

LECTURERS' AND STUDENTS' PERCEPTIONS ON THE USE OF PROJECT-BASED DIGITAL BOOKS IN ONLINE LEARNING DURING THE COVID-19 PANDEMIC

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Abstract. Online learning is learning that is done without face-to-face, but instead done online. Online learning requires teaching material to make the learning process easier. Digital media is helpful when used in classrooms or online learning, such as project-based digital books. The purpose of this study is to describe and explain the perceptions of lecturers and students on the use of project-based digital books in online learning during the covid 19 pandemic. This type of research is qualitative. The data sources used were 12 lecturers and 73 students of the Elementary School Teacher Education study program in Madiun, Indonesia. Data collection techniques used were questionnaires and interviews. Data analysis techniques were using interactive models. The result of this study is that lecturers and students stated that project-based digital books and learning have benefits for online learning. There were 83 participants who stated that they needed project-based digital books on online learning, and two participants did not need them. A total of 83 participants expressed delight in using project-based digital books for various reasons, while 2 participants expressed displeasure with using project-based digital books.

Keywords: Digital books, projects, online learning, covid-19

INTRODUCTION

At this moment, the world is being stricken by the covid-19 pandemic. The covid-19 pandemic is also happening in Indonesia. The covid 19 pandemic caused learning to be diverted with online learning. The selection of online learning because online technology becomes a particular channel for the government to overcome the pandemic covid (Beaunoyer, Dupéré, and Guitton 2020). Moreover, nowadays, technology has entered the realm of education (Tugun et al. 2020), (Sugandi and Kurniawan 2018), (Mamun, Lawrie, and Wright 2020) (Chiu 2020). Technological developments can make changes in the implementation of teaching and learning (Keengwe, J. and Georgina 2012). It causes online learning to be widely practiced (Goodsett 2020).

In reality, online learning is not that easy to implement. With the treatment of school from home, many problems arise. One of them is the difficulty of a teacher in delivering materials to students. Still lacking the learning models, methods, and strategies needed for online learning can be an obstacle in online learning (Nakayama, Yamamoto, and Santiago 2007). Also, online learning that is implemented suddenly makes many lecturers and students who are not ready. Based on previous research, online learning also has technical constraints, technical equipment, and a lack of coaching about online learning (Caliskan et al. 2020). Students do not get feedback directly with online learning if poorly quality learning content causes worries, and inadequate resources also hinder online learning (Caliskan et al. 2020), (Lloyd, Byrne, and Mccoy 2012).

Regarding this situation, all teachers should be able to prepare learning media that makes it easier for students to follow the learning. Media that makes it easier to support lectures is by using electronic learning media. One of the things teachers have to prepare is a digital book. The matters related to digital become an interesting choice (Roth et al. 2019). Therefore, digital books are in great demand by the public (Fu, Zhang, and Yan 2018), (Jones et al. 2020). Nowadays, students prefer to buy electronic textbooks for their mobile devices instead of traditional textbooks (Uner and Roediger 2018). That's because digital textbooks are more practical than traditional ones. Digital textbooks also affect students' perceptions of learning, grades, and cognitive burdens compared to traditional ones (Weng et al. 2018). Digital books can be an effective way to provide students with information without any restrictions on space and time. With the development of the internet in this era, it will make something digital-based popular easier. Thus digital information resources play an essential role in online learning and are expected to help students and others (Zhang and Li 2006).

The use of digital books is not hindered by time and distance (Fojtik 2015), (Horava 2013). It shows that digital books can be accessed anywhere and anytime. During the covid pandemic that requires students and university students to learn from home, this digital book will be beneficial because it can be accessed anytime and anywhere. Even from home, students can still get references from digital books used to learn. Digital books can be used for self-learning if no one assists the child in learning (Dore, Hassinger-Das, and Brezack 2018). With digital books, students or university students will get many benefits.

Teaching materials in the form of digital books are developed oriented to project learning. Why should it be project-based? It is because project-based learning provides real assignments for students (Godman, Brandon and Stivers 2010). With real tasks, students will be easier to understand learning. The project approach is the concept and principle of a study, which involves students solving problems and being given meaningful tasks, and providing students with the opportunity to work independently to construct each student's knowledge and produce a product as a result of its culmination (Godman, Brandon and Stivers 2010). Based on previous research, that project approach is an approach that can direct students to be able to solve problems, self-direction, communication, and creativity (Wurdinger and Qureshi 2015).

Based on the above problems, this study aims to describe and explain lecturers' and students' perceptions on the use of project-based digital books on online learning during the covid-19 pandemic. In this study, lecturers' and students' perceptions can be used as materials to develop teaching material for online learning

RESEARCH METHOD

This research was a qualitative type of research. It is an empirical inquiry that identifies phenomena in a real-life context. As the boundaries between phenomena and context are not clearly visible and the multi-source evidence used (Yin 2008).

Respondents

The study involved 12 lecturers, consisting of 10 women and 2 men. In addition to lecturers, it also involved 73 students consisting of 41 women and 32 men. The respondents came from 3 universities, Madiun residency, Indonesia. The lecturers had an age range of 31-41 years, while students had an age range of 19-21 years.

Data collection techniques

Data collection techniques used were interviews and questionnaires. The Interviews in this study were used to interview lecturers and students. Interviews were asking questions and getting answers from participants in a study (Tracy 2013). The respondents were lecturers and students as implementers of online learning and project-based digital book users.

Data Analysis

The analysis used in the field was data analysis by Miles & Huberman model. Activities in qualitative data analysis were conducted interactively and took place continuously until they were

complete, so the data was saturated. The data analysis activities were namely; First was data collection, Second was data reduction, third was data display, and fourth was conclusion drawing/verification (Miles, Huberman, and Saldana 2014).

RESULT AND ANALYSIS

Result

This research was conducted by interviewing lecturers and students at three universities, Madiun residency, Indonesia. There are 4 questions given to respondents. The four questions are used to find out the perceptions of lecturers and students about the use of project-based digital books on online learning during the COVID 19 pandemic. Based on the interview results that have been conducted, it can be known the following results.

3.1 Lecturers' and Students' Perceptions on the Benefits of Digital Books and Project-Based Learning

Table 1. Lecturers' and Students' Perceptions on the Benefits of Digital Books and Project-Based Learning

Questions	Answers	N
What are the benefits of digital books on learning?	Digital books are more practical, effective, and efficient	59
	Digital books are more environmentally friendly	26
What are the benefits of project-based learning?	Give students real assignments	26
	Foster creativity	21
	Foster skills	18
	Practice independent and group work	11
	Add experience	9

In table 1 above, it can be seen the lecturers' and students' perceptions on the benefits of digital books and project-based learning. Fifty-nine participants answered that the benefits of digital books are more practical, effective, and efficient. Participants as many as 26 people answered the benefits of digital books that are more environmentally friendly. According to 85 participants, project-based learning has benefits in learning. A total of 26 participants stated the benefit of project-based learning is to provide real tasks to students. Twenty-one participants answered project-based learning could foster creativity, and 18 participants claimed project-based learning could foster skills.

3.2 What do you think about the use of project-based digital books in online learning?

Table 2. Lecturers' and students' perceptions on the use of project-based digital books on online learning

Questions	Answers	N
Require/ Interested in using	Effective learning resources in online learning	38
	Make it easy to give/do tasks	23
	Help to practice language skills	18
	Helps to learn independently	4
Do not require/ not interested in using	No need	2

Table 2 above contains lecturers' and students' perceptions on the use of project-based digital books on online learning. A total of 83 participants expressed need and interest in using project-based digital books for online learning. In comparison, 2 participants did not need or were not interested in project-based digital books. There are four reasons participants need a project-based digital book. Firstly, 38 participants revealed the reason that project-based digital books become effective learning resources in online learning. Later, 23 participants stated that project-based digital books make it easier to give/do tasks. Last, 18 participants revealed their reasons that project-based digital books help to practice skills.

3.3. What is the reason you love using project-based digital books for online learning?

Table 3. Why lecturers and students are happy/not to use project-based digital books for online learning?

Answer	Reasons	N
Happy	Interactive learning	37
	Active learning	20
	Student-centered	14
	Easy to get	8
	More efficient	4
Unhappy	Unhappy	2

In table 3 above, 83 lecturers enjoyed using project-based digital books. It is because project-based digital books can create interactive learning. Thirty-seven participants stated that reason. A total of 20 participants enjoyed using project-based digital books because they made learning active. Some participants were not happy to use digital books that are two people.

Analysis

Digital resources offer delivery and storage mechanisms for many electronic format texts on the device's memory and allow access to the internet (Bando et al. 2017). With digital resources, it can make it easier for people to access them anywhere and anytime. It has its own practical value, as same as the use of project-based digital books in online learning.

Lecturer's and students' perceptions of using project-based digital books have shown that it can help lecturers and teachers in online learning. When lecturers and students were asked questions about the benefits of digital books and project learning, they answered that both have benefits. The benefits of digital books found are that digital books are more practical, effective, and efficient. It agrees with the results of previous research that states the benefits of digital books can also be an effective way to provide information to students without any restrictions on space and time (Horava 2013), (Fojtik 2015), (Zhang and Li 2006). Unlimited space and time make digital books more practical and efficient. Other studies have also stated that digital books are effective in learning (Wong et al. 2011).

Another finding is that digital books are more environmentally friendly. It is because digital books do not need to use ink and are not made of paper, so digital books are certainly more environmentally friendly. Unlike physical books that can be damaged, wet, or lost, digital books that are data on the computer are protected from these problems. Even if the data is lost, users can easily search for a replacement either from the internet or request a return to the book's author (Sohn, W.-S., Ko, S.-K., Lee, K.-H., Kim, S.-H., Lim, S.-B., & Choy 2002). Digital books don't need a large space, with technology making digital books easy to store despite the sheer number (Wong et al. 2011).

Lecturers and students also stated there are many benefits of project-based learning. According to lecturers and students, project-based learning benefits are to give real tasks to students, foster creativity, cultivate skills, train independent and group work, and add experience. The findings

in previous studies also say the same thing that the project approach is built on learning activities and real tasks that provide challenges for learners related to daily life to be solved in groups (Godman, Brandon and Stivers 2010). The project approach also directs students to solve problems, self-direction, communication, and creativity (Wurdinger and Qureshi 2015).

Many lecturers and students needed or were interested in using project-based digital books in online learning during the covid-19 pandemic. There are several reasons lecturers and students needed or were interested in using project-based digital books. One of these reasons is that it is an effective learning resource in online learning. A book is a guide or resource for learning. It makes the book very important for learning (Lau et al. 2018), (van den Ham and Heinze 2018), (Shin and Lee 2018). Digital books have been established as an excellent complement to teaching. On the other hand, the use of digital books is becoming more widespread because it is portable, accessible, and offers the possibility of enriching text with other digital content as an added advantage. Moreover, project-based digital books, in which the learning process will involve students directly in working on real projects and product development (Guo et al. 2020).

Lecturers and students stated that they needed a project-based digital book because it makes it easier for lecturers to give students assignments and makes it easier for students to do tasks. Project-based digital books, which are realized with the help of technology in which there is a real task to practice, can make it easier for lecturers and students. Previous findings say that e-books are one of the learning resources that provide information and knowledge content that learners need to complete learning requirements and tasks (Bozkurt and Bozkaya 2015). Previous research has also stated that project learning is built on learning activities and real tasks (Godman, Brandon and Stivers 2010). It shows that in project-based digital books, there are real tasks that provide challenges for students.

Another reason lecturers and students needed project-based digital books is to help practice language skills. Language skills must be trained because someone will be skilled in language if they practice so often. With project-based digital books will make students easy to practice language skills. It is because project-based digital books come with projects for students. Project-based learning can be related between technology and the problems of everyday life that students are familiar with. It is in line with previous research that stated that the use of digital books could affect language and literacy development (Martin-Beltrán et al. 2017). Digital books can improve someone's reading literacy (Gupta and Dileep 2020). Digital books also improve communication skills (Rajeh et al. 2020). It is because digital books can make it easier for children to get reading materials, where reading books play an essential role in children's cognitive and social. Digital books can also help parents in supporting children to practice language (Troseth et al. 2020). Besides, digital books can also add vocabulary to the language (Smith et al. 2013).

Lecturers and students also argued that project-based digital books could help to learn independently. In project-based digital books, there are already materials, exercises, and tutorials in audio or video, making it easier for students to learn independently. Previous research has also stated that digital books can be used for self-learning if no one accompanies the child in learning (Dore et al. 2018). Besides, digital books can also increase students' motivation to work on problems, and digital books can reduce students' anxiety in doing tasks (Turel and Ozer Sanal 2018).

There are several reasons lecturers and students are happy or unhappy about using project-based digital books. The reason lecturers and students love to use project-based digital books is to make learning interactive. That's because project-based digital books are made interactively, making it easier for lecturers and students to use them. Digital books are also better when designed in an interactive way (Kao et al. 2016).

Project-based digital books cause learning to become more active and student-centered. Project-based learning is a learner-centered learning model for conducting an in-depth investigation of a topic (Grant 2002). It is said that because with digital books based on projects, students will be more active so that the learning is centered on students. The book is equipped with real tasks that make students more active.

Project-based digital books that can be obtained easily is also the reason lecturers and teachers loved to use them. Easy to obtain because this book can be downloaded or accessed anywhere with a smartphone. It makes project-based digital books more practical and exciting to use. Similarly, the results of previous studies are also agreed. With project-based digital books, students can easily access the book without the constraints of space and time. Digital books make information can be disseminated quickly compared to conventional books. Digital books are also expected to facilitate the learning process conducted by their users because the format of digital books can be searched, copied so that the information sought can be obtained easily and quickly (Fry 2020). The use of project-based digital books is also said to be more cost-effective. Project-based digital books are not printed using paper, making them cheaper.

CONCLUSION

Based on the description above, it can be concluded that lecturers and students state that project-based digital books have benefits for online learning. Digital books that have practical, effective, and efficient properties will be more creative when project-based. That's because project-based learning is student-centered learning to complete a project. It is very suitable for online learning.

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