Building Student Engagement and Confidence through a Blended Learning Approach in Professional Learning

Deena Duarte Fell

Department of Education, Lamar University

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Dr. Dwayne Harapnuik

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As Covid-19 upended learning in February 2020, educators scrambled to find ways to help students continue to learn at home. New or rarely used processes were brought out, dusted off, and reimagined to ensure learning could continue at home for weeks on end. Along with "pivot," some of the most used phrases at this time included blended learning and virtual learning. This literature review will examine the difference in these two approaches to learning, how and why blended learning works, how blending learning can be applied in the professional learning landscape, and considerations for building a blended learning system in professional and educational settings.

Blended Learning, BL, is a concept introduced by a team at the Harvard Business School, led by Clayton Christensen (1997). He coined the phrase "Disruptive Innovation" which has now been applied to many different industries that will be discussed later in this review. In education, a blended learning approach involves a student learning at least in part through online delivery of content and instruction plus at least part at a supervised brick-and-mortar location away from home (Horn & Staker, 2012). Blended learning often includes a technological portion of the day, but this is not a required part of a blended learning classroom, according to Horn & Staker (2011). The blended learning approach can be confused with hybrid or online learning. While these are similar classroom approaches, a hybrid approach deals more with a combination of teacher-lead online or virtual learning, along with a digital component that is independently completed (Gallardo-Echenique et al., 2015).

Blended Learning Models Explained

The Blended Learning approach has evolved over the last 2 decades. In 2015, four types of blended-learning programs were widely seen across K-12 schools in the United States and abroad (Horn & Staker, 2015).

Those are:

1. Rotation Model: This occurs in a traditional, onsite, classroom setting. A teacher sets up centers or stations with designated activities at which students engage for a set amount of time. At a designated time, students move to experience a new center and activity. One of those centers may allow students to work on a digital device to engage with an academic-learning product or online program that is meant to be done independently. This model can also look like the following in both a classroom or professional learning setting:
    a. Station Rotation-Each learner experiences each station activity for a designated amount of time with a designated group of classmates. Transition time is usually indicated with a timer, alarm, or other audio prompt.
    b. Lab Rotation- a time when the class moves to a new location, such as a computer lab
    c. Flipped Classroom- Student participate in online learning, off-site, and then attend an onsite, teacher-guided class. The class usually builds upon the independent or online learning that occurred prior to class.
    d. Individual Rotation- Similar to station rotation, except students may move independently or only experience one or two centers per day.

2. Flex Model: This requires students to learn independently, off-site and online, but with the ability to access support in a more traditional classroom setting with a teacher for guidance. This does not necessarily include a “formal” class or schedule.
3. A La Carte model: Students attend a brick-and-mortar school and attend a fully-virtual class while there. The virtual class teacher is different from the homeroom teacher.
4. Enriched Virtual Model: Students meet during scheduled face-to-face classes with the teacher and have online lessons to complete away from the teacher. This allows students the opportunity to have a brick-and-mortar school experience, while completing tasks on their own schedule away from the teacher. Generally, this is the same teacher for both settings. This is different from the complete virtual model that students experienced during the Covid-19 school closures, when students were able to meet solely online and follow a set schedule in a virtual setting (Le Cunff, 2022).

When considering all the options for incorporating blended learning into a school day or corporate training experience, the models can feel overwhelming. How does one choose which will have the greatest impact and which will be best received? Blended Learning does not have to be a one-size-fits-all program, so the options are an asset, but other concerns may arise. Studies found similar concerns among instructors designing a blended learning course that involves a virtual component (Muscanell, 2023) and students taking blended learning courses (So & Brush, 2008).

Why it Works: What’s the appeal of a Blended Learning Model?

Just as K-12 educators moved to virtual teaching models during the pandemic closure, higher education leaders also had to develop online options to continue their traditionally onsite classes. An August 2023 report (Muscanell, 2023) shows that faculty members continue to prefer on-site

(in-person) teaching but understood the need for multiple modalities. Only a slight majority, 53%, prefer to teach courses that are completely on-site, indicating that online teaching may not seem so foreign, anymore. In fact, 96% felt confident in their tech skills for online teaching purposes. Faculty report their preference for in-person teaching stems from being better able to gauge their audience's needs in order to increase engagement, which could lead to better student learning and academic performance. Faculty embrace online teaching because they understand the need for their students to have greater flexibility in learning choices and schedules, and health and safety concerns. This was not the case prior to the pandemic when institutions like the University of Central Florida started offering online courses. At that time, the main concern was less student-centered. Instead, faculty worried that student engagement would decline to a point that their class ratings for online classes would negatively impact their tenure and promotion potential (Hartman et al., 2019).

For the learner, however, blended learning opportunities have resulted in higher levels of interaction and satisfaction than that of face-to-face courses (Dziubian, Hartman & Moskal, 2004; Waddoups & Howell, 2002; Wingard, 2004; So & Brush, 2008). Students listed course structure, emotional support and communication medium as the main factors leading to their perception of collaborative learning, social presence, and satisfaction. Overall, attending a class in person, or social presence, did not lead to a significant increase in satisfaction.

Blended Learning beyond K-12: Using BL models in Professional Settings

These same principles apply when planning for professional development events and training in business or workplace settings. What models of blended learning are helping professionals better learn to do their jobs with confidence? What does this look like and in which industries are blended learning approaches trending? In the case of Shell Oil Company, employees have

benefited from a mix of hands-on learning in the workplace, plus work-related learning tasks via technology since 2000, according to Collis & Margaryan (2004). Teacher prep programs have used student teaching models for years, which includes working onsite in classrooms, while also learning from professors in their college courses. Today, teachers are also expected to know a digital or virtual teaching style, adding another level to their blended training. Finally, healthcare workers who are therapists to special needs children have learned via a blended model that involves classroom training, in home or facility hands-on learning, and knowledge and practice acquisition through digital experiences and video examples (Lotrecchiano *et al., 2013).*

What to consider when Creating and Participating in a Blended Learning Program

With so many positives coming from blended learning in educational, business, and healthcare settings, are there any drawbacks to these teaching and training styles? In the K-12 setting, not all technology is created equal and not all deliver on the promises on which they are sold. A research summary by Brodersen & Melluzzo (2015) focused on 14 online and blended learning programs; 11 of which used a blended learning strategy, while 3 were fully online. Focusing on the BL programs, these allowed for students to work independently in individual digital programs after which teachers were provided feedback in the form of reports, data, and scores. Some programs offered differentiation within the digital component while others required teacher input and intervention to create the differentiated learning piece. Ultimately, some programs seemed to help with standardized test scores, but were not consistent in helping in other progress monitoring tools and screeners. Dynarski et al. (2007) found no significant effect on outcomes on tests like the Stanford Achievement Test. Two years later, another study (Campuzano et al., 2009) found the Leap Track program did have a positive effect on students' SAT reading scores, but no other major impacts. This study did not touch upon what training or

guidance, if any, was taught to educators who were expected to support these digital pieces in their classrooms.

Teaching, Training and Coaching in the Future: The Next Trend (now?)

Where does blended learning go now? A newer trend in blended learning is rising from the world of Virtual Reality (VR). Student teachers found that their reflection process after a VR experience and an in-person classroom teaching experience was basically the same. This was less true for their reflection on real classroom video experiences (Richter et al., 2022).

In healthcare, nurse training programs are also utilizing VR to better prepare for real-life experiences. Previously, nurse trainees learned through hand-on experience and via videos. Videos do not have an immersive feel, though, leaving the student as more of a bystander and observer. Getting to experience medical procedures via technologies like VR goggles allows for a more realistic learning experience. We learn in Huang et al (2022) teachers have found this approach to lead to greater engagement and students in the Pre-RN program felt more prepared having had more simulated real-world experience via VR.

Ultimately, there are relatively few drawbacks to learning in a blended environment, but there are areas to take into consideration. Instructional leaders should always consider the needs of the learner and the educational delivery systems available (Heuston, 2011). Covid closures caused students to learn via full-time online classes and revealed that technology, devices, and internet access was not equitable across the United States (Crocker & Kleitsch, 2023). This needs to be considered when planning for a blended experience that will include offsite work requiring technology. When developing a BL lesson, allow students to have a say in how they will learn and how they will demonstrate what they know. Finally, a blended learning experience should be

about building a community along with building knowledge. Bloom et al. (2005) encourages students to share in developing lessons and experiences, while also building a network of colleagues to turn to when needing inspiration, guidance, and expertise versus working in isolation be it online or onsite.

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