



E-Blended Learning Using Web Technology

Ms.L.Sundari, Ms.M.Swathika, Ms.V.Nivetha, Ms.L.Megala

¹UG Student, ²UG student, ³UG student, ⁴Assistant Professor

Department of Electronics and Communication engineering, V.R.S. College of engineering and Technology, Arasur, Villupuram, INDIA

Abstract-This paper discusses the program's design and structure, considers the program's impact on academic capacity in Blended learning within the institution, and reflects on future directions for the program and emerging insights into blended learning and participant engagement for both staff and students. E-blended learning is specifically "to provide outstanding learning environments and programs that lead to excellent outcomes for graduates, enabling them to work in and guide a diverse and complex world characterized by increasing change".

Index Terms-Self paced learning, web browser, web museum thematic models.

I. INTRODUCTION

Blended learning means different things different people. This may appear to be an academic point but in reality these definitions illustrate the untapped potential of blended learning. The first generation of e-learning or web learning programs focused on presenting physical classroom based instructional content over the Internet. Furthermore, first generation E-learning programs tended to be a repetition or compilation of online version of classroom-based courses. The experience gained from the first generation of E-learning. Often riddled with long sequences of 'page turner' content and point and click quizzes is giving rise to the realization that a sufficient choices, engagement Social contact, relevance and contact needed to facilitate successful learning and performance.

In the second wave of E-learning, increasing numbers of learning designers are experimenting myth blended learning models that combine various delivery models.

A. Blended Learning

Learning requirements and preferences of each learner tend to be different. Organizations must use a blended of learning approaches in their strategies to get the right content in the right format to the right people at the right time. Blended learning combines multiple delivery media that are designed to complement each other and promote learning and application-learned

behaviour. Blended learning mixes various event-based activities, including face to face classrooms, live e-learning and self-paced learning.

B. Benefits Of Blending

Blended learning is not new. However in the past, blended learning was comprised of physical classroom formats, such as lectures, labs, or handouts. Today Organizations have a myriad of learning approaches and choices. The concept of blended learning is rooted in the idea that learning is not just a one-time event-learning is a continuous process.

C. Internet Tools And Browser

Internet related technological terms and tools need to be understood well before applying them in education.

Web browser

If we consider literal meaning of the two terms, web implies 'Network' and Browser means 'look through'. In this context, web Browser together implies looking through the network of something. This meaning if applied in the concept of internet, then it roughly implies looking through the network of the information pages on available internet. A browser is an application that provides a way to look at and interact with all the information on the word.

D. Real Time Online Learning



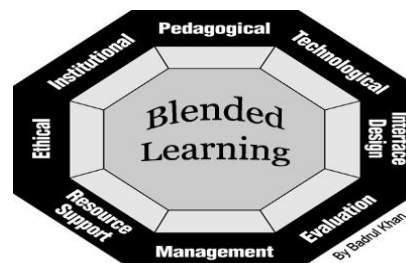
There are many educational sites which offer online courses or other educational activities to be carried out on the spot. Students not only can learn information from others but also can share their ideas with other learners. They can learn about other schools learning styles and study Programmes on the www. This has resulted in the creation of Global education and students are fast becoming the global learners having fellow students from different parts of nation and also from different countries. There are many sites having educational games in different subjects. Students can learn the desired content by playing these games.

For social studies students, there are sites like Web museum which provide multimedia view and allow the students for virtual visits to different historically or geographically important places. E.g. Net logo is one software that allows students to work on various thematic models by playing with the variables. Mathematics and sciences students can carry out virtual experimentations provided in different educational sites. E.g. www allows students to free download the Geiger software which provides them the platform to practically learn different geographic concepts and constructions. This article has two objectives:

1. To provide a comprehensive view of blended Learning and discuss possible dimensions and Ingredients (learning delivery methods) of blended Learning programs.
2. To provide a model to create the appropriate blend By ensuring that each ingredient, individually and Collectively, adds to a meaningful learning Experience.

Badu Khan's blended e-learning framework, referred to here as Khan's *Octagonal Framework* enables one to select appropriate ingredients (<http://BooksToRead.com/framework>).

Khan's framework serves as a guide to plan, develop, deliver, manage, and evaluate blended learning programs. Organizations exploring strategies for effective learning and performance have to consider a variety of issues to ensure effective delivery of learning and thus a high return on investment.



Introduction to Khan's Octagonal Framework

A variety of factors are required to be addressed to create a meaningful learning environment. Many of these factors are interrelated and interdependent. A systemic understanding of these factors can enable designers to create meaningful distributed learning environments. These factors comprise the Octagonal Framework. The framework has eight dimensions: **institutional, pedagogical, technological, interface design, evaluation, management, resource support, and ethical.**

Each dimension in the framework represents category Of issues that need to be addressed. These issues help Organize thinking, and ensure that the resulting learning program creates a meaningful learning experience. **Institutional** The Institutional dimension addresses issues concerning organizational, administrative, academic affairs, and student services. 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. Can the organization manage offering each trainee the learning delivery mode independently as well as in a blended program? Has the needs analysis been performed in order to understand all learners' needs?

Pedagogical The Pedagogical dimension is concerned with the combination of content that has to be delivered (content analysis), the learner needs (audience analysis), and learning objectives (goal analysis). The pedagogical dimension also encompasses the design and strategy aspect of e-learning. This dimension addresses a scenario where all learning goals in a given program are listed and then the most appropriate delivery method is chosen. For example, if a learner is expected to demonstrate a product (in sales training), then using



product simulation as part of the blend is appropriate. If a learner is expected to come up with a new price model for a product, then using a discussion as one of the elements in the blend would be an appropriate choice.

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. Issues include creating a learning environment and the tools to deliver the learning program. 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) that catalogues the actual content (online content modules) for the learning program. Technical requirements, such as the server that supports the learning program, access to the server, bandwidth and

Accessibility, security, and other hardware, software, and infrastructure issues are addressed.

Interface Design

The Interface Design dimension addresses factors related to the user interface of each element in the blended learning program. 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 analysed. Issues like content structure, navigation, graphics, and *help* also can be addressed in this dimension. For example, in a higher education course, students may study online and then attend a lecture with the professor. The blended learning course should allow students to Assimilate both the online learning and the lecture equally well.

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. Delivering a blended learning program is more work than delivering the entire course in one delivery type. 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 making different types of resources (offline and online) available for learners as well as organizing them. Resource support could also be a counsellor/tutor always available in person, via e-mail, or on a chat system.

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.

II. CONCLUSION

While learning technologies and delivery media continue to evolve and progress, one thing is certain organizations (Corporate, Government, and Academic) favour blended learning models over single delivery mode programs.

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BIOGRAPHY



Ms. I. Sundari is a U.G. student in Electronics & Communication Engineering of V.R.S. College of Engineering and technology, Arasur, Villupuram District. My area of interest is Signal Processing.



Ms. M. Swathika is a U.G. student in Electronics & Communication Engineering of V.R.S. College of Engineering and technology, Arasur, Villupuram District. My area of interest is Signal Processing.



Ms. E. Nivedha is a U.G. student in Electronics & Communication Engineering of V.R.S. College of Engineering and technology, Arasur, Villupuram District. My area of interest is Image Processing.



Ms. L. Megala is an Assistant professor of ECE in V.R.S. college of Engineering & Technology. She completed her B.E/ECE in Idhaya Engineering College for women, Chinnasalem in the year 2008. She completed her M.E in the field of Applied Electronics in S.K.P Engineering College, Thiruvannamalai the year 2011. She has attended 6 national conferences and 3 international conference. She is the life time member of ISTE. She has a teaching experience of 6 years. At present, she is going to have a research work in the field of Digital Image Processing.