

Online or Offline Learning: Systematic Literature Review Analysis In Indonesia

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ABSTRACT

Online or offline learning has an impact on students who are continuing their education. The purpose of this study was to look at the learning process conducted online and the impact it had. The research uses a systematic literature review method. The data collection analyzed includes 15 publication documents. Data were obtained through a database of dimensions in 2019–2023. In data collection, limitations are made, and then the analysis step uses the NVivo software to obtain a more accurate theme point. Results obtained through in vivo analysis include brain capabilities for strategically and effectively understanding visual priming, most notably requiring tissue to access everything. Teaching ethics in business can thus develop learning systems management, be able to detect cheating activities, integrate culture-based character education, promote high-level thinking skills, and provide new energy. Meanwhile, the impact of moving from offline to online is hybrid learning, shifting learning methods, creative problem-solving-flipped classroom vocational education, and transition.

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1. INTRODUCTION

The COVID-19 outbreak has drastically changed the learning system, replacing face-to-face learning with online home learning. Along with the emergence of positive COVID-19 cases in Indonesia, the Ministry of Education and Culture has adopted a policy of learning and working from home since mid-March 2020. Physical contact restriction is a strategy adopted by the government to break the chain

of transmission of the COVID-19 virus (Rasmitadila et al., 2020). However, the implementation of this physical distance policy also has a negative impact on economic, social, and educational growth. Many parties are worried about the government's decision to release students and shift the learning process from school to home with the implementation of the Work from Home (WFH) program (Settersten Jr., 2020). In contrast to Belawati et al. (2023), he succeeded in creating a tool to evaluate the readiness of high school students for independent online learning. With 36 statements, the device proved to have good reliability, construction validity, indicators, and differentiating power.

With the shift from offline to online, there is a new experience involving interaction through internet media. During the crisis, it is important for students, professors, and campuses to build and maintain comfort in communication to reduce uncertainty. Online education brings a new learning culture where students can learn independently and access educational resources flexibly from various locations (Sumandiyare et al., 2021). According to Darmawati et al. (2022), both online and offline learning must be well-controlled by teachers through effective communication. This study aims to explore teacher communication in the process of preparing for learning from online to face-to-face.

Online learning carries the risk of computer vision syndrome (CVS) in college students, affected by emotional exhaustion and the length of computer use (Tika & Fitria, 2023). Students' stress and mental health during online learning are also concerns (Nuryana et al., 2023). Online learning during the pandemic showed variations in student response types, including inconsistent, proactive, self-reliant, and desperate (Surahita et al., 2021). To overcome this challenge, Hakim et al. (2023) developed an ASSURE method that involves analysis of participants' needs, goal setting, selection of appropriate strategies, utilization of technology, participation of students, and evaluation.

Meanwhile, the latest research related to the theme that the authors raise the importance of digital transformation in increasing knowledge acquisition for public sector employees. Digital transformation includes the use of information and communication technologies to increase efficiency and effectiveness in the learning and knowledge development process (Suryanto et al., 2023). The instructional quality of the Zoom platform affects students' learning intentions online. In this context, instructional quality includes aspects such as clear material delivery, proper use of technology, effective interaction, and support from teachers. This study aims to understand how these factors affect students' learning intentions in the context of online learning using Zoom (Wedari et al., 2022). In the new normal era, blended learning has become a good choice as an alternative to traditional learning. This approach combines online and offline learning to provide a flexible learning experience (K. Muhammad, 2022). Thus, researchers are interested in researching online or offline learning.

2. METHODS

Systematic literature review, also known as SLR (systematic literature review), aims to answer research questions that have been carefully established to search, evaluate, and methodically interpret relevant review literature. This approach ensures that research is conducted within a clear and transparent framework, resulting in a deeper understanding of the subject under study. Thus, SLR contributes significantly to developing knowledge and expanding insights into the field of research in question (Wohlin & Prikladniki, 2013). Meanwhile, according to Fajri et al. (2021), a systematic literature review is the process of searching, analyzing, and summarizing literature related to online or offline learning.

2.1 Research Question

In this study, two formulations of problems were proposed as references for presenting discussions:

RQ1: What is the process of learning online and offline?

RQ2: How does learning from offline to online impact?

2.2 Search Literature

After formulating the problem, the first step in the search for literature is to analyze selected documents with similar themes in accordance with this study. The focus of the document search is in the time range from 2019 to 2023. All the data obtained is sourced from past research accessible over the internet. This study used the Scopus database as a source to search for relevant literature data. Keywords used are "Online learning" OR "offline" OR "student perspective" OR "Islamic University of Indonesia"

A search of the data was conducted to answer the problem formulation that has been proposed in this study. A total of 120,548 informational documents were found through Scopus. At this stage, the researchers limited the total number of documents to 1,171.

TITLE-ABS-KEY ("Online learning" OR "offline" OR "student perspective" OR "Islamic University of Indonesia") AND (LIMIT-TO (AFFILCOUNTRY, "Indonesia")) AND (LIMIT-TO (PUBYEAR, 2023) OR LIMIT-TO (PUBYEAR, 2022) OR LIMIT-TO (PUBYEAR, 2021) OR LIMIT-TO (PUBYEAR, 2020) OR LIMIT-TO (PUBYEAR, 2019)) AND (LIMIT-TO (DOCTYPE, "ar")) AND (LIMIT-TO (LANGUAGE, "English")) AND (LIMIT-TO (SRCTYPE, "j"))

2.3 Data Collection

After the literature search stage, the next step is to collect the data that has been obtained to obtain information relevant to the problem formulation. In the data collection process, documents are selected based on accessibility, precision, and conformity to research needs. The following are details about data collection:

1. Review the database
2. Type the word "Online learning" OR "offline" OR "student perspective" OR "Islamic University of Indonesia" for keywords in search as in Figure 1.

The screenshot shows a web browser window with the Scopus search results page. The URL in the address bar is: `https://www.scopus.com/results/results.uri?sort=plf-f&src=s&st1="Online+learning"+OR+"offline"+OR+"student+Islamic+University+of+Indonesia"`. The page displays "1,171 document results". Below this, the search query is repeated: `TITLE-ABS-KEY ("Online learning" OR "offline" OR "student perspective" OR "Islamic University of Indonesia") AND (LIMIT-TO (AFFILCOUNTRY, "Indonesia")) AND (LIMIT-TO (PUBYEAR, 2023) OR LIMIT-TO (PUBYEAR, 2022) OR LIMIT-TO (PUBYEAR, 2021) OR LIMIT-TO (PUBYEAR, 2020) OR LIMIT-TO (PUBYEAR, 2019)) AND (LIMIT-TO (DOCTYPE, "ar")) AND (LIMIT-TO (LANGUAGE, "English")) AND (LIMIT-TO (SRCTYPE, "j"))`. The interface includes options to "Edit", "Save", and "Set alert". On the left, there are "Refine results" and "Open Access" filters. The main content area shows a table of search results with columns for "Document title", "Authors", "Year", "Source", and "Cited by". The first result is: "Covid-19 distance and online learning: a systematic" by Muhaimin, M., Habibi, 2023, BMC Medical Education, with 0 citations.

Figure 1. Keyword search results in the Scopus database

2.4 Quality Assessment

In evaluating and eliminating documents collected in literature studies, several criteria need to be met in the retrieval of advanced data analysis. The following are some of these criteria:

QA1: Was the article published in 2019–2023?

QA2: Does the article come up with an article on online and offline learning?

QA3: Do the articles obtained have any connection or similarity to online and offline learning themes?

Furthermore, each document will be judged based on the quality assessment criteria. Documents that meet the criteria will be considered in the presentation of the discussion, while those that do not meet the criteria will be eliminated. This aims to ensure that only relevant and qualified documents are used in the study.

Y (yes): For articles that have met the criteria

T (no): For articles that do not meet the criteria

Table 1. Number of documents that have fulfilled the quality assessment

No	Authors	Title	Year	Quality Assessment		
				QA1	QA2	QA3
1.	Kristanto, A., Sulistiowati, Pradana, H.D.	Brain-based online learning design in the disruptive era for students in University	2021	Y	Y	Y
2.	Kurniawan, Y., Karuh, C.S.Y., Ampow, M.K., (...), Anwar, N., Cabezas, D.	Evaluation of Hybrid Learning in the University: A Case Study Approach	2022	Y	Y	Y
3.	Susila, H.R., Qosim, A., Rositasari, T.	Students' perception of online learning in the covid-19 pandemic: A preparation for developing a strategy for learning from home	2020	Y	Y	Y
4.	Prasetyo, D.B., Sofyan, L., Muchtar, P.A., Dewi, D.F.	Nudging to handwash during the pandemic – The use of visual priming and salience	2022	Y	Y	Y
5.	Muslim, S., Siang, J.L., Arum, A.P.	Network-based online learning program vocational school in Jakarta state university	2019	Y	Y	Y
6.	Sari, R.C., Warsono, S., Ratmono, D., Zuhrohtun, Z., Hermawan, H.D.	The effectiveness of teaching virtual reality-based business ethics: is it really suitable for all learning styles?	2023	Y	Y	Y

7.	Hizqiyah, I.Y.N., Widodo, A., Sriyati, S.	Development of a learning management system (lms) to facilitate online learning of biodiversity materials	2022	Y	Y	Y
8.	Setyanto, A., Setiaji, B., Hayaty, M., Krisnawati	Cheating activity detection on secure online mobile exam	2020	Y	Y	Y
9.	Muhammad, A.R., Suhaimi, S., Zulfikar, T., Sulaiman, S., Masrizal, M.	Integration of character education based on local culture through online learning in Madras Ahaliyah	2021	Y	Y	Y
10.	Maryani, I., Prasetyo, Z.K., Wilujeng, I., Purwanti, S.	Promoting higher-order thinking skills during online learning: The integration of metacognition in science for higher education	2022	Y	Y	Y
11.	Kristianto, H., Gandajaya, L.	Offline vs online problem-based learning: a case study of student engagement and learning outcomes	2023	Y	Y	Y
12.	Syauqi, K., Munadi, S., Triyono, M.B.	Students' perceptions toward vocational education on online learning during the COVID-19 pandemic	2020	Y	Y	Y
13.	Rahayu, S., Setyosari, P., Hidayat, A., Kuswandi, D.	The effectiveness of creative problem solving-flipped classroom for enhancing students' creative thinking skills in online physics educational learning	2022	Y	Y	Y
14.	Sulisworo, D., Kusumaningtyas, D.A., Handayani, T., Nursulistiyono, E.	The learning design and student's response to physics online learning in rural school of Indonesia	2019	Y	Y	Y
15.	Nasrudin, D., Setiawan, A., Rusdiana, D., Liliasari	Renewable energy online learning: a systematic literature network analysis	2022	Y	Y	Y

Table 1 shows a list of 15 articles that have been selected and analyzed by quality assessment criteria. These articles have been treated and analyzed to answer the proposed problem formulation. Data that does not meet the quality assessment criteria is not included in the table.

2.5 Data Analysis

This study continues with the stage of data analysis that has met the quality assessment criteria. To aid in data analysis, researchers utilize NVivo software which has proven effective in managing and analyzing qualitative research data (Bazeley & Jackson, 2013; Brandao et al., 2015). The analysis process shall follow the following steps: (1) encoding data; (2) verifying and purging data; (3) collecting data; (4) requesting data; and (5) analyzing the data. Using NVivo, data analysis can be performed more accurately and efficiently. After analysis of the data using NVivo software, the next step is to provide responses and discussions appropriate to the formulation of the submitted problem. Based on all the data analyzed, this study concludes the findings that are the result of this literature study.

3. FINDINGS AND DISCUSSION

3.1 RQ1: The learning process while online

In the context of online and offline learning, there are several processes that are important in learning, according to the results of analysis using NVivo software. The following are some online and offline learning processes that have a role to play:

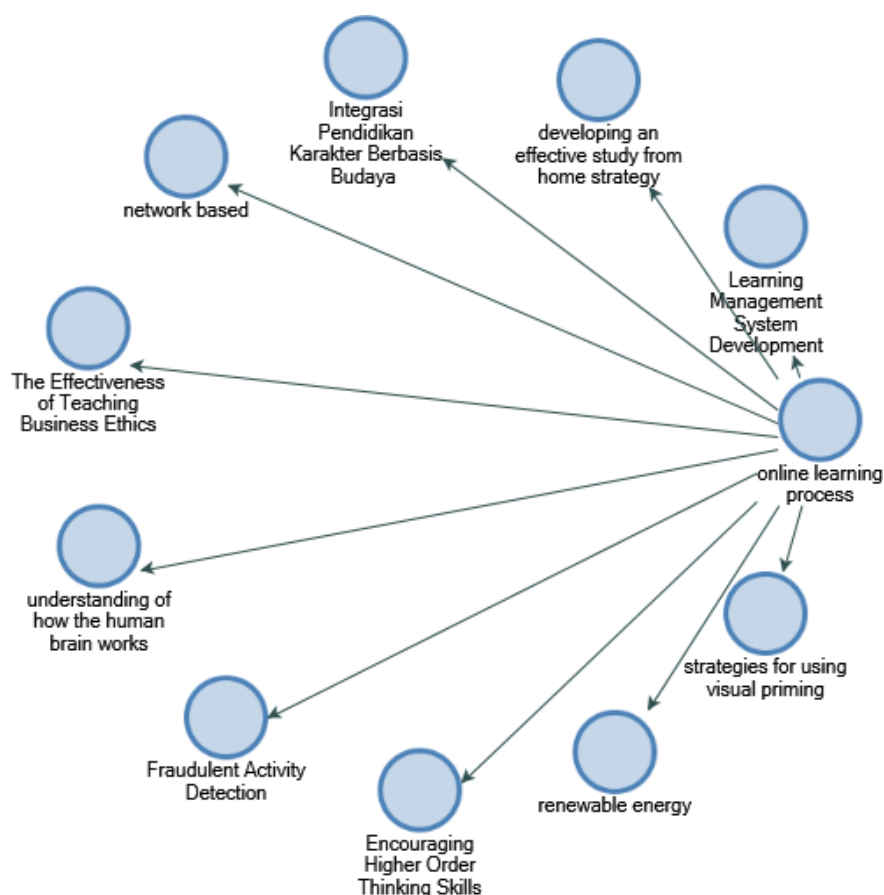


Figure 2. NVivo coding results: online learning process

An understanding of how the human brain works. In a changing era (the disruptive era), this approach was designed for university students. The point of that sentence is how online learning design can integrate neuroscience principles or knowledge of the human brain. This approach aims to create an optimal learning experience by considering how the human brain learns and interacts effectively in an online learning environment (Mariono et al., 2021).

Develop effective learning strategies in the context of online home learning. The focus is on analyzing students' perceptions of their experiences in online learning during the pandemic. Understanding student perceptions can be identified as factors affecting the success of online learning and formulating appropriate strategies to effectively improve their learning experience from home (Sulila et al., 2020).

The use of visual priming strategies as leverage in pandemic times This strategy refers to the use of an online approach involving visuals and messages that highlight the importance of washing hands, with the aim of increasing awareness and compliance with such actions. In the context of a pandemic, this approach aims to effectively convey important messages about hygiene and health to individuals through online media (Prasetyo et al., 2022).

It is based on the network used in the context of vocational schools at Jakarta State University. The program describes the transition from offline learning to online learning, where students can access learning materials and participate in learning activities through online platforms (Muslim et al., 2019). The Effectiveness of Virtual Reality-Based Business Ethics Teaching in Online Learning: Suitable for All Styles of Learning? The sentence deals with the online learning process as it discusses the effectiveness of virtual reality-based business ethics teaching and its relevance to various learning styles (Sari et al., 2023).

Development of a Learning Management System (LMS) to Facilitate Online Learning of Biodiversity Materials Discuss the development of a learning management system (LMS) aimed at facilitating online learning of biodiversity materials. This LMS is designed to facilitate access, management, and interaction between teachers and students in the online learning process on biodiversity topics (Hizqiyah et al., 2022). Detection of fraudulent activity in a safe mobile-based online exam The focus is on developing methods or technologies to detect cheating committed by test takers in the context of online learning. In this case, cheating detection aims to maintain the integrity and security of online exams conducted through mobile devices (Setyanto et al., 2020).

Integration of Local Culture-Based Character Education through Online Learning Development is a method or approach for integrating character values based on local culture into online learning in Madrasah Aliyah. The goal is to ensure that character education continues even though learning is conducted online (A. R. Muhammad et al., 2021). Promoting High-Level Thinking Ability in Online Learning: Integration of Metacognition in Science for Higher Education Metacognition involves self-understanding of thinking and learning, and its use in the context of science can help students develop critical, analytical, and evaluative thinking skills. In online learning, metacognition integration aims to improve students' self-understanding and high-level thinking abilities in learning science online (Maryani et al., 1981).

In order to gain a comprehensive understanding of online learning in the context of renewable energy, this study involves the study of various relevant pieces of literature. In this analysis, key topics, relationships between related concepts, and trends that arise in online renewable energy learning based on existing literature can be explored (Nasrudin et al., 2022).

3.2 RQ2: Effects of learning from offline to online

In this context, the following effects of offline learning on online learning will be explained:

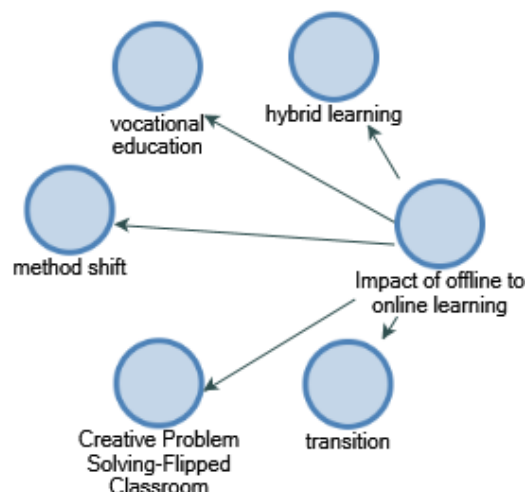


Figure 3. Results of the NVivo Impact Coding of Offline to Online Learning

The hybrid learning process is a case study analysis of educational institutions. This analysis looks at hybrid learning in the context of higher education, analysing its efficacy, benefits, obstacles, and impact (Kurniawan et al., 2022). the transition from traditional classrooms to online formats (Kristianto & Dandajaya, 2023) These shifts have an effect on student participation and the quality of education they receive. The educational process shifts for pupils as a result of vocational training. The impact of online learning on students' capacity to acquire occupational knowledge and skills is just one example of the kinds of student perspectives that can be explored (Shauqi et al., 2020).

Improving Students' Capacity for Creative Thinking Through Online Physics Courses Using the "Creative Problem Solving-Flipped Classroom" Learning Model In the flipped classroom paradigm, students are exposed to course materials through pre-class self-study and then use class time to engage in collaborative problem-solving with their peers (Rahayu et al., 2022). The shift from traditional, classroom-based physical education to virtual, online instruction The constraints and obstacles that students in rural schools in Indonesia may experience necessitate a different approach to online learning design. Responses from online physics courses can shed light on the efficacy of various learning approaches and the barriers preventing students from enrolling in and completing online physics courses in rural schools (Sulisworo et al., 2019).

4. CONCLUSION

From the above, it is clear that his online learning process requires very mature preparation. The data was collected from a Scopus of 1,171 documents, and then QA was conducted to make it easier for readers to understand the research the authors have adopted. So there are 15 documents that address brain capabilities, strategic and effective places, and understanding visual priming, most of which require tissue to access everything. Teaching ethics in business can thus develop learning systems management, be able to detect cheating activities, integrate culture-based character education, promote high-level thinking skills, and provide new energy. Meanwhile, the impact of moving from offline to online is hybrid learning, shifting learning methods, creative problem-solving-flipped classroom vocational education, and transition.

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