Review Article

Fulfillments and Failures of Virtual Learning Environment (VLE): A Systematic Review

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Abstract
Recent studies have investigated the Virtual Learning Environment (VLE) in the higher education institutions in the different countries but there is still limited empirical evidence on what effect this to the student's satisfaction. By promoting collaboration and communication among students, virtual learning environments (VLEs) enhance student engagement and academic achievement. Today's generation now views social media platforms, cell phones, and the internet as normal hardware and software due to technological breakthroughs. It is used by educators and students to exchange documents, videos, and homework; family circumstances affect pupils' attention spans, the availability of learning materials, and their participation in online learning. In order to encourage the use of VLEs and maintain their effectiveness, academes must provide learning materials to them without any technological delays or obstacles. Technology that regularly has technical problems and has a slow reaction time will discourage students from enrolling in virtual classrooms. This will be taken into account when assessing whether or not the students accomplished the learning objectives especially during the pandemic.
Keywords: Fulfillments, Failures, Virtual Learning, Portal, Online Learning.

1. Introduction

Education has undergone substantial transformation as an outcome of technical advances and cultural developments. As a result, school reforms focused on fostering contact between instructors and students while also improving the level of instruction, paving the way for new inventions such as computers and cell phones, which improve communication and contact (Asterhan and Rosenberg, 2015). The emergence of the COVID-19 pandemic necessitated the rapid closure of learning centers, not only in the Philippines but across the world. The sudden shift from traditional face-to-face instruction to completely virtual classrooms has promoted online learning significantly more than ever before (Dhawan, 2020). Consequently, student satisfaction has continuously changed to adapt to the situation. In order to limit the spread of the virus, educational institutions at all levels rapidly introduced online or virtual learning, to continue providing "quality" education, and prevent the pandemic from delaying the development of a generation of students. But given the rapid and emergency nature it is plausible this newly implemented education ecosystem is less than ideal for the satisfaction of the students.

Distance education is characterized by having an existing organizational infrastructure, which allows the educational objectives of online learning to be developed (Singh and Hardaker, 2014). In some other countries, blended learning at universities has been implemented even before the pandemic and has steadily grown over the past fifty years (Shachar and Neumann, 2010; Means *et al.,* 2013). Virtual learning environments, or VLEs, are online platforms that let educators and learners communicate with one another over distances using a range of technological resources. These resources and tools include video conferencing, multimedia content, discussion boards, and tests (Ademola, 2021). Moreover, VLE is an umbrella term that includes many different online learning environments and platforms. A digital classroom, virtual or online learning environment, online teaching and learning platform, or web-based learning tool and resource portal are some examples of its definitions. It can be used to offer online courses, give students access to course materials, lead discussions, and support in person interactions between instructors and students (Amory *et al.,* 1999; Prensky, 2001; Gee, 2004; Rouse, 2011). On a global scale, numerous research

studies have been conducted to investigate the many facets of virtual learning environments. Ademola (2021) delves into the impact of virtual learning environments (VLEs) on student achievements while, Naimi-Akbar *et al.,* (2023) investigate how teachers understand and tackle the design and development of teaching-learning material in virtual learning environments (VLEs) from a teacher's perspective.

In the Philippines, using VLEs has been a crucial answer to the problems caused by geographical dispersion and restricted access to high-quality education. A study by Chua and Montalbo (2014) sheds light on the implementation of VLEs in selected Philippine higher education institutions, highlighting the potential benefits and hurdles faced by educators. While Villarama *et al.,* (2022) investigate challenges and opportunities in virtual classes; and how they affect academic goals through the eyes of students. Elliott and Healy (2001) note that the concept of student pleasure is multifaceted and context-dependent. As a result, it is necessary for HEIs to examine their students' satisfaction carefully as a part of the school ecosystem. Several studies examined failures of VLE including negative attitudes, challenges, impacts, and perception of students (Song *et al.,* 2004; Kear, 2010; Alawamleh *et al.,* 2020; Mahyoob, 2020; Rotas and Cahapay, 2020). On the other hand, studies of Patten and Benati (2015); Alahmadi and Alraddadis (2020); Dung, 2020; Mahyoob (2020); Magid and Mubaraki (2023); Omona (2022) mentioned the advantages, success, positive attitudes, impacts, and perception of students as fulfillments of VLE. While multiple studies have explored aspects of VLEs, it is crucial to synthesize and critically evaluate the findings to gain a comprehensive understanding of the field. This systematic review seeks to identify both the failures and fulfillments associated with students' satisfaction. By doing so, it hopes to offer teachers, institutions, and policymakers' knowledge, empowering them to make educated judgments and advancements in the field of online education.

In order to achieve the purpose of the study, the research question was formulated as follows:
1) What is a virtual learning environment?
2) What virtual learning environments are used in the study?
3) What are the fulfillments of the virtual learning environment on students' satisfaction?
4) What are the failures of the virtual learning environment on students' satisfaction?

2. Research Methodology
The focus of the study is to conduct a critical literature review on the failures and fulfillments of virtual learning environments with an emphasis on students' satisfaction. The aims of this study were (a) to define the virtual learning environment, (b) to identify the virtual learning environments used in the study, (c) to determine the failures of the virtual learning environment on students' satisfaction, and (d) to determine the fulfillments of virtual learning environment on students' satisfaction.

Five researchers worked together to perform the systematic review. For the evaluation of literature databases, a QSR NVivo was utilized. The flow chart is shown in Figure 1 is the procedure of text retrieval, screening, and analysis of the text.

In Stage 1, the researchers searched studies from 6 databases such as ERIC (ProQuest), Google Scholar, Social Science, Database (ProQuest), Social Science Citation Index (Web of Science), ResearchGate, and ScienceDirect. There were five criteria used in this stage.

The following content of the studies should: (1) Be written in English, (2) Focus on fulfillments and failures of virtual learning, (3) Focus on tertiary education, (4) Focus on student satisfaction and (5) Have the words "Virtual Learning", Student Satisfaction'', Virtual Learning Environment'', "Success of the Virtual Learning", Online Learning, and "Failure of Virtual Learning Portal''.

A total of 245 studies were imported from the six databases with 53 duplicated studies. The researchers collected the studies by using the keywords; however, inclusion and exclusion of the related studies were identified using the modified inclusion/exclusion criteria adopted from the studies Vavrus (2009), Bremner *et al.,* (2022). There were a total of 162 remaining studies after the initial scanning conducted by the researchers.

In Stage 2, the researchers were divided into two groups. Three of the researchers were tasked to scan the titles and abstracts of the retrieved literature while the remaining researchers verified the literature whether the studies met the initial five criteria. Also, an additional two criteria were adopted from the systematic review of the studies (Bremner *et al.,* 2022). The studies should be:

1) Be empirical (studies had to be drawn from qualitative and quantitative evidence).
2) Be clearly relevant to the topic (need to present the context implementation).

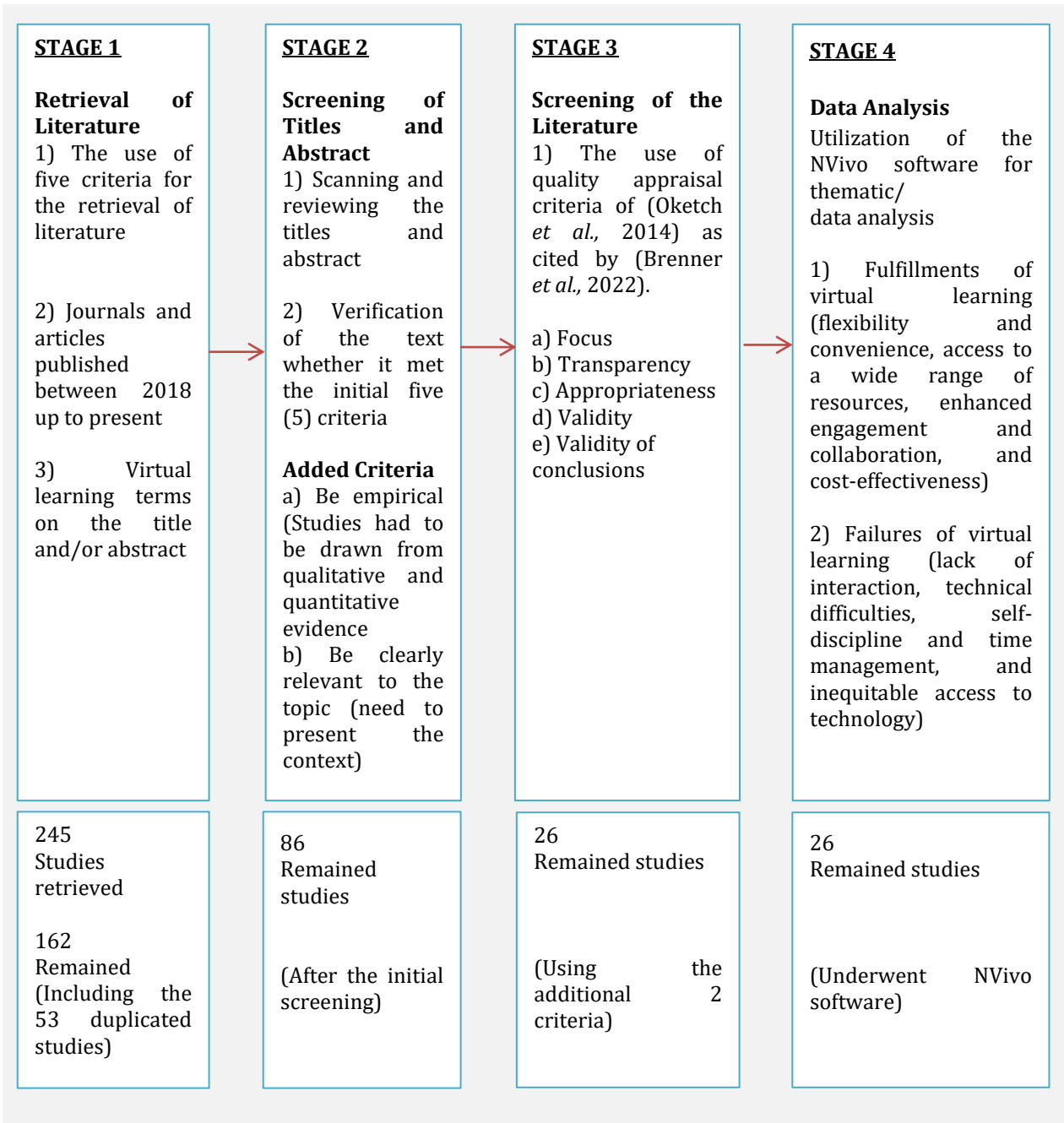**STAGE 1**

Retrieval of Literature
1) The use of five criteria for the retrieval of literature

2) Journals and articles published between 2018 up to present

3) Virtual learning terms on the title and/or abstract

STAGE 2

Screening of Titles and Abstract
1) Scanning and reviewing the titles and abstract

2) Verification of the text whether it met the initial five (5) criteria

Added Criteria
a) Be empirical (Studies had to be drawn from qualitative and quantitative evidence
b) Be clearly relevant to the topic (need to present the context)

STAGE 3

Screening of the Literature
1) The use of quality appraisal criteria of (Oketch *et al.,* 2014) as cited by (Brenner *et al.,* 2022).

a) Focus
b) Transparency
c) Appropriateness
d) Validity
e) Validity of conclusions

STAGE 4

Data Analysis
Utilization of the NVivo software for thematic/ data analysis

1) Fulfillments of virtual learning (flexibility and convenience, access to a wide range of resources, enhanced engagement and collaboration, and cost-effectiveness)

2) Failures of virtual learning (lack of interaction, technical difficulties, self-discipline and time management, and inequitable access to technology)

245 Studies retrieved

162 Remained (Including the 53 duplicated studies)

86 Remained studies

(After the initial screening)

26 Remained studies

(Using the additional 2 criteria)

26 Remained studies

(Underwent NVivo software)

Figure 1. Outlining process of retrieval, screening, and analysis of literature.

Table 1. Summary of key information from the 26 reviewed studies.

Text classification	Distribution text					
Region	East and North Africa	Southeast Asia	US	UK	Middle East	East Asia
No. of texts	4	7	3	2	7	3
Quantitative, qualitative or mixed	Quantitative		Qualitative		Mixed method	
No. of texts	10		6		10	
Quantitative	Survey		Experiment		Others	
No. of texts	10		14		2	
Qualitative	Observation			Interview		
No. of texts	13			13		

The level screening of titles and abstracts was conducted by the researchers to filter out irrelevant studies. A total of 86 related studies remained after reviewing the 162 studies by three researchers.

In Stage 3, to trim down the remaining studies the researchers adopted the 'quality appraisal criteria' from another systematic review of education (Oketch *et al.,* 2014) as cited by Bremner *et al.,* (2022) which includes the following criteria: focus, transparency, appropriateness, validity, and reliability of conclusions. The process of inclusion and exclusion of the related studies was conducted by three reviewers and verified by two validators to double-check whether it met the criteria and to avoid bias during the scanning process. By the end of Stage 3, a total of 26 related studies remained and underwent data analysis using NVivo.

Lastly, Stage 4 covers the remaining studies and is simultaneously read by the researchers. Categorization and utilization of the NVivo software were used to conduct a thematic analysis of the findings. Coding was done in every study and the researchers checked whether it was relevant information. Under failures, the identified themes are as follows: lack of interaction, technical difficulties, self-discipline and time management, and inequitable access to technology while on fulfillments are flexibility and convenience, access to a wide range of resources, enhanced engagement and collaboration, and cost-effectiveness.

Table 1 shows the summary of key information from the 26 reviewed studies. The researchers utilized the NVivo software to determine the text distribution of studies. Most studies of VLE on students' satisfaction were from Southeast Asia and the Middle East both with 7 studies, followed by East and North America with 4 while 3 and 2 studies were from the US, East Asia and UK respectively. Among the 26 studies of text classification, 10 used quantitative methods, 10 mixed methods, while the remaining 6 used qualitative methods. Under quantitative text classification, 10 studies used surveys, 14 used experiments, and 2 studies used other methods. For qualitative text classification, 13 studies used interviews, and the remaining 13 used observation.

3. Results and Discussion
The researchers present the findings of the review. Based on results of the studies, there are several research papers examining the failures and fulfillment of virtual learning. However, research on students' satisfaction was limited.

### 3.1. Virtual Learning Environment
There are 16 out of 26 studies that cited the definitions of VLE. It is categorized as a digital platform, classroom, online platform, a web-based platform, virtual and online learning, and a non-physical learning environment. Amory *et al.,* (1999) states that VLE is a software that facilitates online learning and teaching. On the other hand, Molotsi (2020) defined VLE as a digital classroom where e-learning courses are presented and students learn through interacting, communicating, viewing and discussing presentations, and engaging with learning resources. The study of Phan and Dang (2017) described VLE as an online platform or system that facilitates the delivery of educational materials and resources, as well as the interaction between teachers and students in a virtual or online setting. Likewise, it facilitates the delivery of educational content and resources to students (Dung, 2020). Similarly, it facilitates education and learning through the use of digital tools and resources (Caprara and Caprara, 2022).

In addition, She *et al.,* (2021) described VLE as an online platform or system that facilitates the delivery of educational materials and resources, as well as the interaction between students and instructors in a virtual setting. Racheva (2018), on the other hand, claimed that VLE is a web-based platform that gives students access to a variety of learning tools and resources, including discussion boards, document sharing systems, program information, and course content. This definition of VLE is comparable to that of Hamutoglu *et al.,* (2018), who describe it as a web-based platform that gives users access to learning resources and tools. Another definition of virtual learning environments (VLEs) is learning happening wholly or in part online (US Department of Education, 2010). In contrast, Kaup *et al.,* (2020) saw virtual learning environments (VLEs) as online learning environments that facilitate real-time interactions between instructors and students in disparate locales. Moreover, VLE was described by Rouse (2011) as a non-physical learning environment that is digitally mediated learning which makes use of both online and offline resources.

3.2. Commonly Utilized VLEs
Out of 26 studies, only 4 cited the commonly utilized VLE, namely; Microsoft Team, Google Classroom, WhatsApp, Zoom, Edmodo, and Moodle as shown in Figure 2 (Almusharraf and Khahro, 2020; Dung, 2020; Malkawi *et al.,* 2020). The VLE platforms used by students for submitting their assignments were Microsoft

Teams, and Zoom. The WhatsApp platform was used by most of the students during online learning. Some students' top 4 e-learning platforms were Google Classroom, WhatsApp, Zoom, and Edmodo. Some studies considered using WhatsApp and Google Classroom as user-friendly, economical, and helpful tools for lecture delivery. The effective tools for lecture delivery were Edmodo, Zoom, WhatsApp, and Moodle (Malkawi *et al.,* 2020; Dung, 2020). Some studies found that WhatsApp and Google Classroom were user-friendly, economical, and helpful tools for lecture delivery. Other studies found that Edmodo, Zoom, WhatsApp, Line, and Moodle were effective tools for lecture delivery. The most popular VLE platforms used by students were Microsoft Teams, Google, and Zoom. WhatsApp was the most popular platform for online learning (Almusharraf and Khahro, 2020).
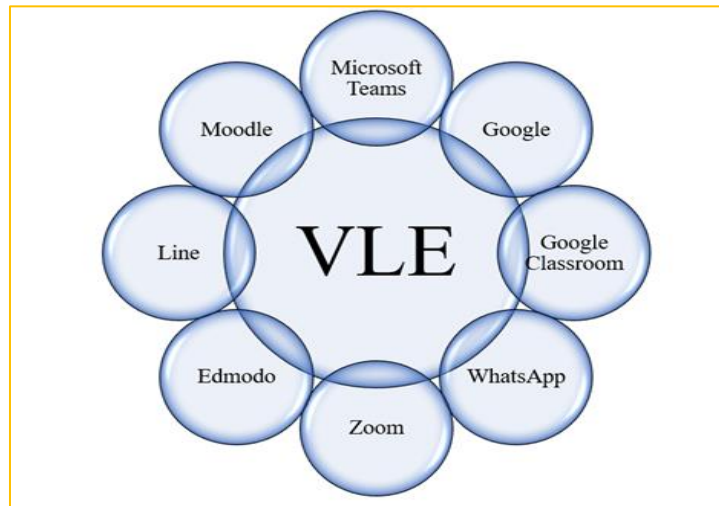
Figure 2. Commonly utilized VLE based on the 26 reviewed studies.

3.2.1. Microsoft Teams
Microsoft Office 365 package of tools, Microsoft Teams (MT) is a new platform for collaborative working and digital communities. For everyone engaged in online teaching and learning in higher education, it offers a communication-optimized and collaborative online environment (Hewson and Chung, 2021). Based on Malkawi *et al.,* (2020), MT is a part of the VLE that students used on a regular basis to create and turn in papers. In a course or program, it can be used as an online collaborative learning environment where students can take part in module discussions; as an online social network that promotes "safe" conversation; or as a platform for file sharing and collaboration where students can collaborate on documents and course materials.

3.2.2. Google Classroom
One component of VLE that has emerged as a substitute for traditional classroom instruction is Google Classroom. Online learning has replaced traditional in-person teaching and learning since the Covid-19 epidemic. Google Classroom is one of the various platforms available for setting up online courses (Saimi and Mohamad, 2022). It was determined that Google Classroom was an affordable, practical, and useful method for delivering lectures. Google Classroom modifies the dynamics of the classroom, positively affects behavioral intention, and serves as a tool for facilitation (Almusharraf and Khahro, 2020; Malkawi *et al.,* 2020).

3.2.3. WhatsApp
WhatsApp is a useful new teaching tool, reflected by positive perceptions of hybrid learning and better academic performance (Alsharif *et al.,* 2020). The efficiency of using WhatsApp as a supplement to traditional learning in hybrid learning to help students acquire and receive knowledge. According to Dung (2020) and Malkawi *et al.,* (2020) shows that WhatsApp is a VLP that is just as easy to use, affordable, and beneficial for delivering lectures as Google Classroom.

3.2.4. Zoom
Zoom is an application designed to support in-person learning through the use of video (Ganesha *et al.,* 2021). In addition, videos can be viewed, downloaded, recorded, and played again. Applying technology that is flexible in the learning process and can transcend geography and time is one of Zoom's advantages (Bawanti and Arifani, 2021). The findings of Serhan (2020) revealed that student engagement in a Zoom

learning environment is less than in a traditional classroom. Moreover, findings of Suardi (2020) show how convenient Zoom cloud meetings for instruction delivery.

3.2.5. Edmodo
Edmodo is an application that facilitates virtual classroom environments for students to cooperate, communicate, exchange knowledge, opinions, and experiments (Agung *et al.,* 2020). According to Balasubramanian *et al.,* (2014), Edmodo is a social learning platform that is different from other social media sites in that it is made for students, teachers, and parents to work together, communicate, share knowledge, complete homework, and have discussions. Trust (2012) also cited that Edmodo provides teachers and students with access to libraries, instructional resources, and pages from anywhere including at home, school, and on the go.

3.2.6. Moodle
A notable trend in the field of Virtual Learning Environments (VLEs) is the development of Open-Source course management systems, such as Moodle (Petrova, 2005). The quality material delivery used in Moodle was easy to use. Students used Moodle as a mainstay for their study materials, group projects, assessments, and grade reports. Hence, it is used for a medium of assessments and course portfolio management (Almusharraf and Khahro, 2020).

3.3. Fulfillments of Virtual Learning
Students' interest and engagement in online courses are enhanced by peer interaction. When students engage with their teachers and fellow students, they are encouraged to share ideas and information. Students' learning outcomes and level of involvement are enhanced by group activities such as project work and conversations which may be empowered by the VLEs. VLEs encourage student cooperation and communication, which improves student participation and learning performance. As a result of technological advancements, today's generation now consider cell phones, the internet, and social media platforms to be standard devices and software. Teachers and students use it to share recordings, papers, and assignments. Family situations have an impact on the student's level of attention, the accessibility of educational resources, and the involvement of students in online learning. Social media platforms have the power to improve the student experience with online learning. Social media networks will continue to be integral to the European educational system.

3.3.1. Flexibility and Convenience
With VLEs, students can access course materials and engage in learning activities at their own pace from any location with an internet connection. VLEs provide a great degree of convenience and flexibility to students. Students with busy schedules or those living in remote places particularly benefit from this flexibility (Alahmadi and Alraddadis, 2020; Magid and Mubaraki, 2023). Likewise, students thought the included assignments, introduction to the topics, and suggested online links were useful and effective (Tan *et al.,* 2021). Moreover, aside from addressing technological issues like slow internet connections, virtual classrooms are flexible. To resolve a variety of issues of online learning, students might actively look for more useful materials. They can also choose when to create online meetings with peers or instructors to make up for missed lessons (Le and Tran, 2023). This gives them additional freedom. Virtual education is highly valued because of its cost, accessibility, and adaptability. It enables students to take advantage of a more flexible schedule that corresponds with their available time and location. Compared to regular classes, students can save about 25% on tuition, materials, and travel expenses by enrolling in asynchronous courses. If they can continuously stay on task and meet their learning objectives, virtual learning offers self-motivated students a dynamic option by giving them access to a wide range of courses and programs (Dung, 2020).

3.3.2. Access to a Wide Range of Resources
With the use of VLEs, students can study with greater depth and acquire new skills by providing them with access to a variety of resources, such as interactive simulations, multimedia content, and online discussion boards. Virtual learning is a dynamic alternative for those who are self-motivated and able to continuously accomplish their learning goals, as they can select from a wide range of courses and programs. Increased time for individual study, exposure to stimulating learning environments, and easy access to useful resources are among the advantages of online learning that students recognize. Virtual education comprises course materials and recorded lectures that students can access through a network of connected computer terminals. It was first designed to provide access to higher education beyond traditional limits (Dung, 2020). Similarly, online learning has the advantage of being accessible from any location in the globe. Time, money,

and effort savings are further advantages. Students can access the lectures whenever they want, which aids in understanding (Mahyoob, 2020).

3.3.3. Self-Discipline and Time Management

Students must exercise greater self-control and time management skills when taking classes virtually. Students may find it difficult to stay motivated and focused when learning at home, which presents a difficulty. Peer pressure and easily accessible instructor feedback in traditional classrooms creates a positive learning environment that motivates students to work towards their learning objectives. Nevertheless, these fundamental components are frequently absent from online learning environments, leaving students to manage their academic path on their own. In contrast to traditional classroom settings, where learners are expected to meet deadlines and receive frequent reminders, virtual learners are expected to manage difficult material on their own without assistance (Magid and Mubaraki, 2023). Moreover, according to Klawitter (2022), procrastination and a weakened sense of accountability are two consequences of this absence of outside pressure in online learning. Inadequate time management in online education has always been a problem. Since self-motivation plays a major role in time management, overcoming this problem is especially tough. Accordingly, many students find it difficult to find the desire to start coursework because there is no defined class schedule in a physical campus setting (Omona, 2022).

3.3.4. Enhanced Engagement and Collaboration

With the use of VLE, educators can lead group projects, online chats, and virtual simulations that foster collaboration and interest. According to a study grounded in constructivism theory, these exercises help students enhance their critical thinking, communication, and problem-solving abilities (Tan *et al.,* 2021). High-quality online instruction that meets students' needs and goals for personal growth, is in line with the Self-determination Theory (SDT) and produces high levels of satisfaction also contributes to the establishment of a positive virtual learning environment (Tan *et al.,* 2021). Additionally, since synchronous learning environments acknowledge the role that interaction plays in language acquisition, they are essential for enhancing students' learning.

3.3.5. Cost-Effectiveness

VLE offers a cost-effective solution for education. Establishing a virtual learning VLE lowers the marginal cost of educating more students, making it an affordable option for schools looking to reduce costs or reach a larger student body. Correspondingly, one of the reasons VLEs are so popular is that they make it easy to participate in online lectures from home and save time in the process. Furthermore, students value having constant communication channels with teachers when taking virtual classes (Magid and Mubaraki, 2023). Online learning makes it easier for students to communicate with teachers, while traditional classroom settings provide chances for students to interact with classmates and use the facilities available on campus (Le and Tran, 2023). Also, the emergence of technology-enhanced learning has the potential to completely transform education, even if traditional classroom instruction has long been the main mode of instruction. This change can increase the number of people who can access high-quality, reasonably priced education, highlighting the revolutionary effects of integrating technology into the educational system (Omona, 2022).

3.4. Failures of Virtual Learning

To sustain the efficacy of VLEs, intimate organizations must make learning resources available to them without any technological barriers or delays in order to promote the usage of VLEs. Students will be deterred from enrolling in the virtual academe or online courses by technology that frequently has technical issues and has a delayed response time. Since technology was the only platform available, particularly during the pandemic, this will be taken into consideration when evaluating whether or not the students met the learning goals.

3.4.1. Lack of Interaction

Students frequently feel alone and alienated in virtual classes, which lowers their motivation and results in less learning. Online communication's inherent drawbacks cannot completely replace the subtleties of in-person conversations, where effective communication is greatly influenced by nonverbal cues and body language. Furthermore, there are a number of disadvantages associated with online learning. Students who are too comfortable may not have the drive or self-control needed to learn well. In addition, a careless attitude towards education is fostered by the occasional lack of relevant learning tools. These hurdles include communication gaps, network problems, and trouble understanding course objectives (Song *et al.,* 2004, Magid and Mubaraki, 2023). On the other hand, studies have highlighted a basic problem with remote learning that is the lack of interaction which has led to negative views. Online learning has become less

personal due to the decline in direct participation, Cole *et al.,* (2014) point to a loss of interaction as the main source of discontent, even as convenience plays a role in students' contentment (Tan *et al.,* 2021). Concerns about the lack of nonverbal cues and immediacy, along with low engagement, lead to miscommunications because some students view the online medium as "faceless." These difficulties are especially difficult for students who are unfamiliar with online learning, as the atmosphere can become hostile and even escalate into "flame wars" (Kear, 2010, Alawamleh *et al.,* 2020). Moreover, numerous students who participated in interviews voiced worries about the lack of opportunities for peer interaction and communication. As Dung (2020) points out, it is clear that online communication cannot completely replace face-to-face interaction. An all-encompassing and successful learning experience still depends on sincere communication and a sense of community.

3.4.2. Technical Difficulties
There have been three empirical studies that have demonstrated how students' low technological skill proficiency contributes to their unfavorable opinions of online learning. In light of their apparent lack of computer proficiency, instructors' ability to provide successful online training is called into doubt when considering the difficulties associated with nonverbal communication and the short length of online learning. Additionally, Oh and Lim (2005) noted that computer ability may have an impact on assessments of how enjoyable online learning is. Unsurprisingly, problems with technology are frequently the cause of disturbances to the online learning experience for remote learners, which are then followed by difficulties with unambiguous communication and delayed feedback (Tan *et al.,* 2021). According to Mahyoob (2020), certain students face challenges when it comes to connecting to the internet, attending lessons, and acquiring the required course materials. In addition to highlighting the crucial role technology plays in the success of online learning, this raises questions about how to guarantee fair access and assistance for every student.

3.4.3. Inequitable Access to Technology
Saavedra (2020), in the middle of a global health crisis, emphasizes the ongoing difficulty of students' access to computers and other remote learning technologies. Student participants pointed out that financial hardship is a contributing aspect to this problem. Due to an equity gap that impedes the success of all students, students from low-income families do not have access to basic tools like computers and internet connectivity. Supporting evidence was obtained by Matswetu *et al.,* (2013) in their research of Zimbabwean students in a remote learning environment who were having financial difficulties. Furthermore, students who previously had trouble finding jobs to pay for their school are made more difficult by the current recession. Notably, the outbreak's economic effects have made things more difficult financially for low-income households in the Philippines (Rotas and Cahapay, 2000). In addition, the financial impact of online learning also includes problems like not having enough internet money to access online course materials. Students have expressed dissatisfaction over the shortcomings of smartphones in meeting their online learning requirements, citing issues such as inadequate memory and the lack of laptops for their assignments. This complex economic crisis not only makes it more difficult for pupils from different origins to access educational resources, but it also widens the gaps between them. Students' difficulties are exacerbated by their inability to pay for the demands of online learning, which highlights the pressing need for inclusive solutions to handle the financial aspects of distance learning (Simamora, 2020).

4. Conclusion
The study summarizes the results of a systematics review of literature examining the failures and fulfillments of VLE on students' satisfaction. There are advantages and challenges to virtual learning. Students may find it to be a flexible and convenient option, however there may be challenges with time management and self-discipline, unequal access to technology, and financial constraints. Virtual learning is a more affordable option for instruction than traditional classroom settings, nevertheless, as it also gives students access to a greater variety of resources and improved interaction chances. A more engaging and welcoming learning environment for all students requires better support systems, individualized instruction, and fair access to resources to meet the difficulties of virtual learning.

5. Recommendation
The review suggests conducting a larger systematic review to gather more unbiased data regarding the failures and fulfillments of VLE. Although these investigations could necessitate a large time and resource commitment, they can aid in filling the gaps in hard data. Also, future evaluations should address the constraints of systematic reviews, such as extending the scope to cover primary and secondary level education in addition to higher education institutions. Efforts should also be made to incorporate pertinent

texts that were possibly overlooked during earlier retrieval stages. Additionally, scholars should work to make VLE studies more methodologically rigorous. A study must be empirical and based on either quantitative or qualitative data, among other requirements. The research must yield clear and reliable conclusions.

Declarations

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