



ENGLISH EDUCATION

English Journal for Teaching and Learning
Vol. 12 No. 01 June 2024 pages 12 - 27
<https://jurnal.uinsyahada.ac.id/index.php/EEJ>



E-Learning Trends in English Educational Research: A Systematic Literature Review

Sukarton¹, Siti Drivoka Sulistyaningrum²

Universitas Negeri Jakarta, Indonesia^{1,2}

e-mail: sukarton@mhsunj.ac.id¹, drivoka@unj.ac.id²

Abstract This research examines the trends in e-learning in English education in 2021 using a systematic literature review with content analysis. The study used a sample of 30 undergraduate students from 1992 and Google Scholar, with data from Crossref and Google Scholar. The research found that the e-learning trend is expected to be strong in 2021, with most publications being journal articles and using qualitative instruments like questionnaires. The application used for e-learning is Zoom, and the findings are generally supportive or positive.

Keywords: Trends; E-learning; English Educational Research; A Systematic Literature Review

Abstrak Penelitian ini meneliti tren e-learning dalam pendidikan bahasa Inggris pada tahun 2021 menggunakan tinjauan literatur sistematis dengan analisis konten. Penelitian ini menggunakan sampel 30 mahasiswa S1 angkatan 1992 dan Google Scholar, dengan data dari Crossref dan Google Scholar. Penelitian ini menemukan bahwa tren e-learning diperkirakan akan kuat pada tahun 2021, dengan sebagian besar publikasi berupa artikel jurnal dan menggunakan instrumen kualitatif seperti kuesioner. Aplikasi yang digunakan untuk e-learning adalah Zoom, dan temuannya secara umum mendukung atau positif.

Kata kunci: Tren; E-learning; Penelitian Pendidikan Bahasa Inggris; Tinjauan Literatur Sistematis.

INTRODUCTION

Nowadays, e-learning is a paradigm change in education, with cheap costs and global reach, making educational opportunities more inclusive and empowering students from all backgrounds, as well as encouraging a culture of lifelong learning by equipping individuals with the skills needed to survive in a constantly changing world. (Niyogushimwa, J. 2023) E-Learning is also meant to alter the future of education by establishing a dynamic and engaging learning environment for students all over the world, due to data-driven insights, and its goal is to provide acceptable definitions of terms (Arkorful & Abaidoo, 2015). E-learning employs a variety of teaching contexts and educational topics, making it critical to understand the significance of literature in English learning. It improves interaction among students and teachers by covering listening, speaking, reading, and writing skills in English (Hubalovskya et.al, 2019).

E-learning is a computer-based educational tool or system that enables us to learn from anywhere and at any time. This technique spreads e-learning to various educational areas. In this scenario, students demonstrate how e-learning has benefited education. The most fundamental benefit of using e-learning media is flexibility. E-learning can be viewed as a motivator in terms of self-motivation for students who can regulate their motivation by studying, as well as a service to organizations and educational institutions that wish to provide education without having to change from a single location to another. (Childs, 2005; Park, 2009; and Welsh, 2003).

Since e-learning is a powerful tool for knowledge transfer, it has the potential to surpass traditional learning. E-learning makes it possible to accomplish objectives quickly. Equal access to information, irrespective of a user's location, ethnicity, race, or age, is a crucial indicator of an e-learning environment's contribution to the learning process. Additionally, the e-learning environment fosters self-reliance in students or learners, transforming teachers from isolated knowledge providers into mentors and advisers (Joshua et al., 2016).

Previous studies by Valverde-Berrocose, et.al (2020) are titled Trends in Educational Research about e-Learning: A Systematic Literature Review (2009–2018) in Ecuador. Research findings have shown that MOOC is the most

extensively studied kind of e-learning. The Community of Inquiry and the Technological Acceptance Model were the predominant theories utilized in the examined research. The predominant approach utilized was a case study. The following findings are offered on the aims of our SRL: the main subjects and research sub-themes, the most extensively studied e-learning modality, the most significant theoretical frameworks on e-learning, and the typologies of research methodologies.

Moreover, a study conducted by Lin et al. (2022) titled "*A Systematic Review on English Language e-Learning Technologies in Malaysia*" provides valuable research findings. Here we are using the same approach, specifically SLR (systematic literature review). The objective of this study is to investigate the present trends in research types, evaluation methodologies, contributions, and the relationships between them. The population consists of 27 research conducted between 2019 and 2022. This report will initially offer all descriptive findings, followed by data analysis, correlations, and finally insights into the review analysis procedures. This study has identified three gaps in research domains and has provided three recommendations for future studies that are innovative and new.

Other researchers by Fischer, et.al (2014) entitled *E-Learning Trends and Hypes in Academic Teaching in Germany*. The methodology and findings of a trend study are the procedures and results of a systematic investigation of patterns or changes across time. The current paper presents the methodology and conclusions of trend research in the field of e-teaching. The primary focus of the study was to analyze the different periods of life and the potential future advancements of e-learning innovations. A content analysis was performed on 427 scientific publications from prominent German-speaking e-learning conferences. E-learning trends and fads in academic instruction have been observed and described. The present work examines two main aspects: firstly, it discusses the current academic theories about trend research in the e-learning sector, and secondly, it introduces the study.

Previous research has discovered differences and similarities. One similarity between the approaches is the utilization of systematic literature methodologies and a concentration on e-learning as an area of discussion.

However, there exist many differences among each of them. The researchers' search data spanned from 2018 to 2023, whereas prior researchers examined publications published from 2009 - 2018 or from 2019 to 2022. The researchers initially examined research subjects about eLearning, with a specific emphasis on developments in E-Learning and academic teaching within the realm of educational studies. At last, the author decided to specifically focus on the issue of e-learning in English teaching. Previous papers were focused on sources from Ecuador, Malaysia, and Germany. However, researchers aim to acquire data from Indonesia and other nations.

The e-learning trend relates to English Language Education and the availability of information-driven conclusions. Online platforms collect a vast amount of data regarding learner behavior, performance, and engagement (Zhang, 2021). This useful information can be used to enhance the learning experience and optimize learning tactics. The following framework will be used in this paper to investigate the e-learning trend in English Education Research by examining actual information provided by Google Scholar, and Crossref, that has related, or the same article published. This research is well-organized: findings are discussed, research is classified, and the results are shown. Following that, the researcher compared numerous subjects in e-learning papers. Finally, examining all the content concludes this topic. The purpose of this study is to show variances in e-learning studies about English education across the publications available on Google Scholar, also Crossref. Established to show methods, instruments, data sources, application programs used, and research findings connected to English learning.

METHOD

A systematic literature review is a sort of review that gathers and evaluates several research studies to address a research question using rigorous methodologies (Gough, et.al 2017). A systematic literature review (SLR) is an independent academic process for identifying and evaluating all relevant literature on a topic to conclude the matter at hand. This study employs SLR with a content analysis technique. The objectives of this study are to show or discover variations in e-learning studies on English education published in Crossref, and

Google Scholar. The research checks for methods, instruments, applications used, data sources, and findings connected to English language learning.

The research population is articles comprising 1992 papers that were recently published from 2018 to 2023, with 1000 sourced from Crossref and 992 from Google Scholar. Its publication spanned from January 01, 2018, to November 13, 2023. The review was carried out concerning a sample set consisting of 30 research papers on E-learning in English Education, which constituted half of the whole dataset.

Handayani (2017), data analysis methodologies set numerous steps for internal researchers to follow when using the PRISMA approach. This stage involves the following steps: (a) setting eligibility or inclusion criteria and exclusion criteria, (b) identifying the source information about the source of the data, (c) selecting literature/research articles, (d) data collection, and (e) data extraction. Justifications for inclusion: the research focuses on individuals within the field of education worldwide.

Samples were collected throughout the period from 2018 to 2023. It is required that the notes be available in English translation and be in the form of journal papers. The primary emphasis is on the results acquired. The primary metric for evaluating e-learning is the descriptive assessment of results, which categorizes them as either good or negative. Exclusion criteria: The study does not focus on e-learning or English education beyond the specific research area. Additionally, the study does not include participants from non-educational backgrounds such as managers, company workers, and others. The review of past studies is not relevant. The research findings are inconclusive in addressing the research inquiries. (Di Rezze, 2018).

RESULTS AND DISCUSSION

Researchers found the following findings. It presents a thorough analysis of e-learning trends in English educational research. The indicators are divided into two categories: the first is based on the year and publication, while the second is based on the method, data, and findings.

Based on Year and Publication

The initial findings obtained from Crossref were retrieved using the specific search term "*E-Learning in English Education*" throughout the time frame of 2018 to 2023. Upon analyzing the research findings, researchers can succinctly provide the information in Table 1.

Table 1. Crossref

Year	Data
2018	99
2019	133
2020	145
2021	202
2022	220
2023	201
Total	1000

Table 1 presents the data; it is evident that there are a total of 1000 articles available on Crossref. Its analysis indicates that the year including the highest number of papers produced on the topic of E-learning in English Education will be 2022, with a total of 220 articles. Conversely, the lowest number of publications was recorded in 2018, totaling 99. Therefore, we can refer to some previously published data available on Google Scholar that shares the same search phrases as Crossref's "*E-learning in English Education*". The outcomes of this search are displayed in the subsequent table 2.

Table 2. Google Scholar

Year	Data
2018	138
2019	130
2020	250
2021	276
2022	152
2023	46
Total	992

Table 2 shows the Google Scholar publisher has a total of 992 data, which is somewhat lower than Crossref's count of 1000. Based on the data, it can be inferred that most of the material, namely 276 articles, comes from the year 2021. The lowest number of articles, specifically 46, will occur in 2023. Subsequently,

we proceed to examine the classifications of articles within each database, specifically Crossref and Google Scholar. Table 3 is displayed below.

Table 3. Types of Publications

No.	Database	Types of Sources								Total
		B	B.C.	C	J.A.	J.I.	P.R.	P.C.	P.A.	
1.	Crossref	8	129	3	759	17	7	8	69	1000
2.	Google Scholar	-	-	-	991	-	-	-	1	992

Notes: B (Book), B.C. (Book Chapter), C (Component), J.A. (Journal Article), J.I. (Journal Issue), P.R. (Peer-Review), P.C. (Posted Content), and P.A. (Proceedings Article).

Based on data the Table 3, it can be inferred that Crossref offers a wide range of data, but Google Scholar mostly focuses on journals as sources for journal articles and proceeding articles as references related to E-learning. The chart displays the dominant source types in both databases, namely Journal Articles (J.A.). Crossref gets a count of 759 J.A. sources, whereas Google Scholar has 991. Only two shows are included in the Component for Crossref got 3. Google Scholar has 1 Proceedings Article. It indicates that each type of Crossref database has just 1 type of data. In contrast to Crossref, Google Scholar contains a mere 2 publications. Conclusively, data tables 1 to 3 demonstrate that E-learning in English Education is prevalent in both the Google Scholar and Crossref datasets.

Based on the Research Methodology and Findings section

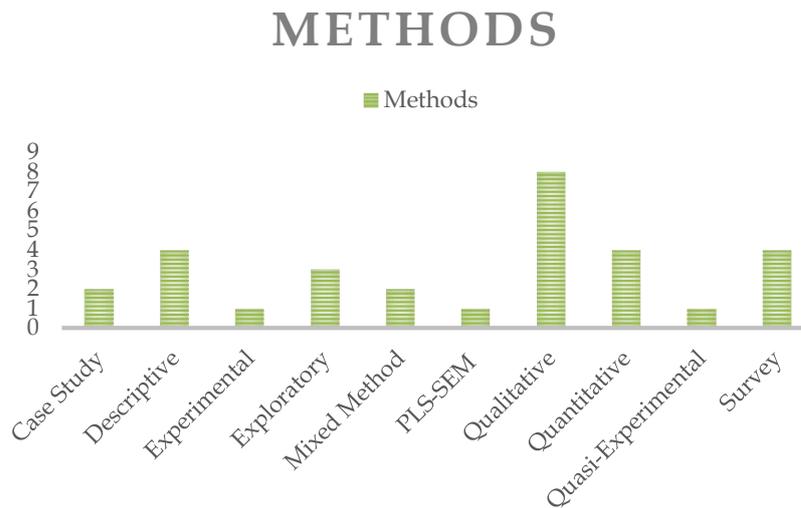
This subpart consists of the outcomes of the analysis, which encompass the methods taken, instruments, data source, applications used, and the findings obtained.

a. The Methods

Throughout this section of the study, a researcher thoroughly examined, perused, and classified articles from the 30 samples utilized, focusing on the methodologies employed in the research. In this instance, the researchers discovered much evidence that research on E-learning predominantly used qualitative methodologies, with 8 papers utilizing this type of methodology. Those who received the number 4 were assigned to quantitative, survey, and descriptive methods. The exploratory gets the number 3 method. The mixed

method, case study is a research method that gets 2 as data collection for method analysis. The remaining categories were quasi-experimental, or experimental, PLS-SEM with each receiving a score of 1. The implications of these discoveries are in Figure 1.

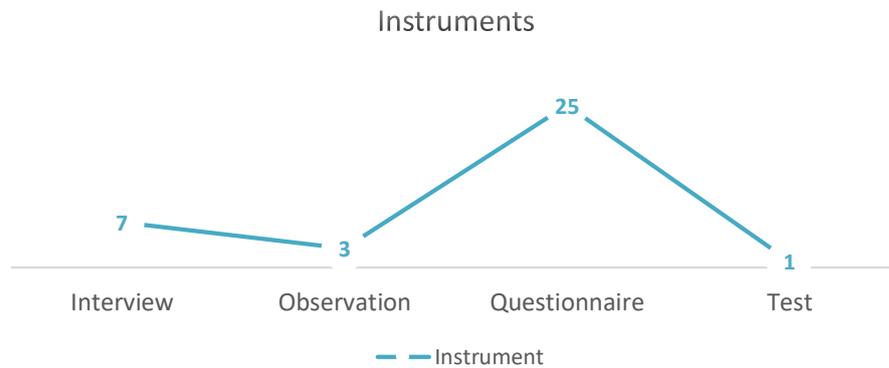
Figure 1. The Methods



b. Instruments of Research

In addition, the data show the research instrument percentage. The research instrument is often selected by those to gather data and is associated with the methodology. Researchers have the option to utilize many research tools when conducting their studies. Out of a total of 30 study samples, it was discovered that there were 5 instruments employed in studies on E-learning in the context of the English language. The total number of instruments utilized is 36. The main ranking used to rate the instrument is a questionnaire, which was used to evaluate half of the articles, resulting in a total of 25 data. Interviews rank as the second most favored tool, with a total of 7. Next, 3 articles use observation as a means or intermediary tool. Next, the minimum requirement is conducting a test on 1 item with a specific instrument. Therefore, this data is represented in Figure 2:

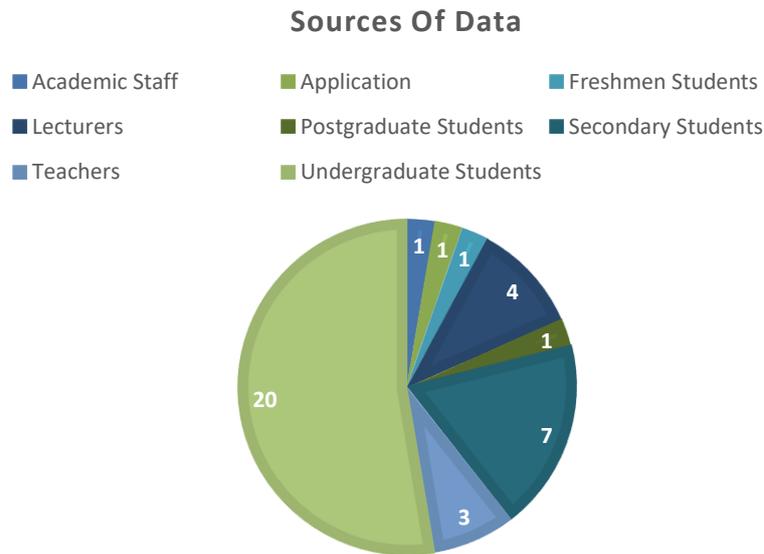
Figure 2. The Chart of Instruments



c. Source of Data

This section presents the conclusions derived from the data source. Upon analyzing the sample data, researchers identified 8 data sources that were utilized for conducting a study of e-learning in the English language. Every study typically relies on two primary sources of data for its researchers. After studying carefully and carefully, several of the study's participants obtained data sources from undergraduate students with 20 of the total data sources, namely 39. In summary, undergraduate students are the primary data sources. The second status is held by secondary students as many as 7 out of 39, making it the second-highest score. Then, in the third place is known that there are lecturers, a total of 4 of the 39 data in this article are data for normal categorization. Subsequently, the teacher received a total of 3 scores, which happened to be the fourth or lowest score. The data sources that obtained the lowest grade 1 were application, postgraduate students, academic staff, and freshmen students.

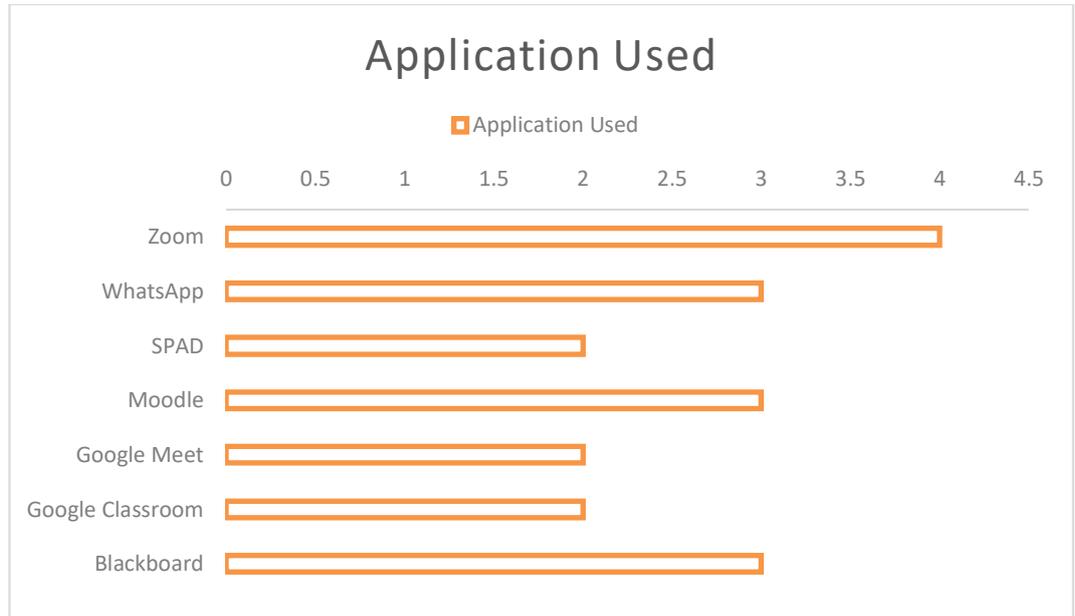
Figure 3. Sources of Data



d. Application Used

This section presents study findings on the utilization of e-learning in technology-based English language studies. For this study, the researchers deliberately selected distinct topics for study to ensure originality and avoid duplication with other scholars. The findings of the article's data analysis reveal many apps that the researcher may not be aware of, which serve as electronic learning instruments in the field of education. During the process of retrieving application data, the researcher discovered a total of 69 data points. Zoom is the e-learning platform utilized, as indicated by 4 articles referencing it. Additionally, three articles explore and investigate the utilization of WhatsApp, Blackboard, or Moodle as e-learning platforms. There are other programs, like Google Meet, Google Classroom, SPAD, and LMS, that have garnered around 2 conversations each. Nevertheless, several programs, such as YouTube, Zenius, Ruang Guru, AI, Edmodo, Game Learning, Facebook, Quipper School, and many more applications, often receive around 1 article for discussion. In this analysis, the remaining 48 articles each receive 1 unit.

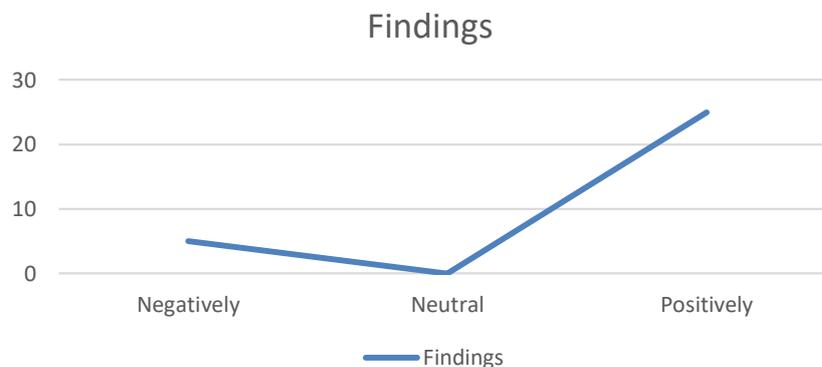
Figure 4. The Chart of Application Used



e. The finding section

Previously, the information supplied in publications was diverse and varied. This was due to discrepancies in how researchers approached questions, techniques, and terminology used in their evaluation tables. The researchers did a detailed review of 30 papers and discovered that each article provided a unique answer, with no two being identical. Nevertheless, all the outcomes are positive. Of the 30 publications, the majority 25 articles showed growing or positive results. Five articles disagree or negatively with the findings and provide a critical analysis of the results. There is no proof of neutrality. The summary of the findings section is in Figure 5.

Figure 5. The Graph of Findings Section



Discussion

The objective of this study is to show the most recent trends and trends in e-learning in the field of English educational research. The research tool comprises papers sourced from publications such as Crossref and Google Scholar. This dataset comprises an examination of several factors, including the year of publication, kind of publication, research methodologies employed, research instruments utilized, data sources, as well as the applications and conclusions derived from the research. After reviewing the data, the researchers determined that in 2022, there was a significant increase in talks regarding e-learning in English educational research, as indicated by a Crossref score of 220. When comparing it to Google Scholar, it revealed 276 articles on the e-learning trend in 2021. Considering most of the data, we can conclude that the E-learning Trends in English Educational Research in 2021 consisted of 276 articles obtained from Crossref. Of the entire 478 articles, 202 are on this trend. As a result, it is expected that the E-learning trend will continue till 2021. This was confirmed by Brika et al. (2022). The results of the bibliometric study, which represents all research on "E-learning in the last two years, namely 2021, is estimated to increase due to the Covid-19 quarantine period". This study predicts that 2021 will coincide with the e-learning trend.

Within the publish type category, Crossref provides a diverse range of data kinds, but Google Scholar offers only two types. Most of the findings from both publications consist of journal articles (J.A.). This agrees with the research findings of Gao, Y., et al (2022) a bibliometric analysis of 644 journal article citations was conducted to determine the impact of a source on E-learning in his research. Therefore, journal articles dominate different types of publications. Afterward, based on the methodology and findings of these studies, the researcher discovered, evaluated, and classed the most widely used method as qualitative, with around 7 publications describing it. This is in line with Chou & Tsai's (2018) research on the trends and features of critical thinking studies in e-learning environments. Whenever it comes to e-learning research, qualitative methods are the most used.

In addition, questionnaires are a popular instrument, with 25 studies using them to collect study data results. This is consistent with Shih et.al (2008)

belief that questionnaires are still the main instrument for gathering research data in cognitive e-learning studies, but more research employs student files or electronic questionnaires. Furthermore, there exists a primary data source that holds greater influence among undergraduate students, surpassing more than half of the maximum data collected. According to Mohammed et.al (2022), undergraduate students are the most common source of information on e-learning platforms, surpassing text discussions, lectures, books, research, and links to scientific and electronic libraries. Additionally, the program utilized was Zoom, which had a scale of 4. Stecuła & Wolniak (2022) concluded that video conferencing solutions like Zoom are the most utilized e-learning platforms.

The last one concluded that 25 data indicated that e-learning may have a positive impact. In total, 5 articles presented people's perspectives based on their research, and they received negative or negative responses. However, according to Qian (2018), the affirmation of support that e-learning platforms represent a significant role in English language education in schools and universities supports suitable methods of teaching and structures for English reading education, helping this to have a positive impact. Based on the preceding discussion, it can be inferred that the e-learning trend will persist in 2021. The most popular type of publisher is a journal article, the many methods employ a qualitative, also instrument specifically a questionnaire, the source data from undergraduate students. The application utilized for e-learning is Zoom. The findings of the study are predominantly supportive or positive.

CONCLUSION

Researchers reviewed 30 papers from Google Scholar and Crossref as well as concluded that the E-learning trend will continue in 2021, based on a total of 478 articles from Google Scholar and Crossref. Additionally, scholars have established that journal articles (J.A.) are the combined population of database types in publishers, specifically, Google Scholar and Crossref, 1750, making it the largest among these two databases.

This study is grounded in many areas that underpin e-learning trends, encompassing methodologies, tools, data sources, applications, as well as research findings. The researchers examined 30 papers from Google Scholar and Crossref, which yielded diverse findings. Qualitative approaches are a prevailing

approach in English education research on e-learning, accounting for 7 out of 30 papers. An instrument that generates significant interest is the utilization of questionnaires or surveys, with data collected from more than half of the sample size, often about 20.

Next, researchers have the data source, which is frequently utilized as study material for responders. Specifically, the sample consists of 20 undergraduate students, constituting approximately half of the total sample size. The Zoom program is widely recognized as the second most renowned tool utilized for facilitating e-learning. Among the 69 data points, zoom garnered 4 votes, since each publication examined by researchers exhibited varying levels of program usage. Ultimately, most of the research on e-learning has favorable or growing results. This conclusion is based on a review of 30 studies, which revealed 25 positive findings. The researcher's conclusion for the study on Trends in E-learning in English Educational Research in 2021 is based on a journal article using a qualitative technique. The instrument used for data collection was a questionnaire, with undergraduate students as the source of information. The learning application employed was Zoom, and the findings indicate a positive outcome. This information can be utilized to create additional research initiatives or focused readers geared at identifying e-learning trends. Overall, these data suggest strong suggestions for future researchers.

REFERENCES

- Arkorful, V. A. (2015). The role of e-learning, advantages and disadvantages of its adoption in higher education. *International Journal of Instructional Technology Distance Learning*, 12(1), 29 - 42. https://www.itdl.org/Journal/Jan_15/Jan15.pdf#page=33
- Brika, S. C. (2022). E-learning Research Trends in Higher Education in Light of COVID-19: A Bibliometric Analysis. *Frontiers in Psychology*, 12. <https://doi.org/10.3389/fpsyg.2021.762819>.
- Childs, S. B. (2005). Effective e-learning for health professionals and students—barriers and their solutions. A systematic review of the literature—findings from the HeXL project. *Health Information & Libraries Journal*, 22, 20-32. <https://doi.org/10.1111/j.1470-3327.2005.00614.x>
- Chou, T. W. (2018). Research Trends and Features of Critical Thinking Studies in E-learning Environments: A Review. *Journal of*

- Educational Computing Research*, 57, 1038 - 1077.
<https://doi.org/10.1177/0735633118774350>.
- Di Rezze, B. V. (2018). A Review of Employment Outcome Measures in Vocational Research Involving Adults with Neurodevelopment Disabilities. *Journal Vocational Rehabilitation*, 49(1), 79 - 96.
<https://doi.org/10.3233/JVR-180956>
- Fischer, H. H. (2014). E-learning Trends and Hypes in Academic Teaching. Methodology and Findings of Trend Study. *International Association for the development of the .* Dresden, Germany.
<https://doi.org/10.1108/ITSE-09-2014-0031z>
- Gao, Y. W. (2022). A Bibliometric Analysis of the Scientific Production of e-learning in Higher Education (1998-2020). *International Journal of Information and Education Technology*, 12(5), 390-399.
<https://doi.org/10.18178/ijiet.2022.12.5.1632>.
- Gough, D. T. (2017). *An Introduction to Systematic Reviews*. London: SAGE Publication Ltd. <https://docs.edtechhub.org/lib/5P6DHX2K>
- Handayani, P. W. (2017). Review dengan PRISMA (Preferred Reporting Items for Systematic Review and Meta-analyses). In *Workshop Riset Sistem Informasi Fakultas Ilmu Komputer UI*. Depok, Indonesia. <https://dosen.perbanas.id/wp-content/uploads/2017/08/Sesi2-SYSTEMATIC-REVIEW-DENGAN-PRISMA.pdf>
- Hubalovskya, S. H. (2019). Assessment of the Influence of Adaptive E-learning on Learning Effectiveness of Primary School Pupils. *Computers in Human Behavior*, 92, 691-705.
<https://doi.org/10.1016/j.chb.2018.05.033>
- Joshua, D. O. (2016). E-Learning platform system for the Department of Library and Information Science, Modibbo Adama University of Technology, Yola: A Developmental plan. *Information Impact: Journal of Information and Knowledge Management*, 7(1), 51-69.
<https://www.ajol.info/index.php/ijikm/article/view/144901>
- Lin, E. L.-L. (2022). A Systematic Review on English Language E-learning Technologies. Lin, E., Lim, K., Faudzi, M., Zabil, M., Omar, R., Selamat, A., & Krejcar, O. (2022). "A Systematic Review on English Language e-Learning Technologies," 2022 IEEE International Conference on Computing (ICOCO), Kota Kinabalu, Malaysia, pp. 380-385, (pp. 380 - 385). Kinabalu, Malaysia.
<https://doi.org/10.1109/ICOCO56118.2022.10031709>.
- Mohammed, D. A.-S.-T. (2022). Information Sources and their Role in E-learning from Iraqi College Students' Viewpoint. *Webology*.
<https://doi.org/10.14704/web/v19i1/web19077>.
- Niyogushimwa, J. (2023, 6 16). *The Importance of eLearning: Revolutionizing Education in The Digital Age*. (Industry.com) Retrieved 10 9, 2023, from <https://elearningindustry.com/importance-of-e-learning-revolutionizing-education-in-the-digital-age>.

- Park, S. Y. (2009). An analysis of the technology acceptance model in understanding university students' behavioral intention to use e-learning. *Journal of Educational Technology & Society*, 12(3), 150-162. <http://www.jstor.org/stable/jeductechsoci.12.3.150>.
- Qian, Y. (2018). Application Research of E-learning Network Teaching Platform in College English Reading Teaching. . *Kuram Ve Uygulamada Egitim Bilimleri*, 18. <https://doi.org/10.12738/estp.2018.5.082>.
- Shih, M. F. (2008). Research and trends in the field of e-learning from 2001 to 2005: A content analysis of cognitive studies in selected journals. *Comput. Educ*, 51, 955-967. <https://doi.org/10.1016/j.compedu.2007.10.004>.
- Stecula, K. W.-K. (2022). Influence of the COVID-19 Pandemic on Dissemination of Innovative E-Learning Tools in Higher Education in Poland. . *Journal of Open Innovation: Technology, Market, and Complexity*, 8, 89-89. <https://doi.org/10.3390/joitmc8020089>.
- Valverde-Berrocso, J. G.-A.-V.-C. (2020). Trends in educational research about e-learning: A systematic literature review (2009–2018). *Sustainability*, 12(12), 5153. <https://doi.org/10.3390/su12125153>.
- Welsh, E. T. (2003). E-learning: Emerging uses, empirical results, and future directions. *International Journal of Training and Development*, 7(4), 245-258. <https://doi.org/10.1046/j.1360-3736.2003.00184.x>
- Zhang, P. S. (2021). Recent Advances in Microfluidic Platforms for Programming Cell-Based Living Materials. *Advanced Materials*, 33(46), 2005944. <https://doi.org/10.1002/adma.202005944>.