

Blended Learning Environments

Charles R. Graham

Brigham Young University, USA

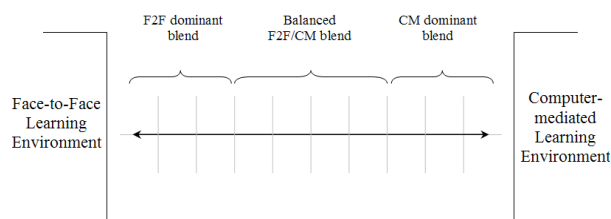
Stephanie Allen

Brigham Young University, USA

INTRODUCTION

The term “blended learning” is being used with increased frequency in academic publications and conferences as well as in industry trade magazines around the world. In 2003, the American Society for Training and Development identified blended learning as one of the top ten emergent trends in the knowledge delivery industry (Rooney, 2003). In higher education, some predict a dramatic increase in the number of hybrid (i.e., blended) courses that will include as many as 80-90% of the range of higher education courses (Young, 2002). Additionally, in a recent Chronicle of Higher Education article, the president of Pennsylvania State University, Graham Spanier, was quoted as saying that the convergence between online and residential instruction was “the single-greatest unrecognized trend in higher education today” (Young, 2002). This article provides an overview of blended learning environments (BLEs) with examples from both corporate training and higher education contexts. It also identifies the most common benefits and challenges related to the use of blended learning environments from the research literature.

Figure 1. Blended learning environments combine F2F and computer-mediated instruction



BACKGROUND

The term “blended learning” has become a buzzword among educators and trainers in the last several years (Lamb, 2001). Prior to that, academicians generally referred to blended learning environments (BLEs) in higher education as “hybrid learning environments.” With the explosion in the use of the term blended learning in corporate training environments, the academic literature has increasingly followed suit, and it is common to now see the terms used interchangeably (Voos, 2003). In this section, we define blended learning and share some examples of blended learning environments in corporate training and higher education.

Terms and Definitions for Learning Environments

By nature, both the terms “hybrid” and “blended” imply a mixing or combining of something. It is that something that people do not always agree upon. Some understand blended learning to be a combination of different instructional methods (soft technologies) (Singh & Reed, 2001; Thomson, 2002), while others define blended learning as a combination of different modalities or delivery media (hard technologies) (Driscoll, 2002; Rossett, 2002). Both of these definitions are quite general and could apply to virtually any learning environment. For example, using these definitions, a traditional course that involves lecture and textbook readings could be called a blended learning environment. Because of this, some critics see blended learning as “an old idea dressed up in new clothes” (Clark, 2003).

As evidenced by the above definitions, blended learning is most commonly considered to be the combination of instruction (both methods and deliv-

ery media) from two archetypal learning environments: a traditional face-to-face learning environment and a computer-mediated or e-learning environment (see Figure 1). In essence, blended learning environments combine face-to-face (F2F) instruction with computer-mediated (CM) instruction.

Real-World Examples

As might be expected, no magic blend is optimal for all learning contexts. As Figure 1 suggests, a broad range of combinations can occur in a blended environment. Figure 1 divides this range into three general levels: blends that have a dominant F2F component, blends that have a dominant CM component, and blends that are fairly balanced in mixing the two environments. In higher education and corporate training, blends of all varieties exist. At the F2F end of the spectrum, many on-campus instructors and corporate trainers are enhancing their courses or training programs by using computer-based technologies. In these instances, the instructors and trainers may change what they do in the F2F environment because of the added CM portion, but they typically do not reduce the F2F contact time. At the CM end

of the spectrum, an increasing number of higher education-distributed education courses have a F2F component. These courses range from requiring F2F orientation activities and in-person testing (Martyn, 2003; Schrum & Benson, 2000) to allowing optional participation in discussion or lecture sessions. In the corporate world, companies often add F2F sessions to e-learning training modules (Bielawski & Metcalf, 2002; Thorne, 2003) to give employees the chance to practice and apply skills and knowledge they have gained via the CM instruction. In the middle of the spectrum, both university courses and corporate training modules reduce F2F class time by increasing the time the learners spend in CM instructional activities. Table 1 briefly describes some real examples of blending in higher education and corporate training contexts.

Blended Learning vs. Hybridization

It is important to note that blending occurs at the instructional level (course or program) as opposed to the institutional level in a blended learning environment. Blending at a program level involves requiring students to take a mix of both online and F2F courses

Table 1. Examples of blended learning environments in higher education and corporate training

HIGHER EDUCATION	CORPORATE TRAINING
<p>1. University of Phoenix</p> <p>FlexNet courses – students meet 1/3 of the time in a F2F format and 2/3 of the time in an online format (University of Phoenix, 2003).</p> <p>2. University of Central Florida</p> <p>E, M, and W courses – E courses are Web enhanced with no reduced seat time. M courses have reduced seat time replaced by asynchronous learning activities. W courses are completely Web-delivered courses (Hartman et al., 1999).</p> <p>3. Brigham Young University</p> <p>Freshman English – students meet F2F once instead of three times a week. Online modules and writing tutoring provide asynchronous support (Waddoups, Hatch, & Butterworth, 2003).</p> <p>4. University of Illinois</p> <p>Engineering students complete assignments using an online tutorial/grading system that provides them with immediate feedback. Instructors receive feedback from the system on concepts students are having difficulties with and can focus the F2F lecture content to address specific challenges (Graham & Trick, 1998).</p>	<p>5. Sales training (developed by Allen Communication)</p> <p>A five-day, F2F course was changed to a blend that included three days of instructional material for self-study on CD-ROM, two days of F2F training, and an online follow-up component to the training experience.</p> <p>6. Training on E-Learning (developed by The Masie Center)</p> <p>The training began with an online synchronous seminar for parts of two consecutive days. Self-study materials were provided for further study with access to an online coach. Two weeks later, the seminars were followed up with a 90-minute, synchronous virtual discussion. The training concluded with a one-day F2F synthesis wrap-up session followed by ongoing online learning community activities.</p> <p>7. Applied lab/research think tank (developed by John Hopkins Applied Physics Laboratory)</p> <p>A five-day, F2F training program was enhanced by adding pre- and post-online workshop activities to prepare and follow-up with participants.</p>

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