STUDENTS’ PERCEPTIONS OF USING SCHOLOGY IN E-LEARNING: A LITERATURE REVIEW

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Abstract. Students in modern era need using technology very much in learning. Technology can assist teachers and students in finding and gathering information. In addition, technology can also be used to facilitate the distance learning process such as assignment collection and assessment. In distance learning, there are many technologies or tools that can be used by teachers and students, one of which is Schoology. Schoology is one of e-learning application where, students can take classes made by teachers / tutors through this application. Several classes can be created by the Teacher at once, each class chooses its own access code. The aim of this study is to analyze the effectiveness of the use of Schoology in e-learning, how the advantages and disadvantages of Schoology in e-learning. This study reports several main studies whose focus is relevant since the last five years (Joshua et al., (2016); Sanchez Garcia et al., (2018), Rosalina (2018), Rama & Wahyudi (2019). The results showed that the students had positive perceptions of using Schoology.

Key words: e-learning, students’ perception, schoology, technology

A. INTRODUCTION

Nowadays, technology is very important. Technology is a necessity for everyone in various fields, including education. One of the uses of technology in education is the use of learning applications, such as Schoology, Google Classroom, Zoom, etc. Furthermore, the role of technology in the world of education is very important, various technological advances have been used to advance the world of education. According to Lestari (2018), technology is the result of the development of science,
which occurs in the world of education. Therefore, education itself should also take advantage of technology to assist the implementation of learning.

In Indonesia, the usage of technology in education has been going on in recent years. This event deservedly happened because in the current era of globalization, the development of information technology is increasingly rapid, is inevitable for its impact on the world of education (Taman et al., 2021). In the global world, the world of education is required to constantly adjust the development of technology as an effort to improve the quality of education, especially adjusting its use for the world of education in particular, in the learning process. Technology is a human creation. Therefore, it is natural to have shortcomings or negative impacts. In the field of education, besides having a positive side, technology also has a negative side.

There are four roles technology in the education field, namely: as part of the curriculum, as a system in the delivery of learning, as a tool in giving orders, and as a tool in improving the entire learning process (Kumar Kc et al., 2018). In the educational curriculum, presentation is part of the learning process and includes the use of technology. Delivering material and giving instructions by the teacher can easily be done using technology, for example utilizing Schoology as the learning application.

Educational technology is a material device and theoretical foundation to support the teaching and learning process in education. Educational technology is not limited but is anything that can enhance classroom learning for mixed, face-to-face, or online learning uses (Pipit Muliyah et al., 2020). Educational technology refers to all of valid applied educational sciences, as well as processes and procedures that derive from scientific research, and in specific contexts. Educational technology
into education to foster a positive, more diverse learning environment and the way for students to learn to use technology and their common tasks.

Sukmawati & Nensia (2019) state there are eight educational technology approaches in carrying out their functions, namely: (1) An interdisciplinary approach in the form of combining various scientific disciplines (systems, psychology, communication, informatics, economics, management, engineering, etc.) into a single circle, (2) Systemic approach, which views the whole with interrelated components, (3) Approach systematic, orderly and directed in solving problem, (4) A synergistic approach, which guarantees added value from group activities compared to individually activities, (5) Approach to effectiveness and efficiency, by utilizing the resources available resources, (6) A productivity approach, by providing additional inputs or new inputs with an increase in yield, (7) An integrative approach by combining the concepts and products into a unified whole, (8) Innovative approach, by examining problems holistically and then looking for new answers.

Based on that approach, educational technology does not only help solve learning problems in the context of schools, but in the entire context of community life, by developing and/or using a variety of processes and learning resources. Education technology operates where learning is required, either by individuals, groups, and them incorporated in the organization.

**Schoology in Learning Activity**

According to Rosalina (2018), Schoology is one of the Learning Management System (LMS) designed and developed specifically to be used by teachers and students in a virtual classroom. It provides teachers with methods of managing lesson, engaging student, sharing content, and connecting with other educators. In addition, parents can also participate in supervising their children's learning.
activities. Schoology is a free and easy-to-use open source like Facebook. The difference is Schoology places more emphasis on education so that its features support the management of integrative learning.

Schoology can help teacher in opening wide communication opportunities to students so that students can more easily take part in discussion and teamwork. In addition, Schoology also has many interesting features and functions for students to take advantage of. There are various forms of media such as video, audio and images that can attract students' interest are supported Schoology. Students are directed to apply the use of technology in learning by Schoology.

This schoology application is a newcomer to the learning field online. Schoology has a similar model to Facebook and has many advanced features in the design aspect. Schoology has several characteristics, among others : First, communication (messaging) is the core of the program. Second, all course activities and time reminder items are on the screen view. third, A digital dropbox makes it possible to upload documents in Microsoft Office or direct integration with Google Docs. Fourth, teachers can comment directly on digital work. Last, discussion groups are facilitated to build student communities.

Schoology is also easily accessible from mobile devices. This application can easily found on the app market for both Apple iOS and Android cell phones. Mobile tablet devices, such as iPads and Androids, can also run the application. Completion of larger writing assignments becomes a barrier, but students can check assignment views, navigate content courses, review their grades, view a calendar of upcoming assignments, and communicate with instructors.

Moreover, Rama & Wahyudi (2019) mention that Schoology has features that are supportive of learning activity. The features of the Schoology application include:
(1) Courses, namely facilities for creating class subjects, for example Mathematics, Physics, and so on. (2) Groups which is a facility to create groups in the grouping of an assignment or class which is done based on groups in different themes. This facility is also available in the Moodle application and on Facebook. (3) Resources (Learning Resources), which are facilities that serve to present learning resources, learning media, and study materials to individuals and groups.

Furthermore, the advantages of Schoology stated by Suprihanto (2016) in his research are as follows: First, there are features that are easy and complete, a good display and easy to understand, easier interaction. Second, there is a description of the time and limit for collecting and carrying out certain tasks so as to spur students in an attitude of discipline and responsibility. Third, Schoology has almost the same features like Facebook, beyond the similarities of Edmodo to Facebook. Fourth, Schoology provides a wider selection of resources than Edmodo does. Schoology can also accommodate the types of questions used in Quizzes. Last, there are attendance facility, which is used to check student attendance, and also Analytics facilities (not supported by the Moodle application) to view all student activities on each course, assignment, discussion and other activities that we prepare for students.

Sumarsono et al., (2020) states that there are some disadvantages of Schoology, such as: (1) It depends on the internet speed because the uploading of the assignment may fail or not depending on the internet speed you have, (2) Non-android cellphones cannot access Schoology, (3) The vulnerability of plagiarism, (4) Even though the position of the student is still at home, they can still submit assignments and have the opportunity to submit many times, (5) It is still possible to collaborate between students who are in the classroom and outside the school. 

As a learning tool, of course Schoology has advantages and disadvantages. Several studies on the usage of Schoology in the learning process that has been carried out
by researchers show different results. But all studies show a positive change from the results of using Schoology in their research. Therefore, based on the above theories, the writers will review several studies on Schoology in e-learning activities and how conclusions about Schoology can be drawn from these studies.

B. RESEARCH METHOD

This literature review takes several studies in the last five years on the use of Schoology in E-learning, this is intended to determine the positive perceptions of students about the use of Schoology as a platform or tool in learning that is widely used today. Two early search engines were used: Google and Google Scholars. Writing in English using schoology in learning is a search term from 16 articles in the last five years.

The writers decided to employ some criteria for choosing the review studies. The criteria used in selecting studies found on Google and Google Scholar and reviewed in this article are as follows: (1) The research article is a premiere study (not a review), (2) The articles used are articles made in the last five years, (3) The study focuses on the perceptions and results obtained by students after using Schoology in learning, (4) Studies in ESL / EFL.

Rationale for choosing the criteria

To provide arguments, a premiere source and not a second source is required. When writing with secondary sources, the concern that will arise is "are the references listed are valid?". So that to ensure the validity of the referenced information, it is necessary to put forward the main references (Rahayu et al., 2019), therefore these studies were selected. The articles selected for use in research are articles made in the last five years, this is so that the results obtained are the latest results or findings. In addition, the selected study focuses on the results or achievements obtained by students after using Schoology in learning so
that we can know for sure the various results of some of these Schoology-themed studies.

**Excluded studies and reasons**

One study (Dewi et al., 2018) was excluded because the main discussion was about student perceptions on the design of asynchronous online, schoology only as a data collection tool (not a tool to be studied). The second study (Hariadi et al., 2016) was canceled because this study conducted research on Schoology and Canvas, meaning that the study focused not only on Schoology but also Canvas.

**Four relevant studies**

In writing this article, the writers found four relevant studies, in accordance with this review, namely: research by Joshua et al., (2016) which reported on The Effectiveness of E-learning Implementation Using Social Learning Network Schoology on Motivation & Learning Achievement. The second study by Rosalina (2018) discusses The Use of Schoology E-Learning Towards Students' Learning Motivation Enhancement in STKIP Surya. Third, by Sanchez Garcia et al., (2018), in their study reported on Schoology as an alternative to traditional teaching tools for University Indonesia. The fourth study is a research by Rama & Wahyudi (2019) entitled The use of Schoology To Enhance Students' Reading Comprehension At Lakidance University.

**C. FINDINGS AND DISCUSSION**

**Findings**

The results of the literature review describe the applications that are often used in e-learning. Joshua et al., (2016) published an article entitled "The Effectiveness of E-learning Implementation Using Social Learning Network Schoology on Motivation & Learning Achievement", the results of the study show that learning
motivation uses Social Learning Networks. Schoology is a variable that greatly influences the learning achievement of STMIK Primakara Bali students. Seeing the effectiveness of the application of e-learning on student motivation and learning achievement is the aim of this study.

Moreover, Sanchez Garcia et al., (2018) employed a research entitled "Schoology as an alternative to traditional teaching tools for University Indonesia". The results of the study show that student’s adaptation to the use of schoology is fast and efficient and produces results. appropriate learning, especially in the field of university education because students have sufficiently mastered this schoology application. Therefore students do not need a lot of study time.

Furthermore, Rosalina (2018) conducted a research entitled “Analysis The Use of Schoology E-Learning Towards Students' Learning Motivation Enhancement in STKIP Surya”. The results of the study show that the overall Likert Scale percentage is 77.30% and 79.05%, meaning that students are motivated to use e-learning Schoology. The results of this study mean that most students are motivated by learning to use e-learning Schoology because of its ease, friendly appearance, and challenging way of doing assignments.

Meanwhile, Rama & Wahyudi (2019) published an article entitled "The use of Schoology To Enhance Students' Reading Comprehension At Lakidance University" shows that there is a significant increase in reading comprehension before and after the implementation of schoology. The researchers show that Schoology is effective for improving students' reading comprehension.

Based on those article review, the researchers conclude that the use of Schoology in education can increase the effectiveness of students in learning. Students and
teachers suggest that using educational technology such as Schoology can promote easier interactions. There is a description of time and limits for collecting and carrying out certain tasks so that it can spur students in an attitude of discipline and responsibility.

However, some students understand some of the shortcomings of integrating Schoology, such as slow internet connectivity making the assignments sent fail, so students ask for institutional support to solve these problems. The researchers concluded that students and teachers believe that Schoology educational technology promotes easier and unique interactions, student-student, and student-teacher.

**Discussion**

The main studies reviewed (Joshua et al., (2016); Sanchez Garcia et al., (2018), Rosalina (2018), Rama & Wahyudi (2019)) clearly shows that students have a positive view of the E-learning Schoology application for all students. For example, states that students are motivated to use e-learning Schoology (namely a cloud-based application, to conduct virtual classroom learning supported by video, audio and images) because of its ease, friendly appearance, and challenging way of doing. Duty. Students love this app because students can check assignment views, navigate course content, review their grades, view a calendar of upcoming assignments, and communicate with a teacher or instructor.

According to Sanchez Garcia et al., (2018), the use of schoology-based learning media could improve student learning outcomes. Moreover, Rama & Wahyudi, (2019) mention that Schoology is effective for improving students' reading comprehension. Those statements were supported by Joshua et al., (2016) who said that there was an increase in student achievement and motivation in learning using Schoology-based learning media.
Based on those explanation, the researchers conclude that students and teachers believe that Schoology educational technology increases the effectiveness and motivation of students in easier and more unique learning and interactions for students, and students-teachers. Institutional support and training for students and teachers are needed for best results.

Table 1. Outline of the review’s four studies

<table>
<thead>
<tr>
<th>Study / Participant / Setting / Instrument</th>
<th>Research Object</th>
<th>Results (Benefits)</th>
<th>Results Drawbacks</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Joshua et al., (2016)</td>
<td>The purpose of this study is to know how extent the effectiveness of the e-learning implementation on motivation and learning achievements of the students.</td>
<td>The results of the research showed that the learning opportunity has the greatest role in the motivation of learning, that is followed by collaborative learning. Schoology became a highly influential variable on learning achievements of Students.</td>
<td>None</td>
</tr>
<tr>
<td>• STMIK Primakara Bali.</td>
<td>The aim of this research is to analyze the usage of schoology e-learning as one of the supporting media towards students’ learning motivation enhancement and students’ opinion about the use of schoology e-learning.</td>
<td>The result showed that most students were motivated by learning using schoology e-learning because of its easyness, friendly look, and challenging way of doing the task.</td>
<td>None</td>
</tr>
<tr>
<td>• Rosalina (2018)</td>
<td>The aim of this research is to analyse</td>
<td>The results obtained showed that the</td>
<td>None</td>
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<tr>
<td>• 30 students from STKIP Surya.</td>
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<tr>
<td>• Questionnaire and observation sheet</td>
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<tr>
<td>• Sanchez Garcia et al. (2018)</td>
<td>The aim of this research is to analyse</td>
<td>The results obtained showed that the</td>
<td>None</td>
</tr>
</tbody>
</table>
135 students of University of Alicante.

Multiple-choice questionnaires.

if we can use Schoology in developing online learning through a collaborative effort between teachers and students, allowing everyone to work together to achieve better results.

means between these groups differed and were statistically significant, highlighting that the CAFD group using the Schoology platform obtained greater differences with respect to the use of traditional methodologies, being more positive the results of the group using the platform.

Rama & Wahyudi (2019)

66 undergraduates from Lakidende University.

Reading text

The objective of the Study is to find out the extent to which schoology enhance students’ reading comprehension.

There is a significant effect of schoology toward the students reading comprehension at Lakidende University. Schoology is effective for increasing students’ reading comprehension.

None

D. CONCLUSION

Based on the results obtained from the four studies, it can be concluded that the Schoology application in learning can have a real influence on student achievement. In the first study, it shows that Schoology is a variable that is very influential on learning achievement. In addition, Schoology is also able to help with distance learning or E-learning.

According to the several studies above, it can be concluded that the use of Schoology in E-learning has a positive impact on student learning outcomes. The
following are the positive effects of using Schoology in learning based on four main studies: (1) Schoology has been proven to increase students' understanding and value in learning, (2) Schoology is variable that is very influential on learning achievement, (3) Schoology is an easy-to-use application so that students quickly adapt to its use so as to produce appropriate learning, (4) Schoology is effective for increasing student motivation in learning, (5) Schoology is effective for use in E-learning, (6) Schoology makes students motivated in learning, this is due to the ease of Schoology, a friendly appearance, and a challenging way of doing assignments, (7) Schoology improves students' reading comprehension.

E. REFERENCES


