

Blended Learning as A pedagogical Approach to Improve the Traditional Learning and E-Learning Environments

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Abstract:

This paper discusses blended learning strategy from various perspectives, like how blended learning becomes strategy to improve the traditional learning and e-learning environments. It shows also feature of the blended learning and its advantages, types, tools, and effectiveness in education through literature and previous studies. It also includes a study that describe the reason behind blended learning, in this study, we can find that blended learning is more successful, containing different course formats, increasing interaction between students, teachers and content, developing achievements and skills than the traditional learning or e-learning.

Keywords: E-learning, Blended learning ,Traditional Learning

1. Introduction:

The present era has witnessed a colossal advancement in communication and information technologies, which has exerted influence on education. It has been validated by empirical research as being effective in the educational process, which is coming into being as a result. Among the most eye-catching innovations, in anywhere (in homes, schools and universities) and any time, e-learning with its resultant educational software contributes to improving the processes of both learning and teaching, but e-learning has disadvantages such as unavailability of required technologies which till now does not rival to print workbooks, reference material or to reduce social and it's cultural interaction.

Objectives of this paper are to:

- Define blended learning and explore the benefits of blended learning.
- Explain the relations between blended learning and e-learning.
- Provide an overview of the impact of blended learning on academic achievement, satisfaction and skills.

2. Traditional learning;

Traditional learning “is a method of using the conventional means which is largely face to face to deliver instructional materials through the use of classrooms and study centres to learners. The method entails the physical presence of students in the class for learning to take place. The assessment and evaluation of students are done using the same method. Traditional classroom teaching has long favoured didactic and often spontaneous, oral instruction rather than guided independent study” (Alaneme, Olayiwola, & Reju. 2009).

2.1 - **Traditional learning advantages and disadvantages of the following** Sellers, Roberts, Giovanetto, Friedrich ,& Hammargren,2006);

-Advantages of traditional learning:

- Gives the instructor the chance to expose students to unpublished or not readily available material.
- Allows the instructor to precisely determine the aims, content, organization, pace and direction of a presentation. In contrast, more student-centered methods, e.g., discussions or laboratories, require the instructor to deal with unanticipated student ideas, questions and comments.
- Can be used to arouse interest in a subject.
- Can complement and clarify text material.
- Complements certain individual learning preferences. Some students depend upon the structure provided by highly teacher-centered methods.
- Facilitates large-class communication.

- Disadvantages of traditional learning:

- Places students in a passive rather than an active role, which hinders learning.
- Encourages one-way communication; therefore, the lecturer must make a conscious effort to become aware of student problems and student understanding of content without verbal feedback.
- Requires a considerable amount of unguided student time outside of the classroom to enable understanding and long-term retention of content. In contrast, interactive methods (discussion, problem-solving sessions) allow the instructor to influence students when they are actively working with the material.
- Requires the instructor to have or to learn effective writing and speaking skills.

3. e-Learning :

e-Learning “is A combination of content and instructional methods delivered by media elements such as words and graphics on a computer intended to build job-transferable knowledge and skills linked to individual learning goals or organizational performance”(Clark, &Mayer, 2008).

- Advantages of e-Learning(Clarey,2007).

- Flexibility, accessibility, convenience , Multimedia capability, Increased fidelity and Cross-platform capabilities
- Web browser software and Internet connections are widely available
- Inexpensive worldwide distribution and Ease of update
- Just-in-time, personal, adaptive, user-centric
- Can take it multiple times (improved retention, comprehension)

- **Disadvantages of e-Learning** (Clarey ,2007).;

- Access capabilities , Internet connection speed/bandwidth.
- Cost (longer development time), Developer limitation.
- Type of content (not all content is suitable for e-learning).
- Learner motivation and initiative.
- Loss of a live (physically present) instructor may cause concern for some learners

Portability

Another disadvantage to e-learning is the technology involved. Some people do not have ready access to a computer and Internet connection. and reduced social and cultural interaction can be a drawback. The impersonality, suppression of communication mechanisms such as body language, and elimination of peer-to-peer learning that are part of this potential disadvantage are lessening with advances in communications technologies (Kruse, 2004).

4 -Blended Learning:

blended learning could become one of the most significant developments of the 21st century (Thorne, 2003).

4.1 - blended learning definitions:

There are many definitions of Blended Learning are summed up in the following:

- Blended learning is a mix of multimedia technology ,CD , streaming,virtual classrooms, voicemail, email and conference calls, online text animation and video-streaming (Thorne,2003).
- Blended learning means that traditional instructor-led training is being supplemented with other electronic formats. In the context of this book, blended learning programs use many different forms of e-learning (Bersin, 2004).
- Blended learning involves using a combination of synchronous and asynchronous learning delivery methods to meet learning objectives .
- Blended approach is a combination of face - to -face and digital elements (Carliner, & Shank, 2008.) .
- Blended learning that combines various activities such as face-to-face meetings, Internet-based learning modules, and virtual learning communities(Link, &Wagner,2009).
- Blended learning, which combines face-to-face learning with a mixture of online activities, has been hailed as both a cost-effective way to relieve overcrowded classrooms and a convenient alternative to the traditional classroom experience. But it has quickly become much more than that (Bart, 2010).

We can see from the above definitions that blended learning is the compiling of many types of learning method and tools such as traditional learning, Web-based learning (WBL), Web-based instruction (WBI), computer-based learning (CBL), computer-Assisted learning (CAL), mobile learning , remote learning, synchronous and asynchronous communication.

Figure 2: shows blended learning as a combination of e-learning and face-to face learning. The e-learning includes both network-based (online learning, Internet-based learning, and Web-based learning) and non-network-based learning (computer-based learning).

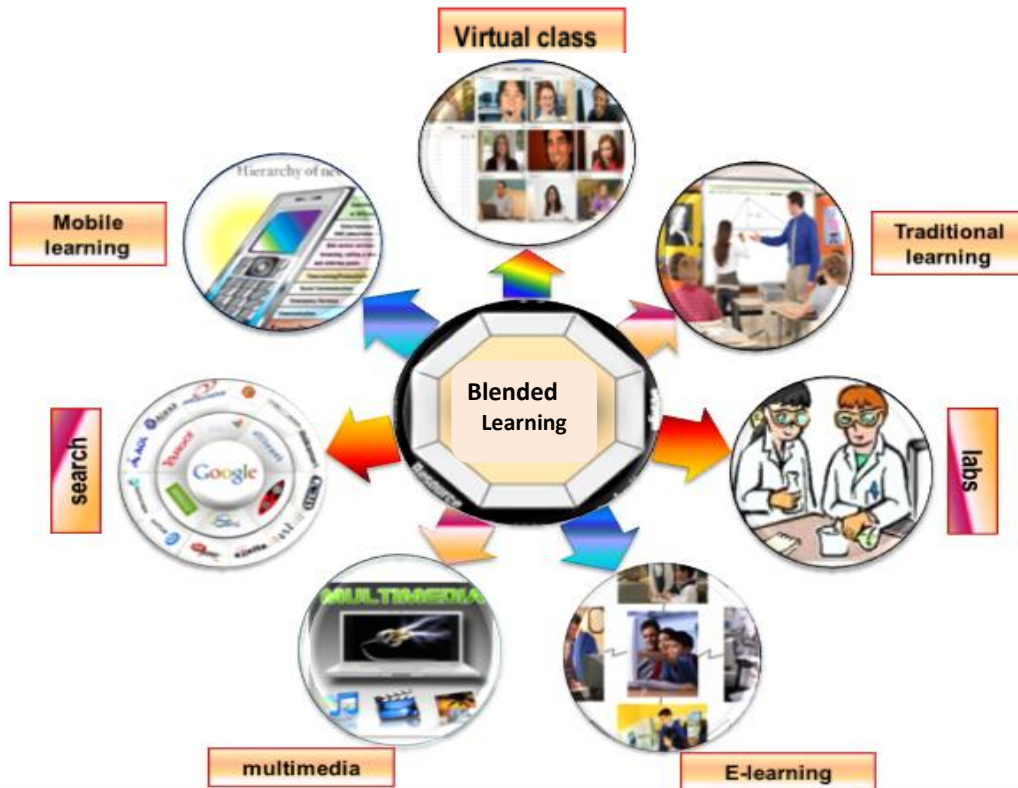


Figure 1 . Components of Blended Learning

4.2 Blended learning benefits derived from many previous studies;

- In blended learning environment students getting familiar with the other students culture, and opening a door for further interaction with domestic students in the classroom (usoff, & Khodabandelou, 2009).
- Blended learning provides students with equal opportunities, regardless of the fact that they either study at a private or state university. Success and motivation depend on the intellectual capacity of the learner, his/her personality, his/her emotions and attitudes towards learning, his/her learning styles, his/her special needs (Gülseçen, Uğurlu, Ersoy, & Nutku, 2005).
- Blended learning is preferred over a traditional lecture format, and promising data emerged to challenge teachers' traditional approach to teaching general health courses at the university level (Melton, Graf,&.Chopak-Foss, 2009)
- Blended-learning students more strongly that their analytical skills improved as a result of the course (Chen, Clement C& Jones2007).

- Blending not only offers us the ability to be more efficient in delivering learning, but more effective (Singh ,2003).
- In Blended-learning marked improvements in pass rates. a generally positive evaluation of the main elements of the blend and widespread use of the new online features (Boyle, Bradley, Chalk, Jones, & Pickard, 2003).
- Blended learning as a way to admit more students to a given academic program. Students reported preferring the blended learning approach and classroom time was reduced (Cottrell, & Robinson,2003).
- Students preferred a combination of both traditional and the e-learning methods of teaching for effective learning(Alaneme, , Olayiwola, & Reju. 2009).
- Blended learning enhances the curiosity of the students in the class, students who are familiar with technology literacy will adopt better, learning approaches than the rest of the students. □with the help of the online learning environment. Increased student satisfaction with the mode of instruction compared to traditional formats(Gülseçen, Uğurlu, Ersoy, & Nutku, 2005) .

4.3 Blended learning framework;

Figure 2. Explain Khan’s framework serves as a guide to plan, develop, deliver, manage, and evaluate blended learning programs. Organizations exploring strategies for effective learning through which accomplishment of a variety of issues were establish to ensure effective delivery of learning and thus a high return on investment(Khan, 2005) .

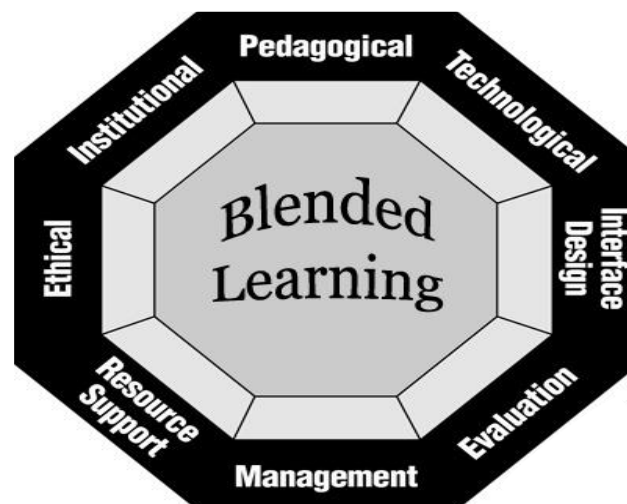


Figure 2. Khan’s blended learning Framework (Khan, 2005).

Dimension of Blended learning:

Institutional: Personnel involved in the planning of a learning program could ask questions related to the preparedness of the organization, availability of content and infrastructure, and learners’ needs.

Pedagogical: The Pedagogical dimension is concerned with the combination of content that has to be delivered (content analysis), the learner needs, and learning objectives (goal analysis).

Technological: Once we have identified the delivery methods that are going to be a part of the blend, the technology issues need to be addressed. This dimension addresses the need for the most suitable learning management system (LMS) that would manage multiple delivery types and a learning content management system (LCMS) .

Interface Design: The interface design dimension addresses factors related to the user interface of each element in the blended learning program. One needs to ensure that the user interface supports all the elements of the blend. The interface has to be sophisticated enough to integrate the different elements of the blend. This will enable the learner to use each delivery type and switch between the different types. The usability of the user interface will need to be analyzed.

Evaluation: The evaluation dimension is concerned with the usability of a blended learning program. The program should have the capability to evaluate how effective a learning program has been as well as evaluating the performance of each learner. In a blended learning program, the appropriate evaluation method should

be used for each delivery type.

Management: The management dimension deals with issues related to the management of a blended learning program, such as infrastructure and logistics to manage multiple delivery types. The management dimension also addresses issues like registration and notification, and scheduling of the different elements of the blend.

Resource Support: The resource support dimension deals with a blended learning program making different types of resources (offline and online) available for learners as well as organizing them.

Ethical: The ethical dimension identifies the ethical issues that need to be addressed when developing a blended learning program. Issues such as equal opportunity, cultural diversity, and nationality should be addressed .

4.4 Types of Blended learning:

There are several types of blended learning that can be used to improve learning environments; e-learning and traditional types rely on the integration between different e-learning tools and traditional learning.

These types are (Singh ,2003):

1- Blending Offline and Online Learning

At the simplest level, a blended learning experience combines offline and online forms of learning where the online learning usually means “over the Internet or Intranet” and offline learning happens in a more traditional classroom setting. We assume that even the offline learning offerings are managed through an online learning system.

2-Blending Self-Paced and Live, Collaborative Learning

The blending of self paced and collaborative learning may include review of important literature on a regulatory change or new product followed by a moderated, live, online, peer-to-peer discussion of the material’s application to the learner’s job and customers.

3- Blending Structured and Unstructured Learning

Not all forms of learning imply a premeditated, structured, or formal learning program with organized content in specific sequence like chapters in a textbook. In fact, most learning in the workplace occurs in an unstructured form via meetings, hallway conversations, or e-mail.

4-Blending Custom Content with Off-the-Shelf Content

Off-the-shelf content is by definition generic—unaware of an organization’s unique context and requirements.

5- Blending Learning, Practice, and Performance Support

Perhaps the finest form of blended learning is to supplement learning (organized prior to beginning a new job-task) with practice (using job-task or business process simulation models) and just-in-time performance support tools that facilitate the appropriate execution of job-tasks.

4.5 Models of Blended learning:

Table .1. explain five blended learning models (Carliner, & Shank,2008.) ;

Model	Defining Feature
e-Learning self-study with other blended media or events	A self-study course is the central learning program. No classroom training is offered. The learner accesses multiple media elements surrounding an online coreand-spoke course.
Instructor led program blended with self-study e-learning	The program is a blend of instructor-led events and self-study e-learning. e-Learning activities are used as prerequisites, activities during the class, and activities between classes.
Live e-learning; Centered with other media added	Live e-learning events, form the basis of the training. Self-study, exercises, and references are provided as surrounding activities.
On-the-job training centered	The main components are on-the-job training with a manager or instructor. Largely used for programs where skills are complex and must be “shown.”
Simulation and lab centered	Simulations or labs are used. Often used for IT and application training where an entire environment can be simulated.

Blended learning opportunities have increased the possible ways that students can learn, with learning occurring across different mediums and at various times. Face to face classes offer assistance in the development of social presence or ‘social comfort’ which is more difficult and often takes longer in the online environment. In virtual learning environments the intrinsic motivation of learners is particularly important in sustaining the collaborative interactivity within the community, while the blended approach brings groups together physically, reminding them of their obligations (Geer,2009).

4.6 Blended Learning improvement:

There are many ways to Improve Blended Learning Course Design . Schreiner,(2010) explained ten ways to Improve Blended in the following :

1-Integrate a Variety of Technologies; Don't rely on one technology option. Blended learning allows for the integration of computers, audio-visual tools and standard visual aids. By using an array of technologies, you increase the likelihood that you reach all of your students.

2- Set Clear Expectations; Make it clear what students should learn as a result of the blended learning course. State your expectations at the beginning of the course, and remind students of these expectations as you move through the lessons.

3-Adopt a Clear Organizational System; Blended learning courses often include an array of independent activities. To ensure that students know what they need to do at each step of the way, organize the course carefully and provide students with a syllabus or course outline, digital or print, so that they can keep track of their assignments.

4- Select Active Learning Techniques; It is easy for students to become disengaged when learning independently. Integrate hands-on activities when students meet in the classroom to require that students actively participate in the lessons.

5-Offer Differentiated Learning; Blended learning affords you the opportunity to reach students at their level. When designing your course, create lessons at a variety of levels. By having leveled lessons available, you can assign the lessons to high, medium and low level students as necessary.

6-Tailor Teaching to an Assortment of Learning Styles; everyone learns differently. Some benefit from visuals, while others thrive when presented with auditory information. As you design the course, integrate an array of different delivery mediums into the course so that all students can be successful, regardless of learning style preference.

7-Take Advantage of Online Resources; The Internet is rich in educational resources. Do not ignore this wealth of material. Instead, save time and effort by integrating online resources into both the classroom and e-learning lessons that make up your blended learning course.

8-Offer Collaborative Learning Options; E-learning can be a solitary endeavor. Allow your students to benefit from working with others by offering collaborative learning options. Use collaboration both in the classroom, by pairing or grouping students, and online by using discussion boards and other e-communication tools.

9- Allow for Easy Communication; Students should be able to easily reach teachers when necessary. Set up a simple system of communication to ensure that students do not become frustrated by lack of teacher assistance.

10-Use Multiple Assessment Methods; Do not always assess the students in the same way. Integrate projects, quizzes and written assignments to ensure that students' deficiency in one area does not have a negative impact on their overall score in their blended learning course.

Conclusion:

In this paper many advantages for blended learning were explain, which is confirmed by previous studies and literatures. These advantages treat the shortcomings of traditional learning and e-learning, and increase the effectiveness and efficiency of teaching and learning. Also the

paper mention of many types of models which represent the blended learning in which Teacher can chooses from it an appropriate learning objectives, content, and characteristics of learners. The blended learning success depends on the quality of designing and applicable of blended learning programs.

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