Evaluation of Blended Learning Programmes in ODL Institutions

(1) School of Education, Pondicherry University, India. (email:mumtazshafi2005@yahoo.co.in)

Abstract: Learning incessantly continues in an individual till his last breath. Learning by formal mode, non-formal or informal or through eclectic approach matters a lot. This wishful learning is possible through ODL Institutions anywhere and at any time. Student needs to gain learning through a blended approach which is the combination of traditional, pre and postmodern and innovative techniques. The concept of blended learning is rooted in the idea that learning is not just a one-time event but it is a continuous process.

Keywords: incessantly, wishful learning, eclectic approach, innovative techniques, blended learning.

Introduction

Learning incessantly continues in an individual till his last breath. It becomes meaningful when he/she derives benefits out of it. The method or modality by which learning gets access is more important as it is on a life long continuum. Learning by formal mode, nonformal or informal or through eclectic approach matters a lot. Unless it is wishful learning and not through compulsion from any external agency it may not leave a mark in the life of the individual. He/She needs to gain learning through a blended approach which is the combination of traditional, pre-modern, post-modern and innovative techniques. Hence, the investigator chose to conduct research in the area of Blended Learning.

Background of the Study

The first generation of e-learning or Web-based learning programs focused on presenting physical classroom-based instructional content over the Internet. Furthermore, first generation e-learning (digitally delivered learning) programs tended to be a repetition or compilation of online versions 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 single mode of instructional delivery may not provide sufficient choices, engagement, social contact, relevance, and context needed to facilitate successful learning and performance.

In the second wave of e-learning, increasing numbers of learning designers are experimenting with blended learning models that combine various delivery modes. Anecdotal evidence indicates that blended learning not only offers more choices but also is more effective.

Review of Related Studies:

We are so early into the evolution of blended learning that little formal research exists on how to construct the most effective blended program designs. However, research from institutions such as Stanford University and the University of Tennessee have given us valuable insight into some of the mechanisms by which blended learning is better than both traditional methods and individual forms of e-learning technology alone. This research gives a confidence that blending not only offers the ability to be more efficient in direct learning, but also more effective in distance mode learning.

Rationale behind the Study:

Education when looked as a service industry can be submitted for a Cost Benefit Analysis (CBA). Whether education as an investment has turned out to be an effective benefit to the individual as well as to the SEUSL: 6-7 July 2013, Oluvil, Sri Lanka

society at large? This question is answered when the technique/concept of a blended learning comes into practice, be it at any level, say, primary or high school or higher education levels.

Educational 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 (ROI).

Blended Learning Programmes:

Blended Learning Programs may include several forms of learning tools, such as real-time virtual/collaboration software, self-paced Web-based courses, electronic performance support systems (EPSS) embedded within the job-task environment, and knowledge management systems. Blended Learning mixes various event-based activities, including face-to-face classrooms, live elearning, and self-paced learning. This often is a mix of traditional instructor-led training, synchronous online conferencing or training, asynchronous self-paced study, and structured on-the-job training from an experienced mentor of a study centre or learning centre.

This is an attempt to study the Blended Learning Practices (BLP) of certain distance mode learning organizations in the present scenario of learning world.

Dimensions of the Blend:

The original use of the phrase "blended learning" was often associated with simply linking traditional classroom training to e-learning activities, such as asynchronous work (typically accessed by learners outside the class at their own time and pace). However, the term has evolved to encompass a much richer set of learning strategies or "dimensions." Today a blended learning program may combine one or more of the following dimensions, although many of these have over-lapping attributes.

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. (Please refer Figure -1) Each dimension in the framework represents a 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.

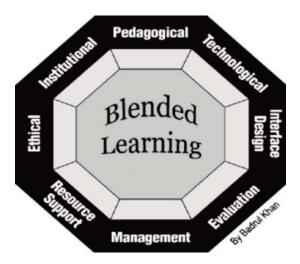


Figure 1: Khan's Octagonal Framework

Institutional Dimension:

The Institutional dimension addresses issues concerning institutional, administrative, academic affairs, and student services. Personnel involved in the planning of a learning program could ask questions related to the preparedness of the institution, availability of content and infrastructure, and learners' needs. Can the institution manage offering each student 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 Dimension:

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.

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This dimension addresses a scenario where all learning goals in a given program are listed and then the most appropriate delivery method is chosen.

Technological Dimension:

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 catalogs 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 Dimension:

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. 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 Dimension:

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 Dimension:

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 Dimension:

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 counselor/tutor always available in person, via e-mail, or on a chat system.

Ethical Dimension:

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.

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. An example of this type of blending may include a learning program that provides study materials and research resources over the Web, while providing instructor-led, classroom training sessions as the main medium of instruction.

Blending Self-Paced and Live, Collaborative Learning:

Self-paced learning implies solitary, on-demand learning at a pace that is managed or controlled by the

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learner. Collaborative learning, on the other hand, implies a more dynamic communication among many learners that brings about knowledge sharing. The blending of self paced and collaborative learning may provide a new approach to learning.

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 classroom occurs in an unstructured form via interactions, hallway conversations, or spontaneous.

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. However, generic content is much less expensive to buy and frequently has higher production values than custom content. Generic self-paced content can be customized today with a blend of live experiences (classroom or online) or with content customization. Industry standards such as SCORM (Shareable Content Object Reference Model) open the door to increasingly flexible blending of off-the-shelf and custom content, improving the user experience while minimizing cost.

The Benefits of Blended Learning Programmes in ODL:

Blended learning is not new. However, in the past, blended learning was comprised of physical classroom formats, such as lectures, labs, books, or handouts. Today, institutions 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. Blending provides various benefits over using any single learning delivery medium alone.

Extending the Reach to the Unreached:

A single delivery mode inevitably limits the reach of a learning program or critical knowledge transfer in some form or fashion. For example, a physical classroom training program limits the access to only those who can participate at a fixed time and location, whereas a virtual classroom event is inclusive of remote audiences and, when followed up with recorded knowledge objects (ability to playback a recorded live event), can extend the reach to those who could not attend at a specific time.

Optimizing Development Cost and Time:

Combining different delivery modes has the potential to balance out and optimize the learning program development while managing cost and time. A totally online, self-paced, media-rich, web-based training content may be too expensive to produce (requiring multiple resources and skills), but combining virtual collaborative and coaching sessions with simpler self-paced materials, such as generic off-the-shelf WBT, documents, case studies, recorded elearning events, text assignments, and PowerPoint presentations (requiring quicker turn-around time and lower skill to produce) may be more effective.

The population accounted for the entire gamut of higher education learners who have registered themselves as students of ODL Pattern. 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.

Objectives

The objectives of the study are to

- provide a comprehensive view of blended learning and discuss possible dimensions and ingredients which are otherwise the learning delivery methods of blended learning programs.
- contemplate a model to create the appropriate blend by ensuring that each ingredient, individually and collectively, adds to a meaningful learning experience.
- analyze the blended learning programmes for their cost effectiveness offered by distance education institutions at higher level.

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Hypothesis

To synchronise with the objectives, the following hypothesis were set:

- The Dimensions of Blended Learning Programme do not provide a comprehensive learning package.
- Blended Learning Programme often effectively results in a meaningful learning experience.
- Blended Learning Programme is no way cost effective.

Research Methodology

A mixed research methodology has been adopted for carrying out the study which has included both historical and experimental method.

Sample:

Out of the many higher learning organisations, four have been selected as shown in the table given below:

One Central University, Two State Universities out of which one is exclusively an ODL and one Deemed University managed solely by private authorities.

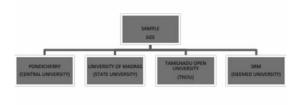


Table: 1 Sample Size

From the above Four Universities 200 students were selected from each and thus totally 800 students were covered. Likewise, Five Academicians were selected from each University taking the total to 20.

The random sampling method was adopted for the selection.

Tools and Techniques:

A well devised questionnaire was designed as a tool to collect data from the students, coordinators, faculties and authorities from the learning centres. Apart from this suitable interviews were also organised with appropriate authorities for eliciting the required information. The methodology of providing Blended Learning programmes were also ascertained and evaluated. Based on the need experimenting the methodology was also adopted.

Procedure of Data Collection:

The Questionnaire designed for eliciting the information from the Students, Coordinator, Faculty and University authorities were circulated to them for appropriate feedback. Apart from the questionnaire the investigator also interviewed each category to bring out the missing inputs required. With the support of the Research Assistant, the investigator distributed the Questionnaire and organised interviews.

Data Analysis and Interpretation

The date collected from the students, academic coordinators, authorities from the universities, professors have been tabulated in a systematic manner so as to analyse the same for arriving at meaningful conclusions. The summed up data were subjected to appropriate statistical techniques to draw inferences as to the validity of the hypothesis.

Discussions of Results and Implications of the Study

The data analysis enabled the investigator to arrive at a tangible solution to the problems presented in the Hypothesis. The first hypothesis was proved wrong as blended learning programme really enabled a comprehensive learning Package. The second hypothesis was proved right as blended learning programme effectively resulted in a meaningful learning experience. The last hypothesis was also proved wrong as the blended learning programme is really cost effective and it was an economically viable proposition.

Conclusion

Learning requirements and preferences of each learner tend to be different. Educational Institutions must use a blend 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 oriented behavior.

While learning technologies and delivery media continue to evolve and progress, one thing is certain that all distance mode organisations favour blended learning models over single delivery mode programmes.

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