Vol 6, No 2, July - December 2021, pp: 78 - 83

Faculty Publications
ISSN: 3008-1017
Title DOI: https://doi.org/10.62458/021024

Blended Learning: An Effective Learning Approach in the 21st Century

Christine Grace Colon*

ABSTRACT

Blended Learning is rapidly emerging as a domain of instructional approach and research. Across disciplines and contexts, at individual lecturer and institution levels, educators are experimenting with the blended model of instruction. Ham (2010) described blended learning as the "marriage of new technologies to old teaching' and this had been positively embraced by both learners and teachers. Millennials have been referred to as "digital natives" in reflection of their apparent ease and familiarity with digital technology. It only makes sense for teachers to leverage this to the students' advantage. However, questions remain on how ready teachers are in a blended learning model of instruction. This study will discuss how educators today can maximize the benefits of each mode of blended teaching and what they can do in order to tailor their lessons based on the needs of their students.

Keywords: Blended learning, 21st Century learning.

1. INTRODUCTION

For the last decade, education has evolved drastically. Learning in the 21st century is no longer dependent on the four-walls of the classroom. It has now moved across new paradigms and dogma. The way our students are taught today is very different to how they were taught fifty or even twenty five years ago (Robinson, 2018). Much of this innovation is related to technological advances. Digital technology has become a pervasive teaching tool and has opened up a whole new world of learning. Given that new learners are digital natives, many educators are finding traditional learning environments needed to be enhanced to be more engaging to students (Groff, 2013) by incorporating technology into teaching. Nowadays, many educational establishments across the world are using dynamic digital tools such as e-learning software alongside more traditional classroom practices to create blended learning models. Even before the COVID-19 outbreak, there had already been many studies about how online and face-to-face teaching can be merged together.

During this time of pandemic and for the future to come, it is expected that a lot will change on how we live our lives. Majority of the citizens across the globe will become more cautious, and therefore would take the best way possible to get educated, and at the same time, be safe from the unforeseen dangers. The new approach, blended learning, will allow only a specific number of students to be physically present and the rest would be online. Other online students get the chance to be physically present also on designated days, so social distancing is practiced. This is done by rotation.

In recent years, a combination of increasing numbers and increasing diversity of the student body in higher education is a worldwide phenomenon (Preston, 2010). More and more educational institutions are coming to rely on the blended learning model. Their reasoning is simple: a multi-channel teaching method offering the best of classroom and online learning all in one place. Each student has a range of different strengths and learning preferences and a blended learning approach allows teachers to acknowledge this. When they are given the ability to use tools from both traditional and digital spheres, teachers are able to present necessary information in a range of different ways designed to suit the varying learning styles of their students.

What is Blended learning?

The relevant classroom formats are:

The traditional classroom or face-to-face instruction is when the instructor and the students of an educational institution are in a place devoted to instruction and the teaching and learning take place at the same time.

* Christine Grace Colon, MA, ACCA, Lecturer, CamEd Business School.
Email: cchristinegrace@cam-ed.com

Online teaching typically refers to courses that are delivered completely online. There are no physical or on-campus class sessions. Online courses can be designed for a handful of enrolled students or can be made open and accessible to a wide variety of participants.

A flipped classroom is an instructional strategy and a type of blended learning focused on student engagement and active learning, giving the instructor a better opportunity to deal with mixed levels, student difficulties, and differentiated learning preferences during in-class time.

Blended Learning is an instructional approach that relies on the mixture of face-to-face and web-based learning environments (Garrison & Kanuka, 2004; Graham, 2006), is also referred to as hybrid or mixed modality course design. It is a student-centered approach to creating a contemporary learning experience, whereby the learner interacts with other students, with the teacher, and with the content through thoughtful integration of online and face-to-face environments. It is a formal education program that is made up of in-person classroom time as well as individual study online using e-learning software. A type of multi-channel method that incorporates activities, images, video, digital tasks and face-to-face discussion. Courses that follow the blended learning model often take place in a real 'brick and mortar' classroom with a dedicated teacher, but offer additional learning opportunities by way of a digital platform. Oftentimes, blended learning is implemented in a flipped fashion where students learn the new content outside the class while face-to-face time focuses on active and building conceptual understanding and cognitive skills (Baepler, 2014).

The combination of online and face-to-face teaching (Blended learning) is now part of the learning landscape in lower, higher and tertiary education, not only for campus-based courses but for courses designed for students studying at a distance as well as for communities of professional learning and practice. The influence of this concept in university teaching and learning can be seen in the appearance of practice focused texts of Littlejohn and Pegler (2007) and more recently, Garrison and Vaughan (2008).

2. LITERATURE REVIEW

Blended learning is now frequently positioned as one of the evolving inclinations in higher education as seen in the works of Allen, Seaman and Garrett (2007), Graham (2006), Garrison and Kanuka (2004) and therefore is of particular strategic importance in the future of universities, their students and teachers as well as in the widening community of professional education and training. To deliver the right content to the right people at the right time, organizations sought to use blended learning approaches. Many studies have been conducted in favor of blending strategies as it addresses a multitude of learning issues. For one, a research study conducted by Chen and Liu (2008) found that dynamic media presentations increase students' learning efficiency. Lai, Tsai, & Yu (2011) also mentioned in their work that synchronization of a teacher's lecturing actions for a Powerpoint presentation with his/her voice creates web-based multimedia material which students can use to access past lectures. They revealed that students using this technology had more positive learning attitudes and higher achievements than those in a classroom control group. Bluic, Ellis & et al (2011) believed that students gather more knowledge from multiple sources through blended courses thus, positively impact students understanding and comprehension of the learning content (Woo, 2008). Other benefits students can gain from web-based lectures are flexibility, parity, accessibility to lectures and higher level autonomy in regulating learning (Ashton & Elliot, 2007; Chen & Lui, 2008; Howlett et al., 2011; Owston et al., 2013; Preston et al., 2010). The soaring demand in flexibility is another driving force for many universities to introduce blended courses that utilize web-based lectures to compel more active participation of the students. The increasing diversity in students' background, learning needs and learning styles, which consequently, requires higher education institutions to start delivering more attractive and successful models of teaching (Howard, 2014) and learning experiences that engage and address the needs of society in the 21st century (Garrison D. R., 2008). Furthermore, Montrieux et al. (2015) findings state that "students evaluate web-based technology as an added value in higher education". It allows students an in-depth processing of the course content (El Mansour, 2007) and it is largely suitable to diverse students with varying learning styles (Waha, 2014). Owen (2010) also acknowledged that blended learning has the potential to foster a scaffolded, supported, discovery approach that suits a range of learning preferences when used collaboratively.

Several studies also pointed out that blended learning is gaining popularity for being cost-effective as it frees up classroom space (El Mansour, 2007). As such,

"online courses may allow increased enrolment, decreased cost and the ability to overcome the lack of the facilities to accommodate the number of courses or the number of students enrolled in each course" (Auster, 2016).

In spite of various positive studies supporting blended learning, there are studies that contradict this approach. For one, Chong, Tosukhowong and Sakauchi (2002), claim that technical problems while delivering the content of the lecture can occur. Von Konsky et al. (2009) view web-based lectures are not equally effective to all students. This is consistent with the concerns of Lopez- Perez et al. (2011) and Owston et al. (2013) that web-based lectures may not be suitable to low- achieving students as they may not have the independent study skills blended learning demands

Variations of a Blended Learning Approach:

1. Using different models of blended learning.
    A. Lab Model - Makes use of separate laboratory to integrate technology in learning experiences. It is done entirely in a traditional classroom setting under the supervision of an instructor. The online lab model of blended learning delivers most, if not all, content remotely. This is different from strictly online learning in that students gather in a traditional setting to access the computers. However, no face-to-face teachers are required. (https://study.com/academy/lesson/online-lab-model-in-blended-learning-definition-application-examples.html)
    B. Flex Model - Shifts between face-to-face mode and technology-assisted in the classroom. Instruction is done entirely online and is supplemented by on-site personal support. Every application of web-based lectures can be an added value, as long as the desired educational goal is taken into account which is consistent with the concept of "constructive alignment" (Biggs, 1996). Using web-based lectures as a repetition is most beneficial when lecturers want to provide the opportunity for students to repeat difficult lectures and concepts. Using them as preparation is most beneficial for lecturers who want to save time by replacing basic lessons with recordings for students to watch at home and to provide more time for exercises and the possibility of answering questions during the limited time available for face-to-face lessons. (https://study.com/academy/lesson/flex-mode-in-blended-learning-definition-application-examples.html)
    C. Pod Model - Creates various learning areas inside one venue such as an E-classroom for collaboration, independent learning, presentations and planning (https://www.kaplan.com.sg/synergy-pod-classroom-future/).
    D. Rotation – Involves a regular flipping between traditional classroom teaching and online learning (https://study.com/academy/lesson/rotation-model-definition-application-examples.html).
2. Flipped Classroom – In a flipped classroom, new content is delivered online and students' homework are done in class. Class time focuses more on activities enhancing the overall learning environment (Slomanson, 2014). This approach supports independent learning and must transcend in the curriculum. (https://omerad.msu.edu/teaching/teaching-strategies/27-teaching/162-what-why-and-how-to-implement-a-flipped-classroom-model)

Statement of limitations and further research

The limitation of this study is the absence of data to assess the effectiveness of blended learning adapted in Cambodia. It would be interesting to study the efficacy of blended learning especially the implementation of a rotation model in CamEd Business School students' academic achievements for future research.

3. CONCLUSION

In-class teaching or face-to-face and online teaching methods have their own advantages and disadvantages. Blended learning takes place by combining face-to face and online learning. Blended learning has been widely embraced by teachers as it addresses a vast variety of students' needs such as learning preferences, distance, increasing number of students, and most recently the difficulties in studying students are facing caused by a global pandemic. Blended learning allows students to become the drivers of their own education as it promotes lifelong learning skills, independent and active learning strategies thus, stimulates students'

interests to acquire knowledge and skills as opposed to passive learning which occurs in in-class, face-to-face learning. Findings from the exploratory study conducted by Chyr (2017) also revealed that there is a significant increase in students' involvement, self-efficacy and self-directed learning in blended learning environments.

While computer technology is not a panacea for teaching, blended learning approaches can minimize the dangers of 'being focused on the enabling technology at the expense of its impact on human endeavour' (Romeo and Russell, 2010, p. 54). The potential of web-based lectures lies in their adaptability for use in several scenarios according to the teacher's educational goals. Although students appreciate the flexibility of the online part of blended learning they still value the face-to-face interaction with their peers and faculty in class (Waha and Davis, 2014).

Blended learning is definitely an effective learning approach in the 21st century. A learning strategy that nearly everyone agrees as a winning combination of face-to-face and online learning. Its advocates agree that there is merit in blended learning that employs flipped pedagogy (Luna & Winters, 2017). It is the future of education especially for higher education. A powerful training solution that combines e-learning with a variety of other delivery methods for a superior learning experience (Gray, 2006). Blended learning is "likely to emerge as a predominant model of the future—and to become far more common than either online or face-to-face instruction alone" (Watson, 2008). While learning technologies and delivery media continue to evolve and progress, one thing is certain: Organizations (corporate, government, and academic) favor blended learning models over single delivery mode programs (Singh, 2003).

With the right skills, mindset, ICT tools, design and facilitation of programs, and on-going evaluation to provide engagement learning experiences (Owen, 2010), blended learning is a very effective and powerful teaching tool today and in the future. We just need to make sure our educators are up to the challenge of changes whilst, offering support during the transition period. There has to be a clear purpose and pedagogic rational using technology for the benefit of the students. Despite employing high tech tools as means of instruction, the essence of content is still driven by teachers who remain the primary drivers of what happens in the classroom (Breen, 2018). Keeping in mind that 'the key to a successful use of technology does not lie in the hardware or software alone but in 'humanware'; the human capacity of teachers to plan, design and implement effective educational activity' (Warschauer & Meskill, 2000). As Bill Gates once said, "Training the workforce of tomorrow with today's school is trying to teach kids about today's computers on a 50-year-old mainframe. Until we design them to meet the needs of the 21st Century, we will keep limiting – even ruining – the lives of millions every year."

4. REFERENCES

Allen, I. E. (2007). Blending in: The extent and promise of blended education in the United States. Sloan Consortium: P.O. Box 1238 Newburyport, MA 01950.

Ashton, J. &. (2007). Juggling the balls—Study, work, family and play: Student perspectives on flexible and blended heutagogy. European Early Childhood Education Research Journal, 15(2), 167-181.

Auster, C. (2016). Blended Learning as a Potentially Winning Combination of Face-to-face and Online Learning: An Exploratory Study. Teaching Sociology, 44(1), 39-48.

Baepler, P. J. (2014). It's Not about Seat Time: Blending, Flipping, and Efficiency in Active Learning Classrooms. Computers & Education 78, 227-36.

Bliuc, A. M. (2011). A blended learning approach to teaching foreign policy: Student experiences of learning through face-to-face and online discussion and their relationship to academic performance. Bliuc, A. M., Ellis, R. A., Goodyear, P., & Piggott, L. (2011). A blended learning approach to teaching foreign policy: Student experienceComputers & Education, 56(3), 856-864.

Breen, P. (2018). Developing Educators for The Digital Age: A Framework for Capturing Knowledge in Action. London: University of Westminster Press.

Chen, H. Y. (2008). Web-based synchronized multimedia lecture system design for teaching/learning Chinese as second language. Computers & Education, 50(3), 693-702.

Chong, N. S. (2002). WhiteboardVCR: a web lecture production tool for combining human narration and text-to-speech synthesis. Journal of Educational Technology & Society, 5(4), 88-97.

Chyr, W. S. (2017). Exploring the Effects of Online Academic Help-Seeking and Flipped Learning on Improving Students. Journal of Educational Technology & Society, Vol. 20, no. 3, 11-23.

El Mansour, B. &. (2007). Students' positive and negative experiences in hybrid and online classes. College student journal, 41(1), 242.

Garrison, D. R. (2008). Blended learning in higher education: Framework, principles, and guidelines. San Francisco: John Wiley & Sons.

Garrison, R. &. (2004). Blended learning: Uncovering it transformative potential in higher education. . The Internet and Higher Education, 7, 95-105.

Graham, C. R. (2006). Blended learning systems: definition, current trends and future directions. Global perspectives, local designs., 3-21.

Gray, C. (2006). Blended learning: why everything old is new again—but better. American Society for Training & Development. Learning Circuits, 10.

Groff, J. (2013). Technology-rich innovative learning environments. OCED CERI Innovative Learning Environment project, 1-30.

Ham, V. (2010). Technology as Trojan horse. Researching IT in Education Theory, practice and directions, 25-38.

Hannelore Montrieux, S. V. (2015). Blending Face-to-Face Higher Education with Web-Based Lectures: Comparing Different Didactical Application Scenarios. . Journal of Educational Technology & Society, 18(1), 170-182.

Howard, J. R. (2014). Another nibble at the core: Student learning in a thematically-focused introductory sociology course. Teaching Sociology, 42(3), 177-186.

Howlett, D. V. (2011). Blending online techniques with traditional face to face teaching methods to deliver final year undergraduate radiology learning content. European journal of radiology, 78(3), 334-341.

Khouri, C. (3 June , 2019). eLearning Industry. Retrieved from BLENDED LEARNING: Why Does Blended Learning Work?: https://elearningindustry.com/blended-learning-work

Kinuthia, W. &. (2010). Educational technology in practice: Research and practical case studies from the field. Charlotte, NC: IAP.

Lai, Y. S. (2011). Screen-capturing system with two-layer display for PowerPoint presentation to enhance classroom education. Journal of Educational Technology & Society, 14(3), 69-81.

Legends of Learning. (n.d.). Retrieved from BLENDED LEARNING: 27 Tips of Blended Learning: https://www.legendsoflearning.com/blog/27-tips-blended-learning

Lim, D. H. (2007). Online vs. blended learning: Differences in instructional outcomes and learner satisfaction. Journal of Asynchronous Learning Networks, 11(2), 27-42.

Littlejohn, A. a. (2007). Preparing for blended e-learning. Abingdon, UK: Routledge.

López-Pérez, M. V.-L.-A. (2011). Blended learning in higher education: Students' perceptions and their relation to outcomes. Computers & education, 56(3), 818-826.

Luna, Y. &. (2017). "Why Did You Blend My Learning?" A Comparison of Student Success in Lecture and Blended Learning Introduction to Sociology Courses. Teaching Sociology, 45(2), 116-130.

Masie, E. (2006). The blended learning imperative. The handbook of blended learning: Global perspectives, local designs, 22-26.

Michigan State University. (n.d.). Retrieved from OMERAD: https://omerad.msu.edu/teaching/teaching-strategies/27-teaching/162-what-why-and-how-to-implement-a-flipped-classroom-model

Muir, D. (n.d.). Pearson. Retrieved from Prentice Hall e-Teach: http://www.phschool.com/eteach/social_studies/2002_05/essay.html

Owen, H. (2010). Meeting Diverse Learner Needs with Blended Learning . Educational Technology, 25-28.

Owston, R. Y. (2013). Student perceptions and achievement in a university blended learning strategic initiative. The Internet and Higher Education, 18, 38-46.

Preston, G. P. (2010). Web-based lecture technologies: Highlighting the changing nature of teaching and learning. Australasian Journal of Educational Technology, 26(6), 717-728.

Publishing, K. (30 July, 2020). Kaplan. Retrieved from Kaplan Singapore: https://www.kaplan.com.sg/synergy-pod-classroom-future

Robinson, T. J. (2018). Concept-Based Learning in Blended Environments Using Intelligent Tutoring Systems. In Intelligent Tutoring Systems: 14th International Conference, ITS 2018, Montreal, QC, Canada, June 11–15, 2018, Proceedings (Vol. 10858, p. , 460.

Romeo, G. &. (2010). Why 'what works' is not enough for information technology in education research'. Researching IT in Education. Theory, Practice, and Future Directions, 54.

Schissel, D. D. (30 November, 2015). Flex Model in Blended Learning: Definition, Application & Examples. Retrieved from study.com: https://study.com/academy/lesson/flex-mode-in-blended-learning-definition-application-examples.html

Schissel, D. D. (30 November, 2015). Online Lab Model in Blended Learning: Definition, Application & Examples. Retrieved from study.com: https://study.com/academy/lesson/online-lab-model-in-blended-learning-definition-application-examples.html

Serva, C. (30 November, 2015). study.com. Retrieved from Rotation Model: Definition, Application & Examples. (2015, November 25). Retrieved from https://study.com/academy/lesson/rotation-model-definition-application-examples.html.

Singh, H. (2003). Building Effective Blended Learning Programs. Educational Technology, 43(6), 51-54.

Slomanson, W. (2014). Blended Learning: A Flipped Classroom Experiment. Journal of Legal Education, 64(1), 93-102, 93-102.

Stratton, E., Chitiyo, G., Mathende, A., & Davis, K. (2020). Evaluating Flipped Versus Face-to-face Classrooms in Middle School on Science Achievement and Student Perceptions. Contemporary Educational Technology, 11(1), 131-142.

Trilling, B. &. (2009). 21st century skills: Learning for life in our times. John Wiley & Sons.

Von Konsky, B. R. (2009). Lecture attendance and web based lecture technologies: A comparison of student perceptions and usage patterns. . Australasian journal of educational technology, 25(4).

Waha, B. &. (2014). University students' perspective on blended learning. Journal of Higher Education Policy and Management, 36(2), 172-182.

Warschauer, M. &. (2000). Technology and Second Language Teaching. Handbook of Undergraduate Second Language Education. New Jersey: Lawrence Erilbaum.

Watson, J. (2008). Blended Learning: The Convergence of Online and Face-to-Face Education. Promising Practices in Online Learning. North American Council for Online Learning.

Woo, K. G. (2008). Web-based lecture technologies: blurring the boundaries between face-to-face and distance learning. Research in Lerning Technology, 6(2), 81-93.