

Review on Blended Learning: Identifying the Key Themes and Categories

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ABSTRACT: *Blended learning is getting popular nowadays. Even though many studies have been conducted on online learning, studies specifically on blended learning are still scarce. This paper investigates a deliberate writing audit about mixed learning of 103 diary research articles. The reason of the audit is to investigate the status of mixed learning investigate and distinguish their topics and classifications as indicated by their substance. Twelve subjects are distinguished in the articles inspected in this paper. Discoveries demonstrated that these investigates predominantly have a place with six classifications: plan, system, factors, assessment, strategy, and audit. Investigates in each class are examined in this paper. Future headings for research are talked about.*

KEY WORD: *Blended Learning, Review, Themes, and Categories.*

1. INTRODUCTION

The term blended learning is being utilized with expanded recurrence in both scholarly and corporate circles. Mixed getting the hang of, joining the best components of on the web and up close and personal schooling is probably going to arise as the overwhelming the showing model of things to come. Mixed Learning could become perhaps the main advancements of the 21st century [1]. Albeit mixed learning or mixed e-learning seems like a confounding term from the start since it is generally another the term for today's educators, it is an unavoidable pattern since the conventional vis-à-vis learning climate is irreplaceable for the social part of educating and learning anyway, Internet-based non concurrent advances, for example, email, discussion, listserv, blog, e-portfolio, web folio.etc.

Blended learning is an approach to education that combines online educational materials and opportunities for interaction online with traditional place-based classroom methods. It requires the physical presence of both teacher and student, with some elements of student control over time, place, path, or pace. While students still attend "brick-and-mortar" schools with a teacher present, face-to-face classroom practices are combined with computer-mediated activities regarding content and delivery. Blended learning is also used in professional development and training settings.

Since blended learning is highly context-dependent, a universal conception of it is difficult. Some reports have claimed that a lack of consensus on a hard definition of blended learning has led to difficulties in research on its effectiveness. A well-cited 2013 study broadly defined blended learning as a mixture of online and in-person delivery where the online portion effectively replaces some of the face-to-face contact time rather than supplementing it [2].

Additionally, a 2015 meta-analysis that historically looked back at a comprehensive review of evidence-based research studies around blended learning, found commonalities in defining that blended learning was "considered a combination of traditional f2f [face to face] modes of

instruction with online modes of learning, drawing on technology-mediated instruction, where all participants in the learning process are separated by distance some of the time." This report also found that all of these evidence-based studies concluded that student achievement was higher in blended learning experiences when compared to either fully online or fully face-to-face learning experiences. "Blended learning" is sometimes used in the same breath as "personalized learning" and differentiated instruction.

The terms "blended learning", "hybrid learning", "technology-mediated instruction", "web-enhanced instruction", and "mixed-mode instruction" are often used interchangeably in research literature.

Although the concepts behind blended learning first developed in the 1960s, the formal terminology to describe it did not take its current form until the late 1990s. One of the earliest uses of the term appears in a 1999 press release, in which the Interactive Learning Centers, an Atlanta-based education business, announced a change of name to EPIC Learning. The release mentions that "The Company currently operates 220 on-line courses, but will begin offering its Internet courseware using the company's Blended Learning methodology [3]".

The term "blended learning" was initially vague, encompassing a wide variety of technologies and pedagogical methods in varying combinations (some making no use of technology whatsoever). The term became more concrete with the publication of the first Handbook of Blended Learning by Bonk and Graham. Graham challenged the breadth and ambiguity of the term's definition, and defined "blended learning systems" as learning systems that "combine face-to-face instruction with computer mediated instruction".

In a report titled "Defining Blended Learning", researcher Norm Friesen suggests that, in its current form, blended learning "designates the range of possibilities presented by combining Internet and digital media with established classroom forms that require the physical co-presence of teacher and students".

Technology-based training emerged as an alternative to instructor-led training in the 1960s on mainframes and mini-computers. The major advantage that blended learning offers is scale, whereas one instructor can only teach so many people. One example is PLATO (Programmed Logic for Automatic Teaching Operations), a system developed by the University of Illinois and Control Data. PLATO in particular had a long history of innovations and offered coursework from elementary to the college level. Mainframe-based training had a number of interface limitations that gave way to satellite-based live video in the 1970s. The advantage here was serving people who were not as computer literate. The major challenge was the expense required to make this work.

In the early 1990s, CD-ROMs emerged as a dominant form of providing technology-based learning as bandwidth through 56k modems wasn't able to support very high-quality sound and video. The limitation to CD-ROMs was tracking completion of coursework, so learning management systems emerged as a way to facilitate progress tracking. The aviation industry used this heavily to track how well one did on courses, how much time was spent, and where someone left off. AICC, Aviation Industry Computer-Based Training Committee, was formed in 1988 and companies such as Boeing used CD-ROMs to provide training for personnel.

Modern blended learning is delivered online, although CD-ROMs could feasibly still be used if a learning management system meets an institution's standards. Some examples of channels through which online blending learning can be delivered include webcasting (synchronous and asynchronous) and online video (live and recorded). Solutions such as Khan Academy have been used in classrooms to serve as platforms for blended learning.

Can give students more adaptable and intelligent learning conditions autonomous from existence. This new way to deal with learning consolidates and incorporates the qualities of the eye to eye and internet learning in a synergistic way to make a unique learning experience compatible with the setting and proposed instructive purposely (Figure 1). As of late, research and usage of mixed learning are getting famous. Indeed in spite of the fact that numerous examinations have been directed on web based learning, concentrates explicitly on mixed learning are still scant. Accordingly, it is expected to investigate the writing to examine the different conclusions for mixed learning accessible. This paper plans to investigate the status of mixed learning research, and recognize their topics and classes as indicated by their substance[4].

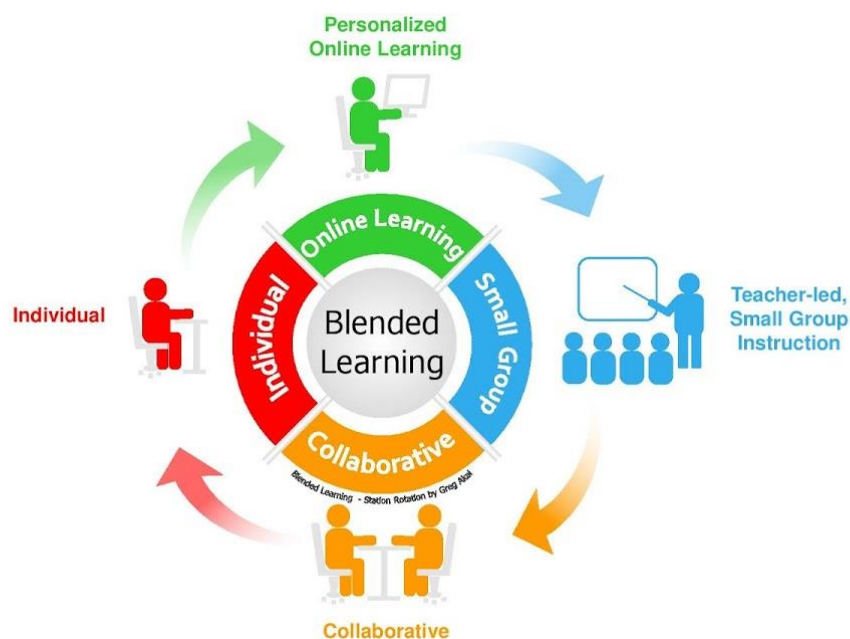


Figure 1: Blended Learning

Blended Learning Design:

There are 29 examination articles which are about mixed learning plan. Among which 7 examination articles stress the online segment, particularly for online apparatuses utilized. 22 articles propose mixed learning models, programs, and so on for the 7 examination articles which stress the on the web segment, 3 of them are about the utilization of Moodle as the online device for mixed learning. Muscarà and Beercock used the wiki apparatus in the Moodle open-source learning the board framework (LMS) as both the gathering information base administration and venture introduction device.

Jia, et al. redid the open-source course the executives framework Moodle to construct the individualized jargon survey and evaluation capacities for English guidance. Hersch zeroed in

on the Moodle testing framework, which offers an option in contrast to traditional testing, to advance its course framework effectively. 4 of them stress online parts[5]. Derntl and Motschnig-Pitrik proposed a layered structure for getting Web-based help from these instructive standards. Méndez and González proposed a Fuzzy Logic-based regulator for a mixed learning approach in a starting control designing course, which depends on a web apparatus called Control Web. Hubackova, et al. arranged on-line courses that are in view of coaches' and understudies' necessities, understudies' information, on instructors' drawn out experience, and obviously on the positive the mentality of ICT understudies (and not just of them) to present day innovations.

Miyazoe and Anderson covered exact examination exploring the subjective changes in composing proficiencies because of utilizing three web-based composition devices, i.e., conversation discussions, web journals, and wikis, in an EFL mixed configuration course. For the 22 articles which propose mixed learning models or on the other hand programs, each article has made its own model or program. For instance, Köse depicted a mixed learning model which comprises of vis-à-vis climate also, a web-based learning measure framed with Web 2.0 innovations. Yeh et al. built up an educator preparing program that incorporates information the board (KM) and mixed learning[6].

2. DISCUSSION

There are 38 exploration articles in our data set concerning about the assessment of mixed learning, in which 20 of them inspected adequacy of mixed learning and gave the comparative end that mixed learning was powerful. For example, Deschacht and Goeman analyzed the impact of mixed learning on grown-up students' scholarly achievement and discovered that mixed learning improves test results. Articles assessed understudies' view of mixed learning. The majority of them got positive outcomes[7]. For example, Bentley et al. explored the learning experience and impression of the understudies, and indicated a genuinely significant level of understudy Fulfillment with the program. Though, Wakefield et al. found that understudies' perspectives on mixed learning fluctuated. Some were good, while others felt e-learning sometimes fell short for their favored learning style, or the topic.

3 articles assessed the particular instruments in mixed learning climate. Akkoyunlu and Yilmaz-Soylu expanded the assessment of students' perspectives on mixed learning also, its usage cycle by creating and approving a target evaluation instrument. Barnard, et al. given proof toward the dependability and legitimacy of the instrument and demonstrated that the OSLQ is a worthy proportion of self-guideline in the on the web and mixed learning conditions. Dias and Diniz presented another model, to be specific FuzzyQoI that, by utilizing fluffy rationale builds, it quantitatively appraises the clients' (teachers' and understudies') QoI with the LMS Moodle inside a b-learning climate.

3 articles featured the issues or issues to be thought of. Azerbaijan and Troudi introduced issues that must be considered prior to utilize on the web conversation in mixed courses[8]. Hussain and Huey introduced the issues confronted while the understudy gives input, and consequently how can be dealt with resolve the issues? Ramakrishnan, et al. recognized the issues confronted utilizing e-realizing which as it were cover the extent of investigating understudy revenue in learning and take a gander at the exploration model that is connected and show the discoveries of the proper methods of learning[9].

3 articles contrasted mixed learning with face-with face learning. Smith investigated the effect of mixed versus up close and personal educational cost more than one year in a K-12 school in Auckland, New Zealand. Yigit, et al. gave execution assessment of understudies in conventional and mixed instruction for Computer Engineering. Barrios, et al. portrayed the association of the mixed course in correlation with the customary vis-à-vis course and introduced fundamental information on understudy evaluation, the utilization of instructive assets, and the scholastic outcomes acquired in the two enlisted gatherings article assessed three mixed learning designs and finished up the best example among the three examples.

E. System There are 25 exploration articles which are clear in their system in our information base. 16 of them are contextual analyses, in which 8 of them picked one college as the case. Schmidt, et al. created and incorporated a novel virtual magnifying instrument, My Microscope, in a mixed learning model at Ulm University. Holley and Oliver built up a model through cross case examination of understudies' learning encounters at a post-1992 University. Taylor and Newton gave a contextual investigation of an Australian territorial college that examined institutional cycles and instructing and learning approaches that would encourage different understudies' fair admittance to learning[10].

Moskal, et al. utilized the advancement of mixed learning at the University of Central Florida as a model and delineated that with appropriate help and arranging, mixed learning can bring about sure institutional change. Wai and Seng utilized a contextual investigation plan also, 120 business college understudies selected at a private college being examined. Koraneekij and Khlaisang built up a model dependent on the overview of 360 understudies, and the meeting from 3 managers and 12 educators at Staff of Education, Chulalongkorn University, Thailand. Nazarenko introduced a contextual investigation research dependent on the experience of actualizing a mixed learning way to deal with a college address course for understudies of FLT strategy at the Faculty of Foreign Languages and Area Studies at Moscow State University. Park, et al. utilized an information driven way to deal with separate basic action highlights of 612 courses in a huge private college situated in South Korea[11].

3. CONCLUSION

It tends to be seen from the extents that articles about assessment of mixed learning is the most (38 articles), and at that point the plan of mixed learning (29 articles). It shows that the examination of mixed learning is as yet going through the start period so that most articles pointed toward distinguishing the adequacy of mixed learning and planning the mixed learning. Survey articles are the most UN-in our data set, which mirrors the importance and need of our exploration. For the articles which are about mixed learning configuration, most articles attempted to build up a model that is reasonable for mixed learning, there is no normal endorsed model till now, which perhaps the motivation behind why this sort of exploration is the normal interest for the specialists. A few articles underline on the web segment, in which moodle is right now the most utilized on the web instrument for the investigates.

For the articles which use mixed learning as a system, just four subjects are concerned, this shows that mixed learning ought to be utilized as a procedure in more subjects later on. For the articles which concern about components impacting mixed learning, a large portion of them concern student factors, there should be more factors which ought to be concentrated later on like educator factors, head factors, strategy factors, social elements, and so forth For the articles worried about assessment of mixed learning, most articles got the end that mixed learning is

successful. Just three articles are about issues and issues in mixed realizing, which ought to be concentrated more to improve the mixed learning later on.

For the strategy, near examination and contextual analysis were generally utilized in mixed learning investigates and we concur that similar examination and a contextual analysis might be the most reasonable examination philosophy for mixed learning till now. For the audit articles in our information base, there are just 10 articles, some of them just audit 3 or 8 articles, which isn't sufficient for audit of mixed learning. More audit articles for mixed learning are required, which mirrors the meaning of this paper. While there are as yet potential restrictions that exist, one of them is that it is difficult to cover all the examination articles accessible for mixed learning, so this paper must be taken as a kind of perspective and further audit including more exploration articles and from different viewpoints are as yet required in the future.

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