

YouTube as Alternatif Media Learning in Vocational Education: A Systematic Literature Review

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Abstrak

YouTube berfungsi sebagai platform pembelajaran alternatif yang berharga dalam pendidikan yang menawarkan beragam video instruksional dalam meningkatkan hasil belajar. YouTube secara positif mempengaruhi pembelajaran siswa dengan meningkatkan keterampilan, kompetensi, motivasi, dan tingkat keterlibatan dalam pembelajaran. Beragam konten, aksesibilitas, dan format menarik dari YouTube menjadikannya sebagai sumber pembelajaran yang kaya dan menyenangkan, terutama saat diintegrasikan dalam konteks pedagogis yang baik. YouTube juga diharapkan menjadi media pembelajaran alternatif pada pendidikan, khususnya pendidikan dan pelatihan kejuruan. Oleh karena itu, perlu dilakukan review jurnal yang membahas tentang YouTube sebagai media pembelajaran alternatif untuk pendidikan vokasi. Metode yang digunakan dalam penelitian ini adalah systematic literature review untuk makalah jurnal yang diterbitkan mulai tahun 2017-2024. Artikel jurnal berasal dari tiga sumber basis data, yakni Scopus, Google Scholar, dan Crossref dengan hasil pencarian sejumlah 2.157 artikel jurnal, kemudian dilakukan empat tahapan sytematic literature review dengan hasil akhir terdapat 86 artikel penelitian dari jurnal yang saling terkait. Temuan dari penelitian ini adalah: Pertama, YouTube diakui sebagai media yang efektif untuk pembelajaran, memberikan kemampuan untuk beradaptasi, personalisasi, dan pengembangan otonomi dan pemikiran kritis. Kedua, video instruksional digunakan untuk memediasi keterampilan kejuruan dan memfasilitasi pembelajaran kejuruan terutama layanan interaktif. Ketiga, YouTube terbukti menjadi media pembelajaran yang sangat efektif untuk kompetensi praktis dan memberikan pemahaman konsep yang lebih mudah dan jelas. Kesimpulan ini menyoroti nilai dan potensi YouTube sebagai sumber daya digital untuk pendidikan berkelanjutan dan pembelajaran kejuruan.

Kata kunci: YouTube, Media Pembelajaran Alternatif, Pendidikan Vokasi

Abstract

YouTube serves as a valuable alternative learning platform in education that offers a variety of instructional videos to improve learning outcomes. YouTube positively influences student learning by increasing skills, competence, motivation, and level of engagement in learning. YouTube's diverse content, accessibility, and engaging format make it a rich and enjoyable learning resource, especially when integrated into an excellent pedagogical context. YouTube is also expected to become an alternative learning media in education, especially vocational education and training. Therefore, it is necessary to review journals that discuss YouTube as an alternative learning media for vocational education. The method used in this research is a systematic literature review of journal papers published from 2017-2024. Journal articles came from three database sources, namely Scopus, Google Scholar, and Crossref, with search results of 2,157 journal articles; then, four stages of systematic literature review were carried out, with the final result being 86 research articles from related journals. The findings of this research are as follows: First, YouTube is recognized as an effective medium for learning, providing the ability to adapt, personalize, and develop autonomy and critical thinking. Second, instructional videos mediate vocational skills and facilitate vocational learning, incredibly interactive services. Third, YouTube has proven to be a very effective learning medium for practical competencies, providing a more accessible and more precise understanding of concepts. These conclusions highlight the value and potential of YouTube as a digital resource for continuing education and vocational learning.

Keywords: YouTube, Alternatif Media Learning, Vocational Education

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1. INTRODUCTION

Vocational education prepares competent, productive, and competitive human resources and a workforce that aligns with industry needs and is capable of entrepreneurship according to their field (Chen et al., 2023; Perić et al., 2020). The key to the success of

vocational education is having quality graduates; the same opinion is expressed (Carruthers & Jepsen, 2021; Rintala & Nokelainen, 2020) The main focus of vocational education is developing work skills for direct application in the world of work. Educational institutions are responsible for creating learning materials and competency tests for students; this is important to help student competency (Pedaste et al., 2023; Sarva et al., 2023). Learning materials are continuously updated to enhance knowledge and skills per dynamic industry trends. In vocational education, measuring students' work abilities is an integration process between learning techniques, practices, and evaluation (Siti et al., 2023; Wahyuni, 2021; Zakaria et al., 2018).

In the teaching and learning process, several factors influence the achievement of learning objectives: educators, students, environment, learning methods, and media. Educators can create various classroom situations, choose learning methods, and create a healthy atmosphere among students (Kariippanon et al., 2018; Nascimento et al., 2019). Learning media helps teachers explain abstract concepts in a concrete and easy-to-understand way. If learning media is used correctly, the learning process will run effectively (Kapi Kahbi et al., 2017; Ratnawati et al., 2021; Wulandari et al., 2023). One of the learning media that is widely used is YouTube, which is a media that is easily accessible anywhere and anytime for online learning and blended learning. In learning activities, you can utilize YouTube technology for successful student learning (Gao & Liu, 2023; Rahmaturrizki & Sukmayadi, 2021), one of which is in the form of video tutorials which are pretty effective for learning and become a source of helpful material for a broad audience (Chtouki et al., 2012; Muslem et al., 2022).

Various studies have been carried out on using learning media in vocational education. If planned well, the use of learning media technology can significantly contribute to vocational education (Puspitasari et al., 2018; Saefudin & Sumardi, 2019). However, there is a need for more knowledge about instructional videos on YouTube to facilitate vocational learning (Flinspach et al., 2023; Shoufan, 2022). For vocational education and training, it has been proposed by study that the taxonomy of online instructional videos and workplace learning consists of professional instructional videos and vlog-type instructional videos (Gao & Liu, 2023). Other studies highlight the challenges and risks with YouTube for learning platforms, suggesting that it best suits guided learning in well-based pedagogy contexts (Callan & Johnston, 2022; Y. M. Lee et al., 2021). Research has shown that YouTube can improve students' skills, competencies, interests, motivation, and level of engagement in learning.

Many studies have examined YouTube as a learning medium that improves student learning outcomes. Therefore, the novelty of this study is necessary to conduct a journal review regarding the effectiveness of YouTube as an alternative learning media, especially in vocational education. This research needs to be carried out as a basis for decision-making regarding appropriate learning media for vocational education. This research aims to examine the literature related to YouTube as an alternative learning media in vocational education, with the focus of discussion including the effectiveness of YouTube as a learning media, the role of YouTube in increasing student motivation and participation, methods and strategies for integrating YouTube in learning, and the challenges and sustainability of YouTube as a vocational learning media.

2. METHODS

The method used in this research is a systematic literature review related to YouTube as an alternative learning media for vocational education. There are four stages in this research namely: 1) database identification, 2) identification based on title, 3) looking for

suitability of abstract content and keywords, 4) deletion of articles that are not appropriate and determining article to be reviewed (Buettner & Buettner, 2016).

To answer the research questions, the solution used is the Systematic Literature Review (SLR) method by selecting articles according to the criteria chosen in this research. The SLR method in this research was carried out by systematically identifying and analysing journal articles in accordance with the recommended stages regarding YouTube as an alternative learning media in vocational education. SLR in this research was carried out in the following stages:

The first stage in this research is selecting a journal database source. The databases used in this SLR are Scopus, Google Scholar, and Crossref. In general, these are articles published in journals in the 2017-2024 period. Searches for journal articles were carried out using Boolean keywords that matched the research questions: ("YouTube" OR "online video") AND ("learning" OR "education" OR "teaching") AND ("vocational education" OR "technical education" OR "skill training") AND ("vocational" OR "technical" OR "skill").

3. RESULTS AND DISCUSSION

Results

The literature search uses database meta-analysis with the help of Harzing's Publish or Perish software, then selected according to three database sources, articles that match the search keywords will be taken if they meet the criteria, and those that are not suitable will be ignored. The keyword identification decision is show in Table 1.

Table 1. Keyword Identification Decision Table

Objective	Main keyword	Developed keywords
YouTube as a learning medium in vocational education	YouTube learning vocational	YouTube, online video learning, education, teaching vocational, technical, skill vocational education, technical education, skill training

From the search results according to keywords, 231 journal articles were found from Scopus, 981 articles from Google Scholar, and 945 articles from Crossreff with a total of 2,157 articles. Details of the search results from the three databases are shown in Figure 1.

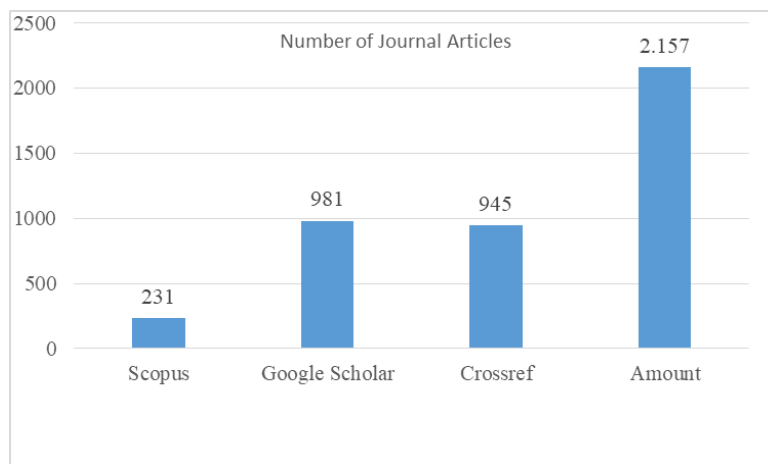


Figure 1. Number of Journal Articles

The second stage is identifying the title of the article, at this stage the researcher uses the help of the Covidence application to filter and extract data in conducting a systematic review. The selected articles then enter the article deletion stage, if they have similarities with other articles from three database sources, namely Scopus, Google Scholar, and Crossref. At this stage the search results were 2,157 articles, after identifying article titles that were relevant to the research topic and duplication of article titles from three database sources, after deleting the same titles, the number was reduced to 2,060 articles.

The third stage is to look for the suitability of the content of the abstract and keywords with the focus of this research. This stage is carried out by screening the abstract to determine its relevance, this is carried out by two reviewers. From the previous articles in stage two which totaled 2,060 articles, after selecting based on abstract content and keywords, at this stage the number was 390 articles.

The fourth stage is deleting inappropriate articles and determining which articles will be reviewed. This is the final stage of this research. At this stage, what is done is to filter articles using inclusion and exclusion criteria according to the criteria created by the researcher. The inclusion and exclusion criteria are shown in Table 2.

Table 2. Inclusion and Exclusion Criteria

Criteria		
Inclusion	I1	Articel related using youtube for learning media
	I2	Article published from 2017 to 2024
	I3	Article are written in English
Exclusion	E1	Idential article from differennt database journal
	E2	Article not related to youtube as media learning

Articles that do not meet the requirements based on the criteria will be removed. Researchers eliminated several articles that did not meet the requirements based on the topic by reading the entire text of the article, then at this stage, 86 articles were identified. The distribution of the number of articles from 2017 to 2024 is shown in the PRISMA systematic review flow diagram in Figure 2.

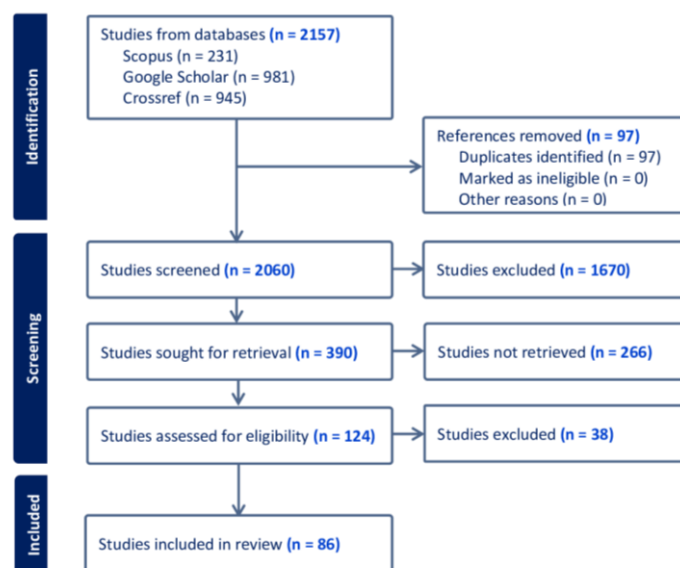


Figure 2. PRISMA Flow Diagram of Systematic Review

Based on Figure 2 show the focus of the literature review, there were 86 articles selected by researchers to continue the review process. The articles were sourced from the Scopus database with 52 articles, Google Scholar with 20 articles and Crossref with 14 articles. A summary of the number of publications from each stage based on the database in the period 2017-2024 is shown in Table 3.

Table 3. Number of Journals According to Stage

No	Journal Database	Stage 1 (article)	Stage 2 (title)	Stage 3 (abstract & keyword)	Stage 4 (final review)
1	Scopus	231	220	146	52
2	Google Scholar	981	939	130	20
3	Crossref	945	901	114	14
Total		2.157	2.060	390	86

All articles reviewed are sourced from research results published in international journals. Next, in the final stage of this research, the researcher summarized the solutions and results of the journal articles reviewed. Details of the number of selected articles based on year of publication are shown in Figure 3.

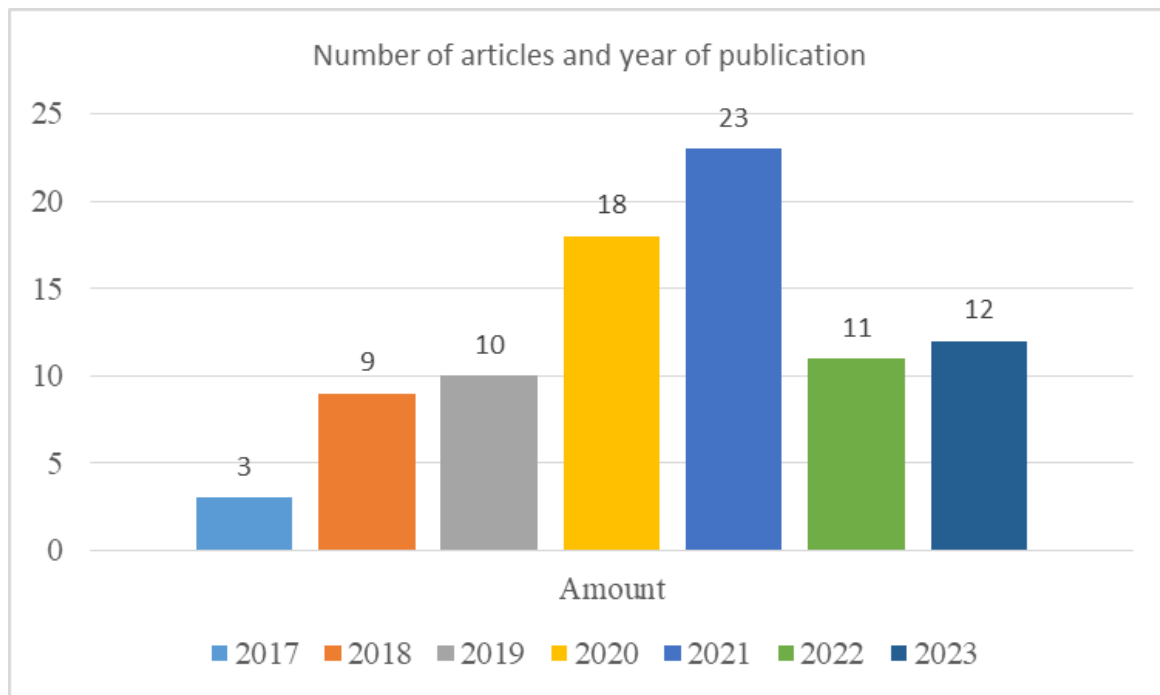


Figure 3. Number and Year of Articles Published

A total of 86 articles were taken from three databases related to the topic of YouTube as an alternative learning media in vocational education, the data was input into the Mendeley application. The data is saved in a file with the RIS extension, then the researcher analyzes the data using VOS viewer software which is used to build and visualize a bibliometric network based on the selected articles. Visualization of youtube research data as a learning imedia is show in Figure 4.

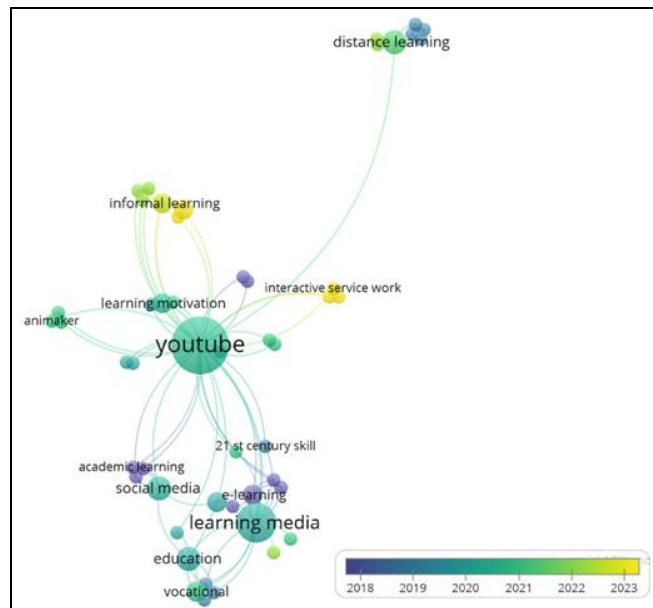


Figure 4. Visualization of YouTube Research Data as a Learning Media

Researchers mapped selected journals to identify the research focus of several journals related to YouTube as an alternative learning media in vocational education. Researchers found the research focus examined from several articles published from 2017-2024. The research focus is on the following areas: 1) learning media, 2) learning motivation, 3) distance learning, 4) informal learning, 5) education, 6) vocational, 7) e-learning, 8) social media, 9) social network, 10) vocational education, 11) learning, 12) online learning. These fields are interrelated, so identifying systematic literature reviews is appropriate in this research.

Discussion

Youtube as an Alternative Learning Media in the Context of Vocational Education

YouTube is used as an alternative learning media in vocational education, which provides a platform for teachers and students to upload, share, and also watch videos that show increased vocational understanding and skills (Abdullah et al., 2023; Chebor et al., 2018; Nwokike et al., 2021; Phanphech et al., 2022). This allows students flexibility in learning to be able to watch videos that demonstrate procedural knowledge so that student's understanding of the subject matter increases (Handaya et al., 2021; Prastiyo et al., 2018; Suryani & Draji, 2021; Yoon et al., 2021). Other research shows that students who watch learning videos on YouTube can improve their understanding of vocational fields (H. Lee, 2019; Rabiman Rabiman et al., 2021; Sirait et al., 2021); YouTube also creates social and digital communities especially in vocational skills that encourage a collaborative learning environment (Ajizah et al., 2022; Dzihnie & Gozali, 2023; Kristiani & Pradnyadewi, 2021). By utilizing YouTube as a learning medium, teachers can improve vocational education by providing interesting and interactive content to suit students' different interests and learning styles (Saputra et al., 2020; Umaroh et al., 2023; Widiantari & Dewi, 2023). YouTube is an alternative learning media that can be accessed at any time and from anywhere, which allows vocational education students to become independent learners. Research shows that YouTube videos are often incomplete and inaccurate in providing information. The quality of educational content for vocational learning is often poor, with a percentage of videos categorized as having low quality (Notley et al., 2023; Wong et al., 2019).

The Role of Youtube is to Increase Student Motivation and Participation in Vocational Learning

The role of YouTube in increasing student motivation and participation in vocational learning is very significant. YouTube functions as an instructional tool that allows teachers and students to publish videos that demonstrate an understanding of a topic, creating a digital community that focuses on developing digital skills (Burton, 2022; Perifanou, 2021; Phanphech et al., 2022). Research has shown that watching educational videos on YouTube can increase students' understanding of the subject matter and enhance their learning experience (Aldenny et al., 2019; Maynard, 2020; Prastiyo et al., 2018). YouTube can be used as a complementary teaching tool, providing educative and easily accessible content that can enhance traditional learning approaches (Moghavvemi et al., 2018; Phanphech et al., 2022; Staziaki et al., 2021). Students use YouTube for entertainment, stress relief, and relaxation, but they also use it to solve academic problems, increase their knowledge, and understand difficult topics (Cholik et al., 2023; Mostafa et al., 2023; Perifanou, 2021). YouTube's visual content makes it easier for students to understand complex concepts, and including videos in teaching sessions can have a positive effect on learning outcomes (Nalendra et al., 2020; Prastiyo et al., 2018; Sirait et al., 2021). Therefore, integrating YouTube into vocational learning can increase student motivation, engagement, and overall learning experience.

Methods and Strategies for Integrating YouTube into Vocational Learning

The integration of YouTube in vocational learning has been explored through various methods and strategies, one of which is the use of YouTube videos to train, instruct, inform, and direct students to work practices. Video tutorials on YouTube support the learning process and help students understand theoretical and practical material (Arkenback, 2023; Chebor et al., 2018; Tang et al., 2020). Active learning models that incorporate YouTube as a learning medium have been proven to produce a positive impact on student learning outcomes and motivation (Cholik et al., 2023; Suryani & Drajati, 2021; Yoon et al., 2021). These methods and strategies show the potential of YouTube as a vocational learning platform, offering various resources and opportunities to improve students' knowledge and skills in various vocational fields.

The application of YouTube as a learning medium in the vocational education curriculum has shown quite significant developments in various countries. Many researchers report the successful integration of YouTube into classrooms, highlighting its potential as an instructional tool (Aldenny et al., 2019; Burton, 2022; Cholik et al., 2023; Maynard, 2020). Online instructional videos on YouTube have been recognized as an efficient method for workplace learning, education, and vocational training (Arkenback, 2023; Hamzah et al., 2022; R Rabiman, 2021; Taufik, 2022). YouTube, as a source of rich learning content, can improve skills, competence, motivation, and engagement as well as performance tests (H. Lee, 2019; Nwokike et al., 2021; Saputra et al., 2020; Shoufan, 2022). Teenagers use YouTube to learn about formal school curricula, video games, and technology, as well as health and culture by following YouTube instructors as part of their learning model (Abdullah et al., 2023; Colás-Bravo & Quintero-Rodríguez, 2023; Pires et al., 2022; Prastiyo et al., 2018). Overall, YouTube has become an important learning space for vocational education and provides a purposeful and enjoyable learning experience.

Challenges and Sustainability of YouTube as a Learning Medium in Vocational Education

YouTube is used as an alternative learning media in vocational education because a lot of content is freely available and has great potential for sustainable education (Černá & Borkovcová, 2020; Chebor et al., 2018; Colás-Bravo & Quintero-Rodríguez, 2023).

However, the challenge in using YouTube as a vocational learning medium is that there is still a lack of instructional videos that specifically prepare students to connect to meeting services in a vocational environment (Arkenback, 2023; Maynard, 2020; Taku Neno, 2023). Another challenge is the need to continuously increase user intent and retention in video-based online learning (Alobaid, 2020; Elliot, 2020; Gao & Liu, 2023; Nalendra et al., 2020; Perifanou, 2021; Yoon et al., 2021). In addition, while the COVID-19 pandemic has provided lessons about the need to switch to digital learning platforms, innovation, and modernization are still needed to meet the challenges of vocational education (Arkenback, 2023; Handaya et al., 2021; Haryanto et al., 2021; Puspitasari et al., 2018; Seyffer et al., 2022; Zhou et al., 2023). Educational content on YouTube is low quality, while high-quality content is still minimal (Desai et al., 2023; Osman et al., 2022). Although YouTube offers opportunities for vocational education, some challenges need to be addressed to ensure effectiveness and sustainability as a learning medium.

4. CONCLUSION

The results of research in various journals regarding YouTube as an alternative learning media in vocational education have produced several conclusions: YouTube is recognized as an effective medium for informal learning, providing the ability to adapt, personalize, and develop autonomy and critical thinking. Instructional videos mediate vocational skills and facilitate vocational learning, incredibly interactive services. YouTube has proven to be a very effective learning medium for practical competencies, providing a more accessible and precise understanding of concepts. These conclusions highlight the value and potential of YouTube as a digital resource for continuing education and vocational learning.

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