English Reading E-Module Based on Gamification and Contextual Teaching and Learning to Promote Reading Comprehension Skills

Isnaini Apri Utami[1*], Sunardi[2], Nur Arifah Drajati[3] (ID)

[1,2,3] Educational Technology Department, Universitas Sebelas Maret, Surakarta, Indonesia

ABSTRAK

Membaca adalah salah satu keterampilan yang paling diajarkan dalam pelajaran bahasa Inggris, tetapi juga merupakan keterampilan yang paling kompleks untuk ditingkatkan. Kegiatan membaca yang dilakukan siswa hanya menggunakan buku teks dan lembar kerja siswa sehingga kurang menarik dan berdampak pada keterampilan membaca siswa yang kurang. Penelitian ini bertujuan untuk mengembangkan modul elektronik membaca bahasa Inggris berbasis gamifikasi dan pembelajaran kontekstual yang layak yang sesuai dengan kebutuhan pembelajar bahasa kedua. Jenis penelitian ini yaitu penelitian pengembangan. Penelitian ini merupakan tahap kedua dari Design-Based Research (DBR) yang merupakan tahap desain dan konstruksi. Subjek penelitian terdiri dari 2 ahli materi pembelajaran, dua ahli ELT, dan 2 guru bahasa Inggris. Subjek uji coba yaitu 35 siswa kelas sepuluh. Penelitian ini menggunakan teknik analisis deskriptif kuantitatif dan statistik inferensial Berdasarkan hasil analisis data yaitu penilaian dari ahli materi pembelajaran diperoleh 93% dan 94%. Penilaian dari ahli isi e-module diperoleh 97% dan 87%. Penilaian yang diberikan oleh guru diperoleh 81% dan 90%. Uji coba kegunaan dari sudut pandang siswa diperoleh 80%. Dari hasil tersebut dapat disimpulkan bahwa modul elektronik membaca bahasa Inggris berbasis gamifikasi dan pembelajaran kontekstual layak digunakan di kelas. Implikasi penelitian ini yaitu modul elektronik membaca bahasa Inggris berbasis gamifikasi yang dikembangkan dapat digunakan dalam pembelajaran.

ABSTRACT

Reading is one of the most taught skills in English lessons, but it is also the most complex skill to improve. The reading activities carried out by students only use textbooks and student worksheets, so they are less exciting and impact students' poor reading skills. This research aims to develop an electronic English reading module based on gamification and contextual learning that is appropriate to the needs of second language learners. This type of research is development research. This research is the second stage of Design-Based Research (DBR), which is the design and construction stage. The research subjects consisted of 2 learning materials experts, two ELT experts, and 2 English teachers. The test subjects were 35 tenth-grade students. This research uses quantitative descriptive analysis techniques and inferential statistics. Based on the results of data analysis, namely the assessment from learning material experts, 93% and 94% were obtained. The assessment from e-module content experts was 97% and 87%. The assessments given by the teacher were 81% and 90%. Usability testing from the student's perspective obtained 80%. From these results, an electronic English reading module based on gamification and contextual learning is suitable for use in the classroom. The implication of this research is that the gamification-based English reading electronic module that was developed can be used in learning.

1. INTRODUCTION

Reading, as one of the four skills needed to master English, is important because of its role as input in learning a language. Although reading can be defined simply as extracting meaning from text, reading consists of a complex process (Alam & Lestari, 2020; Jabir, 2020; Khusniyah & Hakim, 2019). Reading comprehension involves recognizing words quickly and efficiently, developing and using a sizeable introductory vocabulary, processing sentences to build understanding, and activating strategic processes (Magableh & Abdullah, 2022; Sulaiman & Hasrianti, 2021). Reading requires underlying cognitive skills, explaining the meaning of background knowledge, interpreting and evaluating text in a way that is appropriate for reading, and processing text fluently over a long period (Karakaita Putri et al., 2019; Sultan & Nur, 2020). These processes and sources of knowledge enable readers to produce the required level of understanding of the text. Several principles for building a reading curriculum include reading sources that are intriguing, varied, attractive, abundant, and easily accessible (Mahartika & Dewantoro, 2017; Vinhto, 2018). Developing student motivation and combining language and content learning is also essential.

Reading activities are essential for students because reading is the primary capital for studying all subjects at school (Siregar & Kurniati, 2022; Solikhah, 2015). Apart from that, reading can also improve language skills, vocabulary and understanding of texts. Students who like to read also tend to have higher imagination and are more creative in expressing ideas and concepts (Dwigustini & Widiya, 2020; Misvaindra & Sukma, 2020). Reading can also help students improve cognitive abilities and long-term memory (Mentari et al., 2018; Nugrahanto & Zuchdi, 2019). Therefore, all parties need to provide motivation and support so that students can increase their interest and reading activities (Dwigustini & Widiya, 2020; Mahartika & Dewantoro, 2017; Misvaindra & Sukma, 2020; Vinhto, 2018). Reading is the most thoroughly studied language skill because researchers and practitioners have studied its nature for many years, resulting in different theories distinguishing the best teaching and learning reading comprehension skills. Various teaching methods and techniques give language learners options when learning to read (Aprilia et al., 2020; Korat et al., 2021; Wichadee, 2011). Apart from appropriate methods and techniques, teaching materials also play a role in students' efforts in learning.

However, the current problem is that many students still do not like reading. This is reinforced by previous research findings, which also state that many students are bored or do not like reading (Apriliani & Radia, 2020; Budianti & Damayanti, 2017; Hardanti et al., 2022). Other research also reveals that students do not like reading activities because of a lack of reading habits and exciting books that can attract students' attention to reading (Oktadiana, 2019; Paramita et al., 2022). Based on initial observation studies, students at MAN 1 Karanganyar do not use special modules in reading activities. Reading activities carried out by students only use textbooks and student worksheets. Several factors cause students' low interest in reading. External factors include a less supportive school environment, the role of the library could be more optimal, and limited books/reading materials that attract students' interest (Oktadiana, 2019; Paramita et al., 2022; Yuki, 2020). Apart from that, internal factors such as lack of awareness of the importance of reading, lack of motivation and interest, and lack of examples from parents and the surrounding environment are also causes of low interest in reading among students in Indonesia (Sari, 2020; Wulanjani & Anggraeni, 2019).

Based on this, the solution offered is to develop digital-based teaching materials that can help increase students' willingness to read. Teaching materials are teaching aids such as textbooks, worksheets, etc., that enable and facilitate the teaching and learning process (Martha & Andini, 2019; Permana P & Manurung, 2020; Wahyuni et al., 2022). Maximizing electronic learning materials such as e-modules with gamification elements and CTL-based meaningful learning activities is essential to help students improve their reading comprehension skills. Technological developments marked by the emergence of many new technologies have an impact on increasing the level of learning flexibility regarding flexibility of space and time, speed and ease of accessing various kinds of learning materials, one of which is electronic books (Asrial et al., 2020; Permana P & Manurung, 2020; Saraswati et al., 2019). Technology can be used as a tool that can increase students' willingness to read. One way that can be developed to improve students' reading skills is E-modules based on gamification and contextual teaching and learning.

E-modules or electronic modules are used as interactive learning media and can be accessed quickly (Asrial et al., 2020; Musdi et al., 2019; Permana P & Manurung, 2020; Saraswati et al., 2019). E-modules can help students understand concepts and develop specific learning skills. Apart from that, E-modules can also help teachers provide more exciting and interactive learning materials (Astra et al., 2020; Ningsih & Mahyuddin, 2021; Pratiwi et al., 2021). Therefore, e-modules can be an effective and efficient alternative learning medium for improving classroom learning quality (Darmaji et al., 2019; Pratiwi et al., 2021). E-Modules can increase students' enthusiasm for reading because they can improve student learning outcomes and learning motivation. Research shows that developing E-Modules can facilitate students in intensive reading and better learning outcomes (Aufa et al., 2021; Fisnani, YeniFisnani et al., 2020). Apart from that, E-Modules can also help students learn independently and increase student learning motivation. Therefore, using E-Modules in learning can increase students' interest and enthusiasm in reading.

Gamification-based e-Modules are a learning system that uses the concept of gamification to make learning more exciting and motivating. Gamification is changing a system or activity to be more like a game, using elements such as points, levels and rewards (Ariessanti et al., 2020; Lutfi, A. et al., 2021; Marisa et al., 2020). It was concluded that students' learning experiences were positive regarding using gamification for reading in EFL. Apart from games, another thing that has recently become a focus in education is teaching and learning methods that focus on students (Pasaribu & Saparini, 2017; Suastika & Rahmawati, 2019). The role of students in learning has changed from just passively listening to the teacher's explanation to being an active participant with the teacher. So, future learning will be more student-centred (student-centred learning), providing students more opportunities to construct knowledge independently. Contextual learning is one method that supports student-centred learning (Ariyanto et al., 2020; Rizki & Linuhung, 2016). CTL focuses on activities that help students connect what they have learned to everyday life. So that the knowledge they gain will be helpful and practical. Contextual learning helps increase students' interest in learning activities to gain flexible knowledge (Ariyanto et al., 2020; Rizki & Linuhung, 2016; Santoso, 2017).

Previous research findings stated that E-modules can increase students' enthusiasm for learning. Other research also states that E-modules can improve student learning outcomes (Darmaji et al., 2019; Lestari & Parmiti, 2020; Pratiwi et al., 2021). Other research also states that the majority of students stated that they find gamification for reading in ESL fun, enjoyable, engaging, and sometimes challenging (Fahad Alzuhair & Mohammed Alkhuzaim, 2022; John et al., 2021; Li et al., 2018; Li & Chu, 2021; Mak et al., 20219; Manzano-Leon et al., 2022; Sofiana & Mubarok, 2020). Students also stated that gamification allows them to act anonymously, which helps encourage students because they do not feel embarrassed when making mistakes, as is common in conventional classes (Chen & Kent, 2019; Kaban. & Karadeniz, 2021). Anonymity also helps reduce peer pressure for low-achieving students (Bai et al., 2021). Based on this, gamification-based E-modules can increase students' enthusiasm for reading. However, there has yet to be a study regarding gamification-based E-modules to improve students' reading skills. This research is vital because there is a lack of teaching materials to facilitate students' independent learning. Apart from that, the gamification-based E-module that will be developed is tailored to student characteristics to help increase student knowledge. Thus, this research aims to develop an E-module based on gamification and contextual teaching and learning.

2. METHOD

This study is Design-Based Research. Design-Based Research (DBR) is a systemic approach to innovation planning and implementation that stresses an iterative approach to design and produce a product with ongoing collaboration with the practitioners and the expert. Thus, the focus of DBR is to discern design choices and changes in an effort to produce technology-based learning (Huang et al., 2019). This is in line with the purpose of this study which is to develop an electronic English reading module for high school students. Design-Based Research Model showed in Figure 1.
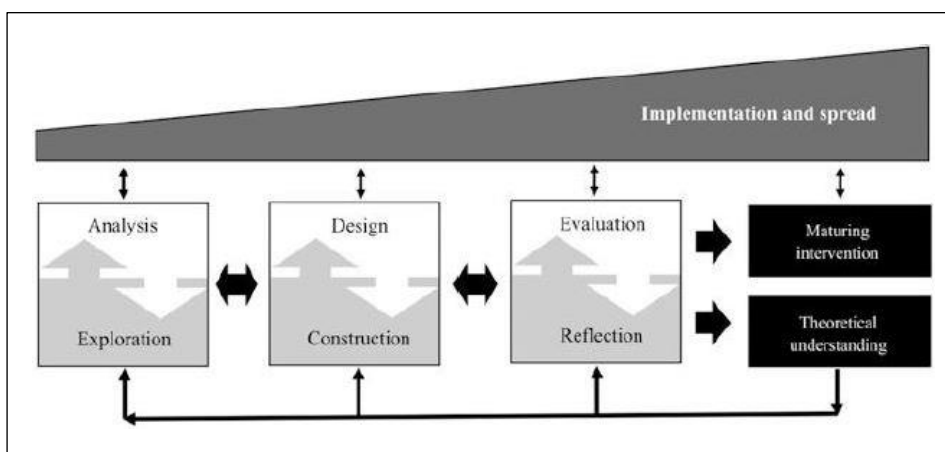

Figure 1. Design-Based Research Model

There are three phases in the DBR, namely analysis and exploration, design and construction, and evaluation and reflection phase. The first phase is analysis and exploration. Its purpose was to analyse the problem and explore the possible solutions for the problem. The second phase is design and construction. Its purpose is to design and develop a possible solution based on the result of the first phase. The third phase is evaluation and reflection. In this phase, the designed product will be evaluated to check its feasibility and effectiveness. The result of the third phase will be used as a guide to accept, revise, or reject the designed product (Huang et al., 2019). However, this study only focuses on the design and development part of the DBR. The design and development part consisted of the validation of the product by the experts and the students' trial. The method used to collect the data was the questionnaire method. The participants of this study consisted of two instructional design experts, two subject content experts, two English subject practitioners, and 35 students. The instructional design experts are the lecturers of the Educational Technology Program. The subject content experts are the lecturers of English Education Program. The practitioners are two English teachers of MAN 1 Karanganyar.

The questionnaire for the instructional design expert was derived from the theory of module by Russell and Johanningsmeier, gamification by Kapp (Kapp, 2012), and CTL by Johnson (Johnson, 2010). The questionnaire for the subject content experts and the practitioners was derived from Cunningsworth's criteria for choosing English learning materials that consisted of seven aspects: aims and approaches, design and organization, language content, skills, topic, methodology, and practical consideration (Cunningsworth, 1995). The grid for the

instrument validity sheet of the electronic module based on gamification and CTL for each expert is presented in Table 1, Table 2, and Table 3.

Table 1. Instructional Design Expert Validation Instrument

No	Aspect		Indicators
1	Module	a.	Use of self-contained, self-instruction package
		b.	Concern for individual differences
		c.	Statement of objectives
		d.	Utilization of a variety of media
		e.	Active participation by the learner
		f.	Immediate reinforcement of responses
2	Gamification	a.	Application of game thinking to solve problems using game elements.
		b.	Application of game thinking to encourage learning using game elements.
3	CTL	a.	Connecting academic subjects with the context of students' personal circumstances.
		b.	Connecting academic subjects with the context of students' social circumstances.
		c.	Connecting academic subjects with the context of students' cultural circumstances.

Table 2. Subject Content Expert Validation Instrument

No	Aspect		Indicators
1	Aims and approaches	a.	The aim of the module corresponds with the teaching program and the curriculum.
		b.	The module is appropriate for the learning process.
		c.	The module encompasses all the materials needed for the learning.
		d.	The module is flexible in that it can be used for various learning styles.
2	Design and organization	a.	The module was arranged based on the topic in the curriculum.
		b.	The materials were arranged based on the difficulty.
		c.	There are exercises and feedback.
		d.	There are references for the grammar being used.
		e.	The materials are suitable for learning independently.
		f.	The layout of the module is clear.
3	Language Content	a.	The grammar used is suitable for the students' level.
		b.	The vocabulary used is suitable for the students' level.
		c.	The module contains materials to increase reading comprehension: finding the main idea, etc.
		d.	The language style is in accordance with the students' social circumstances.
4	Skills	a.	The texts and reading activities are in accordance with the students' skills and interests.
5	Topic	a.	The content materials are interesting for students.
		b.	There are a variety of topics.
		c.	The topic supports the students' awareness and experience.
		d.	The topic given is up to date, but suitable for the students' language level.
		e.	The social and cultural contexts in the e-module are related to the students' real life.
		f.	Women and men are presented equally.
		g.	There is no racism.
6	Methodology	a.	The learning approach used (CTL) is suitable for the current learning process.
		b.	The gamification technique is suitable for the students' learning styles.
		c.	There was feedback to support students' in developing their skills and learning strategies.
		d.	Students can adjust their learning speed and style.
7	Practical consideration	a.	The features of the module are interesting.
		b.	The e-module is easy to install and use.
		c.	The e-module can be used without other apps or media.

Table 3. Practitioner Validation Instrument

No	Aspect		Indicators
1	Aims and approaches	a.	The aim of the module corresponds with the teaching program and the curriculum.
		b.	The module is appropriate for the learning process.
		c.	The module encompasses all the materials needed for the learning.
		d.	The module is flexible in that it can be used for various learning styles.
2	Design and organization	a.	The module was arranged based on the topic in the curriculum.
		b.	The materials were arranged based on the difficulty.
		c.	There are exercises and feedback.
		d.	There are references for the grammar being used.
		e.	The materials are suitable for learning independently.
		f.	The layout of the module is clear.
3	Language Content	a.	The grammar used is suitable for the students' level.
		b.	The vocabulary used is suitable for the students' level.
		c.	The module contains materials to increase reading comprehension: finding the main idea, etc.
		d.	The language style is in accordance with the students' social circumstances.
4	Skills	a.	The texts and reading activities are in accordance with the students' skills and interests.
5	Topic	a.	The content materials are interesting for students.
		b.	There are a variety of topics.
		c.	The topic supports the students' awareness and experience.
		d.	The topic given is up to date, but suitable for the students' language level.
		e.	The social and cultural contexts in the e-module are related to the students' real life.
		f.	Women and men are presented equally.
		g.	There is no racism.
6	Methodology	a.	The learning approach used (CTL) is suitable for the current learning process.
		b.	The gamification technique is suitable for the students' learning styles.
		c.	There was feedback to support students' in developing their skills and learning strategies.
		d.	Students can adjust their learning speed and style.
7	Practical consideration	a.	The features of the module are interesting.
		b.	The e-module is easy to install and use.
		c.	The e-module can be used without other apps or media.

This research uses quantitative descriptive analysis techniques and inferential statistics. The quantitative descriptive analysis technique was used to obtain the score from each expert and student using the assessment sheets. The instrument validity technique uses expert judgment that requires a selected expert from each type of instrument to be consulted about the quality and validity of the learning media using the selection questionnaire from various points of view (Sugiyono, 2018). The data obtained from the questionnaire results will then be analyzed. In this study, the data analysis used descriptive percentage and category techniques to describe the feasibility of the electronic module. Table 4 is a conversion table for the eligibility criteria for the electronic module referring to the research (Bustanil S et al., 2019).

Table 4. The Eligibility Criteria for the Module

No.	Eligibility Level	Interpretation	Decision
1	82% - 100%	Very Good	Very Feasible
2	63% - 81%	Good	Feasible
3	44% - 62%	Enough	Not Worth It
4	25% - 43%	Not Good	Not Feasible

In testing the effectiveness of e-modules based on gamification and contextual learning, experimental research methods were used using Posttest-Only Control Design. Participants in this effectiveness testing stage

were class X students at MAN 1 Karanganyar. The research samples, namely the control and experimental groups, were chosen randomly. The control group is class XA5, totalling 37 students, and the experimental class is class XS3, totalling 38 students. The data normality test used Kolmogorov-Smirnow with a significance value of 0.05. Homogeneity test using SPSS version 23 software with Lavene statistics. To test the effectiveness of e-module products based on gamification and contextual learning, an independent sample t-test is needed with the help of SPSS version 23 software to compare the average score of the experimental group with the control group and the conditions after treatment.

3. RESULT AND DISCUSSION

Result

The product produced in this research is an English reading electronic module for the eleventh-grade students for the 2022/2023 school year. The development was carried out using the Design-Based Research Model. While this study focused more on the evaluation part of the third phase of the DBR model, the first phase and the second phase findings could be summarised as follows. First, Analysis and Exploration. From the class observations, artefacts analysis, and focused group discussion with the students and teachers, there are already various types of learning media and resources used to facilitate the students' learning process such as YouTube channels, English Education textbooks, companion books, WhatsApp groups, learning apps such as Kahoot, and so on. However, most of the students' learning results were not up to the standard of the minimum learning requirement. From the analysis and exploration, the teachers and the students agreed that they need learning materials that can be used independently with minimum assistance from the teachers, related to the student's daily lives, and contain fun games.

Second, Design and Construction. The second phase is design and construction which is a follow-up process after identifying the problems and the possible solution in the first phase. In this phase, the researchers designed and constructed an electronic module based on the theoretical frames that fit the students' language level, daily lives, and situations. The materials chosen for the e-module are about recount text since it is easier to relate to the students' real-life situations. This selection is also based on the new Merdeka curriculum. The content layout and design mostly used the Canva application, then it was made into a mobile application using the Smart App Creator application. After the electronic module was ready, it was evaluated by the experts to see the validity and liability of the electronic module. The electronic module designed and assessed by expert judgment at the evaluation and reflection stage is presented in Figure 2.
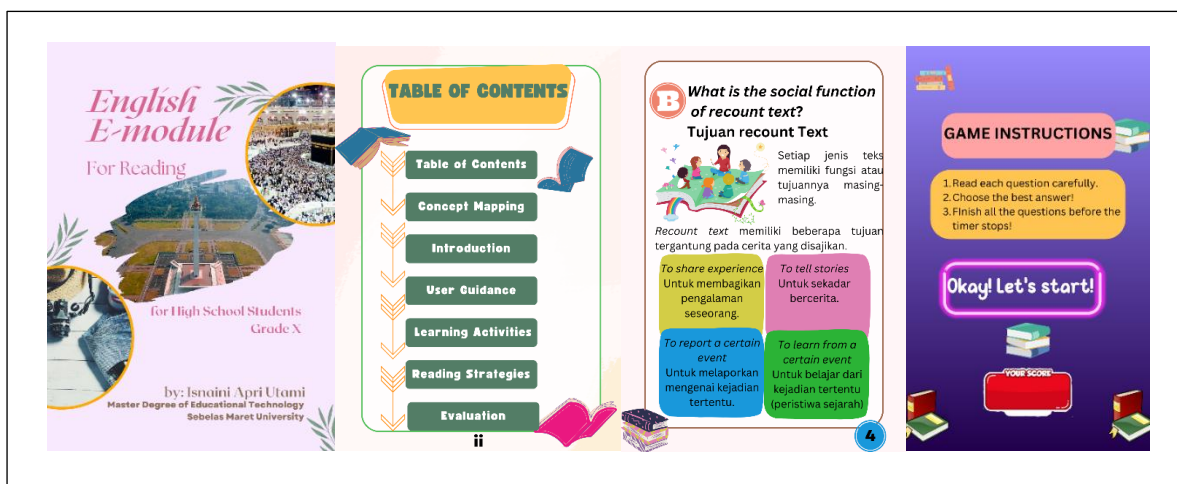

Figure 2. E-module Based on Gamification and Contextual Learning

Next, the electronic module that was designed and constructed (draft 1) was evaluated by the experts before being tested by the students. There are two kinds of experts involved in this evaluation phase. The first is the experts in English education subject matter and the second is the experts in the instructional design. The validation for the English education subject matter was carried out based on the criteria of choosing English learning materials by Cunningsworth (Cunningsworth, 1995). The results of the validation by the English education subject matter experts are presented in Table 5.

Table 5. E-module Assessment Results by the Subject Matter Expert 1 and Expert 2

No	Aspects	Expert 1		Expert 2	
		Percentage (%)	Interpretation	Percentage	Interpretation
1	Aims and Approaches	93.75	Very good	93.75	Very good
2	Design and Organization	100	Very good	95.83	Very good
3	Language Content	100	Very good	87.5	Very good
4	Skills	100	Very good	100	Very good
5	Topic	96.43	Very good	85.71	Very good
6	Methodology	87.5	Very good	75	Good
7	Practical Consideration	100	Very good	75	Good
	Total Result for all aspects	**96.56**	**Very good**	**87.01**	**Very good**

Based on Table 5, the validation score for the English subject matter obtained 93.75% and 93.75% for the aims and approaches, 100% and 95.83% for the design and organization, 100% and 87.5% for the language content, 100% and 100% for the skills, 96.43% and 85.71% for the topic, 87.5% and 75% for the methodology, 100% and 75% for the practical consideration aspect. The total score for all aspects from expert 1 is 96.56%, and from expert 2 is 87.01%. Both are included in the very good category which means that the electronic module based on gamification and CTL is very feasible to use in the classroom. Next, draft 1 was assessed by the instructional design experts. The questionnaire consisted of 82 questions. It obtained a percentage of 95.56% by expert 1 and 94.34% by expert 2. Based on the results, it can be concluded that the E-module is very feasible to use in the classroom.

Lastly, the electronic module was tried on by the English teachers as the practitioners. From the two teachers, it obtained 75% and 93.75% for the aims and approaches, 79.07% and 79.17% for the design and organization, 75% and 87.5% for the language content, 100% and 100% for the skills, 82.14% and 100% for the topic. 81.25% and 93.75% for the methodology, 100% and 83.33% for the practical consideration aspect. The total percentages from the teachers are 81.9% and 90.6%. From those validation results, it can be seen that the electronic module based on gamification and CTL has good assessment results and is ready to be tested by the students. E-module Assessment Results by the Subject Matter Practitioner 1 and Practitioner 2 showed in Table 6.

Table 6. E-module Assessment Results by the Subject Matter Practitioner 1 and Practitioner 2

No.	Aspects	Practitioner 1		Practitioner 2	
		Percentage (%)	Interpretation	Percentage (%)	Interpretation
1	Aims and Approaches	75	Good	93.75	Very feasible
2	Design and Organization	79.07	Good	79.17	Feasible
3	Language Content	75	Good	87.5	Very feasible
4	Skills	100	Very good	100	Very feasible
5	Topic	82.14	Very good	100	Very feasible
6	Methodology	81.25	Good	93.75	Very feasible
7	Practical Consideration	100	Very good	83.33	Very feasible
	Total Result for all aspects	**81.89**	**Good**	**90.52**	**Very feasible**

The results from the English subject matter and the instructional design experts are very good which means that the E-module is feasible to use in the classroom. Nonetheless, there are some notes from the experts to revise the E-module before it can be tested by the students in a trial. The instructional design expert gave comments to put background design that reflected the cultural background of the students, namely batik, puppets, etc. The learning objectives were based on the 2013 curriculum. However, the instructional design expert reminded that the school was going to implement the new curriculum of *Merdeka Belajar* then the electronic module should be made to facilitate the future needs of the students. Therefore, the objectives of the study were changed into the learning objectives achievement criteria from the *Merdeka Belajar* curriculum.

Lastly, the instructional design experts commented that the gamification should be presented in levels which were missing from the first draft. Thus, the games are put into 3 levels based on the topic covered in each learning material. After the 2nd draft was ready, it was then tested in the students' trial. There are two phases in the students' trial. The first is the small group trial which consisted of 8 students and the big group trial which consisted of 27 students. The students consisted of high, medium, and low-achieving students in the 10th grade. The results of the students' trial are presented in Table 7. In accordance with the results, it can be concluded that the electronic module based on gamification and CTL is feasible to use in class as a learning resource for the students.

Table 7. Small Group Students' Trial Result dan Big Group Students' Trial Result

No.	Aspects	Small Group Students' Trial Percentage (%)	Interpretation	Big Group Students' Trial (Percentage (%)	Interpretation
1	Interest	80.47	Good	78.70	Good
2	Content	71.35	Good	77.01	Good
3	Usability	88.28	Very good	84.72	Very good
Total Result for all aspects		**80.03**	**Good**	**80.14**	

Next, a gamification-based e-module was tested for effectiveness. The normality test results show that the normality test results of the control class pre-test data have a significance value of 0.115, and the experimental class has a significance value of 0.105. The two normality test results of the pre-test data for the two classes are greater than 0.05 (normal = sig. > 0.05), so it can be concluded that the pre-test data for the control and experimental classes are normally distributed. The results of the post-test data normality test for the control class had a significance value of 0.156, and the experimental class had a value of 0.066. The two normality test results of the post-test data for the two classes are more significant than 0.05 (normal = sig. > 0.05), so it can be concluded that the post-test data for the control class and experimental class are normally distributed. The results of the data analysis are presented in Table 8.

Table 8. Normality Test Results of Pre-Test and Post-Test Data for Control and Experimental Classes

Value	Class	Kolmogorov-Smirnov		
		Statistic	df	Sig.
Pre-test	Control	0.134	35	0.113
	Experiment	0.139	33	0.105
Post-test	Control	0.128	35	0.156
	Experiment	0.147	33	0.066

Next, a homogeneity test was carried out. The homogeneity test results of the pre-test scores for the control and experimental classes are at the sig levels. = 0.807. This significance value is more significant than 0.05 (sig. = 0.807 > 0.05), so it can be concluded that the distribution of variance in the pre-test results of the control class and experimental class is homogeneous. The results of the homogeneity test of the post-test scores for the control and experimental classes show that the significance level is 0.853. This result is more significant than 0.05 (sig. = 0.853 > 0.05), so it can be concluded that the distribution of variance in the post-test results for the control class and experimental class is homogeneous. A balance test is carried out after the data is said to be normal and homogeneous. The data analysis results show that the data's significance value is 0.068, which means more than 0.05 (sig. = 0.068 > 0.05). Based on the test results, the pre-test scores for the control class and experimental class were in balance. The next step is to conduct a different test on the post-test results of the control and experimental classes to determine whether reading comprehension learning using gamification-based reading e-modules and contextual learning positively impacts students' reading achievement. The results of the different tests are presented in Table 9.

Table 9. Post-test Value Difference Test Results

Post-test results	t-test for Equality of Means						
	t	d	Sig (2-tailed)	Mean dif.	Std. error dif.	95% Confidence terval of the Difference	
						Lower	Upper
Variances are assumed to be balanced	3.030	66	0.003	10.930	3.607	18.132	3.728
Variances are not assumed to be balanced	3.027	65.442	0.004	10.930	3.611	18.140	3.720

The results of the analysis of the difference test with the t-test shown in Table 9 show that the significance value is 0.003 (sig. = 0.003 < 0.05), and the calculated t is 3.030 ($t_{calculated}$ = 3.030 > t_{table} = 0.2352). Based on these results, there is a significant difference in the post-test results of the control and experimental classes. Therefore,

learning to read using e-module based on gamification and contextual teaching and learning positively impacts the students' English reading achievement.

Discussion

Based on the analysis of the results of the research evaluation stage, gamification and CTL-based e-modules have achieved valid and practical criteria as learning resources for students. This can be seen from the validation results of learning design experts, subject content experts, and English practitioners regarding the feasibility of gamification-based electronic modules and CTL meeting the very feasible criteria. Gamification and CTL-based e-modules can be used in learning. This is caused by several factors, namely as follows. First, gamification-based e-modules can improve students' reading comprehension skills. With a contextual learning approach, e-modules can attract students' interest in learning and understanding the material better (Kimianti & Prasetyo, 2019; Rohmah et al., 2021). Gamification is a learning approach that facilitates learning and encourages student engagement, motivates action, promotes learning, and solves problems using game-based mechanics, aesthetics, and game thinking (Ariessanti et al., 2020; Lutfi, A. et al., 2021; Marisa et al., 2020). The contextual learning approach is also reflected in text examples related to students' daily lives so that students can reflect on the knowledge they have learned in real life (Antara, 2019; E. Ramdani, 2018; Suastika & Rahmawati, 2019). This is to the understanding that contextual learning aims to help students see the meaning of academic material in the context of their' lives (Arsyad et al., 2020; Santoso, 2017; Sulastri, 2016).

Second, gamification-based e-modules can increase students' enthusiasm for reading. Gamification-based e-modules are electronic teaching materials that are effective and efficient and prioritize student independence. Applying application-assisted learning gamification can increase learning motivation (Ramdani & Simamora, 2022; Syahrial et al., 2019). E-modules can use various ICT devices, such as smartphones, so they are flexible (Kurniawati, 2020; Zaharah & Susilowati, 2020). Students can study anywhere (Mutmainnah et al., 2021; Sidiq & Najuah, 2020). E-modules can attract students' interest with an appearance like an actual book (Istuningsih et al., 2018; Oksa & Soenarto, 2020; Wulandari et al., 2021). The student practicality questionnaire assessment results show that the e-module using a contextual learning approach for students is very effective. E-modules can be a solution for implementing practical and effective learning because e-modules can prioritize student independence (Herawati & Muhtadi, 2018; Rahmatunisa et al., 2022). In research, gamification-based e-modules have been tested for attractiveness with an exciting category, which shows the effectiveness of learning using e-modules. Besides that, e-modules with a contextual learning approach can increase students' motivation and interest.

Third, gamification-based e-modules can create a fun learning atmosphere. Applying gamification in learning can increase students' motivation through several mechanisms (Ariessanti et al., 2020; Lutfi, A. et al., 2021; Marisa et al., 2020). Based on research, gamification can provide additional motivation to ensure students participate in learning activities (Permata & Kristanto, 2020; Sudana et al., 2021). Apart from that, gamification can also increase students' learning motivation, engagement, cognitive, affective and psychomotor skills (Ariessanti et al., 2020; Lutfi, A. et al., 2021; Marisa et al., 2020). Gamification can increase student motivation through rewards, healthy competition, and an interactive and engaging learning environment. In the learning context, gamification aims to increase student motivation, involvement and participation in learning (Hendriyati Haryani et al., 2023; Sudana et al., 2021). By utilizing game elements, rewards, healthy competition, and an interactive learning environment, gamification can create a more enjoyable and exciting learning experience for students (Ariessanti et al., 2020; Hendriyati Haryani et al., 2023; Lutfi, A. et al., 2021; Marisa et al., 2020). This can trigger the brain's reward system and make learning more enjoyable, making students feel happy and motivated. Thus, gamification can be a powerful tool for increasing student motivation in the classroom.

Previous findings stated that reading comprehension modules significantly encouraged English language learning, primarily through activities focused on developing reading competence (Hikmah & Wibowo, 2020). Applying gamification in English language learning to improve reading comprehension skills is what has been introduced previously. However, inevitably, the use of gamification for reading comprehension skills in English as a foreign language in the last 10 years (2012-2022) is still limited (Fahad Alzuhair & Mohammed Alkhuzaim, 2022; Kaban. & Karadeniz, 2021; Manzano-Leon et al., 2022). This research implies that the gamification-based e-module developed can be used in English language learning to improve students' reading comprehension. Limitations in this development research include: first, this learning teaching material only contains material by SK KD English class X SMA/MA Semester 2, namely the recount text. Second, the learning teaching materials developed are in the form of e-modules based on gamification and CTL. Third, the research results of the gamification and CTL-based e-module reading teaching materials that were prepared were only tested on some students of Madrasah Aliyah Karanganyar's class using an internet connection; the network speed will affect its use. Based on those limitations, further studies are needed to design and develop an e-module based on gamification and CTL that covers other topics besides recount text. Also, the e-module might be created without the need to use the internet connection and tested by more participants to ensure its effectiveness on various students.

4. CONCLUSION

The research showed that the electronic English reading module based on gamification and Contextual Teaching and Learning met the criteria and received excellent qualifications based on the validation from the experts and the English subject practitioners. It also received good response from the students during the trial. Furthermore, during the effectiveness test, the e-module has proven to have significant impact on the students' reading comprehension skills. Thus, it was concluded that the electronic English reading module based on gamification and Contextual Teaching and Learning is suitable for learning and improving students' reading comprehension skills. It is recommended to students to help them learn independently with the minimum assistance from the teacher.

5. REFERENCES

Alam, S. K., & Lestari, R. H. (2020). Pengembangan Kemampuan Bahasa Reseptif Anak Usia Dini dalam Memperkenalkan Bahasa Inggris melalui Flash Card. *Jurnal Obsesi : Jurnal Pendidikan Anak Usia Dini*, *4*(1), 284. https://doi.org/10.31004/obsesi.v4i1.301.

Antara, A. (2019). Pengaruh Model Pembelajaran Kontekstual Terhadap Kemampuan Membaca Permulaan Anak. *Mimbar Ilmu*, *24*. https://doi.org/10.23887/mi.v24i2.21263.

Aprilia, F., Lustyantie, N., & Rafli, Z. (2020). The Effect of Reading Interest and Achievement Motivation on Students ' Discourse Analysis Competence. *Journal of Education and e-Learning Research*, *7*(4), 368–372. https://doi.org/10.20448/journal.509.2020.74.368.372.

Apriliani, S. P., & Radia, E. H. (2020). Pengembangan Media Pembelajaran Buku Cerita Bergambar Untuk Meningkatkan Minat Membaca Siswa Sekolah Dasar. *Jurnal Basicedu*, *4*(4), 994–1003. https://doi.org/10.31004/basicedu.v4i4.492.

Ariessanti, H. D., Purwaningtyas, D. A., Soeparno, H., & Napitupulu, T. A. (2020). Adaptasi Strategi Gamifikasi Dalam Permainan Ular Tangga Online Sebagai Media Edukasi Covid-19. *e-Jurnal JUSITI (Jurnal Sistem Informasi dan Teknologi Informasi)*, *9*(2), 174–187. https://doi.org/10.36774/jusiti.v9i2.772.

Ariyanto, L., Rahmawati, N. D., & Haris, A. (2020). Pengembangan Mobile Learning Game Berbasis Pendekatan Kontekstual Terhadap Pemahaman Konsep Matematis Siswa. *JIPMat*, *5*(1), 36–48. https://doi.org/10.26877/jipmat.v5i1.5478.

Arsyad, A., Sulfemi, W. B., & Fajartriani, T. (2020). Penguatan Motivasi Shalat Dan Karakter Peserta Didik Melalui Pendekatan Pembelajaran Kontekstual Pada Mata Pelajaran Pendidikan Agama Islam. *POTENSIA: Jurnal Kependidikan Islam*, *6*(2), 185. https://doi.org/10.24014/potensia.v6i2.9662.

Asrial, Syahrial, Maison, Kurniawan, D. A., & Piyana, S. O. (2020). Ethnoconstructivism E-Module to Improve Perception, Interest, and Motivation of Students in Class V Elementary School. *JPI (Jurnal Pendidikan Indonesia)*, *9*(1), 30–41. https://doi.org/10.23887/jpi-undiksha.v9i1.19222.

Astra, I. M., Raihanati, R., & Mujayanah, N. (2020). Development of Electronic Module Using Creative Problem-Solving Model Equipped with Hots Problems on The Kinetic Theory of Gases Material. *Jurnal Penelitian & Pengembangan Pendidikan Fisika*, *6*(2), 181–194. https://doi.org/10.21009/1.06205.

Aufa, M. N., Rusmansyah, R., Hasbie, M., Jaidie, A., & Yunita, A. (2021). The Effect of Using e-module Model Problem Based Learning (PBL) Based on Wetland Environment on Critical Thinking Skills and Environmental Care Attitudes. *Jurnal Penelitian Pendidikan IPA*, *7*(3), 401–407. https://doi.org/10.29303/jppipa.v7i3.732.

Bai, S., Hew, K. F., Sailer, M., & Jia, C. (2021). From top to bottom: How positions on different types of leaderboard may affect fully online student learning performance, intrinsic motivation, and course engagement. *Computers & Education*, *173*. https://doi.org/10.1016/j.compedu.2021.104297.

Budianti, Y., & Damayanti, N. (2017). Pengaruh Metode KWL (Know Want to Learn) terhadap Keterampilan dan Minat Membaca Siswa. *Indonesian Journal of Primary Education*, *1*(2), 13–18. https://doi.org/10.17509/ijpe.v1i2.9311.

Bustanil S, M., Asrowi, & Adianto, D. T. (2019). Pengembangan Media Pembelajaran Interaktif Berbasis Video Tutorial Di Sekolah Menengah Kejuruan. *JTP - Jurnal Teknologi Pendidikan*, *21*(2). https://doi.org/10.21009/jtp.v21i2.11568.

Chen, J. C., & Kent, S. (2019). Task engagement, learner motivation and avatar identities of struggling English language learners in the 3D virtual world. *System*, *2020*(88). https://doi.org/10.1016/j.system.2019.102168.

Cunningsworth, A. (1995). *Choosing your coursebook*. Macmillan Education.

Darmaji, Astalini, Kurniawan, D. A., Parasdila, H., Iridianti, Susbiyanto, Kuswanto, & Ikhlas, M. (2019). E-Module based problem solving in basic physics practicum for science process skills. *International journal of online and biomedical engineering*, *15*(15), 4–17. https://doi.org/10.3991/ijoe.v15i15.10942.

Dwigustini, R., & Widiya, J. (2020). Think Pair Share Technique to Promote Students' Reading Comprehension. *Jurnal Ilmu Pendidikan*, *12*(1). https://doi.org/10.37640/jip.v12i1.270.

Fahad Alzuhair, N., & Mohammed Alkhuzaim, K. (2022). Efektivitas Aplikasi Elektronik Gamified dalam Mengembangkan Kemampuan Pemahaman Membaca di kalangan Siswa Menengah Kelas Satu di Arab Saudi. *Penelitian Pendidikan Internasional*. https://doi.org/10.1155/2022/7677140.

Fisnani, YeniFisnani, Y., Utanto, Y., & Ahmadi, F. (2020). The Development of E-Module for Batik Local Content in Pekalongan Elementary School. *Innovative Journal of Curriculum and Educational Technology*, *9*(1), 40–47. https://doi.org/10.15294/IJCET.V9I1.35592.

Hardanti, A. D. T., Rahmawati, F. P., & Widodo, W. (2022). Peningkatan Minat Membaca Menggunakan Media Cerita Bergambar pada Mata Pelajaran Bahasa Indonesia Siswa Kelas 1 SD Negeri Bringin. *Educatif Journal of Education Research*, *4*(3), 261–266. https://doi.org/10.36654/educatif.v4i3.235.

Hendriyati Haryani, Wahid, S. M., Fitriani, A., & Ariq, M. faris. (2023). Analisa Peluang Penerapan Teknologi Blockchain dan Gamifikasi pada Pendidikan. *Jurnal MENTARI: Manajemen, Pendidikan dan Teknologi Informasi*, *1*(2), 163–174. https://doi.org/10.34306/mentari.v1i2.250.

Herawati, N. S., & Muhtadi, A. (2018). Pengembangan Modul Elektronik (E-Modul) Interaktif Pada Mata Pelajaran Kimia kelas XI SMA. *Jurnal Inovasi Teknologi Pendidikan*, *5*(2), 180–191. https://doi.org/10.21831/jitp.v5i2.15424.

Hikmah, A., & Wibowo, E. W. (2020). The effectiveness of HOTS English module in English teaching and learning. *jurnal Ling Tera*, *7*(2), 175–183. https://doi.org/10.21831/lt.v7i2.36330.

Huang, R., Spector, J., & Yang, J. (2019). *Educational Technology: A Primer for the 21st Century*. Spinger.

Istuningsih, W., Baedhowi, & Sangka, K. B. (2018). The effectiveness of scientific approach using e-module based on learning cycle 7e to improve students' learning outcome. *International Journal of Educational Research Review*, *3*(3). https://doi.org/10.24331/ijere.449313.

Jabir, A. (2020). Application Of Sas Method In Improving Beginning Reading Ability In Elementary School. *Social, Humanities, and Educational Studies (SHEs): Conference Series*, *3*(3). https://doi.org/10.20961/shes.v3i3.57025.

John, P., Mohamad, M., Mahmud, S., & Fuad, N. M. (2021). The Perceptions of Tertiary Level Learners on the Use of Mobile App 'Balloon Vocabulary' in Improving Vocabulary for Reading Comprehension. *Theory and Practice in Language Studies*, *11*(9). https://doi.org/10.17507/tpls.1109.05.

Johnson, E. B. (2010). *Pembelajaran kontesktual: Menjadikan Kegiatan Belajar Mengajar Mengasyikkan dan Bermakna*. Kaiffa.

Kaban., L., & Karadeniz, S. (2021). Children's Reading Comprehension and Motivation on Screen Versus on p Paper. *SAGE Open*, *11*(1). https://doi.org/10.1177/2158244020988.

Kapp, K. M. (2012). *The gamification of learning and instruction: Game-based methods and strategies for training and education*. CA: Pfeiffer.

Karakaita Putri, P. N. A., Arini, N. W., & Sumantri, M. (2019). Pengaruh Strategi Directed Reading Thinking Activity (DRTA) Berbantuan Media Flip Chart Terhadap Keterampilan Membaca Pemahaman. *Jurnal Ilmiah Sekolah Dasar*, *3*(2), 158. https://doi.org/10.23887/jisd.v3i2.17762.

Khusniyah, N. L., & Hakim, L. (2019). Efektivitas Pembelajaran Berbasis Daring: Sebuah Bukti Pada Pembelajaran Bahasa Inggris. *Jurnal Tatsqif*, *17*(1), 19–33. https://doi.org/10.20414/jtq.v17i1.667.

Kimianti, F., & Prasetyo, Z. K. (2019). Pengembangan E-Modul Ipa Berbasis Problem Based Learning Untuk Meningkatkan Literasi Sains Siswa. *Kwangsan: Jurnal Teknologi Pendidikan*, *7*(2), 91. https://doi.org/10.31800/jtp.kw.v7n2.p91--103.

Korat, O., Tourgeman, M., & Segal-Drori, O. (2021). E-book reading in kindergarten and story comprehension support. *Reading and Writing*, *0123456789*. https://doi.org/10.1007/s11145-021-10175-0.

Kurniawati, E. F. (2020). Pengimplementasian e-modul etnokonstruktivisme terhadap motivasi belajar peserta didik. *Jurnal Penelitian Ilmu Pendidikan*, *13*(1), 10–21. https://doi.org/10.21831/jpipfip.v13i1.26589.

Lestari, H. D., & Parmiti, D. (2020). Pengembangan E-Modul IPA Bermuatan Tes Online Untuk Meningkatkan Hasil Belajar. *Journal of Education Technology*, *4*(1). https://doi.org/10.23887/jet.v4i1.24095.

Li, X., & Chu, S. K. W. (2021). Exploring the effects of gamification pedagogy on children's reading: A mixed-method study on academic performance, reading-related mentality and behaviors, and sustainability. *British Journal of Educational Technology*, *52*(1). https://doi.org/10.1111/bjet.13057.

Li, X., Mok, S. W., Cheng, Y. Y. J., & Chu, S. K. W. (2018). An Examination of a Gamified E-quiz System in Fostering Students' Reading Habit, Interest and Ability. *Proceedings of the Association for Information Science and Technology*, *55*(1). https://doi.org/10.1002/pra2.2018.14505501032.

Lutfi, A., Aini, N. Q., Amalia, N., Umah, P. A., & Rukmana, M. D. (2021). Gamifikasi untuk Pendidikan: Pembelajaran Kimia yang Menyenangkan pada Masa Pandemi COVID-19. *Jurnal Pendidikan Kimia Indonesia*, *5*(2). https://doi.org/10.23887/jpk.v5i2.38486.

Magableh, I. S., & Abdullah, A. (2022). Differentiated instruction effectiveness on the secondary stage students '

reading comprehension proficiency level in Jordan. *International Journal of Evaluation and Research in Education (IJERE)*, *11*(1), 459–466. https://doi.org/10.11591/ijere.v11i1.21971.

Mahartika, A. S., & Dewantoro, D. A. (2017). Meningkatkan Kemampuan Membaca Pemahaman Anak Tunagrahita Ringan dengan Menggunakan Metode Reading Aloud. *Jurnal ORTOPEDAGOGIA*. https://doi.org/10.17977/um031v3i22017p123.

Mak, M. T. F., Wang, M., & Chu, K. W. S. (20219). Effects of a Gamified Learning Platform on Elementary School Students' Flow Experiences in Leisure Reading. *Proceeding of the Association for Information Science and Technology*, *56*(1). https://doi.org/10.1002/pra2.75.

Manzano-Leon, A., Rodriguez-Ferrer, J. M., Aguilar-Parra, J. M., Fernandez-Campoy, J. M., Trigueros, R., & Martinez-Martinez, A. M. (2022). Play and learn: Influence of gamification and game-based learning in the reading processes of secondary school students. *Revista de Psicodidactica*, *27*(1). https://doi.org/10.1016/j.psicoe.2021.08.001.

Marisa, F., Akhriza, T. M., Maukar, A. L., Wardhani, A. R., Iriananda, S. W., & Andarwati, M. (2020). Gamifikasi (Gamification) Konsep dan Penerapan. *JOINTECS (Journal of Information Technology and Computer Science)*, *5*(3), 219. https://doi.org/10.31328/jointecs.v5i3.1490.

Martha, nia ulfa, & Andini, novita pri. (2019). Pengembangan Bahan Ajar Mata Pelajaran Bahasa Indonesia Berbasis Cerita Rakyat Kabupaten Banjarnegara. *Jurnal Inovasi pembelajaran*, *5*(2). https://doi.org/10.22219/jinop.v5i2.9992.

Mentari, R., Sukirlan, M., & Nurweni, A. (2018). The Implementation of Rap Strategy to Improve Students' Reading Comprehension. *Unila Journal English Teaching*, *7*(2).

Misvaindra, D., & Sukma, E. (2020). Pengaruh Strategi Directed Reading Thinking Activity Terhadap Kemampuan Membaca Intensif Siswa Sekolah Dasar. *Primary: Jurnal Pendidikan Guru Sekolah Dasar*, *9*(2), 194–201. https://doi.org/10.33578/jpfkip.v9i2.7880.

Musdi, E., Syafriandi, & Tasman, F. (2019). Improving High School Mathematics Teacher Ability in Making E-Module in Padang Panjang City. *Pelita Eksakta*, *2*(1), 52–56. https://doi.org/10.24036/pelitaeksakta/vol2-iss1/64.

Mutmainnah, Aunurrahman, & Warneri. (2021). Efektivitas Penggunaan E-Modul Terhadap Hasil Belajar Kognitif Pada Materi Sistem Pencernaan Manusia di Madrasah Tsanawiyah. *Jurnal basicedu*, *5*(2), 1625–1631. https://doi.org/10.31004/basicedu.v5i3.952.

Ningsih, S. Y., & Mahyuddin, N. (2021). Desain E-Module Tematik Berbasis Kesantunan Berbahasa Anak Usia Dini di Taman Kanak-Kanak. *Jurnal Obsesi : Jurnal Pendidikan Anak Usia Dini*, *6*(1), 137–149. https://doi.org/10.31004/obsesi.v6i1.1217.

Nugrahanto, S., & Zuchdi, D. (2019). Indonesia PISA Result and Impact on the Reading Learning Program in Indonesia. *International Conference on Interdisciplinary Language, Literature and Education*, 373–377. https://doi.org/10.2991/icille-18.2019.77.

Oksa, S., & Soenarto, S. (2020). Pengembangan E-Modul Berbasis Proyek Untuk Memotivasi Belajar Siswa Sekolah Kejuruan. *Jurnal Kependidikan: Penelitian Inovasi Pembelajaran*, *4*(1), 99–111. https://doi.org/10.21831/jk.v4i1.27280.

Oktadiana, B. (2019). Analisis Kesulitan Belajar Membaca Permulaan Siswa Kelas II pada Mata Pelajaran Bahasa Indonesia di Madrasah Ibtidaiyah Munawariyah Palembang. *JIP Jurnal Ilmiah PGMI*, *5*(2), 143–164. https://doi.org/10.19109/jip.v5i2.3606.

Paramita, G. A. P. P., Gede Agung, A. A., & Abadi, I. B. G. S. (2022). Buku Cerita Bergambar Guna Meningkatkan Keterampilan Membaca Muatan Pelajaran Bahasa Indonesia Siswa Kelas III SD. *Mimbar Ilmu*, *27*(1), 11–19. https://doi.org/10.23887/mi.v27i1.45499.

Pasaribu, A., & Saparini. (2017). Pengembangan Bahan Ajar Berbasis Kontekstual untuk Meremidiasi Miskonsepsi pada Materi Gaya dan Hukum Newton. *Jurnal Inovasi Dan Pembelajaran Fisika*, *4*(2), 36–47. https://doi.org/10.36706/jipf.v4i1.4264.

Permana P, N. D., & Manurung, I. F. U. (2020). Penggunaan Bahan Ajar Digital Berbasis Inquiry pada Masa Pandemi Covid-19 untuk Mata Kuliah Pembelajaran IPA di SD Kelas Tinggi. *el-Ibtidaiy:Journal of Primary Education*, *3*(2), 73. https://doi.org/10.24014/ejpe.v3i2.11008.

Permata, C. A. M., & Kristanto, Y. D. (2020). Desain Pembelajaran Matematika Berbasis Gamifikasi untuk Meningkatkan Minat Belajar Siswa. *JNPM (Jurnal Nasional Pendidikan Matematika)*, *4*(2), 279. https://doi.org/10.33603/jnpm.v4i2.3877.

Pratiwi, B., Copriady, J., & Anwar, L. (2021). Implementation Of Phenomenon-Based Learning E-Module To Improve Critical Thinking Skills In Thermochemistry Material. *Jurnal Pendidikan Sains Indonesia*, *9*(4). https://doi.org/10.24815/jpsi.v9i4.21114.

Rahmatunisa, N., Sofyan, H., Daryono, R. W., & Nurtanto, M. (2022). Feasibility of Clinical Dietetics E-Module to Improve Learning Achievement of Vocational Students. *Journal of Education Technology*, *6*(1). https://doi.org/10.23887/jet.v6i1.41542.

Ramdani, E. (2018). Model Pembelajaran Kontekstual Berbasis Kearifan Lokal sebagai Penguatan Pendidikan Karakter. *JUPIIS: Jurnal Pendidikan Ilmu-Ilmu Sosial*, *10*(1), 1. https://doi.org/10.24114/jupiis.v10i1.8264.

Ramdani, M. S., & Simamora, A. H. (2022). Meningkatkan motivasi dan hasil belajar mata pelajaran seni budaya melalui e-modul. *Jurnal Edutech Undiksha*, *10*(1), 146–155. https://doi.org/10.23887/jeu.v10i1.44495.

Rizki, S., & Linuhung, N. (2016). Pengembangan Bahan Ajar Program Linear Berbasis Kontekstual dan ICT. *Aksioma: Jurnal Pendidikan Matematika FKIP Univ. Muhammadiyah Metro*, *5*(2), 137–144.

Rohmah, F., Amir, Z., & Zulhidah. (2021). Pengembangan E-Modul Interaktif Berbasis Kontekstual pada Materi Volume Bangun Ruang SD/MI. *Jurnal basicedu*, *5*(6), 6349_6356. https://doi.org/10.31004/basicedu.v6i2.2262.

Santoso, E. (2017). Penggunaan Model Pembelajaran Kontekstual Untuk Meningkatkan Kemampuan Pemahaman Matematika Siswa Sekolah Dasar. *Jurnal Cakrawala Pendas*, *3*(1). https://doi.org/10.31949/jcp.v3i1.407.

Saraswati, S., Linda, R., & Herdini, H. (2019). Development of Interactive E-Module Chemistry Magazine Based on Kvisoft Flipbook Maker for Thermochemistry Materials at Second Grade Senior High School. *Journal of Science Learning*, *3*(1), 1–6. https://doi.org/10.17509/jsl.v3i1.18166.

Sari, P. A. P. (2020). Hubungan Literasi Baca Tulis Dan Minat Membaca Dengan Hasil Belajar Bahasa Indonesia. *Journal for Lesson and Learning Studies*, *3*(1), 141–152. https://doi.org/10.23887/jlls.v3i1.24324.

Sidiq, R., & Najuah. (2020). Pengembangan E-Modul Interaktif Berbasis Android Pada Mata Kuliah Strategi Belajar Mengajar. *Jurnal Pendidikan Sejarah*, *9*(1), 1–14. https://doi.org/10.21009/JPS.091.01.

Siregar, E. S., & Kurniati, R. (2022). Multimedia as a Learning Tool in Training Reading Skills of Elementary Schools Students. *Journal of Educational Technology*, *6*(2), 299–307. https://doi.org/10.23887/jet.v6i2.44601.

Sofiana, N., & Mubarok, H. (2020). The Impact of English game-Based Mobile Application on Students' Reading Achievement and Learning Motivation. *International Journal of Instruction*, *13*(3). https://doi.org/10.29333/iji.2020.13317a.

Solikhah, I. (2015). Reading and Writing as Academic Literacy in EAP Program of Indonesian Leaners. *Dinamika Ilmu*, *15*(2), 325. https://doi.org/10.21093/di.v15i2.261.

Suastika, I. ketut, & Rahmawati, A. (2019). Pengembangan Modul Pembelajaran Matematika Dengan Pendekatan Kontekstual. *JPMI (Jurnal Pendidikan Matematika Indonesia)*, *4*(2), 58. https://doi.org/10.26737/jpmi.v4i2.1230.

Sudana, I. B. K. M., Suyasa, P. W. A., & Agustini, K. (2021). Efektifitas Media Pembelajaran Berkonsep Gamifikasi Pengenalan Tata Surya Mata Pelajaran IPA Terpadu Kelas VII Di SMP Negeri 2 Kubutambahan. *Jurnal Pendidikan Teknologi dan Kejuruan*, *18*(1), 43. https://doi.org/10.23887/jptk-undiksha.v18i1.25698.

Sugiyono. (2018). Metode penelitian kuatintatif , kualitatif dan R & D. In *Bandung: Alfabeta*.

Sulaiman, U., & Hasrianti, A. (2021). The Effect of Synthetic Structural Analytical Method on Beginning Reading Ability of Students in Makassar City. *Ethical Lingua: Journal of Language Teaching and Literature*, *8*(2). https://doi.org/10.30605/25409190.301.

Sulastri, A. (2016). Penerapan Pendekatan Kontekstual dalam Pembelajaran Matematika untuk Meningkatkan Pemahaman Konsep Matematis Siswa Sekolah Dasar. *Jurnal Pendidikan Guru Sekolah Dasar*, *1*(1), 156–170. https://doi.org/10.17509/jpgsd.v1i1.9068.

Sultan, M. A., & Nur, N. (2020). Pengaruh Speed Reading terhadap Kemampuan Membaca Pemahaman Siswa Mata Pelajaran Bahasa Indonesia SD Negeri 55 Parepare. *JIKAP PGSD: Jurnal Ilmiah Ilmu Kependidikan*, *4*(2), 125. https://doi.org/10.26858/jkp.v4i2.13682.

Syahrial, A., Agus Kurniawan, D., Chan, F., Septianingsih, R., & Perdana, R. (2019). Multimedia Innovation 4.0 in Education: E-Modul Ethnoconstructivism. *Universal Journal of Educational Research*, *7*(10), 2098–2107. https://doi.org/10.13189/ujer.2019.071007.

Vinhto. (2018). Thematic Structure in Reading Comprehension Texts in English Textbooks. *International Journal of Languages, Literature and Linguistics*, *4*(1). https://doi.org/10.18178/IJLLL.2018.4.1.148.

Wahyuni, Y., Edrizon, E., & Fauziah, F. (2022). Pengembangan Bahan Ajar Matematika dengan Pemanfaatan Geogebra. *Jurnal Cendekia : Jurnal Pendidikan Matematika*, *6*(1), 1120–1130. https://doi.org/10.31004/cendekia.v6i1.1139.

Wichadee, S. (2011). Developing The Self-Directed Learning Instructional Model To Enhance English Reading Ability And Self-Directed Learning Of Undergraduate Students. *Journal of College Teaching & Learning (TLC)*, *8*(12), 43. https://doi.org/10.19030/tlc.v8i12.6620.

Wulandari, S., Octaria, D., & Mulbasari, A. S. (2021). Pengembangan E-Modul Berbantuan Aplikasi Flip Pdf Builder Berbasis Contextual Teaching and Learning. *JNPM (Jurnal Nasional Pendidikan Matematika)*, *5*(2), 389. https://doi.org/10.33603/jnpm.v5i2.4628.

Wulanjani, A. N., & Anggraeni, C. W. (2019). Meningkatkan Minat Membaca melalui Gerakan Literasi Membaca bagi Siswa Sekolah Dasar. *Proceeding of Biology Education*, *3*(1), 26–31. https://doi.org/10.21009/pbe.3-1.4.

Yuki, L. K. (2020). Implementasi Literasi Budaya Kuda Kosong dalam Meningkatkan Minat Membaca pada Mahasiswa Universitas Putra Indonesia. *Jurnal Soshum Insentif*. https://doi.org/10.36787/jsi.v3i1.215.

Zaharah, Z., & Susilowati, A. (2020). Meningkatkan motivasi belajar peserta didik dengan menggunakan media modul elektronik di era revolusi industri 4.0. *Biodik: Jurnal Ilmiah Pendidikan Biologi*, *6*(2), 145–158. https://doi.org/10.22437/bio.v6i2.8950.