

# LPPM - Univsersitas Siliwangi p-ISSN: 2476-9312 / e-ISSN: 2614-5790 Open Access a

# IMPROVING STUDENTS GRAMMAR MASTERY USING DIGITAL LITERACY FOR SEVENTH GRADE STUDENTS OF SMPN 1 TAMBUN SELATAN

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#### Abstrak

Pengajaran bahasa Inggris di era sekarang ini sangat erat kaitannya dengan penggunaan teknologi, terutama ketika kurikulum ingin menjadikan teknologi sebagai bagian dari kegiatan dalam proses belajar mengajar, sehingga siswa dapat menghadapi masyarakat di abad ke-21. Penelitian ini dilakukan terhadap 35 siswa kelas VII SMPN 1 Tambun Selatan. Data dikumpulkan dengan menggunakan deskriptif kualitatif berdasarkan siklus penelitian tindakan kelas oleh Kurt Lewin. Ada dua siklus dalam penelitian ini, terdiri dari pre-test dan perencanaan, penerapan, observasi, evaluasi, post-test pertama dan post-test kedua. Kegiatan pembelajaran menggunakan beberapa teknologi seperti; Google Classroom, Canva, Quizizz dan Padlet sebagai media dalam proses belajar mengajar. Dalam makalah ini, terdapat perbedaan yang signifikan antara nilai pre-test dan post-test. Rata-rata nilai pre-test adalah 47.55, post-test pertama adalah 70.08 dan post-test kedua adalah 88.03. Berdasarkan hasil penelitian ini, dapat disimpulkan bahwa siswa tertarik dengan penggunaan teknologi dalam kegiatan pembelajaran bahasa Inggris di kelas. Selain itu, hasil ini sejalan dengan penelitian sebelumnya oleh Purcell (2013) dan Jose (2021). Hasil penelitian mereka menunjukkan adanya peningkatan skor dengan menggunakan teknologi digital sebagai media dalam proses belajar mengajar.

### Kata Kunci: Literasi digital, Tata bahasa, Inggris, Teknologi

#### Abstract

Teaching English in this era is relatable with the use of technology, especially when the curriculum wants to make the technology as the part of the activities in teaching leraning process, so the students can face the society in 21<sup>st</sup> century. This result have been collected by 35 students in seven grade of SMPN 1 Tambun Selatan. The data was collected using descriptive qualitatve based on the cycle of classroom reserach by Kurt Lewin. There are two cycles in this research, it consists of pre-test and planning, application, observation, evaluation, the first post-test and second post-test. The activities of the lesson use some technology such as; Google Classroom, Canva, Quizizz and Padlet as the media in teaching learning process. In this paper, there is significant score of pre-test and post-test. Average of score in pre-test is 47.55, first post test is 70.08 and the second post test is 88.03. Based on the result that students are interest the use of technology in activities of teaching English in classroom. Furthermore, this result is in line with previous study by Purcell (2013) and Jose (2021). The result of their research shows the increase of score using digital technology as the media in teaching learning process.

Keywords: Digital literacy, Grammar, English, Technology

# I. PENDAHULUAN

In learning English, students should master some skills such as listening, reading, writing and speaking. These skills should be mastered by the students. In these skills, grammar is needed to construct the sentence so that the idea or opinion can be communicated clearly. Teaching grammar in EFL students face some problems such as; 1. Understanding and applying the grammar because the inversion does not support them; 2. Memorising and using the correct forms of words such as verbs, nouns, adjectives, pronouns etc; 3. Developing grammatical competence and accuracy in different skills such as listening and reading, speaking, writing; 4. Balancing between grammar and communication and knowing when to focus on form or meaning. (Effendi, M. S., Rokhyati, U., Rachman, U. A. M., Rakhmawati, A. D., & Pertiwi, D. (2017).

# **Digital Litearacy**

In the MERDEKA curriculum there is an aspect of ensuring that students can compete in 21st century society. One way to achieve this is to use technology as a tool to teach English. Literacy can be defined simply as the ability to read and write, but nowadays the definition has become complex. Literacy is the ability to find, access and use information. (Faridah, N. R., Afifah, E. N., & Lailiyah, S, 2022). Therefore, the ability to find, evaluate, create, and communicate information using digital technologies, communication tools, and networks is referred to as digital literacy (Lee, S. H. 2014). It includes the skills, knowledge and attitudes needed to use digital tools and platforms effectively, safely and responsibly. Basic computer literacy, internet literacy, media literacy, and data literacy are all examples of digital literacy (Shopova, T, 2014). It also includes critical thinking, problem solving, collaboration, and communication skills. As digital technology continues to transform the way we live, work, and communicate. This important ability for effective use and understanding digital literacy as a long-life learning for the students (Shopova, T, 2014).

Teaching digital literacy skills is important in today's society where we are increasingly connected to the digital environment. Teachers can encourage digital literacy by incorporating digital tools and resources into their classroom instruction, giving guidance on how to use them effectively, and modeling responsible digital behavior. Teaching students how to conduct effective online research, use productivity software, and create multimedia projects is one example (Harjono, H. S, 2018). This can be effective for students in improving their cognitive, affective and their social in digital field (Harjono, H. S, 2018). The following ways to improve students' critical think: 1. Information evaluation: Digital literacy skills can help individuals evaluate the validity of information they find online. This includes understanding how to identify credible sources, fact-checking information, and recognizing bias (Shopova, T, 2014); 2. Problem-solving: Digital literacy skills can help individuals solve problems effectively. This includes understanding how to use technology to find solutions, recognizing the limitations of technology, and understanding how to collaborate with others online (Aysu, S, 2023). Beside the advantage fo the students, digital litaracy can be way for teacher to make the lesson activitites, media and coolect grades more effectively (Hariono, H. S. 2018).

# **Technology and Teaching Grammar**

Merriam-Webster defines grammar as the study of the classes of words, their inflections, and their functions and relationships in a language. It also includes the facts of language that grammar deals with. The other definition, grammar in English, refers to the set of rules that govern sentence structure and word usage in language. It examines how words are organised into phrases and clauses, how verbs and nouns agree in tense and number, and how punctuation and capitalisation are used. (Hans, A., & Hans, E, 2017). Understanding English grammar is essential for effective written and spoken communication. It enables speakers and writers to express themselves clearly and accurately, as well

as comprehend what others say or write. In EFL country especially in Indonesia, the problem of teaching grammar are: 1. Students do not have English knowledge background, it makes students unfamiliar, and they lack vocabulary; 2. Students afraid of learning Grammar because they think grammar is hard (Effendi, M. S., Rokhyati, U., Rachman, U. A. M., Rakhmawati, A. D., & Pertiwi, D, 2017). It makes students lost interest in learning grammar, so that the teachers have hard time to deliver the material (Ayu, M., & Sari, F. M, 2022). Teacher should be creative to find a better way to make sure the students' interest and understanding about grammar. One way to make effectiveness in teaching learning grammar and also get student interest is combine the material with digital literacy.

Improving grammar with digital literacy is a topic that has been discussed by many educators and researchers. According to some sources, digital literacy is about more than just using computers. It involves developing a range of skills to use technology effectively, creatively and various purposes responsibly for (cambridge.org). Some of these skills include searching for and creating content. communicating and collaborating online, solving problems and innovating, and staying safe and ethical online (Shopova, T, 2014). Some strategies for improving grammar through digital literacy are: 1. Using social media platforms to practice writing in authentic contexts and for authentic audiences (edweek.org); 2. Exploring grammar through engaging videos and interactive tasks that focus on understanding and applying grammatical features (bedrocklearning.org); 3. Using online tools to optimize teaching and learning grammar, such as quizzes, games, feedback tools (cambridge.org). In general, integrating digital literacy into grammar instruction could help make the process of learning more interactive and engaging for students, as well as provide opportunities for them to practice and apply grammar concepts in a variety of contexts.

Digital technology supports learners in crafting good paragraphs in multiple ways (Purcell, K., Buchanan, J., & Friedrich, L., 2013). According to Purcell's study, 78% of teachers agreed that digital technology impels learners' creativity and personal expression whilst 96% agreed that it empowers them to share their work across various social media platforms. On the downside, some teachers expressed unease regarding the casual writing style adopted by learners in formal writing or research assignments. Additionally, the study highlighted the need to educate learners about plagiarism since the greater availability of information can make it challenging to create original content.

Teacher should explore innovative ways to stimulate learners' interest in English language acquisition, such as incorporating technology. Moreover, the use of technology may encourage learners to develop digital literacy skills that are essential for their success in the 21st century, as pointed out by Jose (2021). Digital literacy is the ability to find, recognise, create and communicate information using digital technologies. communication tools and online networks (Lee, 2014). This capability can be nurtured if teacher can proficiently leverage and create content using technology. The combination of the two can pique students' interest, and if students are already keen on learning, it becomes less challenging for teachers to impart knowledge. Media examples in digital literacy include animated videos or videos that explain the material, the usage of social media, and interactive games. (Murtafi'ah, B., & Putro, N. H. P. S. (2019).

Based on the observation in SMPN 1 Tambun Selatan, the writer finds that only a few of teacher using digital literacy in their activities, most of them still, do the conversional way especially to teach grammar. This makes students do not pay attention on the material. This can be affected to their understanding and perspective about grammar. Students think learn grammar is hard and boring because they just listen to their teacher and do assessment without any visual media that can encourage them to get the attention. The goal of this paper is to make teacher aware with digital literacy in teaching learning and also get students attention of the grammar and give some of tools to make easier of teaching activities and collect the grades of the students.

### II. RESEARCH METHOD

The descriptive quantitative research method is a research method that uses specific variables to describe or explain a phenomenon or population. The descriptive qualitative research method in English language teaching is a type of research that aims to describe and understand a phenomenon or situation in its natural context. It involves collecting and analysing data that is mainly in the form of words, such as interviews, observations, documents, etc (Nassaji, H, 2015). Descriptive qualitative research method can be used to study various aspects of teaching and learning English, such as teaching methods, learning strategies, students' attitudes, teachers' beliefs, etc (Khasanah, A. U, 2019). Some characteristics of descriptive qualitative research method are; 1. It is exploratory and interpretive. It does not test hypotheses or seek causal relationships, but rather explores the meanings and perspectives of the participants; 2. It is flexible and responsive. It allows the researcher to adjust the research design and data collection methods according to the emerging findings and the context; 3. It is holistic and contextual. It considers the whole picture and the specific details of the phenomenon or situation, as well as the social and cultural factors that influence it: 4. It is inductive and thematic. It generates themes or categories from the data rather than imposing pre-determined categories or frameworks (Nassaji, H, 2015).

The way of descriptive quantitative in this paper: 1. Identifying the variables to be measured and observed; 2. Identifying the population and sample to be studied. This paper was conducted with 35 student of seven grade in SMPN 1 Tambun Selatan; 3. Gathering information using suitable data collection method from the scores of the students (the score of pre and posttest every cycle); 4. Using descriptive statistical methods such as mean, median, mode, and frequencies and percentages, along with graphical techniques such as histograms, bar graphs, or scatterplots, analyze the data; 5. Drawing conclusions based on data analysis results.

This research is classroom action research conducted for two cycles. Digital literacy is the action that applied in this study focused on media in learning English. The subjects of this study were students of SMPN 1 Tambun Selatan class VII-G second semester of 2022/2023 academic year. The object of this research is student learning activities, student learning outcomes, and student opinions due to the application of the digital literacy. This class action research was carried out in two cycles, and each cycle consisted of four stages, namely 1) planning, 2) implementation of action, 3) observation and evaluation of action, and 4) reflection. In Cycle I, the explanation about Simple Present Tense through narrative video about Eid Al Fitr using Canva. Other website that used in this research are Quizizz as the assessment for learning. Whereas in Cycle II, it was applied to the explanation about sentence and Simple Present Tense through Youtube video animation with conversation about daily activities. This cycle also used Quizizz as assessment for learning but there is the explanation about the material. Using Padlet as other website to collaboration with other students that provide the short text. Google classroom is platform that can access by students to learn about the material before they come to the class. In this website teachers can add material such as video or power point and also the assessment and how to do it in description box.



Picture 1. Research action class model by Kurt Lewin

# A. Steps to do the research:

### 1. Planning

The steps in action planning are 1) reviewing teaching materials or materials, preparing syllabus, and lesson plans, student activity sheets, and handouts, 2) preparing and reviewing observation and evaluation formats consisting of pretests and end-of-learning tests, quizzes, observation sheets, and questionnaires, and 3) reviewing indicators to determine the effectiveness or success of the actions implemented, such as student absorption and learning completeness.

### 2. Implementation of action

Implementation of action is in principle the realization of an action that has been planned. The steps for implementing the action are as follows:

- 1) Cycle I
- a. Before learning begins, a pretest is conducted to determine students' initial knowledge of the study material to be discussed.
- b. Learning was carried out with the following steps:

Activities Teacher		Students		
Introduction	1. Teacher greats and ask students about 1	1. Students great to the teacher and tell		
	the presence.	who is absence.		
	2. Teacher does the ice breaking with 2	2. Students do the crossword through		
	crossword. It aims students know	their phone. Student who does not		
	some vocabulary related to Eid Al	bring the phone they answer on the		
	Fitr.	whiteboard.		
	3. Teacher asks some question related to	3. Some of students answer about what		
	the topic.	they do during Eid Al Fitr.		

Tabla	1. Activities	in	avala 1
Table	1. Activities	ın	cycle I

Main Lesson	1.	Teacher shows the video about	1.	Students watch the video and answer
		describing activities on in Eid Al Fitr.		what is the video talks about.
		The video shows the short text and	2.	Students give attention to the teacher
		also the picture of the activities. So,		about how to make sentence using
		students can relate the video with		simple present tense.
		their own tradition in Eid Al Fitr.	3.	Students active to play the quizizz. In
	2.	Teacher explains the material about		that there some funny memes.
		simple present tense through the	4.	Students write down the answer on
		video with asking what do you think		Padlet.
		about the video?; what is your		
		favorite menu in Ed Al Fitr?; Where		
		do you go to pray (sholat ied)?; Do		
		you do the takbiran?.		
	3.	Teacher asks students to play the		
		quizizz related to the topic in the		
		video.		
	4.	Teacher asks students to make 5		
		sentences about what they do during		
		Eid Al Fitr. Teacher shows students		
		work on the Padlet.		

2) Cycle 2

a. Before the class start teacher has shared the link through google classroom about

the material and how to do the assessment.

b. Learning was carried out with the following steps:

Activities	Teacher	Students
Introduction	1. Teacher great and ask students about	1. Students great to the teacher and tell
	the presence.	who is absence.
	2. Teacher does the ice breaking video	2. Student dance Together with teacher
	about subject and verb.	through Video that play on the wall. All
	3. Teacher asks some question related to	of the students join the dance.
	the topic.	3. Students answer the question about
		subject and verb.
Main Lesson	1. Teacher plays conversation video	1. Students watch the video and answer
	about their activities and there is also	how the use of simple present tense
	explanation about simple present	based on the video.
	tense.	2. Students find the subject and verb on
	2. Teacher gives the text to students	Padlet.
	through Padlet and ask them to find	3. Students read the material on Quizizz
	the subject and verb.	about the further explanation about
	3. Teacher discusses with student about	simple present tense.
	their answer.	4. Students active to play the Quizizz. In
	4. Teacher asks students to read material	that there some funny memes.
	on Quizizz and play the quiz.	

3. Observation and Evaluate

During the learning process the researcher observed the learning strategy used. The variables observed were in accordance with the object of research, namely students' learning activities, students' assessment and students' reflection. Tests were conducted on students' concept understanding in the form of differences of verbs based on subject, rearranging word to make a meaningful sentence and making sentences related to simple present tense. Tests of students' concept understanding were carried out in the form of an increase in average learning scores between the initial test and the end of learning test and the end of cycle test.

### 4. Reflection

Based on the observation and evaluation in cycle I, the researcher held a reflection to see how much success and failure in the application of digital literacy as media in teaching Grammar. Reflection was carried out on student learning activities and looking for factors that caused the failure of the action and finding solutions to these problems. In addition, reflection was also carried out on the achievement of student learning outcomes, as well as efforts that need to be made to improve student learning outcomes.

## **III. RESULT AND DISSCUSION**

#### Validity Test

The results of data analysis obtained in relation to the improvement of students' grammar mastery using digital literacy involving 35 students at SMPN 1 Tambun Selatan were analyzed using the Manova (Multivariate Analysis of Variance) analysis technique to determine the effect of the pre-test (X) on the first treatment using digital literacy or cycle 1 variable (Y1) and the second treatment using digital literacy or cycle 2 (Y2).

The results of the calculation of the validity test of the question for improving grammar mastery found that Valid, because R Calculation (0,408) is higher than R Tabel (0,2709) and score of sig. less than 0,05. It is 0,01 for the first cycle and 0,007 for the second cycle.

Table 3. Shows the results of testing the question to improve grammar mastery of students.

		Correlations		
		Diagnostic Test	Cycle 1	Cycle 2
Diagnosti	c Pearson	1	$.408^{*}$	.429**
Test	Correlation			
	Sig. (2-tailed)		0,011	0,007
	Ν	38	38	38
Cycle 1	Pearson	.408*	1	.460**
	Correlation			
	Sig. (2-tailed)	0,011		0,004
	Ν	38	38	38
Cycle 2	Pearson	.429**	.460**	1
	Correlation			
	Sig. (2-tailed)	0,007	0,004	
	Ν	35	35	35

Correlations

# **Descriptive Statistic Analysis**

Furthermore, descriptive statistical analysis was conducted to see the effectiveness of using digital literacy as the media to improve students' grammar. Based on the description table in Table 2, it can be seen that the average of pre-test is lower than the result of cycle 1 and the average of cycle 2 is higher than cycle 1. With the identification of the average score of pre-tests, cycle 1 and cycle 2 which has increased it can be said that the use of digital literacy is effective in learning English grammar.

		Descriptives			
		Siklus		Statistic	Std. Error
Result of	Pre-test	Mean		47,55	3,251
test		95% Confidence Interval for Mean	Lower Bound	40,97	
			Upper Bound	54,14	
		5% Trimmed Mean		46,53	
		Median		42,50	
		Variance		401,659	
		Std. Deviation		20,041	
		Minimum		19	
		Maximum		94	
		Range		75	
		Interquartile Range		21	ĺ
		Skewness		0,948	0,383
		Kurtosis		0,296	0,750
	Cycle 1	Mean		70,08	2,345
		95% Confidence Interval for Mean	Lower Bound	65,33	
			Upper Bound	74,83	
		5% Trimmed Mean		70,31	
		Median		75,50	
		Variance		209,048	
		Std. Deviation		14,458	
		Minimum		42	
		Maximum		93	
		Range		51	
		Interquartile Range		25	ĺ
		Skewness		-0,351	0,383
		Kurtosis		-1,197	0,750
	Cycle 2	Mean		88,03	2,506
		95% Confidence Interval for Mean	Lower Bound	82,95	
			Upper Bound	93,10	
		5% Trimmed Mean		88,92	
		Median		100,00	

 Table 4. Descriptive statistical analysis using digital literacy to improve Grammar mastery of students.

 Descriptives

Variano	ce	238,567	
Std. De	viation	15,446	
Minim	ım	60	
Maxim	um	100	
Range		40	
Interqu	artile Range	25	
Skewne	ess	-0,856	0,383
Kurtosi	S	-0,834	0,750

### **Normality Test**

Then the normality test was conducted to see if the data obtained were normally distributed. The implementation of this is a prerequisite before carrying out Manova (Multivariate Analysis of Variance) testing. Based on the results of normality test. According to the results in Table 3, the normality test using one-sample Kolmogorov-Smirnov has significant value obtained on the Pre-test variable is 0.012 > 0.05, the significance value of the posttest in cycle 1 is 0.016 > 0.05, the significance value of the posttest in cycle 2 is 0.000 > 0.05 so that the data is said to be normally distributed.

Table 5. Normality test using digital literacy to improve grammar mastery of students

1.4

	Tests of Normality							
			Kolmogorov-Smirnov <sup>a</sup>			S	hapiro-Wil	k
			Statistic	df	Sig.	Statistic	df	Sig.
Result of the test		Pre-Test	0,163	38	0,012	0,907	38	0,004
	ne test	Cycle 1	0,160	38	0,016	0,926	38	0,015
		Cycle 2	0,334	38	0,000	0,740	38	0,000

#### a. Lilliefors Significance Correction

Based on the multivariate analysis table above, the significance value is 0.004 < 0.05. So that the results of the multivariate statistical analysis show that there is a significant effect of pre-test (X) on all dependent variables (cycle 1 and cycle 2). Thus, it can be interpreted that the use of the digital literacy can improve students' grammar mastery. The overall result of the Manova (Multivariate Analysis of Variance) test results that have been described show that the digital literacy is demonstrably effective in improving students' grammar mastery. This can be seen in the effect that occurs cycle 1 and cycle 2 which is given the treatment digital literacy is superior compared to the result before the treatment.

Table 6. Multivariate test using digital literacy to improve Grammar mastery of students

Multivariate Tests <sup>a</sup>								
				Hypothesis				
Effect		Value	F	df	Error df	Sig.		
Intercept	Pillai's Trace	0,943	258.547 <sup>b</sup>	2,000	31,000	0,000		
	Wilks' Lambda	0,057	258.547 <sup>b</sup>	2,000	31,000	0,000		
	Hotelling's Trace	16,680	258.547 <sup>b</sup>	2,000	31,000	0,000		
	Roy's Largest	16,680	258.547 <sup>b</sup>	2,000	31,000	0,000		
	Root							
Pre-Test	Pillai's Trace	0,637	2,992	10,000	64,000	0,004		

Wilks' Lambda	0,452	3.018 <sup>b</sup>	10,000	62,000	0,004
Hotelling's Trace	1,012	3,037	10,000	60,000	0,004
Roy's Largest Root	0,747	4.782°	5,000	32,000	0,002

a. Design: Intercept + Pre-Test

b. Exact statistic

c. The statistic is an upper bound on F that yields a lower bound on the significance level.

This research has been simlar with other research by Jose (2021) that shows students has increase in their grammar mastery and also make students interest in teaching learning activities. But there some a difficultiest that teacher face such as a lots of device that use in teaching using digital tools, the signal to access the internet sometimes is unstable and the understanding about the technology must be understood by teacher it self. In fact many senior teacher that has been tired so they not aware with new technology.

### **IV. CONCLUSION**

The obtained results indicate an increase in understanding of grammar itself, as confirmed by the significant improvement in pre-test, post-test 1, and 2 results. This aligns with the previous research conducted by Purcell (2013), who studied students' writing skills using digital technology. The current research focuses on teaching materials in the form of animated videos, as well as utilising various platforms such as quizzes, Padlet and Google Forms for data collection and analysis.

The following study pertains to the motivation of participants in engaging with learning activities via a questionnaire distributed through Google Forms, with the understanding that all students are capable of participating. According to the findings from the research conducted by Jose (2021) and Purcell (2013) on utilising technology in education, teachers agree that students can express their ideas actively with the usage of technology, which suggests positive outcomes.

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