BLENDED LEARNING APPROACH FOR ENHANCING STUDENTS LEARNING EXPERIENCES IN A KNOWLEDGE SOCIETY

By

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ABSTRACT

Blended learning which, its name suggests, blends online learning with traditional methods of learning and development. It is a new instructional strategy, based on the non-linear and interactive features of the digital learning and instruction through the web. Exploring the literature review, the purpose of the study was to get a deeper understanding of the characteristics, methodological and pedagogical perspectives of blended learning in an Indian context. Observations from content analysis revealed that the impact of e-learning in the learning environment made tremendous potentialities and it could revolutionize the teaching and learning process. Blended learning is the most logical and natural evolution of our learning agenda. It suggests an elegant solution to the challenges of traditional learning and development to the needs of individuals. Model-driven design provides a sustainable approach that reduces some cost of the complex curriculum development and improves the sustainability of curriculum innovation. As a result of the study, blended learning will focus on optimizing the mix of classroom instruction with online learning, and performance support tools that can maximize the total impact on students' learning experiences.

Keywords: Blended learning, Characteristics, Model Driven Instructional Design, Methodological and Pedagogical Perspectives, Benefits and Challenges.

INTRODUCTION

E-learning has an interesting impact on the learning environment. Although it represents tremendous potential in the way, it could change the learning and development radically, which has rapidly evolved into a concept of blended learning which, like its name suggests, blends online learning with more traditional methods of learning and development. According to Thorne. K (2003), Blended Learning is the most logical and natural evolution of our learning agenda. It suggests an elegant solution to the challenges of tailoring learning and developments to the needs of individuals. It represents an opportunity to integrate the innovative and technological advances offered by online learning with the interaction and participation offered in the best of traditional learning. It can be supported and enhanced by using the wisdom and one-to-one contact of personal coaches.

Blended Learning –a Conceptual Framework

Blended learning as described by De Zure (2002), refers to courses that combine face-to face classroom instruction with online learning. Blended learning involves a shift away from purely classroom interaction, lecture style mode of instruction to a more student-centered style. The present education system calls for learner-centered education and in keeping with this requirement, blended learning is most appropriate. This is so because students are not active and interactive and are directly involved in their own learning, thus making learning more meaningful for them (Buckley, 2002). As stated by Poon. J (2013), and Little John and Pegler (2007), Blended Learning is a 'useful approach, because it changes the focus of learning design by shifting the emphasis from simply considering the face-to-face and online environments to the design of issues, such as considering the process and synergy of blending between online and face-to-face environments'. Therefore, blended learning is itself a blend. It is a mix of pedagogical approaches that combines the effectiveness and the socialization opportunities of the classroom with the technological enhancements of online learning (Dziuban, Hartman, Juge, Moskal, & Sorg, 2006). Thus, the blended

learning approach must be student-centered and use a selection process,

- Combining or mixing web-based technology to accomplish an educational goal,
- Combining pedagogical approaches (e.g. constructivism, behaviorism, cognitivism) to produce an optimal learning outcome with or without instructional technology,
- Combining any form of instructional technology with face-to-face instructor-led training and
- Combining instructional technology with actual job tasks.

Blended learning represents a new approach and mix of classroom and online activities consistent with the goals of specific outcomes and behavioral changes. According to Garrison, D. R. and Vaughan, N. D (2008), the key assumptions of a blended learning design are:

- Thoughtfully integrating face-to-face and online learning.
- A fundament rethinking the course design to optimize student engagement
- Restructuring and replacing traditional class contact hours.

Literature Review

Akkoyunlu, B., and Meryem, Y. S. (2008), have studied student's perceptions in a blended learning environment based on different learning styles. Results revealed that students' views on blended learning process, such as easy use of the web environment differs according to their learning styles. Powell A. (2011), in his case study describes the current e-learning initiatives and projects for the students in secondary schools in New Zealand. Harnisch, H., and Tylor, M. L. (2012), have contributed to the research by identifying from the key stakeholders of students' and deliverers' factors that are specific to the blended learning process and contribute to a structured and positive transition experience for the students. Staker, H., and Horn, M. B.(2012), have observed that there were six main blended-learning models emerging in the sector from the perspective of the student. Yapici, I. U., and Akbayin, H. (2012), have studied the effect of blended learning model on high school students' biology achievement and on their attitudes towards the internet. Their research results revealed that the blended learning model contributed more to the students' biology achievement than Traditional teaching methods. Psycharis, S., Chalatzoglidis, G., and Kalogiannakis, M. (2013), have endorsed the improvement in students' performance and it is associated with participants' conceptual understanding, that students had stronger attitudes towards blended learning.

Purpose of the study

Previous studies disclose that some studies have examined the effect of blended learning on the students' achievement, while other studies described the styles and models of blended learning. Some studies examined stakeholder perception in a blended environment and measured the quality of blended learning. Exploring the literature review, most of the studies are conducted in foreign countries. Hence, the purpose of the study was to get a deeper understanding of the characteristics and methodological and pedagogical perspectives of blended learning in an Indian context.

Characteristics of Blended Learning

Blended teaching models aim to bridge two contrasting perspectives on learning methods, namely, teacher-led classroom teaching and learner-oriented online learning. In fact, different combinations of these perspectives can be utilized. By integrating the particular advantages of classroom teaching and e-learning, students are helped to adjust their learning progress, reinforce what they have learned, and personalize their learning process (Shi-Jer et.al, 2012). According to present e-learning environment,

Blended Learning	
Teachers	Learners
Decisions on learning objectives and control over progress.	Classroom learning and self learning
Teaching of learning strategies	Self assessment
Leading simultaneous learning activities	Participations in discussions and questions
Uploading teaching material	Simultaneous learning
Production of digital learning result evaluations and self-assessment worksheets.	Utilising supporting resources Sharing learning results.

Table 1. Characteristics of blended learning for teachers and learners

the characteristics of blended learning differ for teachers and learners as characterized in Table 1.

Blended Learning: A Model Driven Instructional Design

According to Stephen, L. (2012), a Model Driven Design (MDD) is the concept of developing complex learning experiences through the use of a team model (how the team is staffed and empowered), a process model (how the experience is developed) and a perceptual model (how the experience is discussed and visualized). It provides the ability to share models and learning units beyond the borders of the institution. Blended learning is a process model instructional design committing to do the followings:

- To develop a curriculum concept.
- To develop a high-level design. Develop a language and visualization that tell the story of the program.
- To establish a detailed design for each unit of the curriculum.
- To develop or identify the core or source materials for the unit.
- To design and develop all supporting digital materials and exercises that support the learning objectives for the unit.
- To review and refine each unit of the curriculum for completeness, effectiveness and support of the design objectives and overall quality.
- To implement (teach) the new program.
- Based on the initial and ongoing teaching experiences, assess the program effectiveness for the future.

Blended Learning: Strategies and Tools

Blended learning is a new instructional strategy, based on the non-linear and interactive features of digital learning and instruction through the web. Therefore, this instructional strategy, based on adaptive learning environment is to be integrated into web based instruction in teaching learning process. The introduction of an adaptive and interactive source of learning means that instructors may spend less time for presenting knowledge to groups of students and more time facilitating small groups work and guiding students to appropriate resources of curriculum. This involves a change in all instructional practices and delivery of web-based and blended learning. According to National Research Council (NRC), as cited by Abdelaziz, H. A (2012), blended learning instructional strategy consisted of four basic components. They are,

- Knowledge-centred, wherein the emphasis is on understanding rather than remembering.
- Learner-centred, wherein individual learners' personal and cultural backgrounds and learning styles are valued.
- Community-centred, wherein learning activities are collaborative and foster a community of practice and inquiry that involves legitimates peripheral participation.
- Assessment-centred, wherein formative assessment is used to make students' thinking visible to them, and evaluations are performance-oriented.

Thus, the blended learning instructional design offers a framework for planning, developing and evaluating instructions based on the learners' needs, content requirements and delivery methods.

Following categories of knowledge management tools support blended learning:

- Content portal technologies
- Collaborative filtering techniques
- Search engines and text retrieval
- Directory technologies and expertise locators
- Virtual synchronous classrooms
- Digital content asset management systems
- Web based content management systems
- Electronic document management systems
- Digital library technology
- Knowledge map software

Methodological and Pedagogical Perspectives on Blended Learning

Methodological Perspectives

Constructivist and connectivist perspectives were adopted as a theoretical framework for blended learning

instructional strategy (Abdelaziz, H.A, 2012). Constructivism has a substantial impact on views pertaining to the conditions and instructional strategies essential to build and organize learner's knowledge. Connectivism has considerable views regarding how to contribute, delve and support other people learning. As the World Wide Web (WWW) and the Internet have become the common tools for instruction in the digital age, blended learning environment is providing creative solutions to qualify and quantify learning through the following strategies (Horton, 2008).

- Increasing knowledge- by making it more accessible to people.
- Capturing knowledge- by making it easier for people to record what they know.
- Refining knowledge- so it is expressed in a way that's useful to others.
- Sharing knowledge- which involves making knowledge accessible.
- Applying knowledge-that is action on the messages in the content, and
- Pedagogical assumptions.

With the rapid growth in computer technology and multimedia, instructions should be designed in a way that makes it subject to a sequence of quick tryout and revision cycles (Abdelaziz, H. A, 2012). So, the instruction should be self-regulated process taking place through the learner who is motivated to explore problems and situations. In order to learn through the web as a constructivist learning environment, the learning environment should be shifted to a learner-centered rather than teacher-centred environment. Students and teachers must enter into a collaboration or partnership with technology and multimedia to create a virtual community that supports the learning process. Thus, computer technology and multimedia help in developing multiple perspectives through the learner's exposure to multiple point of view or resources.

Pedagogical Perspectives

To engage learners in knowledge construction, facilitate test for their understanding, and prompt reflection on the knowledge generation process, constructivist and connectivists recommend the creation and use of web-based and blended learning environment. According to Driscoll (2002) and Abdelaziz, H. A (2012), such learning environment should:

- Engage learners in activities to authenticate in the discipline in which they are learning,
- Provide collaboration and opportunity to engage multiple perspectives on what is being learned,
- To support learners in setting their goals and regulating their own learning, and
- Encourage learners to reflect on what and how they are learning.

To achieve this, Blended Learning instructional model makes use of systematic development of instruction, which is composed of various stages: Analysis, Design, Development, Implementation, Execution and Evaluation (Boitshwarelo, 2009). Underlying this process is an emphasis on content structure, cognitive processes and collaborative activities. Content structure is determined by the different information types and performance goals. Cognitive processes have a focus on factors that can enhance cognitive activity such as using visual formats to improve perception. Collaborative activities are characterized by the co-participation in activities and the facilitating role of the instructor.

Benefits and Challenges for Blended Learning

Benefits of Blended Learning

Blended learning benefits the students as well as the institutions. It facilitates improved learning outcomes, access flexibility, a sense of community, the effective use of resources and student satisfaction. It offers inviting opportunities for students to learn, re-learn and have live while learning. The benefits of blended learning reported in a research study by Dhakiria, H (2012), offers the following advantages;

Blended learning can make the students sensitive. The design must consider the student's profile and background for a better learning outcome. Students must be made part of the learning resource and material to optimize learning opportunity. It tackles on student centered paradigm. The learning culture shifted from teacher-centered approach

to student-centered must be sustained and improved. Blended learning offers a convergence of face to face teaching with technology and maximizes learning. The classroom segment uses role plays, case studies, and other discovery learning procedures that explore higher order thinking about real-life issues and situations. It is more effective than traditional way of teaching.

Challenges for Blended Learning

The use of blended learning can pose challenges for students and universities. Unrealistic expectations and feelings of isolation are the challenges to students, where Universities are challenged by time and support issues. Both students and institutions encounter challenges presented by technology issues (Poon, 2013). Vaughan (2007) cites studies suggesting that students enrolled in blended courses can sometimes have unrealistic expectations. Students in those studies assumed that fewer classes meant less work, had inadequate time management skills, and experienced problems with accepting responsibility for personal learning. Students in such courses have also reported feeling isolated due to the reduced opportunities for social interaction in a face-to-face classroom environment. The challenges associated with blended learning are;

- Unrealistic student expectations
- Student-perceived isolation
- Technological problems for students
- Time commitment
- Technological problems for institutions
- Lack of support for course redesign
- Difficulty in acquiring new teaching and technology skills.

Blended Learning Application for Enhancing Students' Learning Experiences

Blended learning is seen as a technology, practice or discipline that can easily become as a bedrock component of e- learning. It is useful for students learning in the following ways:

- Blended learning motivates to learn more.
- Blended learning increases the level of independence in the learning process.
- It assists to acquire a deeper understanding of basic concepts and procedures.
- Hyperlinks to websites provide additional learning materials that are readily available.
- Through blended knowledge management learning get immediate feedback on online assessment.
- Blended learning allows more interaction with the lecturer than in face to face sessions.
- Blended learning promotes online discussions with other students.
- Blended learning makes learning more convenient and the classroom can be accessed in our own time.

Conclusion

The impact of e-learning in the learning environment made tremendous potentialities and it could revolutionize learning and development, and at present evolved into a concept of Blended learning. Blended learning is the most logical and natural evolution of our learning agenda. It suggests an elegant solution to the challenges of traditional learning and development to the needs of individuals. Model Driven Design provides a sustainable approach that reduces some of the cost of complex curriculum development and improves the sustainability of curriculum innovation. It represents an opportunity to integrate the innovative and technological advances offered by online learning with the interaction and participation offered in the traditional classroom setting. As a result of the study, the blend itself will focus on optimizing the mix of classroom instruction with online learning, and performance support tools that can maximize the total impact on students learning experiences in Indian context.

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