Exploring Learners' Perceptions of LMS VTVlive Implementation in English Teaching and Learning

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Abstract. There have been several changes in education because of the digital revolution in society and the quick advancement of technology. Many technology tools have been developed to help instructors become effective educators. In that situation, employing a learning management system (LMS) is regarded as a typical teaching technique. From that perspective, this study was conducted to investigate learners' perceptions of the implementation of LMS VTVlive, which is currently used at the University of Social Sciences and Humanities, Vietnam National University. This study included 100 students as the participants and developed an evaluation framework to assess students' perceptions of using LMS VTVlive in their English learning. The methodology combined both questionnaire and semi-structured interviews, which made it possible to gather information for a deeper understanding of LMS's advantages and disadvantages. Research results show that despite some obstacles learners experienced, they had a positive attitude about the effectiveness of using LMS VTVlive to enhance English learning as well as about its influence on their academic achievement. Hopefully, this study can help the researchers have an overview of students' current online learning, thereby making adequate pedagogical adjustments in the teaching process.

Keywords: Perceptions · LMS VTVlive · E-learning · English teaching and learning · Vietnamese learners

1 Introduction

There have been several changes in education as a result of the digital revolution in society and the quick advancement of technology. In this regard, according to Nomass [1], technology is being used in teaching and learning on a regular basis. It plays a crucial role in teachers' careers; they can use it to support learners in the learning process. Additionally, to raise the education standard, instructors must continually adapt to new technological developments to meet global standards. Nomass [1] also said, "Numerous technological tools have been developed to help teachers hone their pedagogical approaches. To successfully support the teaching and learning process, teachers must pick the right technology and use it to its fullest potential." Besides, in order to integrate technology

into classroom activities effectively, teachers must possess appropriate knowledge of the course material, pedagogical principles, and technological considerations [2].

In that circumstance, utilizing a learning management system (LMS) is thought to be a typical teaching approach [3]. The phrase "LMS" refers to "a broad category of systems that offer administrators, teachers, and students access to online learning resources" [4]. In other words, by maximizing the features offered by LMS in designing, implementing, and creating opportunities for virtual communication with learners throughout the learning process, teachers may use LMS for online learning more successfully.

At the "University of Social Sciences and Humanities (USSH), Vietnam National University (VNU)", during the two years of the Covid-19 pandemic, the LMS named LMS VTVlive at https://ussh.vtvlive.vn/ was put into use to serve online teaching and learning. This is the first time that this LMS was deployed and used on a school-wide scale to meet the demand for online teaching promptly during the time when classroom teaching was interrupted due to epidemics and natural disasters. Teachers were expected to be skilled users of LMS VTVlive when the university introduced it into the classroom so that they could enhance engagement in the classroom. However, to ensure that the teaching and learning process is successful, teachers must also consider how the students feel about the innovation they have implemented, in this case employing LMS VTVlive for online learning.

This fact motivated me to carry out this investigation to assess learners' perceptions of the effectiveness of applying LMS VTVlive in English teaching and learning. These goals can be achieved through the following research questions:

- *What are the benefits of implementing LMS VTVlive in English teaching and learning?*
- *What difficulties do learners face when learning through the LMS VTVlive?*

2   Literature Review

2.1   Theoretical Background of Learning Management Systems (LMS) and LMS VTVlive

Concepts of LMS

Information and communication technology (ICT) has significantly altered the educational field in recent years. Garrison [5] said, "Learning Management Systems (LMS) is an example of cutting-edge technology being used in the teaching process". Application software called a learning management system (LMS) tracks, manages, and reports teaching and learning activities [6]. According to Lonn & Teasley [7], "an LMS is an online platform that enables professors and students to exchange learning resources, make announcements, turn in and return assignments, and communicate". In addition, Almrashdeh et al. [8] argued that "a specific learning process can be planned, carried out, and evaluated using an LMS". According to Piña [9], LMS helps create an environment where teaching and learning activities can take place without being limited by space and time.

An online teaching-learning process can be provided through the usage of LMS (e-learning). Naidu [10] said that "students can access educational materials through e-learning without regard to time or location restrictions". By removing physical obstacles, e-learning aims to simplify the learning process and enable face-to-face instruction to be replaced by online instruction. Additionally, according to Islam et al. [11] "the LMS contributes to improving the quality of the learning process by managing knowledge resources and archiving teaching resources". LMS is thus a crucial building platform in the teaching-learning process.

Issues with LMS VTVlive
LMS VTVlive is a product of Vietnam Interactive Television Joint Stock Company (VTVlive) which is a member company of Vietnam Cable Television Corporation (VTV-cab), Vietnam Television Station. VTVlive focuses on developing technical infrastructure, technology solutions, and consulting solutions in the field of education and training, providing high-quality educational products for substantive and sustainable education. Therefore, LMS VTVlive provides a total solution for schools from primary to university to organize training activities, promote educational innovation, and promote the initiative and creativity of teachers and learners through a flexible, safe and secure teaching and learning platform. LMS VTVlive provides users with the necessary tools to serve the following functions: manage courses and learners' activities, design and share lesson content, test and evaluate learners, and motivate communication and interaction between teachers and learners.

Firstly, in terms of managing courses, LMS VTVlive allows users to customize the look of the course and manage the files uploaded to the system. Secondly, when entering one of the classes, teachers can create teaching content in the form of multimedia such as texts, slideshows, images, audio, and links to share with learners, make announcements or create assignments and assign them to learners. Thirdly, to test learners, LMS VTVlive provides tools to create, distribute, and administer quizzes to learners with different types of questions. Specifically, on LMS, teachers can create question banks of multiple choice, true/false, short answer, concatenation, etc., to include in the test. Lastly, besides the communication tools provided on the system, such as messaging tools, chat, announcements, forums, and email, this LMS also allows teachers to create virtual classrooms for direct communication and conduct recorded lectures, which are very convenient for students when reviewing lessons.

From the above characteristics, it can be seen that LMS VTVlive is not only a high-end educational software but also a platform that contributes to students' success with a number of easy-to-use LMS features. This LMS helps users create an online learning environment that fairly evaluates students' achievement and offers learning initiatives at all levels. These features of LMS VTVlive are in line with Azizah's [12] contention that "three elements must be taken into account when building a learning environment: learning conditions, learning techniques, and learning outcomes".

2.2 Previous Studies on Learners' Perceptions of LMS Implementation

Numerous studies have been conducted worldwide on how students feel about using a learning management system (LMS) to adopt blended learning or online teaching and

learning at the university level. First, Al-Mashaqbeh's study [13] showed that most students felt satisfied when using LMS in learning. This finding is comparable to the study by Aljarrah [14] on the use of LMS in learning, which was carried out at a university in Jordan with the participation of 365 students. The study's participants had a favorable opinion of LMS because it increased class participation and better academic performance. Studies have shown positive and negative aspects of students' perceptions in recent years. Carbonilla and Bhati [15] examined students' perceptions of the usage of technology in the classroom, particularly in higher education institutions in the Philippines. The results claimed that most students had certain disadvantages when using technology in the classroom. Ekinci and Ekinci [16] looked at how students felt about utilizing mobile applications to learn English in a different study. The results stated that students were aware of both advantages and disadvantages of using this application.

In Vietnam, the Covid-19 epidemic in the past two years has implemented online teaching in most universities. The adoption of LMS at several Vietnamese universities has also been the subject of numerous studies, such as the study of Dang Tan Tin and Robertsom [17], Ngo Ngoc Minh [18], Cao Thi Xuan Lien [19]. However, there are still not any studies on learners' perceptions of the effectiveness of using LMS VTVlive in teaching and learning.

2.3 Evaluation Framework to Assess LMS

Many studies around the world mentioned issues to consider when creating the LMS assessment framework. Regan [20] emphasized that "both the face-to-face instruction and the remote education delivery model can be used to implement the resulting principles and practices that characterize good teaching. Furthermore, the elements of a successful educational experience are independent of the setting and timing of delivery".

According to Chizmar and Williams [21], two questions should be taken into account while analyzing online pedagogical issues: "1) What instructional strategy should be used?; 2) Will the instructional strategy work when delivered via various Internet distribution techniques?" The answer to the first question governs the second. Chickering and Gamson [22] said that "The selection of instructional technology must be based on pedagogy. Effective teaching is governed by Seven Principles, which can be applied to both on-campus and online courses when determining responses to the first question". According to Chickering and Ehrmann's [23], technology was added to the Seven Principles with the statement, "If the power of the new technologies is to be fully realized, they should be employed in ways consistent with the Seven Principles".

Besides the seven principles of pedagogy and technology selection above, Shackel [24] proposed four key operational criteria for evaluating LMS. Those include a) Effectiveness - How well a certain percentage of system users perform in terms of task completion; b) Learning ability - The aptitude for learning new skills. The amount of time it takes to learn and relearn a system is also considered learning; c) Flexibility - The ability of the design to adapt to a variety of tasks and circumstances; d) Attitude - The user's happiness with the system, including their intention to keep using or improve their use of it.

Based on the criteria mentioned in these previous studies, in this study, I categorized evaluation criteria to assess the use of LMS into five main points as follows:

- *Course planning*: this criterion assesses whether LMS allows learners to identify the effectiveness of the learning plan, understand the goal and usefulness of the course provided, the grading criteria to pass the course.
- *Course Design*: this criterion evaluates the user-friendly interface of the LMS, which enables learners to follow the course content and instructions easily.
- *Course Delivery*: this criterion evaluates how well learners access the LMS and how they keep up with class activities.
- *Class interaction*: this criterion shows whether learners find communication and collaboration facilitated in LMS via virtual classrooms, online discussions, or announcement area.
- *Class evaluation*: this criterion assesses some features like level of evaluation of each course, grading, and individual feedback from teachers.

The aforementioned assessment standards served as the foundation for the developed components of the research instruments, which are covered in more detail in the next section.

3 Methodology

3.1 Participants

The participants in this study are 100 students from 5 General English classes at the "University of Social Sciences and Humanities, VNU". These are the classes that I was assigned as the form teacher from the beginning of the 2021–2022 school year when the Covid-19 epidemic was spreading strongly; therefore, all classes were required to study online and use the LMS VTVlive during the learning process. One module of the General English class lasts for 15 weeks with the duration of 1 session a week (5 periods/1 session).

3.2 Research Methods

Questionnaire
As regards the quantitative phase, questionnaires were used as the main research instrument. "One of the most common research techniques used in the social sciences is the use of questionnaires" [25]. Questionnaires have advantages over some types of data collection instruments because they are inexpensive and do not require much effort on the researcher's part. They are supposed to save researchers a lot of time as the information can be gathered easily without the presence of the researcher [25]. Furthermore, the participants could feel free and comfortable answering the questions. For these reasons, the questionnaire was the main research tool used to investigate learners' perception of LMS VTVlive implementation in teaching and learning. The questionnaire was divided into two main parts that closely followed the content of the research questions.

Part 1 is a survey on students' perceptions of the benefits of learning English on LMS VTVlive. This section consists of 15 subsections designed based on the LMS

evaluation criteria outlined in the Literature Review section. Besides, the 5-point Likert scale (completely disagree, disagree, neutral, agree, strongly agree) was adopted to elicit the participants' perceptions. This choice is because it is easy for the participants to understand the 5-point Likert scale. According to Dörnyei [25], it takes less time and effort to complete the 5-point Likert scale than higher-point scales and gives respondents the option of selecting a neutral answer. To design a closed Likert questionnaire, I followed the guidelines provided by Wellington [26].

Part 2 examines students' main difficulties when studying on LMS VTVlive. In this section, still based on the LMS evaluation criteria framework, I proposed some main difficulties for students to choose (multiple answers can be selected) and open-ended questions for students to refer to other difficulties they encountered.

Interview

In terms of the qualitative phase, the interview method was used to clarify the information obtained from the questionnaire, thereby providing more reliable and authentic data for the research. The interview is considered a qualitative technique used to understand participants' experiences [27]. During the interview, most questions were yes/no with explanations. Interview questions were also divided based on the LMS evaluation criteria outlined in the questionnaire with the aim of collecting more information that students had not clarified in the questionnaire. Vietnamese was also allowed in the interviews to help students understand the question clearly and express their ideas easily.

Some of the findings from the aforementioned study techniques are presented in the section that follows.

4 Results and Discussions

4.1 Research Question 1: What are the Benefits of Implementing LMS VTVlive in English Teaching and Learning?

To find out students' perceptions about the benefits of LMS VTVlive (at https://ussh. vtvlive.vn/) which is currently being used by the "University of Social Sciences and Humanities, VNU" for e-learning, I focused on investigating how satisfied students were with specific aspects of the LMS VTVlive. It was based on the LMS evaluation criteria, including course planning, course design, course delivery, class interaction, and class evaluation. These criteria were evaluated on the Likert scale with five options, with the specific conventional value of each option as follows: Strongly agree = 5, Agree = 4, Neutral = 3, Disagree = 2, and Completely disagree = 1.

Based on the survey results, it can be seen that, in general, students had a positive perception of most aspects of LMS VTVlive, with the Mean frequency of overall aspects being 4.22. In particular, the aspects that received the highest rating from students (Mean > 4.50) included aspects related to course design and class evaluation. The aspect that received the lowest rating from students was the aspect related to the speed of accessing the LMS, with a Mean = 2.53. Table 1 following presents the learners' perceptions of LMS benefits together with their mean, median, and mode scores:

As can be seen from the above table, the students appeared to be quite impressed with the course design of LMS VTVlive. All parts of the course design had frequencies that

Table 1. Descriptive Statistics for Benefits of LMS VTVlive.

Criteria	Mean	Median	Mode
Course planning			
LMS allows learners to have a clear overview of the course (goals, subject description, learning outcomes, and a schedule of learning events…)	4.78	5	5
LMS has clear channels for students' queries about subject content, learning activities and assessment.	3.78	4	4
LMS enables learners to find the learning resources in their LMS subjects.	4.30	4	4
Course design			
Learners can follow course instructions easily.	4.84	5	5
Learners can follow course contents easily.	4.92	5	5
Course contents offer clear examples and well-organized assignments.	4.89	5	5
Course delivery			
Learners have no difficulties in accessing and using LMS.	2.53	2.5	3
LMS provides an assignment tool to allow students to send materials to teachers and vice versa.	4.33	4	4
LMS keeps students constantly informed of the activities in the classroom.	3.70	4	4
Class interaction			
Face-to-face meetings by virtual classrooms supported by LMS VTVlive are really useful.	3.97	4	4
The forum activity module enables learners to have asynchronous discussions with teachers, which makes learners study better.	3.87	4	4
Real-time synchronous discussions by Chat activity module makes learners more motivated to study.	3.13	3	4
Class evaluation			
There is an appropriate level of evaluation for each course assignment.	4.86	5	5
LMS allows teachers to give individual feedback to learners, which is useful to help them study better.	4.73	5	5
LMS gives learners opportunities for self-assessment and progress check through quizzes, forum activities.	4.62	5	5

fell between 4.8 and 4.9 on the Mean. When asked for more explanation in the interview, students admitted that their comprehension of the course material had also improved. One of the students shared: "*….I could follow the instructions and contents on LMS easily, so my understanding of the subject was improved. Then we felt more confident*

discussing it in the classroom." (S1). Some students were also satisfied with the structure of content provided on LMS because they found the examples and assignments well organized, and they might download and read the relevant sources before the meeting. This finding agrees with Hamid et al. [28], who stated, "social technologies, in this case, the Learning Management System, should promote flexibility in the learning process and make it simpler to post, share thoughts, and reuse research material and discussion. Additionally, they promote connections within the academic community to pertinent services run by academics and students."

Besides another criterion that gained the high rating from students is class evaluation. In the interview, students showed their high appreciation of the grading provided by LMS VTVlive. One of the students shared: "*Transparency on grading, including the feature to see the minimum, average, and maximum grade is really useful in evaluating my study progress*" (S2). In addition, another student believed that one more benefit of LMS VTVlive was the ability to monitor their academic progress. It can be presumed that this LMS provided access to the student's learning process, informed them of their grades on a device, and reflected their course work. The possible reason is that learning management systems (LMS) automatically record students' learning behaviors, as You [29] alleged, "self-regulated learning in an online learning environment may be tracked; in addition, LMS usage is already widespread across most institutions, and LMSs offer new ways to track students' progress and participation in their learning."

Moreover, the opinions from students in the interview also revealed they quite enjoyed the class interaction on LMS. They claimed that the assignments provided by the teacher through the LMS drew their attention and motivated them to complete them. One student said: "*When we use LMS, I am more open and motivated to ask more questions. This is because I don't have to stand in front of the classroom…I can post and discuss my question with my lecturer through LMS*" (S3). It may be argued that using LMS VTVlive offers a comfortable type of contact that can increase students' enthusiasm to learn. The author proved that a productive and interactive learning environment could increase learners' motivation, especially, if the students felt comfortable with the technology. This result is in line with the study of Fandiño et al. [30], who claimed that students tended to show a better disposition to learn when they used the computer effectively and purposely.

However, besides some striking benefits that LMS can bring to students, the results from Table 1 also show us that there are some aspects that are not highly rated by students. Therefore, it is necessary to learn more about the obstacles students can face when using LMS VTVlive. These difficulties are detailed in the next section.

4.2   Research Question 2: What Difficulties do Learners Face When Learning Through the LMS VTVlive?

To explore the main difficulties that students faced when studying on LMS VTVlive, in Part 2 of the questionnaire, I proposed some main difficulties based on the LMS evaluation criteria framework for students to choose (multiple answers can be selected) and open-ended questions for students to refer to other difficulties they encountered.

It is obvious that the results obtained from Part 2 of the questionnaire are quite consistent with what I obtained from Part 1. With so many benefits that students admitted

Table 2. Descriptive Statistics for Drawbacks of LMS VTVlive

Criteria	Percentage
Course planning	
LMS content is irrelevant to the module.	0%
The interface of LMS is not user-friendly	0%
Course design	
Learners find it difficult to understand online material in each course.	0%
The video/audio quality in each course is poor.	0%
Course delivery	
Learners have technical problems in accessing and using LMS.	48%
LMS takes learners a long time to submit assignments.	38%
Class interaction	
Learners face technical problems when joining in the virtual classroom.	41%
There is lack of teachers' availability to explain in discussion activities.	0%
Class evaluation	
LMS provides poor mechanism for feedback and assessment.	0%
Learners find it difficult to understand the grading on LMS.	0%

being satisfied with LMS VTVlive, it is understandable that the percentage obtained for each difficulty in Part 2 is not too large (<50%). The most difficulties still belong to the technical factors and the transmission line leading to the students having difficulties logging into the system, submitting assignments or joining virtual classrooms. The Table 2 shows all the information gathered from Part 2 of the questionnaire:

The results obtained from Part 2 of the questionnaire are really interesting. Although I suggested a few difficulties related to different aspects of LMS VTVlive, many aspects gained 0% of the students. This is also quite an encouraging result for teachers to see that students felt excited and satisfied, and they did not face too many difficulties in the process of online learning in the past school year.

From the table, it can be seen that students only focused on three main difficulties. Nearly half of the students did not appreciate the speed of logging into the LMS (48%), and the submission of papers on the LMS also took a long time (38%). Besides, due to technical problems, many students had difficulties in joining the virtual classroom (41%). In the interview, students were asked to explain more about their choices. One student gave the review, "Sometimes there are some troubles such as difficulty in accessing, bad network, and if I want to access LMS on the web, I have to wait for quite a long time" (S4). Some students experienced technical problems, such as rebooting/shutdown systems. One student said: "Sometimes, when we want to submit our assignments via LMS, it gets stuck or under repair. It also shuts down or has an error connection during practical exams" (S5). It can be said that the above difficulties may be due to the unstable connection on the students' computer side. Another reason for the LMS system being

overloaded, especially during peak hours, may be due to many users logging in simultaneously, causing slow processing and login speeds. This can result in lengthy waiting times for teachers and students and significantly hinder their ability to use an LMS.

The findings of this study are consistent with Ilgu and Jahren's [31] study, which suggested, "Technological difficulties with online activities may be the primary cause of students' discomfort and irritation throughout their learning experiences and should be kept to a minimum". In the Vietnamese context, this finding is similar to the results in the study of Cao Thi Xuan Lien [19]. When investigating the usage of LMS for online instruction at "The Department of English, University of Foreign Languages, Hue University", Cao Thi Xuan Lien [19] concluded that the speed of information processing and the stability of the LMS are still factors that cause inconveniences to the use of LMS by lecturers and students. Therefore, it is undoubted that this aspect is a limitation of LMS that needs to be overcome to meet the demands of teachers and students more effectively.

5   Conclusion

This study was conducted with 100 students from 5 General English classes at the "University of Social Sciences and Humanities, VNU". They are classes that I was assigned as a form teacher for the 2021–2022 school year. I collected data by combining quantitative and qualitative research methods through questionnaires and interviews. The study investigated learners' perceptions of the effectiveness of applying LMS VTVlive in English teaching and learning. The findings of the study indicated that students were well aware of the advantages of learning English on LMS VTVlive. Among the benefits, it was found that students highly rated the aspects related to course design and class evaluation. Besides exploring the advantages of LMS, the study also examined the difficulties students faced when using this system. A positive and encouraging result for teachers is that students hardly had many obstacles with LMS VTVlive. Students mainly admitted that they sometimes had difficulties with the speed of information processing and the stability of the transmission line when logging in to the LMS.

It can be seen that the research is beneficial to English teaching and learning on the LMS VTVlive platform. Although there has not been an opportunity to conduct the research on a broader scale, getting students' feedback to know about the current status of using LMS in online teaching is essential. The feedback obtained from students about the process of using LMS in online learning will be the basis for educators to have a more comprehensive view of the effectiveness of the LMS being used as well as make suitable adjustments to improve the quality of LMS in the coming time.

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