#### **CHAPTER IV**

## FINDINGS AND DISCUSSION

This chapter presents the findings and discussion of the research. This study has two questions that must be answered and explained by the researcher from the research findings. This chapter presents an overview of how gamification is implemented in grammar and student responses about learning using gamification in grammar at the Language Development Unit, Antasari State Islamic University Banjarmasin. In addition, the findings in this study are discussed based on the results of the observations, interviews, and documentation.

## A. Findings

This research was conducted at the local English 97 (ninety-seven) Language Development Unit at Antasari State Islamic University. This class is taught by Ms. S, who graduated from UIN Antasari in 2019 and has 16 students from various majors collected through an English placement test. In this research, the researcher explains how gamification is applied to grammar in higher education in the first research question. In this question, the researcher describes through four observations and interviews with lecturers. As for the second question, student responses to learning using gamification in grammar in higher education, the researcher interviewed eight students to answer this question. In addition, the researcher used documentation in the form of learning photos, field notes, and textbooks. Therefore, the data found in the field are shown below.

# 1. The Implementation of Gamification in Learning Grammar in Higher Education

Based on data obtained through observation, interviews, and documentation, there are several steps to implement gamification in the local 97 (ninety-seven) Language Development Unit. The findings are described below.

#### a. Arrange the Material into Different Stages and Tiered Systems

Based on the findings, Ms. S divides each game's material into several stages or levels. The gamification application used by the teacher is Quizizz. This application has several features that can divide students into levels, such as multiple-choice questions, checkboxes, fillin-the-blanks, and selection. The teacher divides the questions based on certain levels, such as making questions at the beginning in the form of multiple choices, then leveling up to the next, more difficult question with questions in the form of filling in the blanks, and so on.

The teacher uses inductive grammar to teach grammar using gamification and combines the gamification method with the task-based language teaching method. In addition, at every meeting, Ms. S divided the material based on the stages in the syllabus and sequentially according to the syllabus. The proof can be seen in Ms. S statement below: "Yes, I usually divide the material according to the existing syllabus and deliver the material according to the textbook"

### b. Prepare the Necessary Devices

Students in higher education can bring devices that support learning, such as smartphones or laptops. Before starting learning using gamification, the teacher must prepare what is needed during learning. First, the teacher must ensure students bring smartphones and an internet network. The statement from Ms. S below can prove this:

> "I notify students in advance via the Whatsapp group that tomorrow is the day of learning using Quizizz, and ask students to prepare smartphones or laptops that can be used to access Quizizz"

In the teacher's statement, the researcher can know that the teacher prepared the necessary tools. Then when learning begins, the teacher asks about the completeness of the students. In addition, the teacher also asked about students' knowledge of the application used. Most students already know the Quizizz application, so the teacher only explains it in general terms. The statement from Ms. S below can prove this:

"Firstly, I introduce the day's material and open a group discussion to check their understanding. Next, I asked students if they had smartphones and an internet connection. After that, I asked about Quizizz and whether they were familiar. Some of these are familiar, and I only need to explain the common uses of Quizizz. I usually ask one of the students to try Quizizz, and he follows my instructions. After that, I will ask all the students to start a game together according to my instructions." After the device is set up and ensures that students understand, the teacher starts the game by sending the Quzizz link to the WhatsApp group and asking students to log in. After all students logged in, the teacher started the game.

## c. Monitor Student Progress

Based on the findings, when the game starts, the teacher monitors student progress through the leaderboard on Quizizz. In addition, the teacher goes around the class to see students' progress. The teacher approaches the students one by one to make sure they can play it. Evidence can be seen based on the statement from Ms. S below:

> "I walked around the class to check their smartphone and interviewed some students about Quizizz whether they were having difficulties or not"

At each level students can pass, the teacher announces provisional scores orally. In addition, the teacher monitors the classroom situation so that no students use cheating when learning using gamification.

## d. Divide Students into Several Groups

According to the explanation by Ms. S, every week, there are three English learning meetings, and once or twice the lesson discusses grammar according to the syllabus. Every grammar lesson is taught, and the teacher uses gamification for learning. In the four observations the researcher made, the researcher found that the teacher taught grammar using gamification by making small groups for two meetings. A class of 16 students is divided into four groups, each with 4 members. Each group member can discuss questions on Quizizz with their group mates. The teacher asks each student to play the game even though they have made a group, and they are only allowed to discuss to get answers. The teacher divide students into several groups. This is based on a statement from Ms. S below:

"I build interaction with discussion. In addition, I build interaction between students while learning from small groups. I allow students to discuss only in their small groups"

The teacher also adds that if students can work together well during grammar learning using gamification, it is implemented like the statement below:

*"Students look happy, they can work well, and they are comfortable with Quizizz"* 

## e. Use a Countdown Timer on Several Quizzes to Create Fake

### Pressure

Before the teacher starts teaching grammar using gamification, the teacher first prepares the application used during learning. Usually, the teacher makes several graded questions and various forms of questions. Then at each level or question is given a different or the same time limit depending on the teacher's wishes. At the observation time, the researcher found that the teacher gave different countdown timers when students worked on Quizizz in groups and individually. Ms. S gave more time when students worked on group questions than when answering individual questions. The countdown timer that the teacher gives aims to put fake pressure on students so they can focus more on the questions and not be able to copy their friends' answers.

## f. Create a New Situation If a Game process Is Unsuccessful

In implementing gamification, sometimes there are some obstacles both from teachers and students. The thing that often becomes a barrier to the success of the game process is the internet network. Things that teachers and students cannot predict. As in the second observation, it was raining heavily, and several providers had unstable internet networks, so the teacher took action. Proof of statement from Ms. S below:

> "So far the main problem that often occurs is due to internet connection which is sometimes lost, the rest goes well"

If the game process is unsuccessful, Ms. S takes actions that facilitate student learning. First, the teacher gives options for students constrained by the internet network, and they can hotspot the internet with their friends who want to share. The class does not have a wifi network, so the teacher cannot work on this. Next, Ms. S gives options to students who experience problems with the internet network by asking their friends to answer questions on Quizizz together on one device. As stated by Ms. S below:

> "Usually, I offer several options if students cannot join due to an internet connection. They can hotspot their

friends or ask their friends to answer together on one device"

# g. Include a Leaderboard that Displays All Students' Performance to Encourage a Spirit of Competitiveness and Teamwork

The leaderboard is one of the features of several gamification applications such as Quizizz. With this feature, the teacher can monitor student progress and compare student scores between wrong and right answers. In the Quizizz game held by Ms. S, the leaderboard is not displayed but is mentioned verbally when students are answering questions. leaderboard Including this encourages student competitiveness and teamwork when they are divided into small groups. In addition, there are other features of several applications on gamification that are displayed on the leaderboard. That feature is a point that is given at each level or question. Points can be set by the teacher as needed, then the total points from the start to the end of the game will be displayed on the leaderboard and will display student scores during the game. The results of the student leaderboard in local 97 Language Development Units are below. See figure 4.1

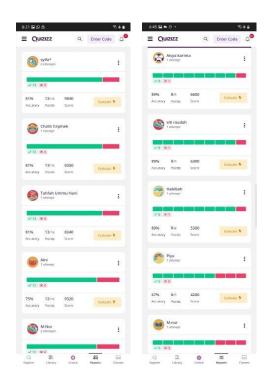


Figure 4.1 Leaderboard

# h. Encourage Healthy Competition to Motivate Students

In each game, students' competitive spirit usually emerges. Students are not motivated if they are not given the right reasons. At the start of the game, Ms. S told students that the scores they got on Quzizz would be used as assignment grades. This makes students motivated to get high scores and creates competition among students. Evidence can be seen in the statement of Ms. S below:

> "Yes, by me saying at the beginning of the game that the score they get will be the value of the assignment. This certainly motivates students and can focus more on answering, so they do not answer the game carelessly"

#### i. Develop Students from The Feedback

After the game, Ms. S looked at the leaderboard and announced the winners from first to third place. The winner with the highest score was given verbal praise, and Ms. S asked the students to applaud the winner. After announcing the winner, the teacher asks students to pay attention to the results of their game again. The teacher provides feedback by explaining the part of the question many students answered incorrectly. The teacher looks at the leaderboard about questions to which students have many incorrect answers. After explaining again, the teacher checks students' understanding by asking several questions related to learning. Evidence can be seen from the statement of Ms. S below:

> "I usually check which part he/she answered incorrectly. Then the students and I evaluate the questions together after Quzizz ends. After I give feedback to students, I ask questions again until they understand. Sometimes students can also evaluate themselves by selecting the evaluation feature on Quizizz."

Apart from feedback and re-explanations from the teacher, students can also evaluate themselves by pressing the evaluation files on the leaderboard. In the evaluation feature, students can see the correct answers from their previous wrong answers. The difference is that there is no explanation of the answer in the evaluation feature. *See figure 4.2* 

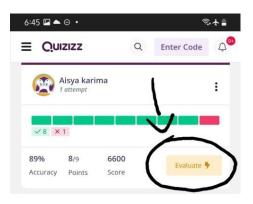


Figure 4.2 Evaluation Feature

# j. Use Gamification on an Ongoing Basis

The last step taken by the teacher is to unite students' abilities and carry out continuous games. Based on the findings, when teaching using gamification, Ms. S only uses one application, namely Quizizz. Implementing gamification requires preparation time and effort, so teachers must be able to introduce this application to students. If students are familiar with the gamification application, then the teacher uses that application on an ongoing basis. As Ms. S stated below,

> "Yes, I only use Quizizz because the students are used to this game, and to make questions in the game, I also have to master it first, which takes time. Almost every week, I use Quizizz to teach, especially grammar, because grammar requires much practice so students are more familiar with and Quizizz has features that help me"

# 2. Student's Response to the Implementation of Gamification in Learning Grammar in Higher Education

The teacher can implement gamification in grammar at the Language Development Unit. However, to find out whether gamification is

going well, this can be seen from the students' responses after learning to use gamification. Based on the data found in the field, five student responses are the most important, consisting of the advantages and disadvantages of implementing gamification, which the researcher explain below.

## a. Feel Happy and Not Easily Bored

One of the advantages of implementing gamification is that learning is fun and makes students not easily bored. After the gamification implementation held by Ms. S in the local 97 Language Development Unit at Antasari State Islamic University, it can be found that students feel that gamification is fun and not boring learning. Students gave different answers, but one meaning and evidence can be seen from the interview below.

> "It is very exciting. It feels like playing a game even though I am answering questions, then I do not get bored easily, and the material easily sticks to my brain" (S1) "Makes it easier for me to learn, fun, and not easily bored. Besides that, I also know how to think fast to get answers" (S2) "Very fun, and I feel interested in learning in class" (S3) "Very exciting and fun" (S4) "I feel happy and enjoy" (S5) "So much fun" (S6) "I am happy because it is easier to understand" (S7) "It is not boring, and it is really fun learning" (S8)

### b. Motivated to Focus on Learning

Learning using gamification is known to be fun and makes students not easily bored. However, gamification has another advantage: motivating students to focus more on learning. Based on the data findings, the eight students interviewed had different responses. Seven out of eight students admit that the implementation of gamification can motivate them to focus more on learning. This can be proven based on the statements from the student interviews below.

> "Yes, it really motivates me to focus more, and also when learning to use Quizizz, the material feels like I am playing guessing games even though I am answering questions" (S1) "Yes, it motivates me to focus because I think gamification (Quizizz) is fun, and there is a time limit, so I focus on answering questions" (S2) "Yes, because I can focus on working on the material, and I can play while studying" (S3) "Motivated because I can focus more on existing questions" (S4) "I become more focused and more fun when studying" (S5) "Yes, I am motivated" (S7) "Yes, it is easier for me to focus and feel that there are competitors when playing" (S8)

One of the eight students had a different response. That is, he did not feel motivated to focus more on learning. Evidence can be seen below.

"I feel normal, not motivated" (S6)

## c. Easy to Work Well with Friends

The implementation of gamification in grammar can be done individually or in groups. The researcher found that two of the four observations were made in groups during the observation period. Ms. S divided the students into four small groups consisting of four students each. Implementation in 97 local Language Development Units elicited different student responses when they worked together in small groups to answer questions on Quizizz. Six out of eight students could work

well together, and below are the student responses from the interviews.

"Yes, I can work together well because my group mates are compact" (S1) "We can work together by exchanging ideas" (S2) "Yes, we work well together, we usually discuss answers with each other, and I feel less nervous because I am in a group" (S4) "Yes, we work together and can implement it well" (S5) "Like that, we work well because we exchange answers" (S7) "Yes, we cooperate with both group members" (S8)

Two students had different responses and felt less able to cooperate with their group mates. In addition, they feel that groups are less able to help them.

> "Sometimes I can work together. Sometimes I do not depend on my group mates" (S3) "I cannot work with a group of friends. I feel that answering Quizizz in groups does not help me in answering questions" (S6)

# d. Satisfied with the Results of the Game

Grammar learning using gamification, carried out in English classes at the local Language Development Unit 97, resulted in different student responses. One of them is about student satisfaction with the results of the game. The researcher find out student responses to this satisfaction. Four out of eight students were very satisfied with their scores, but four out of eight students sometimes felt satisfied and sometimes dissatisfied, and below are the findings of student responses from interviews. "Yes, I am very satisfied with the results because there we know what percentage of our improvement in learning English" (S1) "Sometimes I am satisfied with the results of my score, and sometimes I am not because I answered the wrong questions" (S2) "Yes, I am satisfied with my own hard work" (S3) "I feel satisfied because the score is quite high" (S4) "Sometimes satisfied and sometimes not" (S5) "Sometimes I am satisfied with my results, sometimes so so" (S6) "I am satisfied with my score on Quizizz" (S7) "Not bad" (S8)

### e. Disappointed with the Unstable Internet Signal

From the data findings, internet signal problems when playing games were the only problem found when learning grammar using gamification in the English Language Development Unit Local 97 class. During the interviews, the responses and reasons given by the students varied. About four out of eight students experience internet signal problems when playing games. Below is evidence from interviews to seek student responses.

> "Yes, sometimes it is difficult to get a stable internet signal. The fix is I will ask the hotspot for the theme that has a better signal" (S1)

> "Sometimes, if the network is not stable, I ask for hotspot with friends or fill in the answers together with friends" (S2) "Yes, but rarely. My fix is to log out of Quizizz for a while and then Sign Back in" (S3)

> "Alhamdulillah there are no problems using the Quizizz application" (S4)

"No, I have not had any network issues or anything so far" (S5)

"No, I do not have some problems" (S6) "Never" (S7) "Never" (S8)

*"None" (S8)* 

### **B.** Discussion

After the data is presented in the description above, the researcher writes and analyzes based on the findings that have been written. The researcher has two research questions answered in this study. After conducting research and analyzing all the data, the researcher wants to convey the findings and relate them to the existing theory. Below is a discussion of the findings.

# 1. The Implementation of Gamification in Learning Grammar in Higher Education

Based on the findings, the researcher found a difference between the implementation of gamification in teaching grammar in English class 97 at the Language Development Unit and the theoretical application of gamification teaching. At the local 97 Language Development Unit, the teacher teach grammar using the Quizizz application. The Quizizz application is an online application used by teachers when teaching, which functions as an assessment for students (Ju & Adam, 2018). Using the Quizizz application, which contains questions, pictures, points, levels, leaderboards, and badges (Reiners & Wood, 2015). In addition, at the beginning of learning, the teacher starts with an explanation and then instructs students to use Quizizz.

The teacher said that the score on Quizizz would be used as the value of student assignments and the teacher made Quizizz a medium for assessing student assignments. This shows that the teacher uses the Task-Based Language Teaching (TBLT) method in English class 97 Language Development Units. The TBLT method can be combined with teaching grammar using gamification (Cam & Tran, 2017). The teacher teaches grammar using inductive grammar. Students understand the material from assignments using games given by the teacher with students' understanding (Ibrahim, 2016).

In its implementation at the local 97 Language Development Unit, the teacher takes several steps when teaching grammar using gamification. The first step is for the teacher to arrange the material into several stages and tiered systems (Jusuf, 2016). From the field data, the teacher divides the material into several stages according to the syllabus and grammar material in the textbook. Then, the tiered system in English class 97 in the Language Development Unit uses different levels for each question. On the first day of research, the teacher gave five multiple-choice questions and three filled-in questions, which students answered. Each question is given a point, which triggers a level increase for students if the points they get exceed those of their friends (Reiners & Wood, 2015).

The second is that the teacher prepares the necessary tools (Singhal, Hough & Cripps, 2019). In learning grammar using gamification, the teacher must prepare the equipment or material needed. The initial preparation is that the teacher must ensure that students bring equipment that supports learning using gamification, such as carrying a smartphone or laptop. Then, the teacher also has to make and conceptualize the game before it is played by students, such as making questions, adding illustrations, points, levels, etc. In addition, the teacher also prepares supporting devices, such as LCD projectors, to display student scores on the leaderboard. Leaderboards are a motivational tool because students can see their work immediately (Dominguez et al., 2013). Nevertheless, in field data, the teacher do not use this supporting device.

The third is the teacher monitoring student progress (Singhal, Hough & Cripps, 2019). In the game process, teachers can monitor student progress from the leaderboard. In addition, the teacher walks around the class to check that each student is on the right track and to check if students have any difficulties or problems in the game. Then the fourth, the teacher divides students into several groups. Learning using gamification can be done individually or in groups. The teacher divides students into several groups to increase cooperation between students. Group work can improve learning, and students can socialize more with their friends (Forslund Frykedal & Hammar Chiriac, 2018). Besides competing positively, students can socialize well with other students during the game. This can improve good relations between students.

The fifth is that the teacher use countdown timers on some quizzes to create fake pressure on students. The encouragement of the countdown timer, which creates a fake pressure effect on students, makes students more motivated to focus on learning using gamification (Singhal, Hough & Cripps, 2019). At each lesson, the teacher gives a different countdown time according to the needs of students in answering questions. If students are divided into groups or questions are given at a difficult level, the teacher will give a longer countdown timer to answer and vice versa. The effect of pretend pressure given by the teacher during the game has a motivational and stressful impact on students.

Stress in the game is positive pressure on individuals to keep going and get the best (Friedlander et al., 2011).

The sixth is to create a new situation if the game process is unsuccessful (Jusuf, 2016). In the application of gamification, several obstacles occur, one of which is that students lose the signal during the game (Reiners & Wood, 2015). In overcoming this, the teacher makes several options for students to continue learning. The teacher allows students to ask friends for internet hotspots, and students can also ask to join their friends to play on one device. Students added that if they have problems, they can exit the game and re-enter after the internet signal improves. Furthermore, the seventh shows a leaderboard that displays all student performance to encourage a spirit of competitiveness and teamwork (Singhal, Hough, & Cripps, 2019). When the game starts, the teacher will go around the class to check student progress while announcing the temporary score on the leaderboard. The existence of a leaderboard allows students to be motivated by the achievements they get (Mekler et al., 2013). Leaderboards are usually displayed in front of the class with the help of an LCD projector to increase student enthusiasm and competitiveness. However, at the local 97 Language Development Unit, the teacher does not display the leaderboard but mentions it verbally. The teacher announces each progress score and students' final scores while walking around the class.

The eighth is to encourage healthy competition to motivate students. In each game, there will be a sense of competition to win, which can reduce students' anxiety and nervousness. Competitive games can reduce anxiety about games because students can have intrinsic interest, curiosity, and more control (Wei et al., 2018). This indicates that encouraging students to have healthy competition has a positive side. Competition in games has positive things (Sepehr & Head, 2013). Furthermore, the ninth is student development from the feedback given by the teacher. Good quality teaching can be achieved by teachers providing high-quality and effective feedback (Rowe & Wood, 2008). At the end of the game, the teacher will provide feedback by reviewing the questions on Quizizz. The teacher usually asks students about questions they find difficult, or the teacher sees questions that have a lot of wrong answers from the results on the leaderboard.

The tenth is that gamification is used sustainably (Singhal, Hough, & Cripps, 2019). When the teacher has mastered one of the gamification-based applications, the teacher should use it on an ongoing basis. Suppose students are familiar with one of the gamification-based applications. In that case, it will be easy for the teacher to implement it in learning because students are familiar with it. In implementing gamification, the teacher must prepare a game first, then be able to play it and teach it to students. This takes much time. This is closely related to the application of gamification, which requires more effort and time than teaching traditional methods (Lee & Hammer, 2011).

In addition, the teacher does not give physical awards for game winners that can be shown to others (Jusuf, 2016). The teacher gives rewards in the form of verbal praise and actions in the form of giving applause to students who get the highest score in the final score of the game. This is related to the absence of taking badges for students who fail in games or are given additional bonuses when they can pass complex challenges. Then, the gamification carried out by the teacher at each meeting has different levels or forms of questions, and the material being taught is different. The teacher does not give level sensors on the date or time students can check daily for new challenges. The teacher also does not introduce characters that can hinder or help students. This shows that students cannot find the game's character (Jusuf, 2016). The last is using a narrative structure to implement gamification (Singhal, Hough, & Cripps, 2019). The teacher does not make a narrative structure in the game and uses multiple-choice questions or sentences in the form of sentences.

# 2. Student's Response to the Implementation of Gamification in Learning Grammar in Higher Education

Students' responses to the implementation of gamification in grammar learning in the Language Development Unit have different opinions. This student response is closely related to the advantages and disadvantages of gamification. Five main student responses were taken based on their experiences in learning using gamification at the local Language Development Unit English 97. The first student response is to think gamification is students feel happy and not easily bored. When students learn to use gamification with online games with several features that can help students to be able to play while learning, this is an advantage of gamification, which can increase student learning interest (Villagrasa & Duran, 2013). Today's students are very close to their smartphones, so the application of gamification keeps students interested and not easily bored. In addition, the teacher provide motivational encouragement to students to learn grammar and provide new things to learn so that students do not get bored studying at a higher level (Scrivener, 2013).

The second student response is that gamification motivated to focus on learning. Nowadays, students are often caught off guard in learning because they are distracted by their smartphones. Students are motivated to focus more on learning with gamification (Reiners & Wood, 2015). The main indicator that motivates students to focus is the countdown timer feature. Students will focus more when there is pressure or encouragement from the countdown timer. Students will not be careless and will pay attention to each question to answer on time. This pressure can occur because of competition to win the game (Friedlander et al., 2011).

The third student response is about easy to work well with friends during grammar learning using gamification. Learning to use gamification can be done individually or in groups. In this case, six students responded positively because they could work well with their friends when learning grammar using gamification in groups (Reiners & Wood, 2015). Meanwhile, two other students gave different responses. They think their group mates cannot help when answering questions in the game. Each student has different characteristics and abilities in learning, so it is the teacher's responsibility to help students be more compact in working together.

The fourth response that about satisfied with the results of the game. In every game, there must be winners and losers. Those who win will feel satisfied because of the achievements obtained (Reiners & Wood, 2015). In this case, students have various responses. Half of the students were satisfied with their scores on the game. They are satisfied with their hard work, getting the score they want, and noticing improvements in learning grammar. In contrast, the other half of the students gave a different response. They are sometimes dissatisfied and sometimes satisfied. Different student abilities can be the main reason for this dissatisfaction. Students will be satisfied if they get a high score or win the game. However, sometimes they get low scores and are ranked bottom on the leaderboard, so they feel dissatisfied.

The last response given by students was about disappointment with the unstable internet signal. This is closely related to the drawbacks of gamification, obstacles in unstable signals that disrupt the game process (Reiners & Wood, 2015). Students cannot predict or adjust their signals, so they are always smooth while learning using gamification. Based on the student response data obtained, some students have experienced this. They solved it with 3 events: asking for an internet hotspot with friends who have a more stable and stronger internet signal, participating in learning with friends on one device with the teacher's permission, and finally exiting the game and logging back in. All students' responses have various kinds of responses, some are positive, and some are negative. This relates to the advantages and disadvantages of gamification implemented by the teacher in one of the locales in the Language Development Unit.