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Contribution of digital books to online learning in lecturers and student perceptions

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Abstract: A digital book is a book that is compiled, converted and published into a digital format. The purpose of this study is to describe lecturer and students' views on the contribution of digital books to learning. This research was included in the survey research, by conducting a survey of lecturer and students in Madiun City, with a sample of 7 lecturer and 102 students. Data collection techniques using closed questionnaires with indicators are a) Readiness of lecturers and students to use digital books, b) ease of use of digital books, c) the benefits of digital books in the learning process. The results of the analysis show that as many as lecturers and students are more likely to agree that digital books have a contribution to online learning. Lecturers and students stated that they were ready for online learning using digital books. Many lecturers and students operate digital books easily. Lecturer and students also stated that digital books have benefits, namely being more practical, easy to obtain, saving costs, increasing learning motivation, making it easier to learn independently, being able to provide new experiences in learning, making it easier for students to understand the material, having attractive features and appearance, making student achievement increase, being able to evaluate the learning process, learning with digital books can assess themselves.

Keywords: Digital books, online learning, student perception.

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INTRODUCTION

At this time, all over the world is experiencing the covid 19 pandemic, it is also happening in Indonesia. The COVID-19 Coronavirus outbreak, has created a catastrophic situation around the world (Tuli, Tuli, Tuli, & Gill, 2020). The COVID-19 pandemic caused global morbidity and mortality, exhausted health systems, and disrupted society (Brown, Kumar, Rajji, Pollock, & Mulsant, 2020) (Banerjee, 2020). That led to the WHO calling for social distancing, handwashing and hygene breathing. Based on this, policies emerged, one of which was the government calling for learning from home. With this appeal, all schools and universities have switched to online learning.

Online learning is considered one of the solutions in fighting this covid 19 outbreak (Favale, Soro, Trevisan, Drago, & Mellia, 2020). This is done to avoid the increasing spread of covid 19. This is because online technology has become a special channel for the government to overcome the covid pandemic (Beaunoyer, Dupéré, & Guitton, 2020)

One of the things that teachers must prepare is a book. In a learning, be it online or in-person learning, it cannot be separated from a textbook. Books have a huge role to play in learning or lecturing. Therefore, even during the Covid-19 pandemic, books must still be owned by students. Books are a mandatory reference for use in primary and secondary education units or universities that contain learning materials in order to increase faith, piety, noble character, and personality, mastery of science and technology, increase sensitivity and aesthetic ability, improve kinesthetic and health abilities compiled based on National Education Standards.

Books are one of the important learning tools (Giani, Zulkardi, 2015). Books are an effective learning resource in the learning process to learn directly by themselves, an effective resource to present content by the teacher, a source of ideas and activities, a reference resource for learners, a syllabus that reflects objective learning and helps inexperienced teachers who are still not confident (Mustadi, 2015).

There are so many benefits of a book in a study. One of the benefits, namely books and related learning materials, is considered a major input in an effective school system (Milligan, Tikly, Williams, Vianney, & Uworwabayeho, 2017). Books have a role in language learning (Huang, 2019). Books should be able to make a guide to learning, also introduce culture to students, and tolerance integrates knowledge across disciplines. Books are essential for learning (Lau et al., 2018) (van den Ham & Heinze, 2018) (Shin & Lee, 2018). Books with learning resources must be suitable, because books must be adapted to existing learning resources. In addition, books also add to the collaborative learning experience (Alhumaidan, Lo, & Selby, 2018).

Reading books plays an important role in a person's cognitive and social development (Hourcade et al., 2003). However, during the COVID-19 pandemic, many students did not have access to a variety of book collections due to the limited library resources that could be visited. Therefore, an alternative is needed to provide learning resources for students. Looking at the current Covid pandemic, textbooks must also be digital. This is because it is to make it easier for students to take lectures and also comply with health protocols urged by the government. With the global spread of internet and mobile technologies, digital text has become more widely used for literacy and language learning inside and outside schools; and some argue as literacy (Martin-Beltrán, Tigert, Peercy, & Silverman, 2017).

Nowadays, college students prefer to buy electronic textbooks for their mobile devices as an alternative to traditional textbooks (Uner & Roediger, 2018). That's because digital textbooks are more practical. Digital textbooks also influence students' perceptions of learning, grades, and cognitive load compared to traditional ones (Weng, Otanga, Weng, & Cox, 2018). Seeing this phenomenon, digital books certainly have a lot of role to make it easier for students to obtain references without traveling. That's because digital books can

be accessed anywhere and anytime. Based on this, this study aims to describe lecturer and students' views on the contribution of digital books to online learning.

METHODS

Research Design

This research is included in descriptive research, by conducting a survey of lecturer and students in Madiun City. Survey research is a quantitative research procedure in which it administers surveys on a sample or overall population design to describe the attitudes, opinions, behaviors, or specific characteristics of the population (Creswell, 2012). The design of this study is described as follows.

This research begins with finding problems then studying theories and finding hypotheses. After compiling the hypothesis, the population, sample, and compiling research instruments are determined. Compile a questionnaire instrument that will be used for data collection. The information contained in the questionnaire is the readiness of lecturer and students to use digital books, the ease of use of digital books, the benefits of digital books in learning. After compiling the research instrument, the questionnaire validation was carried out using expert opinions conducted by two experts. After that, collecting data with a questionnaire that has been validated to lecturer and students in Madiun City which was randomly selected as many as 7 lecturer and 102 students. The data obtained from lecturer and students is in the form of quantitative data which is then analyzed descriptively and compiled conclusions.

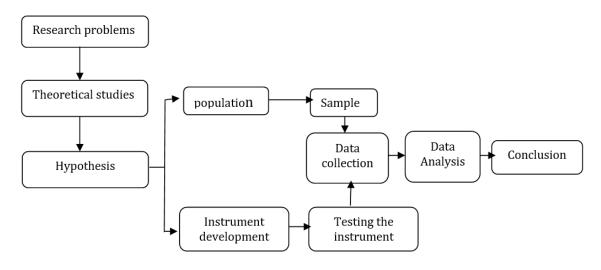


FIGURE 1. Research Design

TABLE 1. Background responden

Variable	Kind	N
Gender	Female	73
	Male	36
Age	18 to 19	27
	20 to 21	75
	30 to 40	7
Job position	Strata 1 Students	102
	Lecture	7
Total		109

TABLE 2. Questionnaire grid of lecture and students' perceptions of the contribution of digital books to online learning

NO	ASPECT	INDICATORS
1	Student readiness	(1) I know digital books are electronic books
	to use digital	(2) I know digital books should be read through software
	books	(3) I know electronic books as a media development
		(4) I know electronic books as a source of knowledge
		(5) I am more interested in digital books than printed books
		(6) I understand the use of digital books
		(7) I have a laptop or mobile phone to operate digital books
		(8) I have an internet network to access digital books
		(9) I am able to use a laptop, and a mobile phone
2	Ease of use of	(10) Digital books are easy to operate using laptops / gadgets
	digital books	(11) Digital books have no barriers when used/operated
3	Benefits of Digital	(12) Digital books are more practical
	Books in Learning	(13) Digital books are easy to get
		(14) Digital books are more cost-effective
		(15) Digital books can increase learning motivation
		(16) Digital books make it easy to learn independently
		(17) Digital books provide new experiences in learning
		(18) Digital books make it easier for me to understand the material
		(19) Digital books have attractive features and appearance
		(20) Digital books make achievements increase
		(21) I can evaluate the learning process with digital books
		(22) By using digital books can assess yourself

Participant

The participants used were lecturer and students in Madiun City who were randomly selected. There were 7 lecturer and 102 students. Participants had an age range of 18-40 years. Samples are examined by age, gender, and occupation, as described in the Table 1.

Material

The instrument in this study used questionnaires, namely students' perceptions of the contribution of digital books to online learning. This instrument uses the choice of strongly agree, agree, neutral, disagree, strongly disagree. The questionnaire grid of students' perceptions of the contribution of digital books in online learning is presented in Table 2.

Data Analysis

This research was conducted by distributing questionnaires, then analyzing quantitative data, then identifying results for follow-up. In this study, the questionnaire was given to 7 lecturer and 102 students in Madiun city after the data was obtained, data analysis was carried out in the form of data coding. Then the data is analyzed to get the percentage and average.

RESULTS

The data obtained through the questionnaire is in the form of responses to lecturer and students' perceptions of the contribution of digital books in online learning, concentrated based on the aspects observed and descriptive exposure based on the responses submitted. The results of the analysis of lecturer and student perceptions of the contribution of digital books in online learning are described in Table 3.

TABLE 3. Results of analysis of lecturer perceptions of digital book contribution to online learning

Item	Strongly agree		Agree		Neut	Neutral		Disagree		Strongly disagree	
•	Count	%	Count	%	Count	%	Count	%	Count	%	
Q1	35	100	0	0	0	0	0	0	0	0	
Q2	25	71,4	8	28,6	0	0	0	0	0	0	
Q3	30	85,7	4	14,3	0	0	0	0	0	0	
Q4	25	71,4	8	28,6	0	0	0	0	0	0	
Q5	20	57,1	12	42,9	0	0	0	0	0	0	
Q6	35	100	0	0,0	0	0	0	0	0	0	
Q7	35	100	0	0,0	0	0	0	0	0	0	
Q8	35	100	0	0,0	0	0	0	0	0	0	
Q9	35	100	0	0,0	0	0	0	0	0	0	
Q10	15	42,9	12	42,9	3	14,3	0	0	0	0	
Q11	20	57,1	4	14,3	6	28,6	0	0	0	0	
Q12	20	57,1	8	28,6	3	14,3	0	0	0	0	
Q13	25	71,4	4	14,3	0	0,0	2	14,3	0	0	
Q14	15	42,9	8	28,6	0	0,0	4	28,6	0	0	
Q15	15	42,9	4	14,3	9	42,9	0	0	0	0	
Q16	25	71,4	8	28,6	0	0,0	0	0	0	0	
Q17	15	42,9	12	42,9	3	14,3	0	0	0	0	
Q18	15	42,9	16	57,1	0	0,0	0	0	0	0	
Q19	15	42,9	8	28,6	6	28,6	0	0	0	0	
Q20	20	57,1	8	28,6	3	14,3	0	0	0	0	
Q21	15	42,9	12	42,9	3	14,3	0	0	0	0	
Q22	15	42,9	12	42,9	3	14,3	6	0	0	0	

TABLE 4. Conclusion 3 aspects of lecturer perception

No	Aspek	Strongly agree (%)	Agree (%)	Neutral (%)	Disagree (%)	Strongly disagree (%)
1	Lecture readiness to use digital books	87,3	12,7	0	0	0
2	Ease of use of digital books	50	28,6	21,4	0	0
3	Benefits of Digital Books in Learning	50,6	32,5	13	3,9	0

The lecturer conducted a questionnaire containing 22 questions regarding the use of digital books in online learning. The answer is by choosing the option strongly agree, agree, neutral, disagree, strongly disagree. Where strongly agree equals getting a score of 5, agree gets a score of 4, neutral gets a value of 3, disagree is equivalent to a value of 2, and disagree gets a value of 1. From these 22 questions, it appears that many lecturers answered very agreeably and agree. There were 5 questions answered in agreement by the seven lecturers, namely questions number 1, 6, 7, 8, and 9. This indicates that lecturers agree that digital books have a contribution to online learning. Digital books are indeed not new in the world in the scope of education, digital books are currently one of the options that can be used to enter the flow of digitalization and also in online learning. Advances in computing and communication technology have elevated the learning paradigm from conventional learning to electronic learning. The Table 4 is the conclusion of the 3 aspects of the questions in the questionnaire.

Based on the table above, it is known that lecturers are ready to use digital books in online learning. This can be seen in the lecturer's answer which shows 87.3% strongly agree with the aspect of readiness in the use of digital books. In addition, as many as 12.7% of lecturers agreed with the readiness to use digital books. None of the lecturers expressed disagreement with the readiness to use digital books in online learning. In the

use of digital books, it is also necessary to see the ability of users to use digital media. User understanding of digital media also includes students' understanding of the norms in using digital media correctly.

As many as 50% of lecturers given the questionnaire also stated that they strongly agreed that digital books are easy to use. Of the 7 participating lecturers, none expressed disagreement with the ease of use of digital books. Digital books are easy to access as well as use. Digital books can be read or opened on different types of devices. Digital books can be read through smartphones, PCs and laptops with applications available to open the digital book format.

The table above also shows that digital books have benefits on learning. As many as 50.6% said they strongly agreed that digital books have benefits on learning. This shows that most lecturers strongly agree with the benefits of digital books in learning. Digital books have a number of functions and also benefits that make them attractive to users. An overview of lecturers' perceptions of the contribution of digital books can be seen in the Figure 2.

The picture above explains that there was a percentage of 65.6% who said they strongly agreed, as many as 24% of lecturers said they agreed, there were 8.4% of lecturers who expressed neutrality, then 1.9% of lecturers who expressed disapproval, and no lecturer who expressed strong disapproval of digital books having a contribution to online learning. Based on the picture, it was concluded that the participating lecturers stated that digital books contributed to online learning.

Based on the table, it is known that there are 22 statements to find out students' perceptions of the contribution of digital books to online learning. In the table above, it is known that the indicator that is easiest for students to approve is the seventh indicator, namely students who have laptops or cellphones to operate digital books. The most difficult indicator for students to agree on is that digital books have no obstacles when used/operated. Seeing this, it is concluded based on 3 aspects that will be described in Table 6.

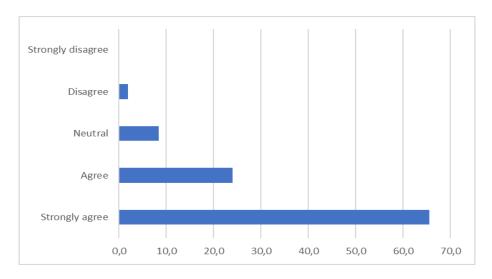


FIGURE 2. Lecturer perceptions of the contribution of digital books to online learning

TABLE 5. Results of analysis of student perceptions of digital book contribution to online learning

Item	Strongly agree		Agree		Neut	Neutral		Disagree		Strongly disagree	
•	Count	%	Count	%	Count	%	Count	%	Count	%	
Q1	275	53,9	188	46,1	0	0	0	0	0	0	
Q2	435	85,3	60	14,7	0	0	0	0	0	0	
Q3	230	45,1	100	24,5	93	30,4	0	0	0	0	
Q4	285	55,9	84	20,6	72	23,5	0	0	0	0	
Q5	105	20,6	180	44,1	90	29,4	8	3,9	2	2	
Q6	150	29,4	160	39,2	84	27,5	4	2	2	2	
Q7	490	96,1	16	3,9	0	0	0	0	0	0	
Q8	125	24,5	256	62,7	30	9,8	6	2,9	0	0	
Q9	315	61,8	128	31,4	21	6,9	0	0	0	0	
Q10	140	27,5	164	40,2	84	27,5	10	4,9	0	0	
Q11	105	20,6	176	43,1	84	27,5	14	6,9	2	2	
Q12	185	36,3	156	38,2	60	19,6	12	5,9	0	0	
Q13	160	31,4	160	39,2	60	19,6	20	9,8	0	0	
Q14	135	26,5	120	29,4	105	34,3	20	9,8	0	0	
Q15	150	29,4	204	50,0	54	17,6	2	1	2	2	
Q16	225	44,1	144	35,3	63	20,6	0	0	0	0	
Q17	200	39,2	132	32,4	81	26,5	4	2	0	0	
Q18	185	36,3	180	44,1	60	19,6	0	0	0	0	
Q19	255	50,0	104	25,5	60	19,6	10	4,9	0	0	
Q20	195	38,2	140	34,3	72	23,5	6	2,9	1	1	
Q21	150	29,4	168	41,2	90	29,4	0	0	0	0	
Q22	155	30,4	164	40,2	90	29,4	0	0	0	0	

TABLE 6 Conclusion 3 aspects of student perception

No	Aspek	Strongly agree (%)	Agree (%)	Neutral (%)	Disagree (%)	Strongly disagree (%)
1	Student readiness to use digital books	52,5	31,9	14,2	1	0,4
2	Ease of use of digital books	24	41,7	27,5	5,9	1
3	Benefits of Digital Books in Learning	35,6	37,3	23,6	3,3	0,3

In the aspect of student readiness to use digital books, 52.5% of presentations were obtained stating that they were very ready, 31.9% who said they were ready, 14.2% who stated that they were neutral, 1% of students who said they were not ready, and 04% who stated that they were very unprepared for the implementation of lectures using digital books.

In the Ease of use of digital books, 24% stated that digital books are easy to operate, 41.7% who stated they are easy, 27.5% who stated neutral, 5.9% of students stated that they were not easy, and 1% who stated that they were very unused. There are still students who have difficulty in using digital books can be caused because students are not used to using digital books, and there is still a lack of lecturers who use digital books so that students do not regularly use digital books in the learning process. In addition, a person's perception of digital books affects whether to use them or not, and a person's ease of using technology (e-learning) will have an influence on user attitudes (Saifuddin, 2017).

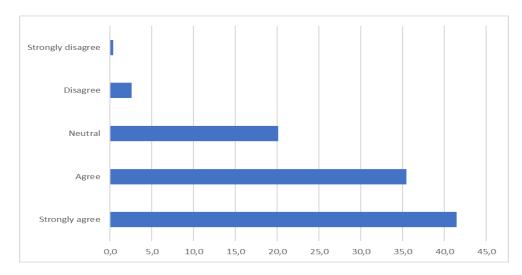


FIGURE 3. Students' perceptions of the contribution of digital books to online learning

In the Benefits of Digital Books in Learning aspect, 35.6% expressed strong approval, 37.3% agreed, 23.6% said they were neutral, 3.3% of students expressed disapproval, and 0.3% expressed strongly disagree that digital books contribute to online learning. This shows that digital books provide benefits for students in online learning.

Aspects analyzed in the scope of usefulness include: Digital books are more practical, digital books are easy to get, Digital books are more cost-effective, Digital books can increase learning motivation, Digital books make it easier to learn independently, Digital books provide new experiences in learning, Digital books make it easier for students to understand the material, Digital books have interesting features and appearance, Digital books make student achievement increase, Digital books can evaluate the learning process, Learning with digital books can judge yourself. An overview of students' perceptions of digital book contribution can be seen in the Figure 3.

The table shows that a percentage of 41.4% expressed strong approval, 35.5% of students agreed, 20.1% of students expressed neutrality, 2.6% of students expressed disapproval, and 0.4% said they strongly disagreed that digital books have contributed to online learning. Seeing this, it can be seen that the perception of students states that digital books have a contribution to online learning.

DISCUSSION

Textbooks are one of the important factors in addition to the factors of students, teachers / lecturers, and infrastructure in the success of a lesson. Textbooks are very useful for a lesson or lecture. The absence of textbooks can cause learning or lectures not to get maximum results. The thing that hinders a teacher in learning is the insufficiency of books for teachers and students (Anugraheni, 2017). This shows that books affect teaching and learning activities.

At this time most students are already using the internet as the main need for learning (Rusli, Rahman, & Abdullah, 2020). Things that smell digital are an interesting choice (Roth, Dahms, Welz, & Cattacin, 2019). Therefore, digital books are in great demand by the public (Fu, Zhang, & Yan, 2018) (Jones, Snider, Nassehi, Yon, & Hicks, 2020). Digital books can be used as an effective way to provide information to students without the limitations of time and space. With the development of the internet in today's era, it will make it easier for something digital-based to become popular. Thus digital information resources play an important role in online learning, and are expected to help students, and others (Zhang & Li, 2016). In a digital book, we must also pay attention to the standards that must exist, namely interoperability, openness, application, and extensibility (Lee,

Guttenberg, & McCrary, 2002). Digital books are also better if designed in an interactive way (Kao, Tsai, Liu, & Yang, 2016).

Digital books have an important role for online learning. With digital books, students can easily access the book without the constraints of space and time. During the Covid-19 pandemic, digital books are indispensable in online learning. The use of digital texts can influence language and literacy development (Martin-Beltrán et al., 2017). Another benefit of digital books is that (1) they are more compact, because these digital books can be placed on mobile phones and can be read at any time without the hassle of carrying them in a bag; (2) more durable, ordinary books can be torn while digital books as long as they are stored in a mobile phone or other device remain the same; (3) Cheaper, because it does not need to be printed and distributed, the price of digital books is cheaper compared to physical books; (4) it is more environmentally friendly, because there is no need to use ink and it is not made of paper, so it is certain that digital books are more environmentally friendly.

Digital books have several advantages over paper-based books (Sohn, W.-S., Ko, S.-K., Lee, K.-H., Kim, S.-H., Lim, S.-B., & Choy, 2002). Digital books make information disseminatable quickly compared to conventional books. In addition, the presence of digital books reduces the excessive use of paper. Digital books also aim to protect the information conveyed. Unlike physical books that can be damaged, wet, or lost, digital books in the form of data on a computer are protected from these problems. Even if the data is lost, users can easily find a replacement either from the internet or ask the bookmaker back. Digital books are also expected to facilitate the learning process carried out by their users, because of the digital book format that can be searched, copied, so that the information sought can be obtained easily and quickly (Fry, 2020).

The use of digital books is unobstructed by time and distance (Fojtik, 2015) (Horava, 2013). It shows that digital books can be accessed anywhere and anytime. During the Covid pandemic which requires students and students to study from home, this digital book will be very helpful because it can be accessed anytime and anywhere. Even from home, students can still get references from digital books used for learning. Digital books can be used for self-study if no one accompanies the child in learning (Dore, Hassinger-Das, & Brezack, 2018). With digital books, students or college students will get a lot of benefits.

Based on several studies, the use of digital books and mobile devices in the classroom has a significant impact on the educational experience of students (Glackin, Rodenhiser, & Herzog, 2014). Digital books can improve a person's reading literacy (Gupta & Dileep, 2020). Digital books have been established as an excellent complement to teaching. On the other hand, the use of digital books is becoming more and more widespread: they are portable, accessible, and offer the possibility of enriching the text with other digital content as an additional advantage. For students, digital books provide many benefits, students are satisfied with the use of digital books (Joo, Park, & Shin, 2017).

Digital books can provide benefits for a child's cognitive and social development (Hourcade et al., 2003). This is because digital books can make it easier for children to get reading materials, where reading books plays an important role in children's cognitive and social. Seeing this, nowadays digital books are in great demand by the public (Fu et al., 2018). Digital books can also help parents in supporting children to practice languages (Troseth, Strouse, Flores, Stuckelman, & Russo Johnson, 2020). In addition, digital books can also increase language vocabulary (Smith et al., 2013). In addition, the books are also presented as a wonderful teacher support tool (Gonzälez, J. C., Guzmän, J. L., Dormido, S., & Berenguel, 2013). Digital books can also increase student motivation in doing questions, with the existence of digital books can reduce student anxiety in doing assignments (Turel & Sanal, 2018).

CONCLUSION

Technological developments can make changes in the implementation of teaching and learning. This includes online learning. Online learning or online learning is learning that uses internet media. Online learning is not carried out face-to-face in the classroom, but is carried out through a network. One of the learning resources needed in online learning is in the form of books. A digital book is a type of information that contains text, images, audio or video that is loaded digitally so that it can only be accessed using electronic devices. With digital books, students can easily access the book without the constraints of space and time. Digital books that can be accessed anywhere and anytime make it easier for students to take lectures, do assignments, and add insight. Digital books can be accessed using their cellphones and can directly access the books. Based on lecturer and student perceptions on the contribution of digital books to online learning, it is known that lecturer and students are ready to use digital books, digital books are easy to use, and digital books have several benefits that can make it easier for students to learn.

However, this study is still limited to some conditions, such as the limited number of lectuer and students participating and the limited area used to conduct the trial. This study suggests further research on the development of digital books as one of the student learning resources and also suggests conducting further research on the effectiveness of digital books for online learning in higher education.

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