Digital Learning Media Needs Analysis for English Reading Comprehension Class

Nurul Lailatul Khusniyah¹

¹ Universitas Islam Negeri Mataram; nurullaila@uinmataram.ac.id

ARTICLE INFO

Keywords:

Digital Media; English; Needs Analysis; Reading

Article history:

Received 2022-01-14 Revised 2022-03-12 Accepted 2022-04-17

ABSTRACT

Technology has become an unavoidable part of education and must be used. The purpose of this study was to obtain the need for digital learning media for reading comprehension English classes. This research is a qualitative descriptive study that was conducted using a survey method. The participants were students (38 boys and 22 girls) and 2 teachers. Data collection techniques are documents, observations, interviews, and questionnaires. Data analysis consists of three steps, namely presentation, reduction, data and Furthermore, the data analysis technique used expert judgment. The results of the study concluded that digital learning media had not been used comprehensively by teachers and students during online teaching and learning activities. From the results of data analysis, the digital learning media needed varies according to the function or role. For online discussion activities, you can use the zoom or google meet. Delivering material and assignments are LMS, google classroom, social media, reading sources are learning websites and electronic textbooks, exercises using online or manual, and communication processes using WA groups.

This is an open-access article under the <u>CC BY-NC-SA</u> license.



Corresponding Author:

Nurul Lailatul Khusniyah

Universitas Islam Negeri Mataram; nurullaila@uinmataram.ac.id

1. INTRODUCTION

Teaching and learning during the Covid-19 pandemic have changed using the concept of blended learning or distance learning. Even technological advances have also had an influence and are needed to implement education. This means that there is a process of changing the concept of teaching from traditional and face-to-face to online or blended learning. All human activities have been carried out at home, such as work and study (Siahaan, 2020). However, online learning has many advantages, namely increasing technological literacy, flexibility in learning, improving self-efficacy, being financially efficient, and is supported by various learning media. Meanwhile, the weaknesses of online learning are heavy tasks, ineffectiveness and low morale, little control from lecturers, and technical problems (Saleh, Sari, & Alim, 2021). This means that educators must prepare all teaching needs, such as teaching materials, making interesting learning videos, fun learning strategies, or providing digital

learning media that are relevant to teaching concepts. Moreover, the current changes in human life, including knowledge and technology and the Covid-19 pandemic situation have required teaching and learning activities to use technology applications.

Therefore, teachers must understand the situation that occurs in carrying out teaching and learning, such as the background and needs of students, the need for teaching materials, learning media and the needs of graduates in the global era. The results of the evaluation of teaching and learning reports for the 2020-2021 academic year during the Covid-19 pandemic showed problems using technology that was not maximized during learning activities, and 60% more used WhatsApp social media for group communication. Thus, out of 30 people (1 class), only 30% are active in the group, and 70% are listening more. While the results of the evaluation of student reading assignments showed that reading materials were less diverse, digital learning resources were not used properly, there were only 30% of students who downloaded several e-books from the links provided by the teacher, and did not use video conferencing for active discussion to discuss the content. Reading and sharing online learning resources. While the results of observations during online learning activities, many students are just waiting for their friends to share information and also the results of reading analysis that are not deep due to a lack of learning resources.

From the explanation of the weaknesses and shortcomings found during the reading comprehension class learning activities in English, it was concluded that there were problems related to the need for digital learning media that were by the needs of students, courses and also the current situation. Even though learning media is an important part of the implementation of learning today, teachers must utilize various learning media related to technological devices (Niati, 2017; Stearns, 2012), smartphones (Gheytasi, Azizifar, & Gowhary, 2015), the website for learning (Kocoglu, 2010). Sharing readings can be done using social media (Puspitasari, 2020) or technology applications for learning to read comprehension (Lysenko & Abrami, 2014). Moreover, e-books have been widely used by students to get information (Kao, Chiang, & Foulsham, 2019). n addition, web texts provide individual or group reading experiences in increasing rhetorical engagement (Tham & Grace, 2020).

Interactive learning, multimedia interaction, creative learning and learning based on global projects and critical thinking are some of the modern changes in the field of education. It is therefore clear that new approaches require new methods. Hardware, software, web facilities, e-mail, worldwide databases, visual and auditory conferencing are signs of technological hegemony in teaching and education (Shatalebi, Sharifi, & Javadi, 2011). Much work has been done to highlight the effectiveness of multimedia as a teaching and learning aid. The literature review shows how the mastery of technology by classroom teachers affects the attractiveness of the tool to students, both visually and through content and whether multimedia tools allow student participation (Abdulrahaman et al., 2020).

From several previous studies, it can be understood that digital media in the learning process is part of the application of multimedia and technology in education, especially in teaching and learning activities. Thus, students can become actors of education both in the classroom and at home. They can take advantage of various technology applications for learning activities and doing assignments. Moreover, students in the current global era are already popular with the use of digital technology applications. Digital media include video games, streaming, social media, and augmented and virtual reality and are used by youth for communication, education, and entertainment. The use of digital media is an integral part of the lives of Generation Z, iGen; most own a smartphone and half report "almost constantly" on the internet. Teenagers use a variety of social media platforms (such as Instagram and Snapchat), games, and apps to communicate, do schoolwork, and engage in activities of daily living (Chassiakos & Stager, 2020)

So, this research gap is the concept of knowledge about how to find out the right use of digital learning media according to student needs for reading comprehension classes in the digital era and the COVID-19 pandemic situation. However, the novelty value that emerged in this study was the analysis of digital learning media that could be by the background and ability of students to own and operate technology applications for learning purposes. So, this research presents an exploration of the need for

digital learning media in the English reading comprehension class. This needs analysis is of course not only oriented to providing digital learning media that is suitable for English reading classes.

The purpose of this study was to identify and obtain the need for digital learning media for English reading comprehension classes. The results of this study are expected to provide benefits and a positive impact on the understanding of teachers or implementing institutions on digital technology that must be included in the teaching and learning process. In addition, teachers can conduct in-depth studies related to the need for digital learning media according to the background and characteristics of students and learning objectives. This is certainly part of improving the quality of teaching and learning and flexibility in the use of digital learning media for online or offline classes.

2. METHODS

This study is a qualitative descriptive approach. It describes a phenomenon or fact in the field to demonstrate patterns and themes related to specific questions (Creswell, 2012). As a result, this study looked into digital learning media for English reading comprehension classes. It must be relevant to the needs and learning situation of the students. This study included two groups of students: semester 3 and semester 5 students who received online learning during the Covid-19 pandemic. In semesters 1 and 2, both groups took reading comprehension courses. There were 60 students (38 male and 22 female) ranging in age from 17 to 20 years and 2 teachers who taught the Reading Comprehension class. The English Education Program Study at State University in Mataram is the site of the research.

(1) Documentation is the first step in the data collection process in this study. This process involves analyzing learning media that is related to digital technology and has been used in an online class. (2) Interview. It is to learn about the digital learning media needs of students and teachers in an English reading comprehension class. 3) Observation is done to analyze online learning. It is to ascertain the students' requirements for digital learning media in English reading comprehension class. Questionnaires were distributed to students, and interviews were conducted with teachers from September to October 2021. The interviews were related to digital media that teachers have used during online learning for reading comprehension classes. While the questionnaire was given to students to determine student perceptions related to digital learning media that have been used so far and their needs. It used Skala Likert and displayed the percentage data. The questionnaire consists of three parts in the following table (Collins, Hammond, & Wellington, 2002);

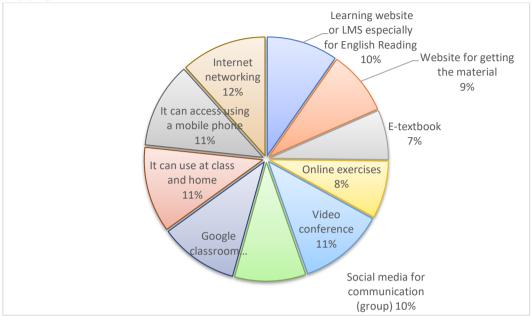
Table 1. Digital Learning Media Questionnaire for Reading Comprehension Class

	Components		Items of Questions
1	Extended access	1.	Learning website or LMS, especially for
			English Reading
		2.	Website for getting the material
		3.	E-textbook
		4.	Online exercises
2	Enjoyment and	1.	Video conference
	engagement	2.	Social media for communication (group)
		3.	Google classroom
3	Control, autonomy,	1.	It can use at class and at home
	and responsibility	2.	It can access using a mobile phone
		3.	Internet networking

The data from the questionnaire were analyzed using a qualitative method in this study. It is a qualitative descriptive form. Data analysis consists of three steps: data reduction, data display, and conclusion. Furthermore, the data analysis technique employed expert judgment.

3. FINDINGS AND DISCUSSION

The results of the data analysis that have been distributed to students are presented in the following graph;



Graph 1. The result of Needs Analysis for Digital Learning Media for Reading Class

Graph 1 is the result of the analysis of questionnaire data that has been filled out by students. The data presented are data on student desires regarding digital learning media that can be used during English reading comprehension classes, especially for the situation during the COVID-19 pandemic. From the graphic data, several points were found, namely;

- 1. Students find it easy to use zoom or google meet to conduct video conferences (online classes).
- 2. Google Classroom is the choice of students to send assignments other than LMS from the university and email.
- Students have difficulty with the availability of quotas to download several e-books. It can help
 them to influence students' comprehension of the text (Lim, Whitehead, & Choi, 2021)
 Website to get online reading material.

Whereas, the results of the analysis of teaching and learning report documents related to the use of learning media during the covid-19 pandemic have found several important findings, including;

- 1. Students have difficulty accessing various information and online English reading materials through the website due to internet network problems.
- 2. Online learning activities to read English comprehension are mostly done through WhatsApp groups so they are less productive.
- 3. Of 30 students in one class, there are 50% of students have difficulty using video conferencing for online classes and uploading assignments on the website used by the teacher, namely Google Classroom.

While the results of online class observations for 2 semesters that have been stated in-field observations related to the use of technology applications found several important points, namely;

- 2. Students have a low level of awareness regarding the use of technology applications for learning to read
- 3. Video conference namely zooms cloud meeting which is used is relatively less than optimal because the class is passive.
- 4. Many students do not use online or digital media to get digital reading resources.

The observation findings are reinforced by the results of interviews with 2 teachers about their views related to the use of digital learning media. Some excerpts from interviews with teachers are;

1. Do you use a variety of digital learning media for reading comprehension classes in English? – Teacher A's answer: "I only use WA Groups and zoom cloud meetings. Meanwhile, students send assignments through the class coordinator and sent to email."

Teacher B's answer: "I use the WA group to communicate the learning process and give assignments or teaching materials. Google meet for video conferencing and google classroom used by students to send assignments to teachers."

2. Do students often use online learning resources to access or do assignments?

Teacher A's answer: "Students tend to take from the books given by the lecturer."

Teacher B's answer: "In one class, only 25% use and explore online learning resources to complete reading assignments. 75% of students use books, WordPress,

From these findings, the description or framework of the need for digital learning media for English reading comprehension classes is;

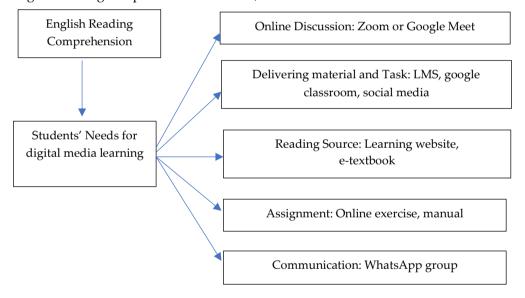


Figure 1. The framework of Digital Learning Media for English Reading Comprehension Class

Figure 1 has provided an understanding that the teaching and learning process must involve the use of online learning media by its function. Because the online learning process during the COVID-19 pandemic is oriented not only to the delivery of teaching materials but also to the communication process through social media, media for delivering materials, sending assignments from students to lecturers, or digital learning resources. Because the current learning process has changed, this is certainly influenced by the progress of human life, advances in science, and technological advances. Over the years, various frameworks, models and literacy have been developed to guide teacher educators in their efforts to build digital skills in their students, which will support them in using new and emerging technologies in their future classrooms (Falloon, 2020). Thus, teachers are required to have technological skills so that they can carry out teaching and learning that is relevant to technological advances. In this case, the basic digital skills of teachers and technology-related teaching skills are more important than digital technology resources (Sailer, Murböck, & Fischer, 2021).

Digital technology used in the learning process has interesting values and advantages because the media is equipped with audio-video. Audiovisual aids are very important in the education system. Audiovisual aids are devices used in the classroom to encourage the teaching and learning process and make it easier and more interesting. Audio-visual aids are the best tools for making effective teaching and best knowledge dissemination. So there is no doubt that technical tools have a greater impact and dynamic information systems (Rasul, Bukhsh, & Batool, 2011). Moreover, with the rapid development of mobile devices, users can now read on the screen. Electronic reading (e-reading) has become a common reading style with the growth of online learning or electronic learning (e-learning). E-book applications (APP) are widely developed and implemented for screen reading (Liu, Shao, Liu, & Zhao, 2021)

4. CONCLUSION

The results of the data analysis concluded that teachers have not used a variety of digital learning media for English reading comprehension classes so far. They still rely on LMS and also communication via WhatsApp. This has an impact on students' limited reading resources so that reading comprehension skills are still low. Meanwhile, from the results of the data analysis, the wishes of teachers and students related to the use of digital learning media are 1) for online discussion activities, you can use the zoom or google meet, 2) deliver material and assignments are LMS, google classroom, social media, 3) the source of the reading is the website learning and electronic textbooks, 4) online or manual exercises and 5) the communication process using WA groups. The distribution of digital learning media is adjusted to the needs of every activity that must be involved in the teaching and learning process. This finding has implications for teachers' understanding in adjusting digital learning media according to student needs, learning environment situations, and student backgrounds.

This research is still limited to analyzing the needs of digital learning media for reading classes. Thus, the results of this study can still be developed. Researchers can further develop the results of this research by designing digital learning media models such as a special website for English reading comprehension classes that can be tailored to the needs of students, online or offline classes and have characteristics that are by the framework of the English study program at the university. Thus, students can learn optimally, and learning activities in class can be of high quality. This, of course, can have an impact on student skills that are relevant to education in the 21st-century era.

Therefore, the results of this study recommend that teachers provide reading sources and learning media for reading activities. Teachers can take advantage of online reading resources that are attractive to students according to their age and current life developments. The concept of learning activities in this digital and modern era cannot be used using conventional learning concepts, but learning activities lead to the discovery of meaningful activities. Practically, this research can contribute to students, lecturers and institutions. Students are helped in overcoming learning difficulties, especially those related to understanding English reading. Students can increase their activity in class, and students can directly think about the content of the reading they are learning.

Acknowledgements: Thank you to participants in English Department UIN Mataram who have helped during the data collection process

Conflicts of Interest: no conflict of interest

REFERENCES

- Abdulrahaman, M. D., Faruk, N., Oloyede, A. A., Surajudeen-Bakinde, N. T., Olawoyin, L. A., Mejabi, O. V., ... Azeez, A. L. (2020). Multimedia tools in the teaching and learning processes: A systematic review. *Heliyon*, 6(11). https://doi.org/10.1016/j.heliyon.2020.e05312
- Chassiakos, Y. (Linda) R., & Stager, M. (2020). Current trends in digital media: How and why teens use technology. *Technology and Adolescent Health*, 25–56. https://doi.org/10.1016/B978-0-12-817319-0.00002-5
- Collins, J., Hammond, Michael, & Wellington, Jerry. (2002). *Teaching and Learning with Multimedia*. London & New York: Routledge.
- Creswell, J. W. (2012). *Research, educational planning, conducting, and evaluating quantitative and qualitative research.* London & New York: Pearson Education.
- Falloon, G. (2020). From digital literacy to digital competence: the teacher digital competency (TDC) framework. *Educational Technology Research and Development*, Vol. 68, pp. 2449–2472. Springer Science and Business Media LLC. https://doi.org/10.1007/s11423-020-09767-4
- Gheytasi, M., Azizifar, A., & Gowhary, H. (2015). The Effect of Smartphone on the Reading Comprehension Proficiency of Iranian EFL Learners. *Procedia Social and Behavioral Sciences*, 199, 225–230. https://doi.org/10.1016/J.SBSPRO.2015.07.510
- Kao, G. Y. M., Chiang, X. Z., & Foulsham, T. (2019). Reading behavior and the effect of embedded selfies in role-playing picture e-books: An eye-tracking investigation. *Computers and Education*, 136, 99–112. https://doi.org/10.1016/j.compedu.2019.03.010
- Kocoglu, Z. (2010). WebQuests in EFL reading/writing classroom. *Procedia Social and Behavioral Sciences*, 2(2), 3524–3527. https://doi.org/10.1016/J.SBSPRO.2010.03.545
- Lim, J., Whitehead, G. E. K., & Choi, Y. D. (2021). Interactive e-book reading vs. paper-based reading: Comparing the effects of different mediums on middle school students' reading comprehension. *System*, 97, 102434. https://doi.org/10.1016/J.SYSTEM.2020.102434
- Liu, H., Shao, M., Liu, X., & Zhao, L. (2021). Exploring the Influential Factors on Readers' Continuance Intentions of E-Book APPs: Personalization, Usefulness, Playfulness, and Satisfaction. *Frontiers in Psychology*, 12. https://doi.org/10.3389/FPSYG.2021.640110
- Lysenko, L. V., & Abrami, P. C. (2014). Promoting reading comprehension with the use of technology. *Computers & Education*, 75, 162–172. https://doi.org/10.1016/J.COMPEDU.2014.01.010
- Niati, B. (2017). Integrating Technology into Extensive Reading for Students of English Study Program. In *Applied Science and Technology* (Vol. 1). Retrieved from http://www.estech.org
- Puspitasari, E. (2020). When the books and reading friends are up to us: Students' Responses about an Extensive Reading Program. *Eralingua: Jurnal Pendidikan Bahasa Asing Dan Sastra*, 4(2), 162. https://doi.org/10.26858/eralingua.v4i2.12376
- Rasul, S., Bukhsh, Q., & Batool, S. (2011). A study to analyze the effectiveness of audio visual aids in teaching learning process at uvniversity level. *Procedia Social and Behavioral Sciences*, 28, 78–81. https://doi.org/10.1016/j.sbspro.2011.11.016
- Sailer, M., Murböck, J., & Fischer, F. (2021). Digital learning in schools: What does it take beyond digital technology? *Teaching and Teacher Education*, 103, 103346. https://doi.org/10.1016/j.tate.2021.103346
- Saleh, M. N. I., Sari, R., & Alim, P. (2021). University Students' Perception on The Implementation of Online Learning During The Covid-19. *Nazhruna: Jurnal Pendidikan Islam*, 4(1), 1–17. https://doi.org/10.31538/NZH.V4I1.1022
- Shatalebi, B., Sharifi, S., & Javadi, H. (2011). An integrative teaching model in the globalization era with a teaching technology orientation. *Procedia Social and Behavioral Sciences*, *28*, 189–193. https://doi.org/10.1016/J.SBSPRO.2011.11.036
- Siahaan, M. (2020). Dampak Pandemi Covid-19 Terhadap Dunia Pendidikan. *Jurnal Kajian Ilmiah*, 1(1), 73–80. https://doi.org/10.31599/JKI.V1I1.265
- Stearns, S. C. (2012). Integration of Technology Into the Classroom: Effects on reading comprehension.

Southern Illinois: : Southern Illinois University Carbondale.

Tham, J. C. K., & Grace, R. (2020). Reading Born-Digital Scholarship: A Study of Webtext User

Experience. Computers and Composition, 58, 102601.

https://doi.org/10.1016/j.compcom.2020.102601