



## Utilizing the E-Book System in Supporting Students' Literacy and Independent Learning

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### ABSTRACT

The development of the E-Book system in supporting learning literacy is very beneficial for students in the era of globalization. In today's era of globalization, it has utilized the E-Book system in various schools in the learning system. The use of E-Books in learning has a positive impact on the present and the future. This study aims to understand the concept of utilizing the E-Book system in supporting students' literacy and independent learning by utilizing the E-Book system in education and to find out the extent of the development of the E-Book system in education. So that teachers and students can use this E-Book system as a means of learning. The method used by the researcher in conducting this study is quantitative, with data obtained through disseminating questionnaires online using Google Forms. The word was processed using the SPSS application by statistical analysis through the ANOVA test; after completing the data test, the researcher presented the data in the form of graphs and tables containing respondents. The results of this study show that the introduction of an offline-based E-Book system will be able to support the literacy and independent learning of students in the world of education. Using the E-Book system in education brings various benefits, such as increasing student participation and supporting the understanding of complex concepts. Learning that utilizes the E-Book system has progressed compared to learning that still uses its own learning method, and cannot compete in the world of education. This study concludes that utilizing the E-Book system, especially independent learning, positively impacts education. The use of the E-Book system is expected to build interactive and effective learning resources. The use of the e-book system in education shows that it can improve the quality of learning and provide advantages in the educational process.

**Keywords:** E-Book System, Education, Independent Learning, Literacy, Quantitative Method

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## **INTRODUCTION**

The world has witnessed a major transformation in the way data is obtained, shared, and understood in recent decades (H.-Y. Sung et al., 2022). The literacy and learning landscape has been transformed by technological advancements, especially the internet. With these advances, literacy is no longer limited to the ability to read traditional prints (Yang, 2021). Currently, literacy includes the ability to read and understand digital texts, manage data from various sources, and the ability to think critically and creatively (Swanson et al., 2020). The need for more inclusive and adaptive educational methods has emerged as a result of this change in the concept of literacy. Students must have the skills to manage and understand digital texts, which also includes digital literacy (Fu et al., 2018). They must also be independent learners who are able to motivate themselves to learn throughout their lives.

Creating learning by utilizing the E-Book system is indeed very much needed in every existing educational institution (Smeda et al., 2018). Lack of knowledge about the E-Book system will hinder the teaching and learning process because they do not understand how to use it. This will create obstacles and limitations in teaching so that students who receive this kind of education will find it difficult to compete with other schools (Blummer & Kenton, 2020). Because using the E-Book system in supporting learning literacy has many benefits and a very significant role and is the main driver of change in various fields (Martins et al., 2018). The ideal teacher standard for now is to have the ability to develop learning materials that can be accessed through E-Books and be able to maximize the use of educational resources. By utilizing the E-Book system to support students' literacy and independent learning.

The reason for this study is due to the lack of educators' knowledge of the use of the E-Book system in supporting students' literacy and independent learning where an educator still uses independent learning (Wirl, 2018). This independent learning will no longer be as effective as it used to be. When compared with the current method, namely using the E-Book system, it will lag far behind (Kirby & Anwar, 2020). Because the standards for a teacher are more difficult. So that students who are taught using offline learning will be more able to develop and compete with others. Teachers who have an understanding of the use of the E-Book system can unite each student in their teaching, creating more interesting and interactive learning (Harjono et al., 2020). On the other hand, teachers who do not understand the E-Book system may be overwhelmed in providing learning materials, which can limit the variety of teaching methods.

The E-book system has undergone frequent changes over the past few years, where educators usually still use book media as a means of learning in the classroom (Liao et al., 2018). However, as the times change, many changes occur, where educators are required to be able to use E-books following existing changes (Chang et al., 2019). By utilizing the E-book system in supporting learning literacy as a means to create educational activities. So that students can adapt and be able to develop and not be left behind (Scott et al., 2022). Therefore, an educator must be able to implement the E-book system in order to make it easier for educators both in terms of conveying

information, helping to improve students' understanding and applying it in the learning environment.

The introduction of the E-Book system to schools is indeed necessary, especially for prospective educators so that it does not become an obstacle when an educator provides material to students (Jbeen et al., 2022). To overcome this problem, a prospective educator must have basic skills in collaborating learning. So that they are not awkward when using these learning strategies (Lana, 2022). The use of the E-Book system will be able to support students' literacy and independent learning in education and be able to encourage educators to be more active in teaching students in the classroom (Fernandez, 2020). The use of the E-Book system is expected to have a significant positive and innovative impact on the education sector. An educator needs to increase his creativity in teaching (Wu & Chen, 2018). They need to adapt the method of using the E-Book system that continues to integrate learning aspects to maintain the learning ecosystem and prevent student saturation with monotonous learning approaches.

There is a similar study conducted where the study discusses Training in the use and development of the E-Book system in supporting students' literacy and independent learning (Wang & Miller, 2020). And explained the use of active learning through discussions (Ahmad, 2021). The purpose of this activity is to improve the skills of teachers in using and creating effective online-based learning materials (Yow & Priyashri, 2019). Not only that, the latest research was also carried out by which the research discussed the experience of the E-Book system in supporting students' literacy and independent learning.

Considering the existing reasons, this study aims to answer the research question is. First, is the E-Book system an important part of today's educational transformation changes? Furthermore, how can the E-Book system open up great opportunities in the teaching and learning process? (Prokop & Stejskal, 2020). Second, is using this E-Book system able to encourage more creativity, to what extent is it effective in improving student learning outcomes? Furthermore, the third question, researchers can focus on educators, which is the question, how do educators create E-Books through literacy and learning for students?

The researcher hopes that the research conducted by the researcher will be carried out in the future so that teachers can master the E-Book system in building interactive learning resources in Education for the future (Reich et al., 2019). By exploring deeper insights into the benefits of E-Book learning, it aims to motivate educators to apply this approach to classroom learning practices and encourage more collaborative student interaction (M. R. A. Chen, 2020; Pizarro & Filipe, 2020) And can apply it in every learning activity, and students can use the E-Book system that supports literacy and learning to create a conducive and active learning atmosphere, and involve all students in participating in learning materials.

## **RESEARCH METHODOLOGY**

### **Research Design**

The current research uses a quantitative-based research design, which uses this type of design to allow researchers to measure the number of creative ideas produced by students (Rafique et al., 2023). The data can be used to find out and compare students who use project-based learning methods with students who do not use project-based learning (Turel & Ozer Sanal, 2018). The data collected by the researcher is in accordance with a survey that has been designed for the nearest educational institution, by conducting observations in the classroom to measure the extent to which students feel capable of implementing project-based learning (Rao et al., 2018). Furthermore, conducting in-depth interviews with teachers and students involved in the learning and distributing a questionnaire in the form of google from containing several questions related to this project-based learning (Lu et al., 2018). After that, statistical analysis will be carried out to see the comparison between students who use project-based learning and students who do not use this type of learning. In this case, the data can be processed through SPSS using the t-test type.

### **Research and Participants Setting**

This research took place in the state Madrasah Aliyah institution. Researchers will specifically carefully select schools that have implemented the E-Book system, especially in supporting project-based student self-learning literacy into student education programs (Y. Y. C. Sung & Chiu, 2022). Nevertheless, researchers have determined the choice at Riau Province Junior High School. This is done because it is very important that research is carried out in the right environment and in accordance with the real application of project-based learning techniques (Chen et al., 2019). Participants in the study consisted of students who were actively involved in the learning process that had been determined at school. The researcher will use a random method of sample students in different localities. In addition, the researcher will also include educators to collect useful information related to the matter being researched with the aim that the researcher will utilize in-depth knowledge about project-based learning.

### **Ethical Considerations**

This research received permission from the school institution. The importance of conducting research ethically is because it is a foundation that must be firmly respected (Dore et al., 2018) Research ethics is intended to ensure that every stage of research is carried out with integrity (Bruno, 2020). One of the most important things is to obtain permission and approval from the participant where the participant should get transparent information, procedures to be carried out, and the right to participate without facing problems and adverse impacts (Mechelen, 2020). In addition, the protection of the collected data is guaranteed confidentiality and security, including the personal data of participants (Korat et al., 2022) The data should only be used for the purposes of the

research described (Boticki et al., 2019) Researchers are asked to reveal what relationships can affect the results of the study. In addition, the results of the research are presented honestly and accurately, without any manipulation of data or documents that can cause impropriety (Makwanya & Oni, 2019) Researchers should avoid plagiarism and appreciate the contributions of other parties involved in the research.

### **Data collection and analysis**

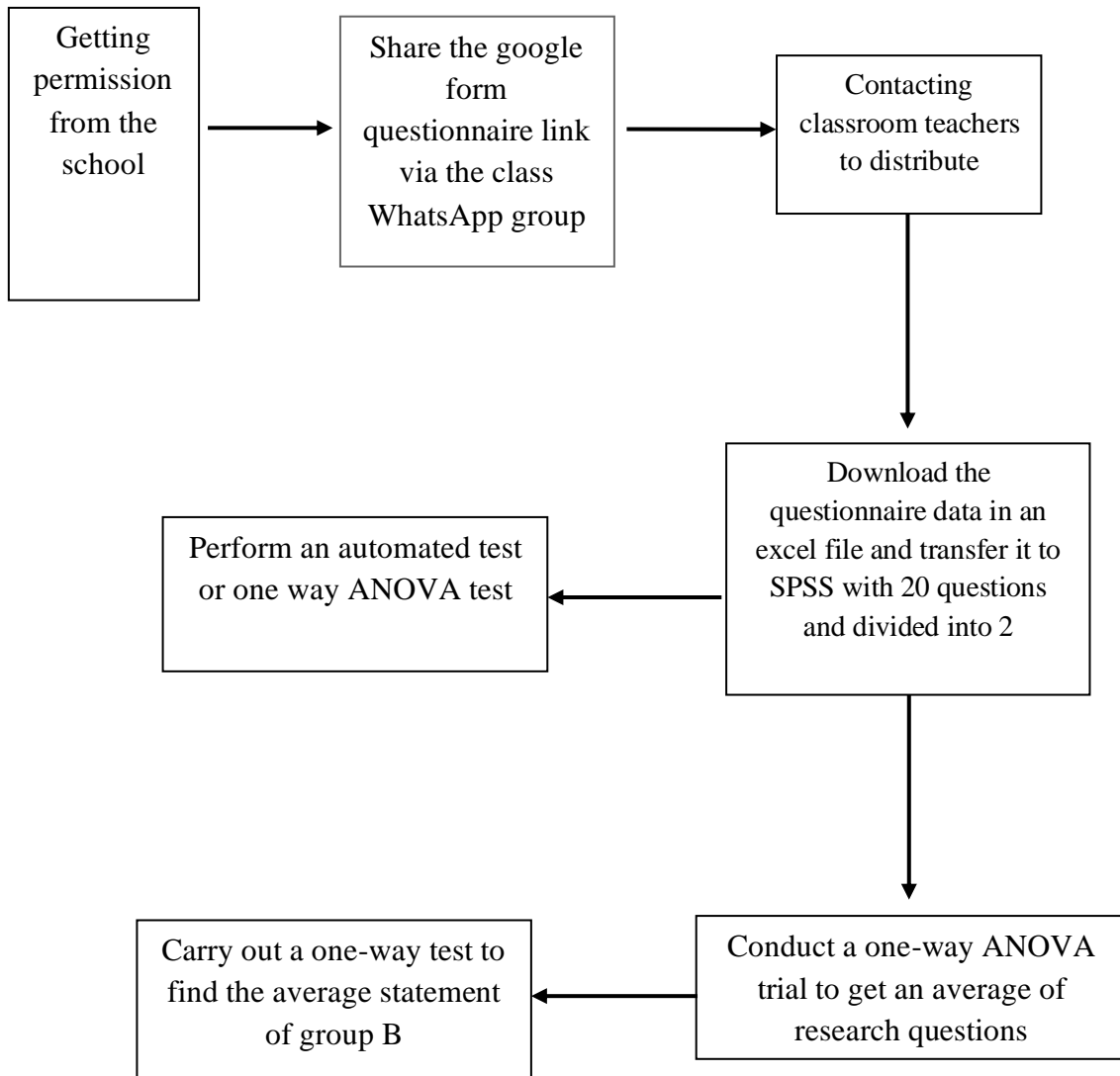
Data collected by researchers in September. The researcher distributed google form to teachers who taught in the class and then distributed it to students involved in the class. The distribution of this questionnaire was carried out precisely from October 20, 2023 to October 28, 2023. The data obtained is then entered into an Excel file and then transferred to SPSS for further analysis. After all the data used has been summarized in the SPSS, further analysis can be continued. After as much data as needed has been summarized in the SPSS, it can be linked to the next analysis. The data is presented in the form of an average percentage score with previously conducted by one-way anova test analysis. The data entered was according to what was obtained by the researcher based on the results of the answers from the students where in the SPSS were written questions related to the research and the number of percentages from 2 parties, which shows the amount of influence of using this learning on student creativity and collaboration.

**Table 1.** Student Class List

No	Departemen	Number of Participants	Percentage(%)
1	Class IPA A	20	60%
2	Class IPA B	20	30%

**Table 2.** Featured Categories

No	Featured Categories	Tier Numbers
1	Strongly Agree (5)	>90%
2	Agree (4)	70-80%
3	Disagree (3)	50-60%
4	Strongly disagree (2)	0-40%
Total		100%



**Figure 1.** Data Collection and Analysis Flow

The researcher conducted research on this matter in accordance with the description that has been explained in the method section above. This research has been structured and organized as much as possible for researchers to get the desired results. In this class, the researcher obtained 20 respondents based on the number of participants in the class with an estimated percentage of 60%. Not only that, researchers also often conduct research on Science B classes with the same number of participants, namely 20 students and the estimated percentage reaches 30%. The research in table 1 was obtained through an in-depth survey in the form of google gform where the researcher gave a statement on the introduction of interactive learning with the choice of agree, strongly agree, disagree, and even strongly agree. Many of them voted to agree and were not inferior to the category of agree. The research is in accordance with the flow that has been depicted in figure 1.

**RESULT AND DISCUSSION****Introduction of the E-Book system in Supporting Literacy**

The research conducted by the researcher on the introduction of active learning strategies by integrating discussions, collaborations and experiments in the learning environment to build interactive learning resources in education if the numbers obtained based on the answers from the respondents got a high average. In the sense that this learning can affect students in interactive learning resources. Students who participate in learning this digital object. If you look at table 2, they strongly agree to get the highest gain. As in numbers 2 and 8, the same percentage was obtained and supported by the option of agreeing, which in the form of questions of active learning researchers can open up good opportunities in the teaching and learning process for both teachers and students with the number of respondents 20 and the results of the percentage obtained reached 63% strongly agree, and some respondents gave the category of choices, agree, with a percentage figure of 30%. In addition, in number 8 of this item, it explains the use of digital technology to enrich the learning experience of students. The percentage figure reached 63% and to agree reached 40% of the respondents' answers that had been obtained.

The introduction of learning strategies in students can be learned by mastering learning strategies at this time. Students are required to have skills and abilities in the field of discussion and collaboration as well as work with groups to design, plan, and carry out online learning that is relevant to the learning material. So that students are given the opportunity to exert intuition in education, both to think innovatively, effectively, and be able to face obstacles that occur. It is required to learn to work with groups, exchange ideas, experiences, and ideas from each student. Teachers are also required to have skills in processing information about learning strategies so that students can utilize them in the learning environment.

**Table 3.** Based on statements and percentages obtained based on answers from respondents

No	Question	SS	S	TS	STS
1	Do you agree that the use of the E-book system can improve students' access to reading materials	31%	69%	0%	0%
2	Key benefits of using E-books in helping students improve their literacy	38%	54%	8%	0%
3	The E-book system can be adapted to different levels and learning needs of students	38%	54%	8%	0%
4	E-book System can motivate students to learn more independently	61%	16%	15%	8%
5	Educators can monitor and assess students' progress when they use E-books for self-paced learning	31%	61%	8%	0%
6	What are the challenges in implementing an E-book system in an educational environment	23%	70%	7%	0%



7	Parents can play a role in supporting their children's use of E-books	46%	38%	16%	0%
8	The use of the E-book system does not replace the role of teachers, but instead complements teaching in the classroom	23%	54%	15%	8%
9	Provide students with access to E-books so they can access E-books anywhere and anytime	31%	54%	15%	0%
10	Using E-books as a reference source in learning	46%	56%	0%	0%

The results of the research conducted by the researcher if considered based on the table above reflect how to utilize the E-Book system in supporting literacy and learning. There is the highest score in the agree category in this sense that the top answer of several proposed options from several statements is given. Not only that, then the category of choices that strongly agree occupies the next position of several options that have been determined, not forgetting also the answer of rejection or disagreement is also made as an option in the statement that has been submitted by the researcher. However, in this study, the respondents only gave two respondents who strongly agreed with the agreement. This proves that the use of the E-Book system for students. If you pay attention to the table above, the highest figure is shown at 70%, which is the question of what are the challenges in implementing the E-book system in the educational environment.

The next research on the question Do you agree that the use of the E-book system can increase students' access to reading materials with a score of 31% in the strongly agree section and a score of 69% in the agree category, and have a disagreement category with a percentage result of 0%. The next study on the question of the main benefits of using E-books in helping students improve their literacy, with a result of 38% in the strongly agree section and 54% in the agree category, and the disagreement category with a percentage result of 8%. There is a figure equal to 38% in the choice of strongly agreeing and accompanied by the second category, namely agreeing with a figure of 54%. The question is that the E-book system can be adjusted to various levels and learning needs of students. The next question that gets the next highest score with the E-book system question can motivate students to learn more independently with the next highest score result, which is 61% strongly agree and the choice agrees with the result of 16%, and in the disagreement section 15%, and in the category of strongly disagree 8%.

The next question with a result of 31% for the category is very agreeable and for the option to agree get a result of 61% and have the option to disagree with the result of the percentage of 8% where the question is that educators can monitor and assess the progress of students when they use E-books for independent learning. The question after that had a percentage result of 46% for the very agreeable choice and the agreed choice got 38% with the question What are the challenges in implementing the E-book system in the educational environment. Then question number eight, namely with the question of using the E-book system, does not replace the role of the teacher, but instead



complements teaching in the classroom with a presentation of 23% for the option of strongly agreeing and the choice of agreeing to get a figure of 54%.

Based on the results of the lowest questionnaire score, there was question number nine with a figure of 31%, the choice category strongly agreed, where there the researcher asked about providing access to E-books to students so that they can access E-books anywhere and anytime, and for the choice category, agreed with the presentation 54%. And the last question, which is 46% strongly agree and to agree with the figure of 56% where the question uses E-books as a reference source in learning. From all questions regarding the use of the E-Book system in supporting students' literacy and independent learning, it supports the use of the E-Book system in learning.

### **Building Learning Resources that Utilize E-Books**

The research carried out related to utilizing the E-Book system is a step that must exist and has an important role in creating an effective learning environment in learning at this time. In creating interactive learning, it allows students and teachers to access information and learning materials anytime and anywhere. By overcoming various problems such as time and place limitations in conducting education in the past (I. C. Lin, 2021). Utilizing the E-Book system for both teachers and students can be adjusted to what is needed by a person or individual. By being a teacher so that they can adapt to the level of understanding of each student. This can influence and maximize the potential of latent understanding.

The development of learning resources requires an understanding of using the E-Book system in order to understand the learning that will be delivered. A teacher must be able to have expertise and skills in developing material that will be delivered to students (Kusumawati, 2020). The learning environment can be used and can be accessed according to the characteristics of various types of students to be taught. The results of the activity were able to improve the quality of education for an educator of online-based teaching materials in the form of E-Books (Su, 2022). Understanding E-Book learning will make classroom lessons more comfortable, fun and easy to understand. Students can actively participate during the teaching and learning process, and can motivate learning. Not only that, students are also more advanced when an educator is able to guide and direct their cognitive abilities.

The development of the E-Book system at this time is very varied so that the learning environment is able to build interactive learning resources. This is because the learning strategy used to make students bored faster. So learning about this is necessary because this is a reference step to face the development of more active learning strategies in the world of education. Making subject matter the main material for students to take part in the learning that has been provided. In the context of interactive science, it can also generate students' enthusiasm for learning. More specifically, there is room for student error to be given the opportunity to try different learning features, various things that work and what does not. This strongly supports creativity because

learners are not afraid to undergo new things and go beyond the boundaries that have been set.

Research related to the E-Book system in education can hone the ability of students who have talents in cognitive and affective assessment. Thus, students can develop a sense of competence in education. In essence, the learning process in the form of integration often brings complex problems. Therefore, intensive problem solving is needed. Students must be able to face problems like this by coming up with creative ideas. Because it will help students to be able to face obstacles and be able to get solutions to existing problems. This is also inseparable from the role of an educator to be able to direct the ability and expertise in developing the learning ability of students. So that the learning materials taught using the E-Book system in the form of learning integration can also be used to look for various advantages.

**Table 4.** Based on the statements and percentages obtained based on the answers from the respondents

No	Question	SS	S	TS	STS
1	By using E-Books can be beneficial during learning	50%	43%	0%	7%
2	Developing feasible, effective, and practical E-books to improve science literacy skills on certain materials	29%	71%	0%	0%
3	The effect of the use of E-books on student learning outcomes in certain subjects	50%	36%	14%	0%
4	Can learning E-Books increase the effectiveness of using E-books in students' literacy and independent learning?	33%	60%	7%	0%
5	By way of E-Book whether it is suitable for the needs and abilities of students	36%	64%	0%	0%
6	Do agree to ensure students actually read the E-book and not just look at other media	22%	64%	7%	7%
7	Whether the advantages of E-books can be compared with traditional books in improving students' literacy and independent learning	29%	64%	7%	0%
8	Student literacy through E-Books can improve the independent curriculum	43%	57%	0%	0%
9	Integrating E-books in STEM learning to improve students' science literacy	43%	43%	0%	14%
10	Do you agree that developing an effective E-book can improve students' religious literacy?	36%	57%	7%	0%

The results of the table above, if examined by the research conducted by the researcher in number two, obtained the highest percentage of all questions. Which reached with a figure of 71% with the question of developing a feasible, effective, and practical E-book to improve science literacy skills on certain materials. If you pay

attention, the E-Book system is able to help teachers to complete work that is difficult to do because it requires an object to be able to understand an example. In addition, there was a very agreeable answer to the same question with the percentage figure reaching 29%. In this sense, it strongly supports the research conducted by current researchers. Because the students involved are able to solve real problems that produce an in-depth and meaningful E-Book system for learning, it will create an interactive classroom by utilizing the learning environment as the main means.

By using E-Books can be profitable during learning. The statement submitted by the researcher on this subject is not inferior to other top studies. In this study, the highest number was also obtained with a percentage of 50% and supported by a statement of agreement that reached a percentage figure of 43%, as well as a choice that did not agree with the sum of 0% figures. Then the next highest question has a percentage of 50% to strongly agree and agree with the results of 36% with the question of the influence of E-book use on student learning outcomes in certain subjects. Having a presentation result with the result of the presentation, namely with a figure of 33% to strongly agree and agree with the figure of 60%, with the question of whether studying E-Books can increase the effectiveness of using E-books in students' literacy and independent learning.

The next highest question is found in number five with a question in the form of an E-Book whether it is in accordance with the needs and abilities of students. With the results of the presentation, 36% for the choice strongly agree and for the choice agree 64%. That is, by way of E-Book, is it in accordance with the needs and abilities of students. The next highest question was with the result of 22% strongly agreeing and 64% agreeing with the question of whether to agree ensures that students actually read the E-book and not just look at other media. The next question: Whether the advantages of E-books can be compared to traditional books in improving literacy and independent learning, students got respondents strongly agree with the figure of 29% and to agree with 64%. Having the same respondent results as the figure after that was 43% with student literacy questions through E-Books can improve on the independent curriculum and the result to agree is 57%.

In addition, based on the results of this study, the researcher tried to ask questions about integrating E-books in STEM learning to improve students' science literacy. The research on it actually received a rejection answer from respondents with a choice of 0% disagreement category and 14% for the strongly disagree category. Not only that, the researcher also tried to ask the question of whether agreeing with developing an effective E-book can increase students' religious literacy. There were answers that did not agree with this by respondents with a percentage of disagreement of 7% and stronger answers strongly disagreed with 0%.

**Table 5.** Uji One Way Anova Class IPA A ANOVA

Sum of Squares	df	Mean Square	F	Sig.
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V1	IPA A	1.603	7	.229	.981	.527
	IPA B	1.167	5	.233		
	Total	2.769	12			
V2	IPA A	3.769	7	.538	2.692	.147
	IPA B	1.000	5	.200		
	Total	4.769	12			
V3	IPA A	3.269	7	.467	1.557	.324
	IPA B	1.500	5	.300		
	Total	4.769	12			
V4	IPA A	8.769	7	1.253	1.566	.321
	IPA B	4.000	5	.800		
	Total	12.769	12			
V5	IPA A	2.641	7	.377	1.132	.462
	IPA B	1.667	5	.333		
	Total	4.308	12			
V6	IPA A	3.192	7	.456	4.560	.057
	IPA B	.500	5	.100		
	Total	3.692	12			
V7	IPA A	5.603	7	.800	3.430	.097
	IPA B	1.167	5	.233		
	Total	6.769	12			
V8	IPA A	5.756	7	.822	1.298	.400
	IPA B	3.167	5	.633		
	Total	8.923	12			
V9	IPA A	3.526	7	.504	1.162	.450
	IPA B	2.167	5	.433		
	Total	5.692	12			
V10	IPA A	2.231	7	.319	1.593	.314
	IPA B	1.000	5	.200		
	Total	3.231	12			

**Table 6.** Uji One Way Anova Class IPA B ANOVA

		Sum of Squares	df	Mean Square	F	Sig.
V1	IPA A	7.077	7	1.011	2.527	.162
	IPA B	2.000	5	.400		
	Total	9.077	12			
V2	IPA A	2.103	7	.300	2.253	.194
	IPA B	.667	5	.133		
	Total	2.769	12			

V3	IPA A	3.744	7	.535	.802	.619
	IPA B	3.333	5	.667		
	Total	7.077	12			
V4	IPA A	2.359	7	.337	1.264	.412
	IPA B	1.333	5	.267		
	Total	3.692	12			
V5	IPA A	1.744	7	.249	.934	.550
	IPA B	1.333	5	.267		
	Total	3.077	12			
V6	IPA A	6.167	7	.881	2.403	.176
	IPA B	1.833	5	.367		
	Total	8.000	12			
V7	IPA A	.974	7	.139	.209	.968
	IPA B	3.333	5	.667		
	Total	4.308	12			
V8	IPA A	1.897	7	.271	1.016	.511
	IPA B	1.333	5	.267		
	Total	3.231	12			
V9	IPA A	9.026	7	1.289	1.381	.373
	IPA B	4.667	5	.933		
	Total	13.692	12			
V10	IPA A	2.936	7	.419	1.144	.457
	IPA B	1.833	5	.367		
	Total	4.769	12			

The researcher conducted the test by processing data with the SPSS application. The data obtained from the respondents is in accordance with the flow of figure 1. There are data processing results in the table above with the uni type of one way ANOVA in the data of science class A and science class B. when viewed from the results given the number on the sig describes the research data produced normally with the number given  $>0.5$  (greater than). Sum of Squares (SS) is the sum of the squares of the difference between each class and the corresponding average. The SS between groups is useful for measuring the extent to which the average of different groups differs. In addition, there is a degree of freedom abbreviated with df which is useful for calculating mean square. Mean square is the result of dividing the sum of squares (SS) by the appropriate degree of freedom. This mean square value is used to calculate the F-test statistics which will later be used to determine the amount of difference between groups conducted by research on researchers.

### **Introduction to the use of the E-Book system**

An E-Book system, or "electronic book", is a platform or system used to provide, manage, and distribute electronic books digitally (H.-Y. Sung et al., 2019). The use of electronic book systems has grown rapidly in recent years and has had a major impact on the world of publishing and education. Here is a further explanation of the use of digital access electronic book systems. Electronic book systems allow people to access books and reading materials in digital form (Spjeldnæs & Karlsen, 2022). Online education and e-learning programs are used in schools, colleges, and other educational institutions. Teachers and students can access e-learning resources easily.

A popular alternative to printed books in schools is digital textbooks. They are less expensive, can be updated easily, and have interactive features that help students learn (Sun & Pan, 2021). Educational organizations, especially higher education institutions, use electronic book systems to gain access to scientific journals, reference books, and research materials. Many publishers publish books in E-Book format, either in conjunction with the print edition or exclusively as an E-Book (Thompson Long et al., 2018). Independent authors can use the E-Book platform to publish their own work without the need to work with traditional publishers. The E-Book system allows digital library members to access e-books, which saves storage space and allows more people to access the readings they want.

Reference books, guides, and technical manuals are often converted into electronic books that can be used by professionals working in various fields. Organizations use e-books to store and disseminate internal documents, such as product manuals, and employee training (P.-H. Lin et al., 2019). The general function of e-books is to allow digital information to be read through special devices. In general, e-book users are technologically literate and tend to buy e-books as a medium. The purpose of e-books is to facilitate the teaching and learning process because teachers can create teaching materials in the form of e-books to then be sent to their students (Kaiser, 2020). Of course, from a student's point of view, it will be very easy because he will be able to learn material in the form of an e-book anywhere and anytime. There are several commonly used e-book formats, such as PDF, EPUB, MOBI, and AZW. The benefits of e-books include cost savings, reduced paper consumption, and more convenient use.

### **E-Book System Supports Literacy in Learning**

To foster a culture of digital literacy in the world of education, e-books or e-books can help. They can be created with interesting sounds and backgrounds to attract children to read books. To continue to provide students with the learning they need when learning remotely, teachers can use e-books that are equipped with basic education standards (Zarzour et al., 2020). Therefore, e-books can be used to encourage Indonesia's children's interest in reading. E-books, such as illustrated stories, can be designed creatively and engagingly, and can be used as creative and engaging teaching materials to increase students' interest in Indonesian lessons.



E-books can be used as an innovative learning medium to improve the quality of education in Indonesia, so that they are able to compete globally. E-books can help students better understand the subject matter. E-books can be designed in a creative and engaging way, just like e-books with comics (Hashim et al., 2021). E-books with picture stories can be creative and interesting teaching materials to increase students' interest in learning Indonesian lessons. The e-book system allows students to quickly search for a specific text or topic in a book. This helps find relevant information and supports literacy skills such as reading comprehension.

The E-Book system allows students to read anytime, anywhere. This encourages more flexible learning, which is important for those with busy schedules. The E-Book system provides easier and faster access to various types of books and reading materials (Roncaglia & Solimine, 2021). This increases students' exposure to a wide range of topics, genres, and authors (Caron, 2020). With e-books, students can quickly download or access books from electronic devices such as computers, tablets, or smartphones. They don't have to go to a physical bookstore or library, which can limit access to materials. Many e-books also offer audiobook versions, so students can listen to the book as an alternative to reading. It supports multi-sensory learning and helps people who have difficulty reading.

Teachers can create the subject matter as an e-book and then send it to their students. From the student's point of view, this will certainly be very simple because they will be able to learn the material in the form of an e-book anywhere and anytime (Gunawan et al., 2019). E-books can have a great impact on students by arousing their interest and enthusiasm in the learning process so that they can improve their academic achievement. Teachers can create eBooks with attractive and creative designs to increase creativity in creating learning materials. The e-book system is often used in schools as a digital textbook. This helps reduce the physical burden of students who no longer need to carry large quantities of printed books to school.

In addition, digital textbooks can be accessed through any device that has an internet connection, so students can read them at home or on the go. E-books have accessibility features that can help students who are experiencing physical or learning difficulties. For example, voice captions or customizable displays allow for easier access for those who need specialized support (Caron, 2020). In addition to text, many e-books also offer audiobook versions. This is especially beneficial for students who have reading difficulties or multisensory learning that involves hearing. The use of e-book systems in learning has brought significant changes in the way education is delivered and accessed. This supports the development of literacy, critical thinking and learning flexibility.

Sum of squares (ss) is observed through the number thousands where the number is obtained through the results of the Science A class with a total of 5,033 as an explanation this is the difference between the groups that the researcher compared in the ANOVA one-way test. The value of 5,033 shows how much variation exists between the groups. Then in df called degrees of freedom, the number 10 measures the number

of degrees of freedom involved in statistical analysis. The mean square shows that this number of .503 is the value obtained by dividing the SS by the number of degrees of freedom (df) This is a measure of the average variation between the groups.  $F = 3.883$  is the test statistic in ANOVA used to test between the groups the researcher compared. The value of 5.783 is the result obtained from the comparison of MS between groups of variation between groups and MS in groups. Finally, the Sig with the number .027 which indicates that the difference in reaching the relevant level has not reached the level that is usually accepted.

Research on active learning strategies in building interactive learning resources in education through the results of the Anova one-way test, the next statement obtained that there was variation between groups involved in interactive learning in the learning resource, the stronger f-statistic value of 3,825 may show that there are quite relevant differences between groups. However, a sig level of 0.28 proves that the difference has not reached the normally accepted level. In the context of the research conducted, this researcher may further analyze the results and see if there are any findings that can be interpreted as group differences, especially if there is an important learning approach that integrates discussion, collaboration and experimentation that can build interactive and effective learning resources for learners.

The use of active learning strategies can help and facilitate teachers in the teaching and learning process. Although there are many benefits of learning like this, it can become uncontrollable if not processed with good management. One of the challenges that will arise is the pressure experienced by the participants. When digital technology requires internet performance, there is a possibility that it feels unusable or even too burdened, especially by the more dominant. This pressure arises for several reasons. Some others may experience problems actively, resulting in discomfort in the distribution of learning and comprehension of the material. In an effort to achieve learning goals, learners may feel compelled to give in or sacrifice their valuable ideas, which can delay creativity and potential in managing data. In addition, time constraints can also foster stress. When there is a tight deadline to complete an assignment, students may feel rushed to complete it and may not have enough time to present the concept of developing the ideas they have.

The next research on the results of the ANOVA one-way test with an SS value of 9,000, with a df of 10 and a mean square of 900, an f-statistic of 2,945 and a significance of .060 in the study of the recognition of digital learning objects in building interactive learning resources in education. Students obtained statistical results from the research data. In this case the research conducted by the researcher obtained that there was no clear difference between the groups compared in the related study. A sig of 0.060 is greater than the commonly used level of 0.05 which identifies that the differences between groups are not statistically relevant. However, it should be recalled that these results may indicate that the implementation of the approach does not have a relevant statistical impact on the variables or aspects measured in the study. Further

analysis or consideration of other aspects of the research may be needed to gain a better understanding.

## **CONCLUSION**

The development of the E-Book system is currently taking place very rapidly, and at this time the E-Book system is very important in the field of education. In today's era of globalization, it has been able to improve the quality of student learning in the field of education. Using the E-Book system in education has many positive and beneficial impacts both now and in the future. Therefore, integrated learning is needed to build interactive learning resources in the field of education. In order to understand it, an introduction is needed to support literacy in learning so that interactive and effective learning is achieved. Refers to learning that uses E-Books as the main means of learning process.

Learning using the E-Book system in today's world will be more effective. Therefore, direction from an educator is needed to be able to use this E-Book system wisely. Skills will be needed during the teaching and learning process. Students are also required to always be ready to face the changing times in the world of education which will continue to develop. Thus, education will never be separated from online learning. Able to interact with teachers within the school institution and fellow students, share innovations, share experiences, and collaborate on learning projects. It helps in developing students' social and collaborative skills. Therefore, the E-Book system is a very important step in transforming independent education into interactive.

The use of the E-Book system of learning materials designed in interactive form such as supporting literacy in learning. This is designed to provide a more interactive and engaging learning spirit for students. The ability to have group discussions is able to provide interactive visualization in presenting concepts that are understood until they are made easy by using instinct. The importance of knowledge about this E-Book system cannot be ignored. Because educators can invite students to actively participate in these learning activities. Because what is issued is easy to understand, the material presented is interesting so that students do not feel bored when using electronics. With this E-Book system, students can learn at their own leisure, improve the quality of understanding that suits them about the material, and actively participate in the learning process.

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