Understanding Blended Learning

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This document is intended to ease the tension of anyone who's nervous about using technology to aid learning. The truth is, you have already been using blended learning, and technology is just an additional aspect of a wide range of blended-learning methods.

The term blended learning is a recent addition to the lexicon of the education profession. The concept of blended learning, however, has been around for decades. The trend of books, articles, conferences, and experts' ideologies focusing on blended learning could lead one to believe that a new educational sensation has been discovered. The novelty of online learning is apparent when you look at the diversity of names given to the phenomenon: web-based learning, eLearning, mobile, mLearning, hybrid, asynchronous learning (Dziuban, C. D., Hartman, J.L., Moskal, P.D, (2004). But is it really so new?

Blended learning is defined as a mix of learning modalities. Examples include multimedia, online courses, instructor-led classes, books, videos, simulations, and job aids. This mix of event-based activities allows the right combination of platforms that will drive the highest retention rate and achieve the highest business impact. While these blends can range from simple to complex, the goal is to create a more effective and efficient learning experience than can be achieved with just a single type of learning.

Blended learning using technology began as early as the 1960s, when mainframes and minicomputers were used in training by Control Data and the University of Illinois (Bersin, J., 2004). Control Data developed a system called Plato, which pioneered the use of computers in traditional educational settings, and still exists today. It was not very interesting visually; however, it was the first platform that extended learning to large audiences through technology.

Why the big commotion now about blended learning? Blended learning, incorporating eLearning, is the "only technology-based delivery vehicle that can make on-going dynamic adjustments to the instructional path based on learners' responses. This tailoring of instruction based on learning progress is called adaptive instruction" (Clark, R. C., & Mayer, R. E., 2008). Further, "scholars, experts, and policymakers have long noted the importance of adapting instruction to the unique needs, strengths, and weaknesses of individual learners. Adaptation has been highlighted as a 'primary requirement' for successful instruction since the 4th century B.C.; even after graded systems were adopted by educators, 'the importance of adapting instruction to individual needs was continuously emphasized'" (Teaching Trends: Adaptive Instruction, 2012, March 26). As such, eLearning technology is fast becoming a go-to solution for flexible and adaptable training.

As reported in Campus Computing 2003, "more than half of all college courses now reportedly use Internet-based resources, and about half of all courses in public research universities have a course Web site" (Dziuban, C. D., Hartman, J. L., Moskal, P. D, 2004). The numbers will likely be much higher now, nearly 10 years later. In fact, "over the past decade, online learning enrolments have increased dramatically both at the K–12 and postsecondary levels. The growth of online learning has significantly altered the US (and worldwide) education market" (Clark, R. C., & Mayer, R. E., 2008).

Blended-learning research has shown "that while student success and high levels of student and instructor satisfaction can be produced consistently in the fully online environment, many faculty and students lament the loss of face-to-face contact. Blended learning retains the face-to-face element, making it—in the words of many faculties—the 'best of both worlds'" (Dziuban, C. D., Hartman, J. L., Moskal, P. D., 2004).

A review prepared by Thomas Russell of the International Distance Education Certification Center found that "there is no significant difference in learning outcomes, commonly measured as grades or exam results, between traditional and e-learning modes of delivery" (Hrastinski, 2008). In Figure 1, the outflowing circles outline the elements of a typical blended or hybrid course. The course is based on asynchronous learning; is accomplished with labs, simulations, and online study; is self-paced; and focuses on the learners' needs and schedules. Figure 2 illustrates that synchronous learning is program focused, teacher facilitated, face-to-face, and group paced. The essential point is that it is up to the organization to understand the advantages and restrictions of all media types, and to determine whether the approach should be asynchronous or synchronous (See Table 1).
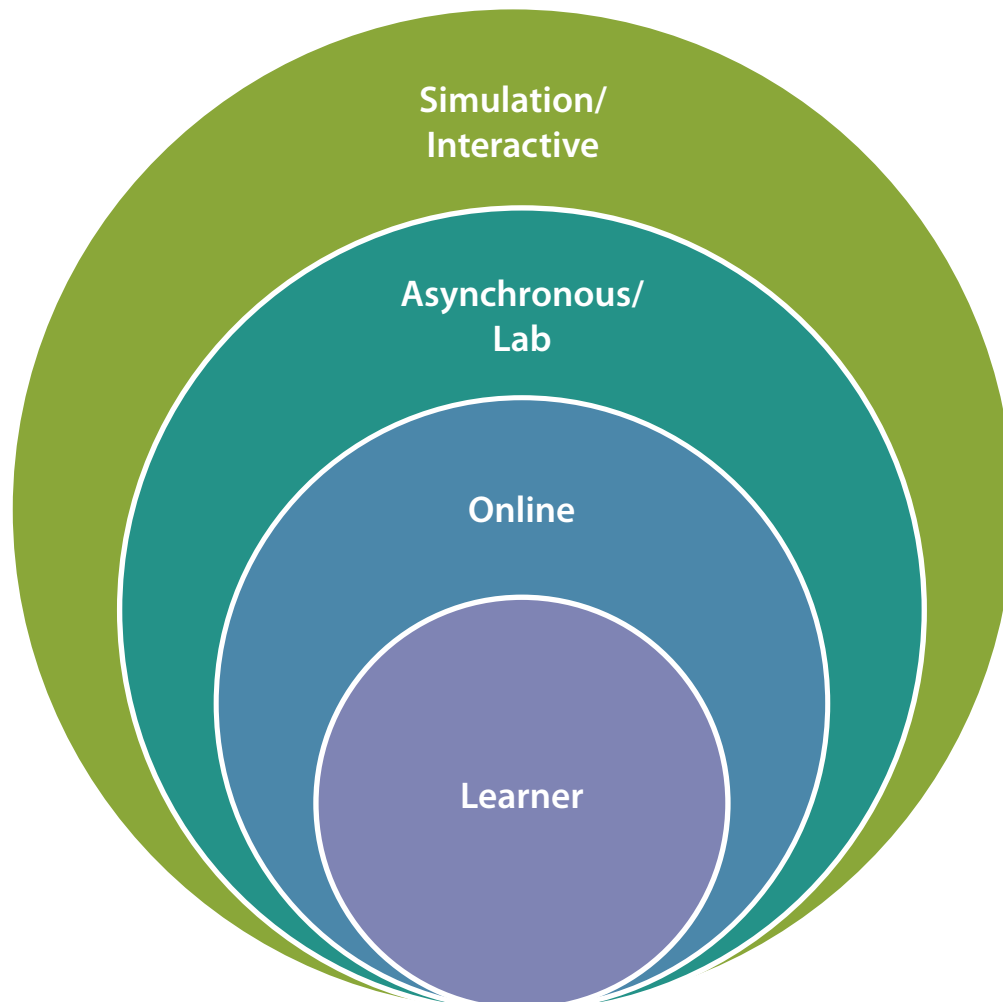
Figure 1: Asynchronous, Self-Paced Learning (Hrastinski, 2008)

CPI values the positive outcomes and meaningful learning achieved through the blended-learning approach. Our blended-learning approach includes classroom training, Participant Workbooks, video and other multimedia programs, refresher training, written resources, advanced courses, online tutorials, and webinars. We understand that in order for people to learn, adapted instruction is the most positive method of training, and we strive to reach all learners.

CPI's use of blended or "hybrid" learning refers to courses that combine face-to-face classroom instruction with online learning and reduced classroom contact hours. The latter point is an important distinction because it is certainly possible to enhance regular face-to-face courses with online resources without displacing classroom contact hours. CPI's teaching philosophy is that in some situations, combining face-to-face and fully online

components optimizes the learning environment to a greater extent than is possible in other formats. By offering blended learning, CPI presents a range of learning tools.

By analyzing our target audience, goals, and content to create focused objectives, we create a successful blended-learning environment. The content and desired outcome should determine whether the practice of a skill is appropriately accomplished online, or best done in a classroom context. There are as many blended-learning models as there are organizational challenges. The benefit of this for us is that we can blend our own mixture to meet the learning needs of our students. As we continue to grow, combinations of eLearning and other modes can be developed to match the available technology, the distribution of the workforce, and the availability of trainers.

CPI realizes that the key to successful eLearning and blended learning is to select and understand the various learning points along a curve, and to fit the media appropriately. With eLearning and blended learning, we provide the right types of media and training fitted to the various stages of the learning process, and fitted to the needs of the learner.
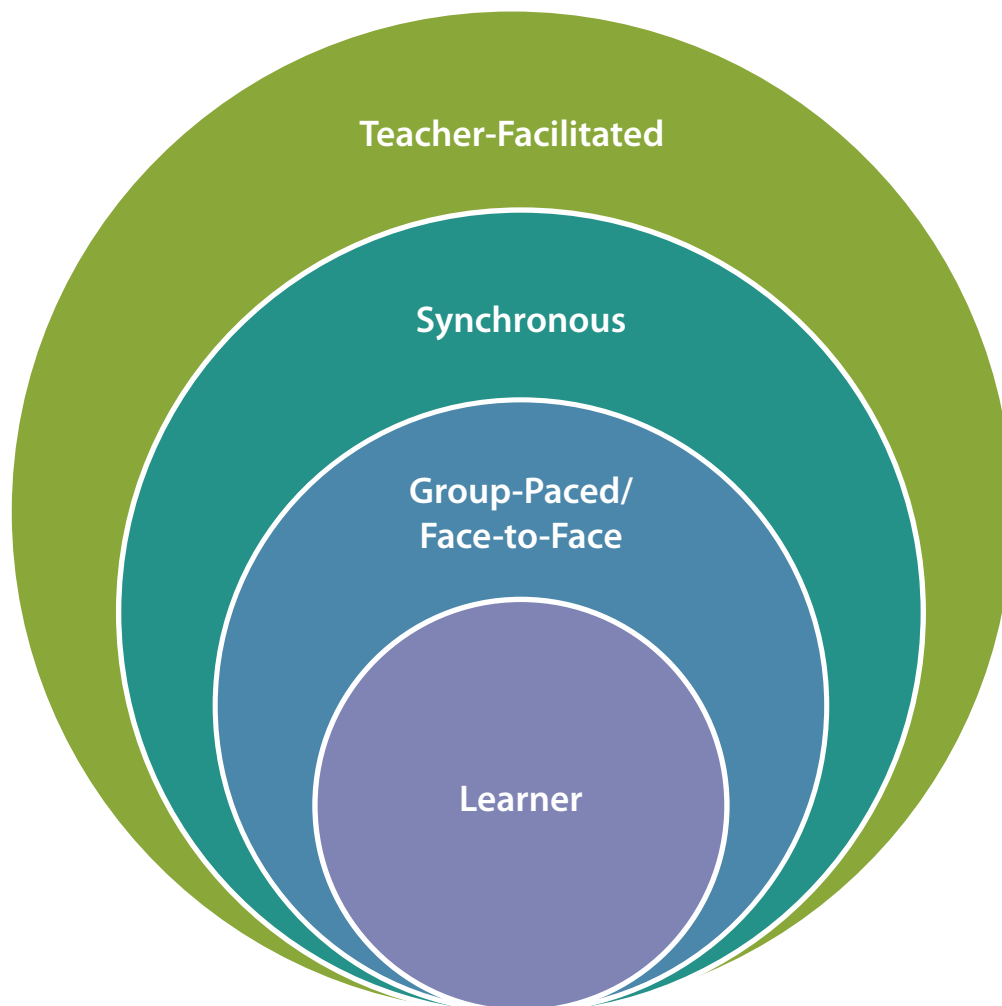
Figure 2: Synchronous, Teacher-Facilitated Learning (Hrastinski, 2008)

Table 1: When, Why, and How to Use Asynchronous vs. Synchronous eLearning		
	Asynchronous eLearning	Synchronous eLearning
When?	▪ Reflecting on complex issues. ▪ When synchronous meetings cannot be scheduled because of work, family, and other commitments.	▪ Discussing less complex issues. ▪ Getting acquainted. ▪ Planning tasks.
Why?	▪ Students have more time to reflect because the sender does not expect an immediate answer.	▪ Students become more committed and motivated because a quick response is expected.
How?	▪ Use asynchronous means such as email, discussion boards, and blogs.	▪ Use synchronous means such as videoconferencing, instant messaging, and chat, and complement with face-to-face meetings.
Examples	▪ Students expected to reflect individually on course topics may be asked to maintain a blog.	▪ Students expected to work in groups may be advised to use instant messaging as support for getting to know each other, exchanging ideas, and planning tasks.
	▪ Students expected to share reflections regarding course topics and critically assess their peers' ideas may be asked to participate in online discussions on a discussion board.	▪ A teacher who wants to present concepts from the literature in a simplified way might give an online lecture by videoconferencing.

Hrastinski, S. (2008, October)

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