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## Blended learning - its challenges and future

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### Abstract

Nowadays, the trend of e-learning is increasing day by day and one of the tools to implement this concept is through Blended Learning. This paper gives the overview of the concept of Blended Learning from different perspectives such as the Holistic Perspective, the Educational Perspective, the Pragmatic Perspective, the Corporate Training Perspective and the Chief Learning Officer (CLO) Perspective. It also describes the various blended learning strategies. This paper also discloses the methods used in Blended Learning such as the synchronous instructional method and the asynchronous instructional method, which will help the readers to select the best instructional method. Besides this, the paper also reveals the dimensions of the blended learning approach i.e. blending offline and online learning, self-paced blending and live blending, collaborative learning, and blending structured and unstructured learning. This paper also describes the areas where this technique is beneficial, along with the challenges faced by this technique such as technical Challenges, organizational challenges and instructional design challenges. Then the Blended Learning process is described in terms of its various advantages. Factors that promote successful blended learning are also mentioned in this paper. Finally, some recommendations are suggested for future research.

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### 1. Blended Learning

Blended Learning is provided by the effective combination of different modes of delivery, models of teaching and styles of learning which are exercised in an interactively meaningful learning environment. Blended Learning courses combine online and classroom learning activities and uses resources in an optimal way in order to improve student learning outcomes and to address important institutional issues (Garrison, 2004). Blended Learning can be defined as the organic integration of thoughtfully selected and complementary face -to-face and online approaches and technologies (Graham, 2006).

In general terms, blended learning combines the online delivery of educational content with the best features of classroom interaction and live instruction in such a way as to personalize learning, allow thoughtful reflection, and differentiate instruction from student to student across a diverse group of learners (Watson)

Definitions of blended learning from different perspectives are as follows:\*

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*Holistic Perspective* – By this we mean the delivery of instruction using multiple media. This includes the integration of instructional media into a traditional classroom, or into a distance learning environment. It also includes any combination of media that supports instruction, regardless of the mix of synchronous or asynchronous media (Holden & Westfall, 2006) .

*Educational perspective* - From an educational perspective, blended learning means courses that integrate online with traditional face-to-face class activities in a planned pedagogically valuable manner; and where a portion of face-to-face time is replaced by online activity. It is primarily focused on integrating two separate paradigms, the classroom – synchronous, and online – asynchronous (Laster, 2005).

*Pragmatic perspective* - Courses that are taught both in the classroom and at a distance, and that use a mix of different pedagogic strategies

- E To combine various pedagogical approaches such as constructivism, behaviourism, cognitive learning approaches to produce an optimal learning outcome with or without the use of instructional technology.
- E To combine any form of instructional technology such as CDs, films, web-based training with face-to-face instructor-led programming.
- E To mix or combine instructional technology with actual job tasks in order to create a harmonious effect in terms of learning and working (Blended Learning, 2009).

*Corporate training perspective* - The use of multiple instructional media to deliver one course or curriculum such as a sales training course involving pre-reading, lectures and role play practices (Wexler, 2008).

*CLO - Chief learning officer perspective* - Executing a learning strategy that integrates multiple delivery modalities (both synchronous and asynchronous) and, in doing so, creates the best possible learning solution for the target audience. (Peters, 2009)

## 2. Components of the Blended Learning Model

A model can be a description of a system or phenomenon that accounts for its known or inferred properties and can be used for further study of its characteristics. Therefore, a blended learning model can be used as a guide in evaluating and integrating separate components that would result in instructionally-sound learning situation. The components are as shown in Figure 1:

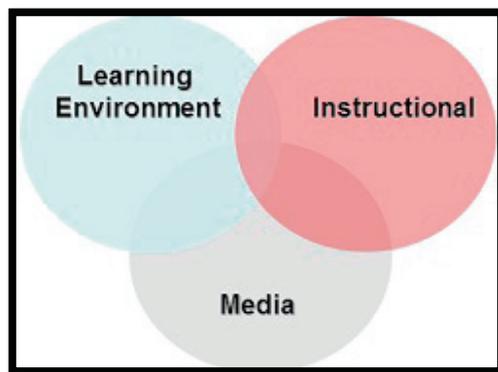


Figure 1. Components of Blended Learning

### 2.1 Learning environment component

A learning environment can either be synchronous or asynchronous. Each learning environment has a distinct set of advantages and disadvantages. The goal of blended learning is to leverage the specific positive attributes of each

environment to ensure the optimum use of resources to attain the instructional goal and learning objectives. (Holden & Westfall, 2006)

## *2.2 Media component*

Media refers to vehicles that simply deliver content. Some instructional media, however, may be more appropriate than others in supporting either a synchronous or asynchronous learning environment, but no single medium is inherently better or worse than any other. Whereas a given delivery medium might not alter the desired content, the selection of a particular medium may affect how you design the content to take advantage of unique attributes of that specific medium. Nevertheless, when the most appropriate media are selected, learning outcomes will not be affected—it is the instructional strategies employed that do s (Holden & Westfall, 2006)

## *2.3 Instructional component*

This component is used to select the most appropriate instructional strategies that support the learning objectives. Such strategies are the products of learning objectives and serve to ensure the learning objectives and facilitate the transfer of learning. When developing blended learning, maintaining instructional quality is paramount. Consequently, learning objectives need not be compromised when developing a blended learning solution. (Holden & Westfall, 2006)

### *3.1 Synchronous instructional methods*

Methods in this domain consist of traditional classrooms, virtual classrooms, live product practice labs, interactive chatrooms and mentoring (Woodall, 2010).

### *3.2 Live classroom*

Traditional classrooms allow instructors and learners to be face-to-face in the same place. The subjects usually consist of topics such as complex, broad, programmatic or new content, that require face-to-face interaction, expert observation, culture building, team building, networking, business problem solving or materials to be presented by an instructor or facilitator. The term Instructor-Led Training (ILT) is used synonymously with on-site training and classroom training (Woodall, 2010)

*Advantages-* A live classroom allows the dissemination of unpublished material. In addition, learners have access to peers and experts. Group discussion and practice can be engaging and add additional interest to a topic. Traditional classroom learning supports learners with certain learning preferences, in particular those who depend upon highly teacher-centred methods It is a good method for “people” people. It also provides for the gradual development of complex or difficult concepts and theories (Woodall, 2010).

*Disadvantages-* Classroom training can be expensive if learners must travel to the classroom location. Also, learners are required to attend sessions at a set time and this usually requires large blocks of time on the part of the learner. If the session is lecture-based, discussion and interaction are reduced. Classrooms can place the learner in a passive role and their attention may be lost (Woodall, 2010).

### *3.3 Virtual classroom-*

A virtual classroom allows instructors and learners to be in different places at the same time, and allows the instructor to archive the event for later viewing. These events are usually conducted through the use of virtual meeting tools. The topics covered can be similar to those dealt with in a live classroom unless they are too complex or contentious (Woodall, 2010).

Advantages - You don't have to be physically present in the classroom to benefit from the instruction. You can 'raise your hand' by clicking a button. A list of other students in the class is viewable, and you can hear the instructor speak. Additionally, the instructor can pass a virtual microphone to you so that you can be heard by the entire group. Information can be presented and desktops and computer applications can be shared across the Internet (Woodall, 2010).

Disadvantages - Everyone must be online at the same time. In most cases, the participants need advanced workstations and a high-speed connection. The instructor must have technical skills, adequate resources and be personally dedicated to making the event interactive. Just like in a live classroom, informational sessions can place the learner in a passive role and learner attention may be lost (Woodall, 2010).

### 3.4 Media used in blended learning

The medium is not limited to technology and can include:

- E Stand-alone, asynchronous, or synchronous online learning / training
- E Performance support tools (knowledge management tools)
- E Traditional classroom, labs, or other "hands-on" experiences
- E Reading assignments, CD-ROMs or other self-paced learning. (E-Learning Resources, 2012)

Table 1 Media used in Blended Learning

<p><b>Live face-to-face (formal)</b>                      Instructor-led classroom                      Workshops                      Coaching/mentoring                      On-the-job (OTJ) training</p>	<p><b>Live face-to-face (informal)</b>                      Collegial connections                      Work teams                      Role modelling</p>
<p><b>Virtual collaboration/synchronous</b>                      Live e-learning classes                      E-mentoring</p>	<p><b>Virtual collaboration/asynchronous</b>                      E-mail                      Online bulletin boards                      Listservs                      Online communities</p>
<p><b>Self-paced learning</b>                      Web learning modules                      Online resource links                      Simulations                      Scenarios                      Video and audio CDs/DVDs                      Online self-assessment                      Workbooks</p>	<p><b>Performance support</b>                      Help systems                      Print job aids                      Knowledge databases                      Documentation                      Performance/decision support tools</p>

**Source:** Strategies for Building Blended Learning  
 Rossett, Dougliis and Frazee

### 3.5 Challenges

#### 3.5.1 Technical Challenges

The technical challenges are not about getting technology to work on networks. Rather, they consist of ensuring the success of the programme by utilizing and supporting appropriate technologies. Technical challenges include-

- E Ensuring participants can successfully use the technology.
- E Resisting the urge to use technology simply because it is available. (Hofmann, 2011)

#### 3.5.2 Organizational challenges

Management often agrees that blended learning is the correct direction for training initiatives, but it fails to understand that this is a complex process that needs thought beyond an individual programme. Organizational challenges include -

- E Overcoming the idea that blended learning is not as effective as traditional classroom training
- E Redefining the role of the facilitator
- E Managing and monitoring participant progress (Hofmann, 2011)

### 3.5.3. Instructional design challenges

When learning technologies are introduced, attention is often paid to the technology implementation, while the design of the actual appropriate content is left with too little time and budget to create a successful programme. Instructional design challenges include-

- E Looking at how to teach, not just what to teach
- E Matching the best delivery medium to the performance objectives
- E Keeping online offerings interactive rather than just “talking at” participants.
- E Ensuring participant commitment and follow-through with “non-live” elements.
- E Ensuring all the elements of the blend are coordinated (Hofmann, 2011)

### 3.6 Advantages of blended learning:

- E It represents a switch from passive learning to active learning. The focus of the classroom shifts from a presentational format to one of active learning. This involves putting learners in situations which compel them to read, speak, listen and think.
- E It offers learners the opportunity to be either together or apart. The model of blended learning emphasizes bringing together the online and face-to-face classroom components. In addition, a blended delivery system allows students to learn and access material in a variety of modes—an important feature since students often have very different learning styles. In fact, research indicates that blended learning increases students’ chances of meeting course outcomes compared with fully online and even fully face-to-face courses, by decreasing dropout rates, increasing test scores and increasing motivation on the part of students.
- E It adds a human touch to the teaching. The interactive content enables the instructor to create a high level of interest, accountability, and real assessment.
- E It enhances individualization, personalization and relevance. It lets the instructor tailor learning content to the unique needs of different audience segments
- E The model offers students the best of both worlds because instructors and students have greater flexibility and accessibility without sacrificing face-to-face contact. A blended learning approach is an effective and low-risk strategy aimed at meeting the challenge of the transformational changes that technological developments bring to higher education. (Hancock & Wong, 2012)

### 3.7 Future recommendations-

In their review of research into blended learning, Bluic, Goodyear and Ellis (2007) argue that research so far has been focused on different aspects of blended learning, especially the technology, and they argue for a more holistic approach which seeks to understand the complexity of blended settings and processes as part of a whole system. The authors agree with this view and, based on our discussion above, suggest additional avenues for future research into blending learning:

- More insights into the factors and approaches which can improve connections between the virtual and physical elements of blended courses within universities,

- Comparative research into the strengths and weaknesses of different ICTs, especially the new technologies integrated with face-to-face environments, to investigate the characteristics of optimal blends for learning,
- Pedagogical frameworks to support blended learning for teachers and students and
- More investigation into successful models of professional development and support for instructors who adopt this new mode of teaching.

Blended learning provides flexibility in learning for both students and teachers. Integration of the virtual and physical landscapes enables both instructors and students to become learners, but this is most effective when there is institutional support through the provision of professional learning and the opportunity for redesigning courses for the most appropriate blend (Bliuc, 2007).

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