

## **CHAPTER III**

### **METHODOLOGY**

The current chapter provides a comprehensive overview of the methodology that was used to investigate how gamification, specifically escape room, integrated into genre-based pedagogy in supporting students' descriptive text development and also the students' linguistic development in writing descriptive text to secondary school's students. Therefore, in providing the overview, this chapter will describe the study's research design, research context and participants, ethical consideration, data collection techniques, instrumentations, data collection procedures and data analysis.

Additionally, it is worth noting that this research is a part of a bigger research where this research will be the pre-application and pre-evidence on the use of gamification, specifically escape room, for teaching descriptive text.

#### **3.1. Research Design**

This research uses a qualitative case study in which the intervention program is the case study itself, and later called an action-oriented case study (Damayanti, 2019). The use of qualitative as the method of research is deemed suitable because according to Hancock (2002) the goal of qualitative research is to create explanations for social phenomena whilst discovering the answers to why-and-how-related questions is typically the focus of qualitative research. Additionally, the use of qualitative approach allows for the collection and analysis of rich, detailed, and nuanced data, providing a deeper understanding of the phenomenon being investigated.

As for the design, the use of action-oriented case study is best suited for this study because it provides tools for evaluating a phenomenon, which is the action or intervention, comprehensively by examining in-depth data from multiple sources

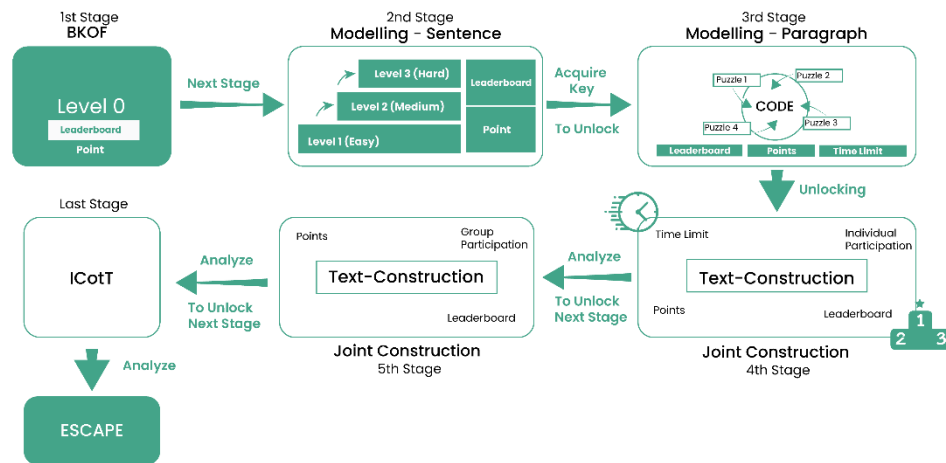
(Abercrombie et al., 1984; Bruns & Kaplan, 1987; Creswell, 2013). Additionally, an action-oriented case study enables this study to analyze the complexities and nuances of the intervention within its natural context, allowing for a holistic understanding of the phenomenon under investigation.

As its name suggests, an action-oriented case study blends action research (Checkland, 1981; Gummesson, 2000; Susman & Evered, 1978) and case study research (Eisenhardt, 1989; Yin, 2009). Therefore, an action-oriented case study combines transformation (interventionism) with comprehension (interpretivism). It includes soft parts like interpretation, gaining insight, logical reasoning, and qualitative data, as well as portions of action research, demonstrating the power of research to modify structures (Vidgen & Braa, 1997). Thus, an action-oriented case study provides a holistic and dynamic approach to understanding and addressing complex organizational issues, by combining the strengths of action research and case study research. Therefore, the combination enables researchers to generate new knowledge, improve organizational practices, and contribute to the development of theory in the field of organizational studies.

### **3.2. Phases of Teaching through the Integration of Gamification into GBA**

In the context of this action-oriented case study, the applied intervention program, aimed at revealing the impact of adapting established pedagogical methods, centers around the incorporation of gamification within the Genre-Based Approach. This integration finds a specific application in the form of gamified escape rooms, utilized for the teaching of descriptive text. The procedural implementation aligns with the four distinct cycles characteristic of the genre-based approach, linking with gamified escape rooms across the four stages. In this context, the role and function of gamification within this study are diverse, serving to enhance engagement, stimulate active participation, foster collaboration, and infuse a dynamic narrative teaching and learning process. The infusion of gamification thus serves as an incentive for stimulating the

instructional process, redefining the learning experience, and encouraging a holistic and immersive educational journey. The following figure and explanations following the figure acts as the thorough discussion on how gamified escape room played its role in each stage of learning activities.



**Figure 3.1.** Stages-flow of Gamified Escape Rooms on GBA

In the detailed explanation on the integration of gamification into GBA based on figure 3.1., the integration of gamified escape rooms into the genre-based approach in this study occurred in several stages. In the initial stage, known as the **building knowledge stage**, the class engaged in discussions to acquire the necessary background knowledge related to school festivals. This involved exploring various aspects of school festivals, including their significance, associated traditions, and relevant vocabulary. By laying this foundation of knowledge, the students were better equipped to understand and participate in the subsequent gamified activities.

Following their knowledge-building discussions, students were engaged in an immersive experience involving a digital gamified escape room linked to the central theme of school festivals. This innovative approach aimed to deliver interactive and

captivating learning activities, allowing students to apply the knowledge they had recently acquired. The gamified escape room experience encompassed a series of activities, where students were tasked with utilizing their newfound insights to make well-informed inferences or guesses regarding various school-related events, based on carefully provided clues. The difficulty of the clues presented a gradual progression, initially posing slightly challenging clues that progressively eased into more approachable ones. In this activity, collaborative teamwork was essential for success, as students collectively attempted to decipher the clues, resulting in their escape from the room. This initial phase marked the beginning of their gamified escape room journey, eventually concluding in their triumphant escape following the completion of independent construction stage.

The gamified escape room activity was enriched with key game elements, including distinct levels, intricate puzzles or challenges, and a time constraint that heightened the sense of urgency and excitement. Importantly, to emulate the authentic escape room atmosphere, a compelling storyline was connected into the experience, effectively immersing participants and reinforcing the thematic connection. The added dimension of a time limit further underscored the immersive escape room sensation, collectively fostering an engaging and memorable learning journey.

Moving on from the building knowledge stage, during the **modeling stage**, the class was introduced to examples and guidelines on how to construct a descriptive text. The first modeling session focused on the construction of well-formed sentences, following the guidelines provided by Derewianka and Jones (2016). The teacher thoroughly analyzed and discussed the guidelines, actively involving the students in the process. By examining sentence structure and elements, the students gained a deeper understanding of how to construct effective and meaningful sentences within the genre of descriptive text. Subsequently, the second modeling session centered on constructing a complete paragraph within the framework of a descriptive text, again

following Derewianka and Jones's (2016) guidelines. The teacher demonstrated and explained the process of organizing sentences into a coherent and cohesive paragraph. This modeling activity allowed the students to observe and learn how to apply the guidelines in constructing descriptive paragraphs effectively. Furthermore, during each session of the modeling stage, the students engaged in gamified escape room activities, wherein they embarked on a series of challenges aimed at earning a badge, symbolizing their access to the room's key for escape.

In the first meeting of modeling stage, the digital gamified escape room experience was carefully crafted by the teacher using Genial.ly, with the primary goal of reinforcing the students' comprehension of sentence construction. Within this activity, the students were tasked with navigating through three progressively intricate levels of gamified materials, each level building upon the previous one in terms of difficulty. The teacher actively facilitated this process by offering direct feedback (in-game mechanic and direct) and allowing for multiple attempts at the challenges. Moreover, participants were awarded points for their engagement in addressing questions and resolving previously incorrect responses. These accumulated points were appropriately recognized and showcased on a leaderboard, adding an element of friendly competition and motivation. To further enhance the immersive nature of the gamified escape room, a captivating storyline was linked, surrounding the students in the narrative of escaping the room. As the students successfully conquered all the levels of challenges within this activity, they were given a badge, signifying their advancement from the third stage of the escape room, and granting them passage to the subsequent stage of this journey.

During the second meeting of the modeling stage, a gamified escape room experience unfolded, presenting a non-digital challenge for the students. Their objective was to resolve a series of puzzles comprising disordered and fragmented paragraphs, a task designed to reinforce paragraph construction skills. This activity

featured four distinct descriptive texts, each with a fragmented title and paragraphs, all concealing a numerical clue crucial for unlocking the exit and escaping the room. Structured as a group activity, this activity fostered collaboration among groups, each comprising five to six students. Additionally, the immersive appeal of the escape room ambiance was maintained through the inclusion of a storyline, amplified by the incorporation of a time constraint. Moreover, a competitive spirit was nurtured, facilitated by the implementation of a leaderboard that tracked the pace at which groups decoded the numerical code and successfully escaped from the room. Points awarded during this stage were integrated with those earned in the previous meeting, fostering a cumulative reward system. As participants deciphered the code and accurately unlocked the door, they were given a badge, symbolizing their completion of this stage, and granting passage to the next stage of their escape room journey.

At the stage of **joint construction**, the focus was to engage the students in collaborative composition, where they worked together with the teacher to construct descriptive texts based on the provided images. This stage spanned for two meetings in which during this collaborative writing stage, the teacher played a facilitative role by prompting the students with questions about suitable titles for the descriptive text and the aspects that could be described based on the given pictures. Additionally, the teacher also ensured individual participation by asking each student to share their ideas, fostering a sense of ownership and contribution among the students.

In this two-meetings stage, students were engaged in a digital gamified escape room experience, entailing collaborative composition of a descriptive text as the key to unlock their virtual locked room. The infusion of a narrative contributed an immersive escape room atmosphere to the activities. In the first meeting, a collective class activity took shape, with students earning points for active involvement in shaping the descriptive text. This encompassed contributing ideas and formulating sentences that appropriately described the school activity. The strategic employment of a leaderboard,

incorporating cumulative scores from the previous meetings, added a competitive dynamic to the engagement. Furthermore, a sense of urgency was triggered through the incorporation of a time limit, guiding the pace of sentence production.

In the second session of the joint construction stage, students gathered in small groups to get on to the continuation of the previous activity: collaborative composition of a descriptive text. This activity retained its essence from the previous meeting, yet presented a noteworthy shift as the teacher's involvement took a more reduced role, granting students greater autonomy. Building upon the foundation laid in the previous meeting, the escape room narrative was further enriched, surrounding students in an immersive storyline that infused a distinct escape room ambiance. Similar to the previous meeting, in this meeting, students earned points through active participation in the writing process by conceiving ideas, crafting sentences, and offering peer corrections. These accumulated points merged with the calculations from the previous three meetings, contributing to the leaderboard's final scores. This leaderboard, an emblem of achievement throughout the entire escape room activities, underscored the performance of students, celebrating their collective efforts. And as the meeting ended, the compositions crafted across the first and second meetings of the joint construction stage were analyzed. This analysis sought to ensure alignment with the prescribed schematic structure and linguistic elements inherent to the descriptive text genre. Upon confirming adherence, students were awarded badges, symbolizing their acquisition of the crucial code, a metaphorical "key," needed to advance beyond this stage of the escape room.

The **independent construction** of the text served as the final chapter marking the conclusion of the students' journey of escape room. In this stage, the students were asynchronously asked to write descriptive text provided in the google docs independently. Their works were then analyzed to determine whether their writing met

the criteria of descriptive text proposed by Derewianka and Jones (2016) which then determined whether they can “escape” the room or not.

### **3.3. Research Context and Participants**

The present action-oriented case study incorporates both broad and local professional learning contexts. The understanding of context as the environment that facilitates professional learning, as highlighted by Desimone (2009), serves as the foundation for this approach. Furthermore, the two classifications of professional learning contexts proposed by Webster-Wright (2009) are taken into consideration.

The broader context in this research encompasses the regulatory factors that govern educational practices. Specifically, the embedding context includes the Merdeka Curriculum and genre-based pedagogy. The Merdeka Curriculum represents the overall framework that guides the educational practices and goals within the research setting. Genre-based pedagogy, on the other hand, provides a specific teaching approach that influences teaching and learning strategies within the broader context.

In addition to the broader context, the research also focuses on the local context, which refers to the specific settings and conditions where the teaching strategy is implemented. Within the local context, gamification, particularly the use of the escape room approach, and descriptive text serve as the key components. Gamification involves integrating game elements and mechanics into the learning process to enhance student engagement and motivation. The escape room approach specifically provides an immersive and interactive learning experience. Descriptive text, as the subject of instruction, serves as the specific content area within which the teaching strategy is applied.

Furthermore, to add the context of the present study, it is crucial to highlight that the intervention program extended over a duration of one and a half months, coinciding with the Ramadhan fasting period. This temporal alignment holds



significance, as it underscores that the students participated in the intervention while navigating the challenges posed by fasting which consequently important to acknowledge that the fasting period potentially impacted the students' physical and mental well-being. This unique circumstance emphasizes the nuanced context within which the integration of gamification into GBA was undertaken, and subsequently, contributes to a more holistic assessment of the program's outcomes.

In selecting the participants, purposeful sampling was used to ensure that the selected participants provided sufficient breadth for this study (Patton, 2002). The participants were chosen from a classroom of 7th-grade students in a Junior High School located in Bandung. The selection of this specific grade level and school was based on several considerations.

Firstly, the duration of the program conducted in the selected school aligns with the research timeline, as it took approximately one and a half months. This time frame allowed for an adequate observation and assessment of the effectiveness and impact of the gamification integrated into genre-based pedagogy being implemented.

Secondly, the choice of the school as the research location was influenced by the relationship between the research parties involved. The existing relationship facilitates the research site selection process, ensuring smoother communication and cooperation between the researchers and the school administration. This collaboration was crucial for accessing the necessary resources and gaining the support needed to conduct the research effectively.

Furthermore, the selection of this school was advantageous due to its prior implementation of cooperative learning and Genre-based Approach (GBA) as teaching frameworks. The familiarity of the students and teachers with these pedagogical approaches enhances the research's feasibility and enables a more efficient integration of the teaching strategy involving gamification informed by Genre-based Pedagogy.

The insights gained from this study can provide valuable guidance to the school's teachers, allowing them to explore the potential of interactive teaching methods, such as gamification, and their application within their own teaching practices.

Additionally, the choice of this particular school as the research site was underpinned by a specific rationale where while the school held a reputation for being well-regarded in terms of its educational quality, it was important to recognize that the mere classification of a school as 'good' did not necessarily translate to automatic high academic performance among its students. This rationale was informed by the researcher's extensive teaching experience of approximately one and a half years at the school. Therefore, the choice of this school allowed for a deeper exploration into the multifaceted dynamics that influence student outcomes, thereby enriching the understanding of the integration of gamification within the genre-based approach to teaching descriptive text.

### **3.4. Ethical Consideration**

Ethical considerations are of utmost importance in this study, given the existing relationships among the three parties involved: the supervisor, the researcher, and the school. In order to maintain the validity and integrity of the study, a commitment to honesty and transparency will be upheld throughout the research process. Despite the potential asymmetry in these relationships, the research will be conducted objectively, ensuring unbiased data collection and analysis.

To ensure ethical standards were met, several administrative stages were thoroughly conducted and completed. These stages included obtaining proper permissions, clarifying the research purpose, and establishing clear communication channels with the school administration. By adhering to these administrative protocols, the research team aimed to conduct the study in a respectful and professional manner.

Moreover, the research team had taken measures to minimize any disruption or interference in the natural classroom setting. The school had not been required to alter or prepare anything in advance solely for the purpose of this research. This approach ensured that the teaching and learning activities in the classroom remain as authentic and unaffected as possible, allowing for a true representation of the participants' experiences.

Additionally, throughout the study, the research team prioritized the confidentiality and anonymity of the participants. Any personal or identifying information was handled with the utmost care and stored securely. Informed consent had been obtained from all participants or their legal guardians, and they had the right to withdraw from the study or not show the students' face at any time without repercussions.

By upholding ethical considerations, maintaining integrity, and respecting the natural classroom setting, this research aimed to produce reliable and valid results while prioritizing the well-being and rights of all participants involved.

### **3.5. Data Collection Techniques**

This sub-section discusses the instruments that were used to collect the necessary data for the present study, as well as the procedures of the data collection. For a brief overview, this research employed three instruments to collect the necessary data: documents collection, reflective field-notes, and observation notes. The data retrieved from reflective field notes and observation notes were used to answer the first research question. And lastly, the data retrieved from documents collection in the form of students' works on descriptive text were used to answer the second research question.

For a more comprehensive discussion, the following sub sub-sections will provide such discussion.

### 3.5.1. Instrumentation

Miles and Huberman (2014) define research instrumentation as specialized, information-gathering tools that may be closely or loosely structured. Thus, the instruments of research are the tools developed by researchers in order to attain their study objectives and are often intended to facilitate the collecting of data for analysis. As for the present study, to obtain the necessary data for the present study, this study will collect the data through several instruments.

#### 3.5.1.1. Reflective field notes

Reflective field note-taking departs from two theories: reflection in/on action (Schön, 1991) and field note-taking (Schwandt, 2015). Schön Reflective Model (1991) is a way for individuals to reflect on their experiences and learning, and to use that reflection to improve their professional practice, while field notes are written records of observations, thoughts, and reflections made by a researcher during their study of a particular subject or phenomenon (Schwandt, 2015). Thus, reflective notes-taking is a tool for self-reflection and analysis to help the researcher better understand their own biases, practices, and perspectives and to identify patterns and themes in their data.

As such, in this sense, reflective notes-taking practice is about the ability to be transformative, ‘to involve and lead to some fundamental change in perspective’ (Cranton 1996, pp.79–80) which means that this practice relies on the examination of very fundamental assumptions, which leads to fundamental change brought by an awareness of how the power of changes operates (Fook, 2012; Kondrat, 1999). This is the perspective that this research adopts in this study because it is most compatible with the theoretical traditions of the social work profession

and with the for social change aspirations of many current practicing professionals.

And as for the present research, in taking the reflective field notes, Schwandt's (2015) general guidelines for the reflective field notes content was used. According to Schwandt (2015), there are several contents that are crucial for reflective field notes and the researcher needs to pay attention to.

**Table 3.1**

Schwandt's (2015) General Guidelines for the Reflective Field Notes Content

- |   |
|---|
| <ul style="list-style-type: none"> <li>● Note ideas, impressions, thoughts, and/or any criticisms you have about what you observed.</li> <li>● Include any unanswered questions or concerns that have arisen from analyzing the observation data.</li> <li>● Clarify points and/or correct mistakes and misunderstandings in other parts of field notes.</li> <li>● Include insights about what you have observed and speculate as to why you believe specific phenomenon occurred.</li> <li>● Record any thoughts that you may have regarding the observations.</li> </ul> |
|---|

By taking notes according to those mentioned content guidelines, the researcher had an introspective commentary of what the researcher observes and experiences — and what all this means to the researcher. Additionally, Emerson *et al.*, (2011), and Pyczak and Bruce (2005) assert that there are at least two reasons why reflecting field notes are crucial. First, it encourages self-reflection, which is essential for fostering a profound understanding of the activities committed. Second, it shows emerging themes, allowing you to adjust your focus in ways that facilitate the development of more developed activities.

Thus, by utilizing reflective field notes-taking as one of the instruments for the present study, it enabled the researcher to answer the

first research question which is “How does the integration of gamification into genre-based pedagogy support students’ development of descriptive text? ”.

#### 3.5.1.2. Observation Notes

Observation is regarded as one of the essential data collection methods in qualitative research. This is because observation allows the researcher to witness the process of activities and document what the study subject does (Fraenkel, Wallen & Hyun, 2012) and thus allows this research to examine participants' behaviors and classroom settings from a holistic standpoint (Gall, Gall, & Borg, 2007).

And as for the present research, in taking the observation notes, Schwandt’s (2015) general guidelines for the descriptive notes content was used. According to Schwandt (2015), there are several contents that are crucial for observation notes and the researcher needs to pay attention to.

**Table 3.2.**  
Schwandt’s (2015) General Guidelines for the Descriptive Notes Content

- Describe the physical setting.
- Describe the social environment and the way in which participants interacted within the setting. This may include patterns of interactions, frequency of interactions, direction of communication patterns [including non-verbal communication], and patterns of specific behavioral events, such as conflicts, decision-making, or collaboration.
- Describe the participants and their roles in the setting.
- Describe, as best you can, the meaning of what was observed from the perspectives of the participants.
- Record exact quotes or close approximations of comments that relate directly to the purpose of the study.
- Describe any impact you might have had on the situation you observed [important!]

By following Schwandt's (2015) general guidelines for writing observation descriptive notes, the present research held significant advantages. The first is that these guidelines provide a structured framework that facilitates a comprehensive exploration of the observed phenomenon. Describing the physical setting offers a background against which the gamification-infused genre-based instruction unfolds, shedding light on how the environment influences the interplay of gamified activities and genre learning. Furthermore, the detailed portrayal of the social environment and interactions within it elucidates the dynamics of how students engage with gamification elements and collaborate within the genre-based framework. Understanding patterns of interactions, communication frequencies, and non-verbal cues can reveal how gamification enhances genre-based learning by promoting participation, communication, and collaboration.

Thus, by utilizing descriptive notes-taking as one of the instruments for the present study, it helps the researcher to provide richer and thorough data for answering the first research question.

#### 3.5.1.3. Documents Collection

Documents are a good source of textual data for qualitative research since a document is a natural data resource that is presented within a context and explains itself (Creswell, 2012). Additionally, the use of documents allows for the tracing of change and progress. When multiple versions of a particular document are available, a researcher might compare them to determine the changes and even small alterations to a paper can imply substantial changes to a project (Yin, 1994). The comparison of these variations enables the researcher to gain a comprehensive understanding of a program's performance throughout time.

Accordingly, as for the present research, documents in the form of the students' written works were collected since this study analyzed the linguistic development of the students' descriptive text works following each cycle of the teaching activities that followed genre-based approach as the framework of teaching. Thus, by collecting the students' works, this study was able to see the linguistic development made by the students from each teaching cycle and answer the second research question which is "What linguistic evidence characterizes students' development of descriptive text as a result of their learning experience? "

### **3.5.2. Procedures of data collection**

To begin the data collection, the researcher conducted one month worth of six meetings with the time allocation of 70 minutes for each meeting of teaching activities by utilizing the integration of gamification, specifically escape room, with Genre based Approach to teach descriptive text (see Appendix 1 for lesson plans). Those six meetings were divided based on the GBA stages with the specification of one meeting of building knowledge of the field (BKoF), two meetings of modeling of the text (MotT), two meetings of joint construction of the text (JCotT), and one asynchronous meeting of independent construction of the text (ICotT).

In a more detailed explanation, in the first meeting of BKoF, the learning activities focused on developing the students' background knowledge of school festivals which comprises about the name of school festivals they have experienced or have yet experienced, their experiences in those festivals, the vocabulary on how to describe those school festivals in simple term (adjectives), and also action verbs to describe what they do in those festivals. The MotT meetings focused on developing the students' knowledge on how to compose a comprehensive sentence in accordance with the linguistic features of descriptive text and also to compose comprehensive paragraph(s). The JCotT meetings focused on practicing the



students' knowledge of writing descriptive text with the guidance of the teacher and also their peers in both individual and group settings. And lastly, the ICofT meeting was held asynchronously where the students had to write their descriptive text individually.

In collecting the necessary data for the present study, during each meeting, the researcher wrote reflective field notes as well as observation notes and also recorded the classroom activities with the help of a camera recorder or mobile phones operated by a research partner. The recorded videos provided an extensive source of research data since the researcher cannot monitor the whole classroom and cannot always take note of the students' behaviors while also noting their utterances during the teaching activities. Additionally, in each meeting, the students' works of descriptive text were collected. Thus, at the end of the six meetings, the researcher has collected six reflective field notes, observation notes and also students' works worth of six meetings. Therefore, at the end of the data collection stage, this research will have three types of data: students' works, reflective field notes, and observation notes.

### **3.6. Data Analysis**

This section focuses on how the data were analyzed in regard to each type of data collected in the present study. For a brief overview, to analyze reflective field notes data, reflexive thematic analysis was used as the framework of analysis. Moreover, observation notes data were analyzed by utilizing thematic analysis as the framework for data analysis. As for the students' linguistic development, the data were analyzed by using content analysis with the system used to inform this content analysis is Systemic Functional Grammar (SFG) which in relation to the characteristic for descriptive text.

For a more comprehensive discussion, the following sub sub-sections provide such discussion.

### **3.6.1. Reflective field notes analysis**

After each session of the intervention program, a systematic process of reflection was undertaken, drawing upon the observations made during the program. The purpose of this reflection was to inform and enhance subsequent sessions, thereby ensuring a continuous cycle of improvement. The reflective notes generated from this process constituted a valuable dataset, subsequently subjected to thorough analysis using Reflexive Thematic Analysis (RTA) as outlined by Braun and Clarke (2021).

The selection of RTA as the analytical approach was carefully guided by its suitability for capturing the complexities inherent in the intervention program data. This methodological choice stemmed from the need to delve beyond surface-level observations and uncover underlying patterns, themes, and potential insights embedded within the reflective notes. By selecting RTA, the analysis aimed to rigorously extract meaningful themes, facilitating a comprehensive exploration of the nuances and dynamics present within the intervention program's evolution.

In regard to the present study, the teacher's reflective notes from the intervention program went into a systematic process based on the Reflexive Thematic Analysis (RTA) guidelines (Braun & Clarke, 2021). The following is how the analysis unfolded.



**Figure 3.2.** Reflexive Thematic Analysis Framework  
(retrieved from Braun & Clarke, 2021)

### Phase One: Familiarization with the Data

The researcher immersed himself in the teacher's reflective notes, reading and re-reading to gain a deep understanding of the content. This step was crucial for identifying relevant information that pertained to the research question of integrating gamification into the genre-based approach for teaching descriptive text.

### Phase Two: Generating Initial Codes

Codes were created to encapsulate concise descriptions or interpretations of significant information in the reflective notes. These codes acted as the building blocks for subsequent theme development. Codes helped categorize and make sense of the data in relation to the research objectives.

### Phase Three: Generating Themes

Once all data items were coded, the focus shifted towards identifying patterns and aggregated meanings across the entire dataset. Themes emerged from the combinations of codes that shared similar meanings. This process involved recognizing connections and relationships within the data, highlighting how gamification influenced the genre-based teaching approach.

#### Phase Four: Reviewing Potential Themes

The researcher reviewed the potential themes in a recursive manner, ensuring that they effectively captured meaningful interpretations aligned with the first research question. Themes that did not sufficiently address the research objectives were refined or revised. This step ensured that the themes accurately reflected the data and contributed to insightful interpretations.

#### Phase Five: Defining and Naming Themes

The researcher delved into a comprehensive analysis of the identified themes and sub-themes. The analysis interpreted how these themes represented the interactions between gamification and the genre-based approach in teaching descriptive text. Each theme was examined in the context of the dataset and research question, providing clear connections and insights.

#### Phase Six: Producing the Report

The final phase involved producing a comprehensive research report driven by the research questions proposed by the present study. In relation to the present study, the analyzed data from the reflective notes were triangulated with the data retrieved from the observation notes before finally used to answer the first research question.

### **3.6.2. Observation notes analysis**

The data analysis process for this study additionally encompassed the analysis of information derived from observation notes. These notes played a crucial role in enriching and providing greater depth to the initial dataset, which consisted of reflective notes. The purpose of this enriched dataset was to address the first research question, which delved into the ways in which the integration of gamification into genre-based pedagogy facilitates students' learning of descriptive text. To collect this data, each session of the intervention program was meticulously observed and documented in a systematic manner.

To analyze the data from the observation notes, a constructionist thematic analysis approach was utilized (Braun & Clarke, 2006; Merriam, 2009; Vaismoradi et al., 2016). This approach is well-suited for understanding complex human phenomena, which is the aim of this study. Specifically, the analysis for the present study focused on comprehending the nuanced interactions and dynamics that emerged from the integration of gamification into the genre-based approach for teaching descriptive text. By closely examining the observation notes, the research sought to identify recurring patterns of engagement, levels of student participation, communication, shifts in motivation, and changes in collaborative behaviors as a result of the learning where the gamification-enhanced genre-based lessons take place.

Additionally, details about the technology used for gamification, and any props or materials that contribute to the learning environment were also observed and analyzed. Furthermore, the analysis aimed to uncover the impact of the intervention program on students' performance and comprehension within the genre-based framework. Through this comprehensive exploration, the research aimed to shed light on how the integration of gamification and genre-based teaching influences the learning experience, offering insights into effective instructional strategies and their implications for teaching descriptive text.

### **3.6.3. Students' works analysis on their linguistic development**

The second primary data which was in the form of students' works on descriptive text were analyzed by utilizing content analysis (Zhang & Wildemuth, 2005). In analyzing the data, content analysis involves a researcher systematically analyzing the written material to identify patterns and trends in communication (Holsti, 1969; Krippendorff, 2004). The system used to inform this content analysis is systemic functional grammar (SFG) in which it is a text-based grammar (Jones, et al.1989) since SFG provides a powerful analytical tool of linguistic approaches that have

been well developed in the area of education (Freebody, 2003). Additionally, SFG also has the capacity not only to locate language socially, but also to identify the linguistic characteristics of a genre, (Cope & Kalantzis, 1993, p. 84) and thus, SFG was “a valuable resource for texts analysis, which is concerned with the linguistic forms of the texts” (Fairclough, 2003, p. 12), which in the present study concerns with students’ descriptive texts.

Systemic Functional Grammar (SFG), also known as Systemic Functional Linguistics (SFL), is a comprehensive linguistic theory that emphasizes the functional and communicative aspects of language. It was developed by Michael Halliday in the 1960s and has since become a prominent approach in linguistics, particularly in analyzing how language is used in different social and cultural contexts (Egins, 2004). According to Halliday (2014), SFG views language as a system of choices that speakers make to convey meaning in specific situations. Moreover, Halliday (2009) notes that SFG emphasizes the interconnectedness of grammar, semantics, and social context. Thus, according to SFG, language serves three main functions: experiential (expressing ideas and experiences), interpersonal (interacting with others), and ideational (organizing language into coherent texts) (Halliday, 1985).

Mood, as defined by Egins (2004) and Emilia (2014), constitutes a vital component of the grammatical system closely aligned with the interpersonal metafunction in language, which governs the arrangement of multiple clauses to convey interpersonal meanings. This discourse underscores the significance of utilizing the relationships between clauses to engage in interactions with others, expressing opinions and behaviors. In the process of text analysis, mood is systematically categorized into several essential elements, encompassing subject, finite, predicator, complement, and adjunct. The subject plays a pivotal role in determining the appropriate use of singular or plural finite verbs. Finite, on the

other hand, functions as a determinant of a definite proposition, with only one finite verb present in a clause. In cases where two verbal groups coexist, such as "am learning," 'am' functions as the finite element, while 'learning' serves as the predicator. These two constituents, namely the subject and finite, jointly contribute to the establishment of mood. In parallel, the predicator, if present, along with the complement and adjunct elements, assumes the role of providing supplementary information, effectively enhancing the overall meaning conveyed within the text.

Mood, integral to the interpersonal metafunction, stands in contrast to the transitivity, which places a heightened emphasis on the experiential metafunction—perceiving the clause as a representation. While in line with traditional grammar, as Thomson (1996) contends, transitivity delves deeper into distinctions at varying levels. It surpasses a mere analysis or differentiation of word classes, such as verbs with or without objects. Rather, it undertakes a more intricate role—depicting the entirety of the clause. The analysis of transitivity within a clause revolves around three fundamental dimensions. According to Martin (1997), transitivity serves as an analytical lens, serving as a source for interpreting experiences, composed of three integral components: the choice of process, participants, and circumstances.

The ideational metafunction revolves around the concepts of theme and rheme within a text, both of which intricately shape the flow of information within a sentence or clause. Theme, as explained by Halliday (2004), represents the informational "starting point" of a message, encompassing details that have been referenced earlier in the text. Essentially, themes capture information that is familiar, established, or already acknowledged (Martin, 1992; Martin, Matthissen & Painter, 1997). In a broader context, Emilia (2014) asserts that theme serves multiple roles—it signifies the manner in which the message is presented and written, reflects the author's perspective on the conveyed message, and even

denotes progression within a text. Hence, theme can be briefly defined as the initial element within a clause, while the subsequent clause following the theme is referred to as the rheme.

*3.6.3.1. Analyzing the students' works based on the characteristics of descriptive text and SFG*

- Generic Structure

To analyze the generic structure of the text, the researcher broke down the text into its constituent parts or elements to understand how it is organized and what its overall purpose is.

- Grammar

To analyze the grammar of the texts in this study, the researcher examined the sentence structure, word choices, and overall linguistic features to gain a deeper understanding of how the text is constructed by looking for subject-verb agreement, verb tense consistency, and proper use of modifiers.

- Mood (Interpersonal Metafunctions)

During mood analysis of the students' texts in this study, the researcher followed a set of predefined rules or criteria to identify and categorize various mood expressions which should be declarative moods. Additionally, researchers paid close attention to modality and modulations in mood, as they provide insights into the writer's level of certainty or commitment to the information being presented.

- Transitivity (Experiential Metafunctions)

This analysis of transitivity in this research involved a close examination of the relationships between participants, actions or processes, and the circumstances or contexts expressed in the text. Therefore, in analyzing the



students' descriptive text writings, relational processes were paid attention to. Additionally, material processes and behavioral processes were also paid attention to as both processes provide additional descriptions regarding actions and behaviors performed by the participants in the text.

- Theme (Ideational Metafunctions)

Theme analysis is a method used to explore how information is presented and organized in a text, focusing on the starting point of the sentence or clause—the theme. Therefore, in analyzing the theme of the students' writings, the researcher involved identifying and classifying the themes and drawing connecting arrows in a text to understand how they contribute to the overall message and coherence of the discourse.

### 3.7. Research Procedure

This section provides an overview of the comprehensive research procedure conducted for the present study. The procedure encompassed various essential steps, including the initial development of the research framework, supervision on proposal creation, the creation of lesson plans with the assistance of participating lecturers, administrative procedures, obtaining permission from the school, acquiring parental consents, data collection, data tabulation and analysis, thesis supervision, and revision processes. Each of these steps played a crucial role in ensuring the methodological integrity and systematic progression of the research. The following table entails a more complete and comprehensive research procedure with its timeline.

**Table 3.3.** Research Procedure and Timeline

No	Activities	Time
1	Research proposal supervisions	November 2022 – January 2023
2	Lesson plans development	February 2023

3	Learning materials development	February 2023
4	Administration procedural (acquiring research permission from the classroom teacher, school, and university)	8 February – 23 February 2023
5	Ethical procedure (acquiring parental permission)	6 March - 9 March 2023
6	Piloting	14 March 2023
7	1 <sup>st</sup> classroom intervention (BKoF)	17 March 2023
8	Research proposal seminar	24 March 2023
9	2 <sup>nd</sup> classroom intervention (MotT)	29 March 2023
10	3 <sup>rd</sup> classroom intervention (MotT)	31 March 2023
11	4 <sup>th</sup> classroom intervention (JCotT)	3 May 2023
12	5 <sup>th</sup> classroom intervention (JCotT)	19 May 2023
13	Thesis draft supervision	May 2023
14	Data tabulation and analysis (observation and reflective notes)	May - June 2023
15	Data analysis (students' works on descriptive text)	June 2023
16	Thesis draft writing post-data analysis	June 2023
17	Thesis draft supervision	June – July 2023
18	1 <sup>st</sup> Thesis defense	10 August 2023
19	2 <sup>nd</sup> Thesis defense	29 August 2023

### 3.8. Concluding Remarks

This section has provided a detailed account of the research methods, design, gamification integration, research context and site, ethical considerations, data collection techniques, and data analysis employed in this study. By considering these various aspects, the research aimed to ensure the reliability, validity, and ethical integrity of the findings, thereby contributing to the overall quality and credibility of the research outcomes.