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BLENDED LEARNING SYSTEM INTO HIGHER EDUCATION

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Abstract:- Understanding the context, dynamics, and actor interactions of education is a complex process that calls for a variety of viewpoints and degrees of study, especially when it comes to technology advancements. The purpose of this paper is to list some of the most exciting Education department, Gokul Das Hindu Girls College, Moradabad(U.P.) developments in the application of blended learning in higher education. the technological capabilities and the settings in which they are employed. The research identifies a few shared features of digital teaching tools. Digital tools or platforms that enable human-machine interaction, in particular, have the potential to improve automated processes for blended learning delivery types. Within this framework, digital tools like video capsules and intelligent tutoring systems have the potential to enhance educational processes. first by making self-paced online learning activities more accessible to a larger number of students. Secondly, by providing each student with a personalized learning path, you may enhance after-class activities and feedback. When matching learning goals with technology-based implementation, educational technology capabilities offer complementing insights that help choose the optimal course of action. Additional investigation will be necessary to verify these findings empirically.

Keywords:- Blended Learning System, Higher Education

I. INTRODUCTION

The University Grants Commission (UGC) Circular (2021) states that this blended approach to teaching and learning paves the way for greater student participation in learning, increased student-teacher interaction, improved student performance and more flexible learning and teaching environments others. The document proposes that all higher education institutions (HEIs)teach 40% of all courses online and the remaining 60% offline.

The educational policy document NEP-2020 emphasizes that the main goal of blended learning is "to make learning not only effective, but also attractive, stimulating, interesting and challenging." It also emphasized the importance of widespread use of technology in education to improve the learning of 4,444 students and achieve 100 percent literacy. The policy calls for developing digital infrastructure

and empowering teachers to create quality online learning materials. Importantly, blended learning helps achieve the NEP 2020 goals of internationalizing indigenous knowledge through digitized course content while maintaining traditional learning and teaching roles. In addition, emphasis is placed on increasing the use of ICT to improve teaching-learning skills.

Technology has transformed higher education to better meet the unique learning needs and styles of students. From learning management systems (LMS) to adaptive learning software and video conferencing, these innovations have changed how and where students live. For more than a decade, many colleges and universities have successfully integrated distance learning and educational technology into their curricula. More than a third of college and university students took at least one online course in 2018, showing a steady shift away from traditional classrooms.

Blended learning combines offline and online learning. Blended learning, as opposed to hybrid learning, uses online learning to supplement, not replace, traditional face-to-face instruction. In blended learning, students complete assignments, ask questions, interact with other students, and interact with their teachers online. Using the example above, a blended learning teacher can schedule face-to-face training on both days and give students the opportunity to write an online forum post outside of class.Hybrid learning is when traditional face-to-face teaching is combined with offline or distance learning methods such as experiential learning and distance learning. The goal is to use the right combination of instructional strategies to effectively teach content while meeting students' learning needs. Supplemental learning strategies are designed to supplement rather than replace traditional face-to-face training. If the class meets, for example, two days a week, the hybrid learning instructor can reserve one day for lecture and the other for hands-on labs or online assignments.

Here are some examples of hybrid learning tools:

*Video conferencing

*Learning management systems

*Online assignments

*Online discussion forums

*Pre-recorded video training.

Research indicates that there are numerous approaches to designing blended learning courses, from including additional online activities into a regular in-person course to creating the entire course from the ground up. Teachers interpret blended learning differently and then design their courses based on their own interpretations of the concept because there is no widely accepted definition for the term (Deperlioglu & Kose, 2013; Graham, 2012b; Lee, Fong, & Gordon, 2013; Stacey & Gerbic, 2008).Choosing the best blended learning design approach is becoming more difficult due to the abundance of available designs. This is particularly difficult for teachers who do not have the requisite theoretical background or hands-on experience with blended learning, which is the majority of teachers in higher education **(Huang & Zhou, 2005).**

The current study seeks to synthesize the current literature on the design of blended learning courses in order to improve understanding of blended learning course design and contribute to the development of the existing literature in this field. It will then make a number of suggestions to assist traditional face-to-face course instructors in choosing the best strategy for creating blended learning courses. The following are the research questions that guide this investigation:

(1) Which blended learning design approaches are there, and what are the advantages and disadvantages of using each one?

(2) What aspects should higher education instructors take into account when deciding which design style is best?

(3) When is it appropriate to use each design approach? And in what way ought it to be used?

The remaining portions of the paper are organized as follows: Initially, the diverse interpretations of the word "blended learning" are examined, followed by an explanation of how these interpretations have resulted in various design approaches. The many design philosophies are categorized, described, and their advantages and disadvantages are suggested. Lastly, advice for the best time and manner to apply each design method are provided, along with the aspects that educators should take into account.

A combination of "design" and "blended course," "design" and "approach" and "blended learning," "approach" and "hybrid course," "blended learning" and "model," and "hybrid course" and "model" were among the search phrases that were utilized. The facts in the article's title, abstract, and conclusion—as well as the publication date—were taken into consideration when determining whether or not to include it. By the time the article was published, a first choice had been decided. Articles released within the previous ten years, when blended learning has become increasingly popular in higher education institutions, were given precedence. An additional standard was the article's context. Only research done within the framework of postsecondary education was considered. The nation in which the study was carried out served as the final selection criterion.

The concept of blended learning Blended learning is not a new term, it has been used for the last two decades and many meanings of the term have evolved. According to Graham (2012b), blended learning is defined as "significant difference in institutional context" (p. 17). This brief background section covers some of the most commonly used definitions of the term.

In 2002, Driscoll identified four distinct "concepts" to which blended learning refers (p. 1):

1. Combines or integrates web-based technology spaces (eg, real-time virtual classroom, self-paced instruction, cooperative learning, and streaming video).audio and text) to achieve an educational goal.

2. Combine different pedagogical approaches (eg. constructivism, behaviorism, cognitive) to obtain optimal learning results with or without educational technology.

3. combines all kinds of instructional technology (such as videotape, CD-ROM, online training, film) with face-to-face teacher-led training

4. Combining instructional technology with real work tasks to create harmonious learning and work effect.

Based on the work of Driscoll (2002), Oliver and Trig well (2005) proposed three different definitions of blended learning (p. 17):

(1) "The combination of media and tools used in an e-learning environment".

(2) "The combination of multiple pedagogical approaches, regardless of the learning technology used ".

(3)"Integral combination of traditional learning with web-based online approaches".

The most obvious problem with this definition is that it deals with only one approach to the process of designing blended learning courses, which replaces the activities of an existing face-to-face course. As discussed in this article, there are other approaches to designing blended learning courses, each with advantages and challenges. In another attempt to provide a more precise definition of the expression, Bliuc et al. (2007) gave the following definition: Blended learning describes learning activities that include a

systematic combination of co-presentation (face-to-face) interaction and technology-mediated interaction between students, teachers and learning resources (p. 234).

Low-Impact Blending: Adding Extra Activities A low-impact approach adds extra online activities to a traditional face-to-face course. Kaletaet al. (2007) found that most instructors designing blended courses add online components to their traditional courses without removing any of the existing activities. They called this phenomenon "a year and a half syndrome" (p. 127). Kaletaet to. Suggested that additional online activities are usually added to an already created course when inexperienced instructors create their first blended course. By simply adding to their courses, these teachers try to get the benefits of blended learning without investing in rethinking the entire course objectives in the context of the blended learning.

Advantages

(1) A simple approach to designing blended learning that can encourage hesitant teachers to try blended learning. According to Silver wood (2006), teachers who could benefit from blended learning may be reluctant to try it because they think blended learning is too complex and too technical.

(2) Rapid approach to creating blended learning. Because of a specific pedagogical need, teachers can directly add a new activity that satisfies the need without spending additional time and effort to rethink and redesign the entire course or explore the many possible blended learning components and methods. An example is McCarthy's (2010) Facebook activity.

3) Low risk of failure if used carefully. According to Vaughan (2007), there are three main risk factors identified by teachers who have taught blended courses: fear of receiving lower student evaluations, fear of losing control of the course, and uncertainty about the impact of online learning on classroom relationships. Increasing activity while keeping the traditional course almost the same can minimize these risks.

(4) A minimum experience of teaching a traditional course is sufficient to combine the course. With limited experience, the instructor may notice an area of the course that could be supplemented with an online activity.

Challenges

(1) To successfully implement this approach, teachers must have technical expertise. According to Cennamo, Rossi and Ertmer (2009), to successfully integrate technology into the teaching experience, teachers need information that allows:

To identify which technological tool is needed to achieve a certain pedagogical goal

To specify how the tool will be. used to achieve the student's goals improves students' ability to use appropriate technical tools at different stages of learning: search, analysis and production.

choose and adopt technical tools that allow them to identify their needs and solve problems related to their own professional development.

(2) A low-efficiency combination has a high risk of developing two separate courses. According to Newcombe (2011), adding online work to a traditional course without reducing instructional time often results in two separate courses, one online and one face-to-face.

(3) Students may see the addition of extra activities as a burden. as a bonus. Many students may view extracurricular activities as just another assignment on top of an already content-intensive course (Garrison and Vaughan, 2011)

(4) Adding a new function without removing the existing one can excessively increase the teacher's workload. Teachers may encounter time constraints and overwhelming workloads when adding online learning resources (Reeves, 2003).

(5) Administrators are often unaware of the additional activities of an existing course and therefore teachers are not rewarded for their efforts (Amiel and Orey, 2007). According to Lee and Lee (2008), insufficient reward and incentives are one of the most important factors that negatively affect teachers' use of e-learning.

Medium Impact Blending: Replacing Activities A medium impact approach redesigns an existing course by replacing some face-to-face activities with online components. This approach is based on the assumption that some parts of the course would be more effective online activities. In some cases, the rest of the face-to-face sessions remain exactly the same, while in other cases, some changes are made to the class activities (Twigg, 2003). An example of such an approach is the restructuring of a two-year political science course (Garrison and Vaughan, 2011). Initially, the course took place as a three-hour lecture per week. The teacher noticed that the case studies discussed in class were dominated by the same four or five students. A surrogate approach was implemented and the three lectures were reduced to two and an online discussion was started. The professor divided the students into small groups for an online discussion using a learning management system (LMS) and controlled the discussion time. The LMS was also used to inform students of the nature, frequency and length of their contributions. The professor increased the grade of the debate to 10 percent of the final grade. The transformation produced promising results and engaged students in a more sustainable and meaningful discussion.

Advantages

(1) This approach allows teachers to start easily and implement gradually, replacing parts of the course as needed (Duhaney, 2004).

(2) Experiences gained from using this approach can help increase teachers' confidence in delivering in-service courses (Ertmer). and Ottenbreit-Leftwich). , 2010)

(3) A useful approach for instructors who have experience designing blended learning and who do not want to make significant changes to their courses. Kaleta, Garnham and Aycock (2005) pointed out that teachers usually want to teach in the same traditional way as they know and know and find it difficult and difficult to spend a lot of time and effort to develop a new course.

4) To give teachers constant opportunities to try different learning methods and more educational techniques, without losing all the advantages of a traditional course. According to Aycock, Garnham, and Kaleta (2002), learning how to use technology correctly and effectively is difficult and can develop with experience.

Challenges

(1) Teachers must have good technical knowledge and some confidence to implement this approach because it is not possible to go back to the previous teaching method. Ertmer and Ottenbreit-Leftwich (2010)

pointed out that technological knowledge is necessary to facilitate student learning, although it is not sufficient if the teacher does not feel confident using this knowledge.

(2) Replacing and integrating new course components requires commitment. time and effort to put together a combined course.

(3) There are no set standards to guide decisions about how much or what part of the courses can be remunerated. Many factors influence such decisions, mainly the nature of the course content and the intentions of the teacher (Vaughan, 2007).

4) Previous experience teaching a traditional course is beneficial. The main challenge in designing an embedded learning course that uses this approach is to identify the parts of the course that don't work well in a traditional format and then decide whether it works better online. Little or no teaching of the course complicates this process.

(5) Intensive long-term planning, monitoring and evaluation of the course is essential for successful implementation. Achieving a good balance between online and face-to-face components is the result of gradually introducing new resources or technologies to replace existing components and then evaluating whether the use of these new resources or technologies helps students achieve learning. Goals (Duhaney, 2004).

Effective blending: building from scratch An effective approach involves creating a blended learning course from scratch. This approach has been variously described in the literature as total transformation, complete transformation, radical change. Harriman (2004) and Hofmann (2006) described a general way to implement this approach. They suggested that instead of looking at the whole course, the teacher should look at the learning outcomes of each course separately. For each outcome, the teacher must determine the best delivery option for that outcome. They argued that by applying this approach at the learning outcome level, teachers can use the most effective combination of technologies and design a better curriculum. This approach is consistent with a general curriculum development model called constructivist alignment, in which assessment tasks are aligned with learning outcomes (Biggs, 1996). Hofmann also added that it is wrong to assume that redesigning an existing track takes less time than building a new track, and that designers should build an entire track from scratch without worrying about "killing the sacred cows of success." traditional programs" (Hofmann, 2006, p. 33).

Advantages

(1) Provides an opportunity to make improvements and reduce or eliminate problems that may occur in the current course. Teachers start from a new perspective with a better chance of devising a more successful course, especially if there are problems with the traditional one (Graham, 2012a).

(2) Allows better integration of online and face-to-face components. According to Littlejohn and Pegler (2007), it is important to create a course from scratch to effectively integrate face-to-face and online components.

(3) Enable teachers to get the most out of blended learning and better meet their students. 'needs. Building a course from scratch gives a better opportunity to think and redesign

the entire course with the needs of students in mind. Teachers can consider a wider range of learning tools to integrate into their courses, increasing the effectiveness of courses (Carman, 2002).

Challenges

(1) Successful implementation of this approach requires a high level of technical expertise and confidence. High technological competence allows teachers to easily learn new technological tools and use them in their courses (Cook, Owston, & Garrison, 2004). Wozney, Venkatesh, and Abrami (2006) found that one of the main factors influencing teachers' technology integration. it was their belief that the technology would help them better achieve their teaching goals.

(2) This approach has a greater risk of failure than other approaches because it can lead to introducing students to a completely new and untried course.

(3) Teachers must consider a wide range of possible blended learning components and fully understand their implications. According to Walters (2008), the wide range of teaching aids, the variety of combinations of technologies and the lack of subsequent examples for certain mixes mean that teachers face difficult situations and therefore pressures when redesigning their courses.

(4) Requires experience in planning blended learning. According to Huang and Zhou (2005), it is difficult for teachers who lack the necessary theoretical knowledge and experimental experiences to fully utilize blended learning. Ellis, Steed, and Applebee (2006) also argued that knowledge of technology and gradual experimentation with blended learning can help teachers understand how technological media relate to teaching.

(5) Designing and developing a new blended learning course takes a long time. Vaughan (2007) stated that developing a blended course typically takes two to three times longer than developing an equivalent course in a traditional format.

Conclusion :-The concept of blended learning does not have a single agreed upon definition. Although this may seem like an academic perspective, the result is that teachers and course designers can develop their own understanding of the term in the context of their courses or institutions and use it to design their blended courses. This paper identified three different approaches to blended coursedesign (low-impact blending, medium-impact blending, and high impact blending) that Merged from the many definitions of blended learning. This classification is based on the current curriculum and possible changes in student learning. The main advice is that teachers without experience in designing blended learning should start with a low-impact approach and when they gain more experience, they can move to a medium-impact approach and only if they have enough confidence, knowledge and experience. blended learning. learning design, they can try an effective approach.

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