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GAMIFICATION IN A FLIPPED CLASSROOM USING ARTICULATE STORYLINE FOR JUNIOR HIGH SCHOOL STUDENTS' VOCABULARY MASTERY

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Abstract: This study aims to design gamification-based-instructions using articulate storyline in a flipped classroom setting to improve vocabulary mastery of junior high school students and to examine how students' perspective on this approach compared to traditional methods. The study employs a Research and Development (R&D) methodology, guided by the ADDIE model (Analysis, Design, Development, Implementation, Evaluation). The results show that there is a significant improvement in students' vocabulary mastery, with an average gain of 30%, and over 85% of students found the gamified activities significantly more engaging and motivating. The study concludes that using the Articulate Storyline in conjunction with gamification in a flipped classroom environment significantly improves both student engagement and vocabulary mastery. These findings provide not only insightful information that positions gamified learning as a strong substitute for

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conventional pedagogy but also further advancements in instructional design.

Keywords: *Gamification, flipped classroom, articulate storyline, vocabulary mastery*

INTRODUCTION

In recent years, along with the change of times and the development of technology, teachers are expected to provide relevant and contextual learning that integrates technology according to the student's needs (Antonietti et al., 2022; Marcelo & Yot-Domínguez, 2019; Sailer et al., 2021). Today's massive technological developments can be used to support learning activities (Haleem et al., 2022; Lockee & Gros, 2020; Maruf & Anjely, 2020). The important role of technology was felt when the worldwide COVID-19 pandemic hit recently (Akram et al., 2021; Dwivedi et al., 2020; Khatoony & Nezhadmehr, 2020). Teachers are forced to immediately be able to apply them in the learning and teaching process, so that they are unconsciously accustomed to using technology in their learning activities (Ding et al., 2019; Maruf & Helingo, 2022). Likewise, students spend much time with their gadgets, they become very familiar with various applications and digital platforms, and almost all of them enjoy playing online games (Famularsih, 2020; Khanmurzina et al., 2020). This phenomenon can be used as an opportunity to make learning activities more interesting and enjoyable so that it can increase student motivation in learning by integrating gamification that utilizes mobile-assisted language learning (MALL) applications to develop and enhance the student's English language (Azar & Tan, 2020; Zain & Bowles, 2021; Maruf et al., 2023).

Gamification can be defined as using game design elements in non-game contexts (Gallego-Durán et al., 2019). Gamification incorporates video game elements like badges, reward structures, avatars, leaderboards, and instant feedback into teaching (Saleem et al., 2022). Gamification aims to influence user behavior by triggering

personal motivations through those game elements (Riar et al., 2022; Rosydiyah, 2022). Together, these elements of gamification, when integrated into educational contexts, not only enhance student engagement and motivation but also foster critical thinking and active participation, highlighting its potential as a transformative tool in language learning classrooms.

The growing prevalence of gamification in education, driven by digital innovation, may give the impression that all learning challenges are adequately addressed (Krath et al., 2021). However, the sheer abundance of these resources does not guarantee their effectiveness in fostering meaningful learning opportunities. Many existing gamification platforms adopt a one-size-fits-all approach, focusing on extrinsic rewards such as leaderboards, badges, and points, neglecting deeper cognitive engagement and alignment with specific learning objectives (Romero-Rodríguez et al., 2024). This superficial approach often fails to meet the complex needs of diverse learners, particularly in junior high school settings where both cognitive and affective development are crucial. To address these gaps, developing tailored gamification strategies that align with curriculum goals and incorporate sound pedagogical principles is essential. By doing so, gamified learning can enhance motivation and mastery, offering a more holistic and engaging educational experience that promotes academic growth and a sustained enjoyment of learning.

In a gamified learning environment, vocabulary acquisition can be enhanced thoroughly. Vocabulary is considered to be one of the most important elements in comprehending lesson materials, especially when learning a foreign language (Schmitt, 2019). Vocabulary boosts the main four language skills of writing, speaking, reading, and listening. Through gamification, vocabulary exercises can be transformed into interactive challenges where students earn points, badges, or levels as they build their vocabulary, motivating them to engage more deeply with the material (Saleem et al., 2022).

An articulate storyline is used to design the media. It collaborates the materials, exercises, quizzes, and feedback in one

platform. It can be integrated with various digital platform applications. Articulate Storyline 360 is an e-learning authoring tool that allows you to create interactive and engaging online courses, simulations, quizzes, and other learning content (Articulate, 2024). It provides a user-friendly interface and a range of templates, characters, and assets that can be customized to suit your needs. With Storyline 360, responsive e-learning content can be created to function on any device and easily published in various formats, including HTML5, Flash, and SCORM. The tool also provides features such as screen recording, video editing, and interactive assessment building to help you create immersive learning experiences (Articulate, 2024; Heliawati et al., 2022).

A previous study conducted by Enayati and Gilakjani (2020) found that Computer Assisted Language Learning (CALL) produced better results in vocabulary learning than traditional vocabulary teaching methods. The results led to the conclusion that teachers can have more student-centered classes and more interactive teaching environments. Another study by Ho (2020) explored using a gamified flipped classroom approach to teach English narrative genres, revealing positive effects on students' engagement with technology and learner autonomy. The game-based teaching approach enhanced students' behavioral, cognitive, and motivational engagement, boosting their confidence and reducing anxiety and reticence toward using English (Ho, 2020). Research by Al Qasmi et al. (2022) highlights the flipped classroom's positive effects on both students' vocabulary acquisition and their motivation, demonstrating its effectiveness in fostering more favorable attitudes toward learning English.

Despite the increasing attention toward flipped classrooms and gamification in education, a well-structured framework for designing and implementing pre-class activities aimed at improving vocabulary mastery among junior high school students remains underdeveloped. Traditional vocabulary instruction methods often fall short of engaging students sufficiently to ensure long-term retention and active participation (Waluyo & Bucol, 2021; Zou et al., 2021). This gap likely

stems from the limited integration of dynamic, student-centered strategies within existing approaches, which fail to leverage the motivational potential of gamified and interactive learning environments.

Previous research has highlighted the benefits of various educational technologies. Studies on Computer-Assisted Language Learning (CALL) and Mobile-Assisted Language Learning (MALL) have shown significant improvements in vocabulary acquisition and student engagement (Enayati & Gilakjani, 2020). Similarly, gamification methods and flipped classroom models have independently demonstrated their ability to boost student performance and motivation (Al Qasmi et al., 2022; Ho, 2020). However, little research has focused on combining these elements into an integrated learning design. Addressing this gap, the present study aims to develop and evaluate a comprehensive model that unites CALL/MALL, gamification, and the flipped classroom, offering a cohesive strategy to enhance student learning outcomes.

This study seeks to address two key research questions: (1) How do gamification class activities using articulate storyline, designed using the ADDIE model, increase the vocabulary mastery of junior high school students in a flipped classroom setting? (2) What are the students' perceptions of using Articulate Storyline as a platform for gamification-based class activities compared to traditional methods of vocabulary instruction?

By integrating flipped classrooms with gamification through the ADDIE model, this study aligns with research demonstrating the effectiveness of these methodologies in enhancing student engagement and vocabulary mastery. By combining these approaches, the current study offers educators evidence-based strategies to create engaging, interactive class activities that address learning needs while boosting motivation and vocabulary retention (Enayati & Gilakjani, 2020; Zou et al., 2021).

METHOD

Research Design

This research is included in the type of research and development using the ADDIE development model. The systematic process is represented in ADDIE which are Analysis, Design and Development, Implementation, and Evaluation. This study focuses on designing an Articulate Storyline as a platform for gamification-based class activities in a flipped classroom setting.

Participants

The participants of this current study are the seventh graders class in SMPN 2 Kauman, Ponorogo. The participants are 94 students from 7A, 7B, and 7C classes.

Research Procedure

In the analysis phase, the researcher analyzed the students' learning difficulties, preferences, needs, and prior knowledge, particularly focusing on their challenges in vocabulary mastery. The researcher also analyzed the learning objective that was expected to be achieved. The researcher conducted a diagnostic assessment by using a semi-structured questionnaire combining both open-ended and close-ended questions, allowing for exploring participants' thoughts and experiences. The questionnaire is divided into 2 parts. The first part consists of 3 yes/no questions about students' engagement in English learning. The second part consists of 2 open questions about students' preferences when learning English. Yes/No questions are used to provide quantifiable data. Open-ended questions allowed the students to provide more detailed responses and share their opinions, thoughts, or explanations in their own words for completing the yes/no questions (Zipp, 2022). A quiz in the form of multiple choice with 10 question numbers on basic greeting and parting material was also conducted to assess students' prior knowledge.

The design and development phase is the next step in the ADDIE model. In this step, the research focuses on creating an effective

learning design, such as a lesson plan, to help learners achieve the specified objectives. It also involves developing an outline of the material and assessment strategies. To ensure the assessment is effective, the research utilizes data collected from the earlier phase. The assessment is carefully aligned with the content and context, with a primary emphasis on accurately measuring the learning objectives.

The next phase is the implementation phase. This phase is about transforming the plan into action. Teachers are responsible for delivering learning material to the students and implementing the teaching techniques. This means carrying out the real teaching and learning activities following the plan for design and development. Teachers ensure that resources and learning materials are used effectively to support students' learning. They also monitor the student's progress and provide necessary guidance and support during learning.

In the evaluation phase, teachers are involved in assessing the effectiveness of the learning process. This includes collecting feedback from students, analyzing the results of learning activities, and identifying areas that require improvement. Teachers may also review the learning materials and instructional strategies to determine their impact on students' learning outcomes. Teachers can decide whether the learning experience was successful and can find ways to improve future instructional planning and implementation (Aldoobie, 2015; Gamal, 2023).

FINDING

Analysis Phase

In the analysis phase, the diagnostic assessments (both cognitive and non-cognitive) were conducted to evaluate the students' current proficiency in English vocabulary and their learning attitudes. The result revealed that students had significant vocabulary acquisition challenges, adversely affecting their ability to engage with learning material. Specifically, the quiz-based cognitive assessment indicated that 68 students of 94 students (more than 70% of students)

who took part in the test scored below the passing threshold (70%) on basic English vocabulary. Additionally, the non-cognitive assessment, conducted via a semi-structured questionnaire combining both open-ended and close-ended questions, highlighted that more than 70% of students lacked motivation to learn English, especially those with low vocabulary mastery.

Based on the results of the close-ended questionnaire, 66 students (70% of all participants) stated that they had never studied English at a previous level of education (primary school level). In comparison, 28 other students stated that they had. 5 students said they liked English, and 89 students (95%) said they didn't like it. 70 students (74%) said English was difficult to learn, 24 students said it was not.

The results of the open-ended questionnaire revealed that two students had studied English independently during their primary education, four students had studied English for only one to two years, and the remaining 19 students had studied English for an average of more than three years. Students who found English challenging primarily attributed their struggles to vocabulary-related issues. They reported difficulties understanding texts due to unfamiliar words, problems with pronunciation, and a lack of prior exposure to English instruction.

As additional information that helps researchers design learning activities, the results of the questionnaire show that 65 students prefer to work in groups, 22 students choose to work in pairs and the remaining 5 students choose to work individually. Apart from that, from several choices of learning activities that can be carried out, 5 activities were chosen by the most participants, namely activities involving pictures, matching, using digital platform applications, related to puzzles and quizzes.

The instructional analysis is conducted to determine how the instructional content aligns with the learning goals outlined by the Merdeka Curriculum, specifically for junior high school students in the English language subject, based on the analysis of learning outcomes contained in the decision letter of the head of the educational

standards, curriculum, and assessment agency, Ministry of Education, Culture, Research, and Technology number 032/H/KR/2024 concerning learning outcomes in early childhood education, basic education levels and secondary education levels in the Merdeka Curriculum. The focus is on addressing vocabulary mastery through gamified pre-class activities using Articulate Storyline, within the context of a flipped classroom. The learning goal set forth by the curriculum emphasizes student autonomy, critical thinking, and mastery of essential vocabulary to support reading comprehension, speaking, writing, and listening skills in English (The Decision of Kemendikbudristek, 2024).

At the beginning of the semester, based on the Merdeka Curriculum, specific learning objectives were defined for the vocabulary mastery program. These objectives are aligned with both the curriculum's overarching goals and the needs of the students, as identified through diagnostic assessments (non-cognitive and cognitive).

In line with the flow of learning objectives that have been prepared according to the needs of seventh-grade students, the material that will be studied first is about greetings and farewells. This learning objective will be implemented in 8 meetings (based on time allocation according to the local educational calendar.

Design and Development Phase

In the design and development step, the researcher makes an effective learning design (lesson plan) that facilitates learners to achieve the learning objectives. In the Design and Development Phase, the researcher focuses on creating a comprehensive learning plan and developing the instructional materials that will facilitate vocabulary mastery for junior high school students. This phase integrates the learning goals identified in the analysis phase, with a specific focus on designing gamified pre-class activities using Articulate Storyline. The design is aimed at engaging students through interactive, self-paced

activities, ensuring that they are well-prepared for in-class learning in the flipped classroom setting.

The first step in the design phase is to create an effective lesson plan that aligns with the learning objectives derived from the Merdeka Curriculum. The plan outlines how gamified pre-class activities will be structured and how they fit within the flipped classroom model. The focus is on maximizing vocabulary acquisition through engaging and interactive activities.

In this flipped classroom model, students complete pre-class activities at home using Articulate Storyline. These activities focus on vocabulary practice and application, enabling students to prepare for more collaborative, communicative tasks during in-class sessions.

Based on the activities chosen by the students through the questionnaire, the researcher proposed some pre-class activities. The first is vocabulary flashcards where students match the picture to the word or the words to definitions. The next is gamified quizzes, timed vocabulary quizzes that provide immediate feedback and points for correct answers. These quizzes are structured to reinforce word meanings, synonyms, antonyms, and the usage of the words in sentences (contextual sentences). The researcher also developed puzzle or riddle games.

The interactive, gamified pre-class activities that students will complete using Articulate Storyline are outlined in the storyboard. The storyboard is an illustration of the media types that will be used, the interactive elements that will be included, and the flow of the content. The first screen, namely the introduction screen, contains a welcome greeting, brief instructions regarding the activity to be carried out, and a goal to collect as many points as possible to become the leaderboard. There is a play button which directs the students to the game menu.

The menu screen contains the leaderboard button and activity buttons divided into 8 levels. Each level button led the students to the activity based on the lesson plan. The last level button led the students to the final quiz.

Implementation Phase

The actual execution of the planned learning activities takes precedence over planning and development during the ADDIE model's implementation phase. This phase is critical as it involves the deployment of the gamified pre-class activities developed in the design and development phase, ensuring that the planned instructional strategies are delivered effectively to the students. In this instance, junior high school students' vocabulary mastery especially greeting and parting material is being improved through the implementation of gamified pre-class activities using Articulate Storyline in a flipped classroom setting.

Before starting the implementation, the researcher ensures that all technical setups and student preparations are ready. The media developed by Articulate Storyline are shared with students via WhatsApp, allowing students to access the content easily on their devices. Students are trained on how to use the platform and navigate the interactive elements, such as quizzes and gamified features like leaderboards.

The learning activities are scheduled to be completed before each in-class session, with each module taking approximately 30-45 minutes. This ensures students are prepared for collaborative, vocabulary-focused classroom sessions. The gamified elements, such as points and leaderboards, keep students motivated and engaged, promoting repeated practice and active learning. As students complete the activities, their progress is tracked via a real-time dashboard, allowing both students and teachers to monitor their performance.

Evaluation Phase

The success of the gamification-based pre-class activities for enhancing junior high school students' vocabulary mastery in a flipped classroom is evaluated in large part by the evaluation phase of this study. A post-test and a questionnaire are the two primary tools used in this phase; they both offer important insights into how effectively the instructional design is working.

After completing the gamified activities, students were given a post-test to evaluate their level of vocabulary mastery in terms of learning outcomes. When comparing the vocabulary knowledge of the post-test results to the diagnostic quiz during the analysis phase, a significant improvement was observed. Students' scores rose by 30% on average, and many of them progressed from a basic vocabulary understanding to more advanced levels of usage and comprehension. The fact that the post-test scores improved indicates that the gamification-based pre-class activities were successful in helping students learn new words. Students who had difficulty with vocabulary during the diagnostic phase in particular made great progress; following the course of action, almost 75 percent of them scored in the higher proficiency ranges.

Students' Perceptions

The second part of the evaluation involved a questionnaire, which collected qualitative feedback from students regarding their experience with the gamified pre-class activities. The 10-number questionnaire focused on measuring students' participation, motivation, ease of use, and overall satisfaction with the Articulate Storyline platform in a flipped classroom setting. The results demonstrated significant improvements in various aspects of the learning process.

Notably, 85% of the 94 participants reported that the gamified components, such as leaderboards and points, substantially enhanced their motivation to complete pre-class assignments. Additionally, a similar proportion of students found the Articulate Storyline modules easier to navigate and more engaging compared to traditional vocabulary learning methods. The ability to learn at their own pace was highly valued, with most participants indicating that it significantly supported their understanding and retention of vocabulary.

Overall, the feedback revealed high levels of student satisfaction, with over 80% of respondents rating their learning experience as interactive, engaging, and enjoyable. These findings

underscore the effectiveness of incorporating gamification through Articulate Storyline in promoting active learning and improving vocabulary mastery in a flipped classroom environment.

DISCUSSION

The data gathered during the analysis phase provided valuable insights into students' existing vocabulary gaps. The low quiz scores and lack of interest in learning English highlighted the need for innovative instructional approaches that engage students while also improving vocabulary retention.

This phase justifies implementing a gamification-based flipped classroom model as an intervention (Gündüz & Akkoyunlu, 2020). The use of diagnostic assessments enabled a more targeted design of pre-class activities that addressed specific vocabulary gaps and motivational challenges encountered by students. The semi-structured questionnaires, in particular, were effective in identifying non-cognitive barriers such as a lack of engagement, which influenced the learning experience.

The flipped classroom model's design and development phases effectively incorporated gamification principles by utilizing Articulate Storyline to produce highly interactive and customized learning experiences. Points and leaderboards are examples of gamified components that encourage motivation and give students instant feedback on how well they're using vocabulary (Doğan, 2023). The researcher made sure that the content was interesting and relevant by arranging the design with the learning objectives determined during the analysis phase, which helped to achieve the overall objective of enhancing vocabulary mastery. These stages emphasize how important it is to create focused educational content that encourages active learning using tools for instructional design like Articulate Storyline.

Students' Responses

The majority of students completing the pre-class activities successfully demonstrates how successful the gamification model is at raising student motivation. The post-test results, which show an increase in vocabulary mastery, highlight the benefits of implementing interactive, self-paced learning resources in a flipped classroom setting (Lopukhova et al., 2020). The fact that students were more engaged in class indicates that the gamified pre-class activities not only helped students become ready for in-class learning but also gave them more self-assurance when using new vocabulary. These findings bolster the effectiveness of using gamification and technology in pre-class activities to improve student learning outcomes.

The positive feedback from the questionnaire combined with the higher post-test scores illustrates that the gamified pre-class activities created with Articulate Storyline helped students become more proficient with vocabulary. The outcomes illustrate that the interactive and self-paced nature of the learning activities, paired with the application of gamification in a flipped classroom setting, offered a successful and entertaining response to the problems associated with conventional vocabulary instruction. This assessment stage not only shows off the effectiveness of the instructional design but also offers insightful information that will help later versions of gamified learning activities be improved and developed.

The findings of this study align closely with existing theories on gamification and its impact on student engagement and learning outcomes. Previous research, such as that by Ho (2020) and Al Qasmi et al. (2022), demonstrated that gamification in flipped classroom models significantly enhances students' motivation and autonomy. Similarly, our study reinforces these claims, showing that 85% of participants experienced increased motivation and engagement through the use of gamified elements like leaderboards and points. Moreover, the significant improvement in vocabulary mastery aligns with Enayati & Gilakjani's (2020) findings, which highlight the

effectiveness of computer-assisted language learning (CALL) in fostering vocabulary acquisition.

However, while these findings strengthen the argument for gamification as a valuable pedagogical tool, they also raise questions about the scalability of such interventions. Unlike some studies that emphasize the challenges of maintaining long-term engagement in gamified environments (Waluyo & Bucol, 2021), our findings suggest a high initial level of satisfaction and motivation. This divergence could stem from the novelty of the approach or the specific context of junior high school students, which warrants further investigation. Overall, the study not only supports but also extends the theoretical framework of gamified learning by highlighting its practical application and effectiveness in vocabulary acquisition within flipped classrooms.

CONCLUSION

In summary, this study shows that junior high school students' vocabulary mastery and engagement are greatly increased when gamification-based pre-class activities utilizing Articulate Storyline are incorporated into flipped classroom models. The significant improvement in post-test scores indicates that the use of gamified elements, like points, badges, leaderboards, and interactive scenarios, effectively motivated students and improved their performance in vocabulary acquisition. Furthermore, when compared to traditional instruction, students expressed greater levels of motivation and enjoyment from these gamified activities, which supports the idea of gamification in educational settings.

Despite the positive outcomes, this study has several limitations. First, the sample size was limited to 94 students from one junior high school, which may affect the generalizability of the findings to other contexts. Second, the study focused solely on vocabulary mastery, leaving other language skills such as speaking, writing, and reading unexamined. Additionally, the research relied on self-reported data from questionnaires, which could introduce bias due to students' subjective perceptions. Lastly, the study's duration was relatively

short, limiting the ability to assess the long-term retention of vocabulary acquired through gamified pre-class activities.

It is advised future research investigate the wider application of gamified learning tools across various subject areas and grade levels in light of this approach's success. Subsequent studies could build on these results by examining the long-term effects of gamification on retaining vocabulary and how it affects other language skills like writing and reading comprehension. More research could also look at how well this model scales to larger and more diverse student populations and how it works with other digital tools to make learning even more individualized and immersive. To maximize educational outcomes, more research should be done on how gamification can assist differentiated instruction for students with different proficiency levels.

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DECLARATION OF AI

The authors declare that QuillBot (v15.555.13) Artificial Intelegence was used exclusively for proofreading purposes during the preparation of this manuscript. This AI-assisted technology was employed to enhance language clarity and readability. The authors have carefully reviewed and edited the content to ensure its accuracy and quality, take full responsibility for the final version of the publication.

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APPENDIX

Table 1.

The result of the quiz

Student	Score	Student	Score	Student	Score	Student	Score	Student	Score
1	67	21	50	41	50	61	75	81	50
2	75	22	25	42	67	62	67	82	67
3	33	23	83	43	83	63	33	83	33
4	33	24	58	44	50	64	67	84	83
5	92	25	58	45	75	65	92	85	50
6	83	26	75	46	58	66	75	86	50
7	33	27	75	47	50	67	58	87	58
8	67	28	50	48	100	68	42	88	75
9	42	29	92	49	75	69	50	89	67
10	50	30	58	50	33	70	100	90	33
11	75	31	67	51	42	71	67	91	67
12	50	32	50	52	92	72	58	92	50
13	42	33	50	53	50	73	50	93	100
14	50	34	83	54	67	74	50	94	50
15	92	35	25	55	50	75	50		
16	17	36	67	56	83	76	75		
17	33	37	67	57	67	77	58		
18	67	38	75	58	50	78	58		
19	83	39	42	59	50	79	33		
20	42	40	58	60	50	80	58		

Table 2.
The result of the questionnaire (diagnostic assessment)

No	Question	Students' Response	
		Yes	No
1.	Have you ever studied English before?	28 Students	66 Students
2.	Do you like English Lessons?	5 Students	89 Students
3.	Do you think English is difficult?	70 students	24 students

Table 3.
The student preferences in learning activities

No	Question	Other information		
1.	Have you ever studied English before?	There are 7 students who have studied but only for 1 year (grade 6 only/grade 1 only, etc.) There are 2 students who study independently. There are 19 students who have studied for ±3 years (grade 3-4, grade 1-6, etc.).		
2.	Do you like English Lessons?	Most responses they do not understand English sentences or words, while others have never studied before, and the rests responded that it is difficult to pronounce.		
3.	Do you think English is difficult?			
No	Question	Students' Response		
4.	In learning activities, do you prefer working alone, in pairs or in groups?	Individual 5 students	Pair 22 students	Group 65 students
No	Question/Sentences	Most answers		
5.	From the list of English learning activities below, which activity do you like (you can choose more than one)	Matching words Activities related to pictures (matching pictures, finding differences in pictures)		51 students 73 students

	Using applications from digital platforms	49 students
	Activities related to puzzles, searching for objects, etc	62 students
	Doing quiz using Multiple choice format	44 students

Table 4.
Distribution of English lesson hours for the first semester

Time Allotment		
No.	Teaching Objective	Time
1	Expressing and responding to formal and informal greetings, greetings and farewells in simple written/oral form in multimodal form (visual/audio/video) in the context of life at home and at school. • Greeting • Leave-taking	12 teaching hours

No.	Material	Time Allotment	JULY				AUGUST				
			1	2	3	4	1	2	3	4	5
1	Greetings, salutations and farewells	12 teaching hours									
	a. Greeting					2 *		2 *			
					Ineffective week	1 *		1 *			
	• Time								2 *		
									1 *		
	b. Leave-taking						2 *				
							1 *				

*note: teaching hours

Table 5.
Lesson plan overview

Points		Details
Class/grade	:	7th grade
Subject/Topic	:	English – Greeting and parting/farewell
Learning focus	:	Vocabulary mastery
Time	:	8 meeting
Instructional model	:	Flipped classroom using Articulate Storyline
Learning objectives	:	● Students will master a list of 100-150 essential words related to the topic ● Students will apply vocabulary knowledge in various real-world scenarios through gamified activities ● Students will demonstrate mastery by achieving at least 80% success in vocabulary quizzes and challenges. ● Students will conduct themselves more independently and with greater engagement during class.
Pre-class Activity	:	Meeting 1 - Students match words, phrases, or sentences of greeting in English with their counterparts in Indonesian. Meeting 2 - Students match words, phrases, or sentences of parting/farewell in English with their counterparts in Indonesian. Meeting 3 - Students match the pictures with suitable sentences. Meeting 4 - Students play crosswords or search for words provided Meeting 5 - Students match words, phrases, or sentences of time in English with their counterparts in Indonesian. Then, they match the picture with the appropriate time Meeting 6 - Students draw the correct clock hands Meeting 7 - Students watch the conversation in the video and then complete the dialogue Meeting 8 - Students do the final quiz
Assessment	:	● Formative assessment: ongoing quizzes, games, or exercises in each gamified activity to track student progress. ● Summative assessment: final vocabulary quiz at the end of the last meeting to measure students' understanding after the application.
In-class Activity	:	● Group discussion: based on the vocabulary learned in the pre-class activities, students will engage in discussions using the words in context. ● Role Play: students use vocabulary to simulate real-world interactions.

Table 6.
Questionnaire Data Summary

No	Question	Strongly Agree/ Very Satisfied (%)	Agree/ Satisfied (%)	Neutral (%)	Disagree/ Dissatisfied (%)	Strongly Disagree/ Very Dissatisfied (%)
1	Frequency of Participation	50%	35%	10%	3%	2%
2	Motivation through Gamified Components	60%	25%	10%	3%	2%
3	Overall Satisfaction with Articulate Storyline	55%	30%	10%	3%	2%
4	Ease of Navigation and Use	45%	40%	9%	3%	3%
5	Engagement Compared to Traditional Methods	50%	35%	10%	3%	2%
6	The benefit of Learning at Own Pace	60%	25%	8%	5%	2%
7	Effectiveness in Vocabulary Improvement	50%	35%	10%	3%	2%
8	Helpfulness in Maintaining Focus	55%	30%	10%	2%	3%
9	Interactivity of Learning Activities	60%	25%	10%	3%	2%
10	Overall Learning Experience	60%	25%	10%	3%	2%

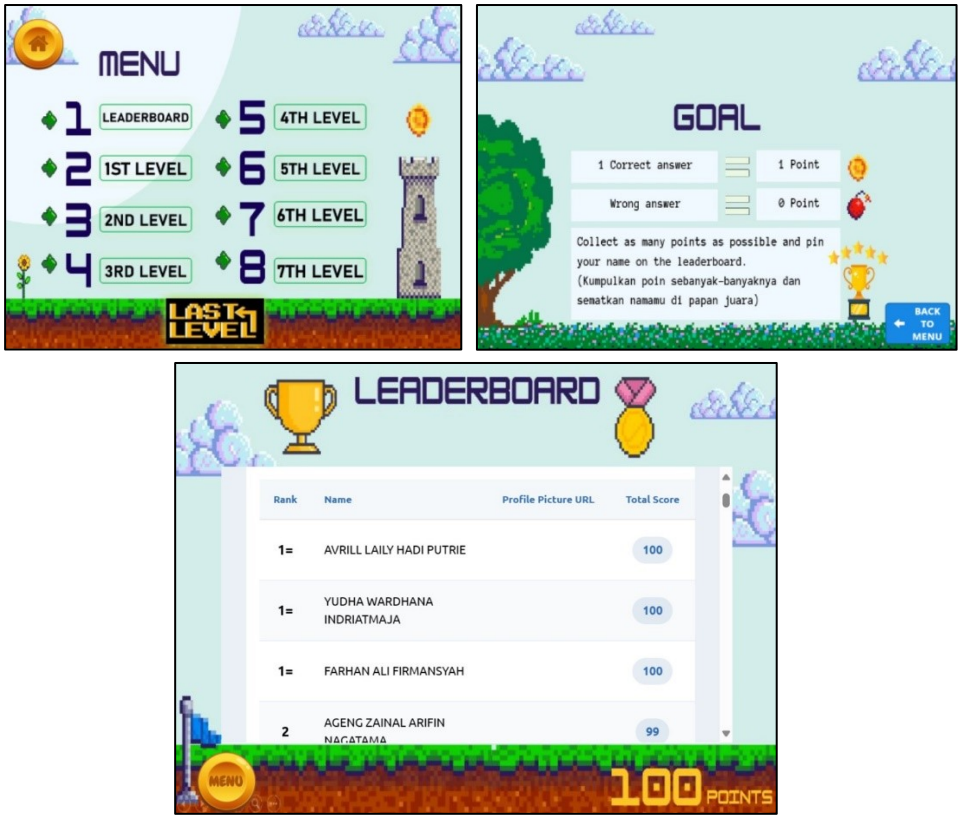

Figure 1. The Storyboard