IMPACT OF BLENDED LEARNING ON THE WORK LIFE BALANCE OF HIGHER EDUCATION TEACHERS: A BIBLIOMETRIC ANALYSIS

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Abstract

By outlining the few researches on the topic "Impact of blended learning on the work life balance of higher education teachers" that has been done, this study tries to fill the research gap. The Dimension database was used to retrieve the research data. The time period under study is from 2018 through 2022. Research has been done on citation analysis based on authors, documents, organizations, and countries. Utilizing the free and open-source VOS viewer, the data is analysed. According to the results of the bibliometrics study, the Australia is the country with the most publications in this area. Singala, Mariamma, Su, Yu-Sheng, Lin, and chien-Liang were the authors of the study's most noteworthy paper. With 300 citations, University of Malaya is the organisation with the most number. The year 2022 has the most publications. This paper presented the publication patterns and citation trends for Impact of blended learning on the work life balance of higher education teachers. As a result, this work will be helpful to emerging scholars in this field.

Keywords:- Blended Learning, work life balance, higher education teaching, VOS viewer, citation analysis.

The last few years have registered a dramatic increase in use of internet in education and a continued investment by educational institutions to increase the integration of technology components into their course offerings. While many have embraced the introduction of online components on the academic experience, some fear that online courses lack the interaction component so critical to the traditional academic experience (Bailey & Morais, 2005).

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An efficient online learning platform is becoming a significant auxiliary teaching tool for blended learning in higher education, demonstrating its strong teaching advantages. As educators expect to obtain better teaching results through the combination of online teaching techniques and traditional face to face teaching in classroom, it is necessary to understand how the online platform influences the learning process (Gao et al., 2020). Therefore, the purpose was to explore the influence of blended learning in the work life balance of higher education teachers.

The use of bibliometrics analysis, which is now widely used, substantially simplifies determining what research is required in each field. It is a field that aids in the evaluation of research by assisting in the review of publications on a particular issue. In the discipline of Bibliometrics, quantitative approaches are employed to analyse and evaluate the impact of research output. Bibliometrics can be used to track the publications and citations of an individual researcher, a research group, an institution, a nation, or a particular field of study. This shows how research has been influenced, improves it, demonstrates its benefits, and offers suggestions for future study ideas. The impact of a scientific topic is regularly investigated using Bibliometrics tools. This study attempted to bibliometrically analyse the impact of blended learning on the work life balance of higher education teachers.

Statement of the Problem

Despite the increasing adoption of blended learning, there is a lack of comprehensive bibliometric analysis focusing specifically on its effects on the work-life balance of higher education teachers. Existing literature often examines blended learning's pedagogical efficacy or student outcomes but overlooks the nuances of faculty well-being. This gap in research limits our understanding of how blended learning practices influence teachers' workload, stress levels, and overall satisfaction in both professional and personal domains. This study aims to fill this gap by conducting a bibliometric analysis to identify trends, key themes, and influential works in the field. By synthesizing existing research, the study seeks to elucidate the complex relationship between blended learning and work-life balance for higher education teachers, ultimately contributing to more informed policy and practice in higher education institutions.

Research Objectives

- To consolidate the literature on "Impact of blended learning on the work life balance of higher education teachers".

- To determine the trends associated with Impact of blended learning on the work life balance of higher education teachers".

Significance of the Study

The significance of this study lies in its exploration of the impact of blended learning on the work-life balance of higher education teachers, a crucial yet under-examined area in educational research. By conducting a bibliometric analysis, the study provides a comprehensive overview of the trends, patterns, and scholarly attention that this topic has garnered over

time. It highlights the growing importance of blended learning as a pedagogical approach and its implications for educators' professional and personal lives. This research will inform institutional policies and strategies aimed at enhancing teacher well-being, improving the quality of teaching, and optimizing blended learning environments. It also serves as a valuable resource for future studies seeking to address gaps in understanding how blended learning affects educators' work-life balance globally.

Scope of the Study

The scope of this bibliometric study focuses on analyzing the research landscape surrounding the impact of blended learning on the work-life balance of higher education teachers. The study aims to map the evolution of scholarly interest in this topic, influential publications, prominent authors, and leading institutions. Through bibliometric techniques, such as citation analysis and co-authorship networks, the paper aims to offer a comprehensive overview of the current state of knowledge and gaps in this area.

Literature Review

1. Blended learning has gained prominence in higher education, offering a mix of traditional and online methods. Research shows that this approach can reduce workload for teachers, thus potentially improving work-life balance (Garrison & Kanuka, 2004).

2. The integration of technology in education has been linked to flexible teaching environments, enabling educators to manage their professional and personal lives more effectively (Graham, 2013). However, increased technology use can also blur work-life boundaries (O'Connor et al., 2016).

3. Studies suggest that while blended learning can enhance teachers' autonomy, it often increases their workload due to the need for mastering digital tools and redesigning curricula (Benson et al., 2011). This can affect their work-life balance negatively (Dziuban et al., 2018).

4. The adoption of blended learning is often seen as a solution to large class sizes and diverse student needs. However, its effect on teachers' work-life balance remains contested; with some reporting increased pressure and others citing flexibility benefits (Harris et al., 2020).

5. Some research highlights that the asynchronous component of blended learning allows teachers to structure their work more flexibly, which can contribute positively to their work-life balance (Vaughan, 2007). On the flip side, the demand for ongoing availability can add stress (Owston, 2018).

6. Blended learning demands a higher level of preparedness and technological competence from educators, which can initially strain their work-life balance before they adapt to the new teaching mode (Staker & Horn, 2012). Nonetheless, long-term effects can vary across institutions and individuals (Bernard et al., 2014).

7. A key benefit of blended learning lies in its potential to offer teachers more control over their teaching schedule, which could lead to improved work-life balance. However, the constant evolution of digital tools can also result in an increased workload (Halverson et al., 2017).

8. Research indicates that teachers often experience a transition period where the additional effort required to implement blended learning strategies temporarily disrupts their work-life balance (Means et al., 2014). After adjustment, however, many report greater satisfaction (Voogt et al., 2013).

9. Blended learning offers potential benefits for teachers, including flexibility and the ability to work remotely. Yet, this flexibility is often accompanied by increased administrative and technical burdens that may negate work-life balance improvements (Hrastinski, 2019).

10. Although blended learning can support personalized teaching methods, it often requires significant time investment in the development and maintenance of online resources. This has been shown to strain teachers' ability to maintain a balance between professional and personal responsibilities (Bower, 2019).

Research Methodology

Step 1: Articles published in all journals that were accessible in "dimensions database" were included in the proposed review of the literature. Looked at the Dimension papers from 2018 through 2022. The keyword "blended learning and work life balance" was used for content searches.

Step 2: 3562 relevant published studies on Impact of blended learning on the work life balance of higher education teachers have been extracted in.csv format from the Dimension database. A free and open-source VOS viewer was used for data analysis and to find out the most relevant keywords and co-authorship network diagrams.

Figure 1 depicts the overall trend of publications in "Impact of blended learning on the work life balance of higher education teachers" during the past few years. The majority of Dimension articles appeared in 2022. (920 publications). However, there was a notable increase in the production of academic publications between 2018 and 2022. The abundance of "Impact of blended learning on the work life balance of higher education teachers" publications is a sign of the field's substantial level of acceptance and significance.

Bibliometrics Analysis

For bibliometrics analysis, the study has one main section called citations. Additionally, citations sub divided into author, country -specific publications and organisation. In order to provide clarity, these divisions have been divided into subcategories.

Bibliometrics analysis of citation

Citations are being used more frequently as crucial success indicators in research strategy and within the research system. Citations are frequently interpreted as demonstrating the calibre or excellence of the research. Citations

Figure 1

Publication Year
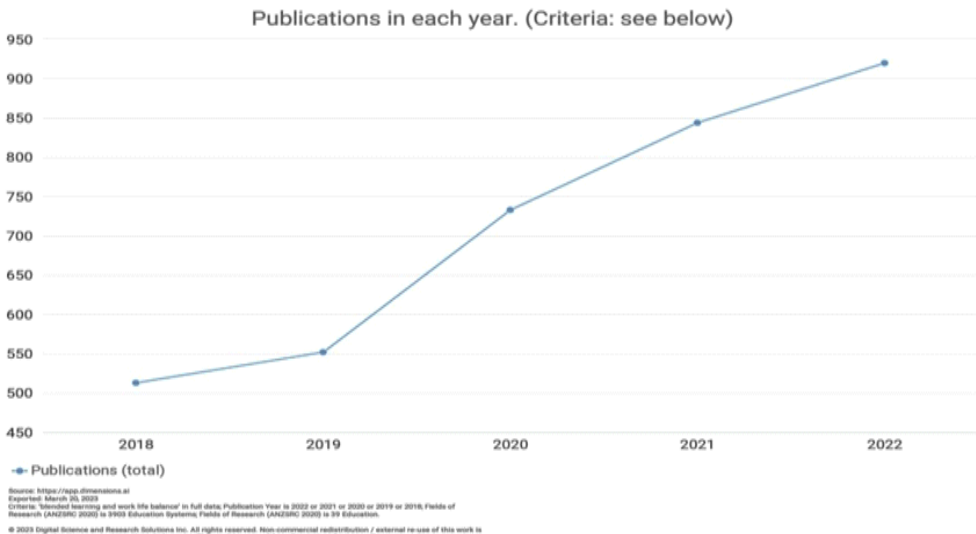
Source: dimensions database

demonstrate the intellectual standing of a publication, author, or piece. A citation is when a piece of writing expressly thanks another and that other work includes a thorough reference or citation inside its list. Authors with a large number of citations are regarded as influential in their areas of study, and journals are ranked according to the number of citations they receive. Citations are used by academic institutions as feedback to evaluate a publication's significance and contribution to a subject. The density diagram shows the most commonly referenced research writers in "Impact of blended learning on the work life balance of higher education teachers" with at least 5 citations.

Authors

Table 1 displays the writers who have received the most citations for their work on the topic of "impact of blended learning on the work life balance of higher education teachers." Because each author approaches the subject from a different angle, their publications demonstrate a great deal of progress in this field. Through the execution of several empirical tests and the analysis of the results, these authors have improved the groundwork for future investigations. Table 1 lists the most active authors on the topic of "impact of blended learning on the work life balance of higher education teachers" from 2018 to 2022. Deale, Cynthia S. was the most productive author in terms of publications, having contributed four publications. Singala, Mariamma who contributed three articles came in second to in Deale, Cynthia S terms of publications.

The citations of an author's work can be used to gauge their impact and authority on the subject. The authors who have been quoted the most on the topic of "impact of blended learning on the work life balance of higher education

Table 1

Most relevant author in terms of citation

| Author	Document	Citation
Singala, Mariamma	3	1061
Su, Yu- Sheng	2	66
Lin, chien-Liang	2	66
Quin, Hanquin	2	59
Hsu, Liwei	2	21

Sources(s): Analysis output

teachers" are listed in Table 1 as Singala, Mariamma, Su, Yu-Sheng, Lin, and chien-Liang, in that order (1061,66 and 66 citations).

Figure 2 displays the writers' citation evaluation. Authors with at least five citations are analysed in the density plot above. There were eighteen clusters displayed, each with a unique tint. Henrich Joseph, who is in the red cluster and has four papers with the most citations, has seventeen citations overall.

Nationality of publication

The data presented in Table 2 provides greater clarity regarding the relative contributions made by each nation to the total body of research as well as the degree of international collaboration among researchers. With this data, it is possible to determine which countries publish the greatest research on a particular subject. The data in the table can be used to assess the degree of international collaboration among

Figure 2

Citation analysis of authors
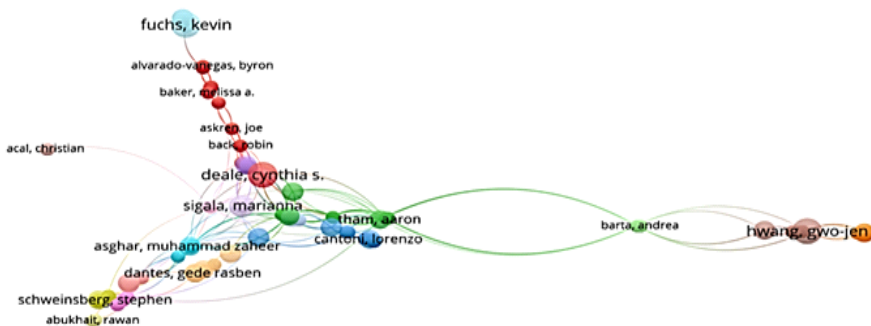
Sources(s): Analysis output

Table 2

Most relevant countries in terms of citations

Country	Documents	Citations
Australia	87	1684
China	129	1638
United Kingdom	83	1217
Cyprus	5	940
Malaysia	60	916

Source(s): Analysis output

academics as well as the contribution made by each nation to global research. This information can be used to determine which nations publish the most studies on a particular subject and whether the writers are amenable to working together.

Figure 3 shows the evaluation of the citations analysis by nation. The countries that have published the most on the subject of "impact of blended learning on the work-life balance of higher education teachers" are analysed below. Australia has received the most citations (1684), followed by China (1638 times).
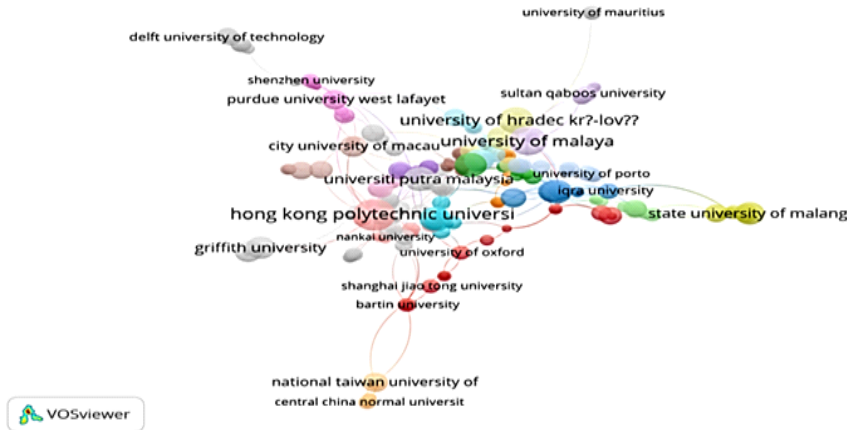
Organization

Figure 4 presents the organization's citation analysis. The organization that has been cited the most for its research on the subject of "impact of blended learning on the work-life balance of higher education teachers" is examined in this

Figure 3

Citation analyses of countries
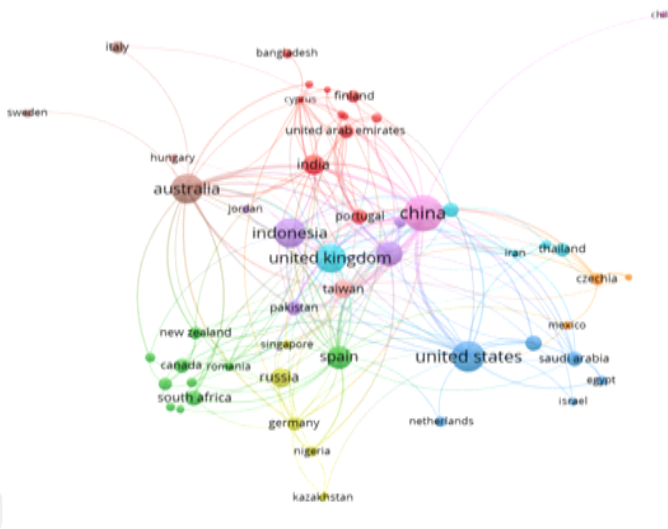
Sources(s): Analysis output

Figure 4

Citation analysis of Organization

Sources(s): Analysis output

section. University of Malaya has 300 citations in this article, more than any other organization. University of Granada has 193 citations.

Findings

The bibliometric analysis reveals that Australia leads in publications related to the impact of blended learning on the work-life balance of higher education teachers, followed closely by China, the United Kingdom, Cyprus, Malaysia, and the United States. This distribution highlights that research in this area is predominantly centered in developed nations, indicating a concentration of academic focus and resources in these regions.

An author-citation analysis identified the most influential researchers in the field, including Singala, Mariamma, Su, Yu-Sheng, Lin, and Chien-Liang, whose work has garnered significant recognition. Their contributions are considered pivotal to the

ongoing discourse on blended learning's impact on educators.

Institutionally, the University of Malaya emerged as the leading organization, with 300 citations, further underscoring its critical role in advancing research on this topic. This finding also suggests that Malaysia is an important contributor to the global conversation on how blended learning influences teachers' work-life balance in higher education.

Suggestions

Based on the findings, the research article "Impact of Blended Learning on the Work-Life Balance of Higher Education Teachers: A Bibliometric Analysis" can incorporate several important suggestions. First, the dominance of publications from developed nations such as Australia, China, the United Kingdom, Cyprus, Malaysia, and the United States indicates the need for more research in

underrepresented regions. Expanding the geographical scope could provide a more comprehensive understanding of how blended learning impacts work-life balance in diverse educational settings. Additionally, an emphasis on author-citation analysis highlights key contributors like Singala, Mariamma, Su, Yu-Sheng, Lin, and Chien-Liang, suggesting that future research should examine the methodologies and frameworks used by these leading authors to further validate and build on their work. Furthermore, the fact that the University of Malaya leads with 300 citations implies that institutions in Malaysia are producing highly influential research in this domain. Collaboration with these institutions could provide valuable insights, and their approach may serve as a model for other universities. Lastly, there is a need to investigate how different regions and institutions implement blended learning, and how this implementation affects teacher well-being, to address possible gaps in global research representation.

Conclusion

From a global perspective, the bibliometrics analysis provides a comprehensive picture of the publication patterns of the topic "impact of blended learning on the work life balance of higher education teachers" from 2018 to 2022. The current study highlights the important topic of "impact of blended learning on the work-life balance of higher education teachers" and its research trends, which could be useful to professionals and academics. Additionally, a growth in the annual publications is anticipated in the future. The present investigation is broad in scope, and the primary analytical term employed is "impact of blended learning on the work-life balance of higher education teachers."

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