ends quickly, but have the opportunity to consider their responses in a discussion that can last for a week. There can be more than one discussion simultaneously. Students that may not want to speak up in class due to language issues, can write and review before posting. Since students cannot “hide” online, we are engaging more students in the learning process. Deep, scholarly research that graduate students engage in is more easily accomplished with interim class meetings either in person or online. All of this leads to transformative learning, using the principles of andragogy foundationally as a sound scientific approach to teaching and learning. The autonomous, responsible learner is a central goal of adult education outcomes and blended learning is a serious and transforming digital approach which will have a very positive effect on the pedagogy and andragogy of the graduate learner and reminds faculty of the implications for them as educators.
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