CHAPTER III

RESEARCH METHODOLOGY

This research intends to find out how the use of adventure-based games can support narrative text learning. In order to find the answer, the researcher conducted a qualitative case study research by conducting an observation in a class before and after the adventure-based game was implemented. After conducting an observation, the researcher gathered deeper data by conducting a focus group discussion. Furthermore, the researcher selects several representatives of participants to interview to deepen the information on how adventure-based game supports their learning. This chapter explained the method, research design, participants, research instruments, and data analysis in detail.

3.1 Research Design

This research aims to find out how adventure-based games support EFL students in learning narrative text and to fulfill the objectives of the research, the current study used a qualitative case study. The case in this study revolved around the negative stigma associated with games in society. However, this research, which explores the role of games in education, specifically in the context of learning narrative texts, offers an opportunity for games to be viewed positively, particularly in the educational field. To substantiate this, the study employed adventure-based games, with a focus on their specific features. This research explored how game features, mechanics, and other elements could facilitate deeper learning and comprehension among students, particularly in relation to narrative elements such as plot, character development, and themes. Furthermore, given the time constraints of the study, the researcher concluded that this research design was the most appropriate approach. This design is effective for investigating an in-depth examination of participant experiences and viewpoints within a specific context (Hyett et al., 2014). It is ideal for finding out how a student's attitude towards adventure-based games and their effect on students. This design also allows the

researcher to explore and deepen their understanding of the issue, and its natural

real-life effects context (Crowe, 2011).

To be more precise, this research used an exploratory case study. This

method enables a thorough investigation of the causal relationship between the

game and how it can support the learning process (Blatter & Haverland, 2012).

Through an in-depth examination of the classroom settings, game design, and

student interaction, the exploratory case study offers insightful information on the

intricate problems involved. Blatter & Haverland (2012) also stated that This

method is suitable for identifying the underlying phenomenon in the educational

context because it is in line with the aim of this research that targets not only

identifying the changes in the students' conditions after given intervention but also

the reasons behind their influence. Thus, this method is perfect because it allows

for a thorough investigation of the causal connections between adventure-based

games and the student's learning process.

Adventure-based games are placed in learning environments, each with its

dynamics, opportunities, and obstacles. By using observation, the researcher can

identify how different people's perceptions of the use of these games are shaped by

contextual elements like learning environment culture, teaching practices, and

students' experiences using a qualitative case study design (Coles & McGrath,

2010). This design also offers the exploration of diverse data by selectively

choosing a range of participants with various backgrounds and cultures. It can

afford multiple perspectives on a single case, strengthening the evidence and factual

accuracy of the result (Gerring, 2004). By utilizing it effectively, the writer can

capture a variety of viewpoints and experiences related to adventure-based games,

enriching the depth and breadth of the research.

Qualitative methods such as observation, focus group discussion, and open-

ended interviews can facilitate the collection of rich and descriptive data that

interpret participants' experiences and points of view. Especially for interviews,

this method can result in rich data and even produce insight into the topic from the

Dityoseno Riadussurur, 2024

ADVENTURE-BASED GAME SUPPORT IN LEARNING NARRATIVE TEXT: EMBEDDING GAME INTO

THE IMPLEMENTATION OF BRUNER'S SCAFFOLDING MODEL

interviewee's perspective, it can even yield more information about the interviewee

without even preparing a direct question and solicited information (Hoffman,

2013). By analyzing that information, the researcher can find an underlying belief,

motivation, and even hidden valuable information that can influence their

perspective on this research. This data collection method made it more flexible and

can have good adaptability, enabling the researcher to identify emergent themes and

providing opportunities for discovery and new insight.

3.2 Research Site and Participants

The research was conducted at a junior high school in Garut. This site was

chosen because it provided an ideal setting for the study, given the target

participants and the efficiency of conducting research at this institution.

Additionally, the school was considered a suitable location for gathering diverse

data, as it attracted students from various backgrounds, which contributed to a more

varied dataset.

The participants for this research represented a diverse range of

backgrounds and experiences. The sample consisted of EFL students from the

junior high school in Garut. The inclusion criteria for the participant selection were

students with ages ranging from 14 years old or higher and English as a Foreign

Language (EFL) students. To be more specific, this study focused on 8th-grade

junior high school students as participants. This choice was made to align the

students' characteristics with the features of the game being used. The selection

also considered the principles of the biopsychosocial approach, which informed the

decision-making process for identifying the target participants. Another factor was

the researcher's limited authority, as the permission obtained only covered 8th-

grade students. The purposive sampling method was used for participant selection.

This method was deemed appropriate as it allows the researcher to choose

participants who were likely to provide the most relevant information for the study.

Since most of the variables aligned with this approach, it was considered the best

choice for this research. Another requirement was that participants should be

Dityoseno Riadussurur, 2024

willing to share their information (Etikan, 2017). The rationale behind these criteria

was to gather a more diversified perspective on the use of adventure-based games

from a range of backgrounds. Participants with prior experience in adventure-based

games were selected for the observation and interview sessions in order to obtain

in-depth information and specific insights from their experiences and viewpoints.

3.2.1 Ethical Consideration

All participants received detailed information about the study's goals,

methods, and possible benefits before participation. Each participant gave their

informed consent and received assurances that they could leave the study at any

moment and that there would be no repercussions. Prior to the interview and focus

group discussion, participants were provided with a consent form as part of the data

collection process. The consent form outlined the terms and conditions, including

benefits and assurances, and was signed by the participants. This form indicated

that participation was voluntary and that their data would remain confidential.

3.3 Research Instruments and Data Collection

In order to get valid and reliable data, the researcher used observation, focus

group discussion, and interview as an instrument. To back up the validity of the

data that has been discovered, the researcher used various article journals to support

the claim and data in this research. Using observation and interview is common in

qualitative research; this is because observation, focus group discussion, and

interview usually do not limit student's views on the subject. This also means that

this current research used a triangulation method to strengthen the validity of the

findings of the research. The method of triangulation can give a more detailed

description of the phenomenon and improve the accuracy of the data collected

(Coles & McGrath, 2010).

3.3.1 Method for Selecting the Adventure-based Game

In this study, the researcher utilized an adventure-based game titled

"Adventure with Anxiety." This game is well-suited for classroom use for several

Dityoseno Riadussurur, 2024

ADVENTURE-BASED GAME SUPPORT IN LEARNING NARRATIVE TEXT: EMBEDDING GAME INTO

THE IMPLEMENTATION OF BRUNER'S SCAFFOLDING MODEL

reasons. Firstly, the game has a short duration, requiring only 15-30 minutes to complete, depending on the player's reading speed. Secondly, it is easily accessible, as it can be played directly in a browser without requiring any application installation. Players simply need to open the browser, visit the game's website, and click "Run interactive story" to begin playing. Thirdly, the game addresses mental health issues commonly experienced by teenagers, particularly anxiety. The narrative follows a teenager struggling with anxiety and progresses through various challenges until resolution.



Image 3.1 Game Interface

Considering these aspects, "Adventure with Anxiety" can serve as a substitute for traditional narrative texts due to its similar structure, including orientation, complication, resolution, and even a coda. Its brief duration, combined with its ability to enhance student engagement, makes it an effective educational tool. Additionally, *Adventure with Anxiety* offered numerous features that could aid players, or students, in better understanding narrative concepts. One of its key features was the interactive storyline, which allowed players to make choices, thereby actively engaging them in the narrative and helping them grasp the story more effectively. This also facilitated an understanding of character development,

including their roles, motivations, and the ability to analyze characters. The game

featured visual and audio cues that helped players become more familiar with the

setting, concepts, themes, and atmosphere, which, in turn, supported their ability to

decipher or decode narrative knowledge. Other features, such as the dialogue

system, feedback mechanisms, and replay options, further enabled students, as

players, to engage with and comprehend the narrative more deeply than traditional

text-based learning methods would allow.

Selecting a game for educational purposes can be likened to choosing a

piece of literary fiction for students, as both media offer rich narratives, complex

characters, and themes relevant to adolescent issues. Both require readers or players

to immerse themselves in the story to fully grasp its context and plot. Therefore,

looking at this point, it is crucial to consider certain aspects when selecting either a

game or a piece of fiction to ensure it meets the criteria of a literary work.

Selecting a literary work to be given to a student is not a trivial matter, and

since the target participants for this research the teenage students in 9th grade of

junior high school, there are a lot of benefits and challenges that need to be

considered (Moecharam, et al, 2014). For instance, suitable literary work to be

given to students in the teenage phase cannot be literature that contains elements in

a children's view or adults' view, but the crossover of both. As stated by Campbell

(2004) the literature for a teenager should have specific elements, such as having a

teenager as a protagonist, no child's or adult's perspective, and a plot that is not too

complex and has immediacy and brevity aspects. The element that is included is a

criterion for literature that is suitable for a teenager, and it is called Young Adult

(YA) literature.

The reading material and literature that was given to students in junior high

school usually related to Indonesian folklore, such as timun mas, sangkuriang, etc.

That kind of literature heavily contains sociocultural aspects that are intended for

students. While that can satisfy students' needs in social or cultural aspects,

selecting Young Adult literature for students is not sufficient in only that. The

Dityoseno Riadussurur, 2024

ADVENTURE-BASED GAME SUPPORT IN LEARNING NARRATIVE TEXT: EMBEDDING GAME INTO

THE IMPLEMENTATION OF BRUNER'S SCAFFOLDING MODEL

complexity of selecting a Young Adult literature can be seen in a "Biopsychosocial"

approach that is proposed by Travers & Travers (2009). In the study of Moecharam

(2014), it is stated that to evaluate and select the appropriate Young Adult literature

for students, the "Biopsychosocial" approach should be considered. While narrative

learning students already have learned about sociocultural from Indonesian

folklore, there is still an aspect that is still lacking such as in biological and

psychological aspects, especially for today's students.

To meet the "Biopsychosocial" (cited from Moecharam, et al, 2014)

approach and fulfill the Young Adult literature elements for the student in the

current research, the adventure-based game that was used is titled "Adventure with

anxiety". The elements in this game fulfill the elements of Young Adult literature,

with a teenager as a protagonist who struggles to cope with his anxiety. The games

also satisfy the 'Biopsychosocial" aspect that can be seen throughout the game. In

the biological aspect, teenagers start to develop some emotional problems, and in

this game the type of emotional problem that is faced is anxiety. In the

psychological aspect, the teenager also starts to have academic pressure which can

also lead to anxiety. This game also represents a physiological characteristic of

teenagers that sometimes develops an imaginary audience. In the social aspect, the

teenager often faces identity confusion and also sometimes emerges antisocial

behavior. All of those aspects are represented in the "Adventure with anxiety" and

the game even provides a solution for it. Hence why in this current research, this

game is an effective media as a Young Adult literature to be given to the students.

Image 3.2 Gameplay

Dityoseno Riadussurur, 2024

ADVENTURE-BASED GAME SUPPORT IN LEARNING NARRATIVE TEXT: EMBEDDING GAME INTO



3.3.2 Observation

In order to collect data in a qualitative method, observation is one of the most commonly used instruments to collect data, this is because it is an open source of data and the researcher can get first-hand raw data from the participants by observing people and places in the research sites (Creswell, 2015).

In observation methods, there are two types of observation based on the researcher's standings in this research. It is participative and non-participative observation. In this current research, because the researcher is the one who is familiar with the adventure-based game that was used in the class, the current research became a participative observation type. This is because the researcher takes part in the research itself as well as engages in the activities (Coles, 2010).

In the current research, the observation was conducted to get data on what is the impact of using adventure-based games in the learning process of narrative text of EFL students. The instrument that was used to observe the students was field notes, and in order to get more concrete data, the researcher was also observed a student's work. Recording data using field notes become one of the most common ways of observation. In this current research, the field note was carried out with segments based on the theory of scaffolding and the constructivist theory. Based on the writing of Fosnot (2005) and Piaget (1973), it is implied that the core writing of constructivist theory is that learners can construct knowledge based on first-hand

experience and interaction with their environment. To measure this, the support of adventure-based games in the learning process was observed, with indicators such as attention level, enthusiasm, and others identified. The same approach was applied to measuring the scaffolding aspect in students, as outlined by Vygotsky (1978), by identifying indicators such as visual aids and support features within the games that could assist students in narrative text learning. In the field notes, the first column was used to record descriptive observations of the classroom situation, while the reflective notes captured the researcher's thoughts based on the emerging themes.

Ciold note		
Field note		
Date:		
Time:		
Location:		
Indicators	Descriptive note	Reflective note
Scaffolding narrative understanding Plot understanding Character development Reflection ability		
Active and interactive learning:		

The observation was carried out from the beginning until the end of the research, everything such as students' actions and students' work was observed. Based on Creswell (2015) the process of observation starts with selecting the site of the research and identifying the central phenomenon and the general situation in the site, identifying the participants and setting a schedule, and conducting multiple observations to get the best understanding of the participants.

3.3.3 Focus Group Discussion

The focus group discussion was used as an additional instrument to gather

data on students' experiences, attitudes, and opinions regarding on how adventure-

based games support the learning process of narrative text. Conducting an open

discussion allows the researcher to collect rich and detailed qualitative data that

reflects on students' experiences, be it from a collective or individual perspective.

To obtain the most reliable results, George (2023) suggested that a focus

group should follow a rule of thumb, with the group consisting of 6-12 participants.

In the current research, one group was composed of 6 students. The duration of the

discussion was approximately 45 minutes, providing ample time to explore

participants' views on how adventure-based games supported their narrative text

learning process. The discussion was recorded, with the researcher acting as the

moderator, and was subsequently analyzed using thematic analysis. This approach

allowed for the identification of themes and patterns that naturally emerged during

the discussion. To ensure confidentiality and obtain consent, each participant was

provided with a consent form, which was signed by the students.

3.3.4 Interview

To give more in-depth data on the research and to improve the validity of

the data that has been collected, the researcher interviewed the students. This is

because observation is not enough to ensure the accuracy of the data and is

insufficient as a triangulation method. To be more precise, the interview that was

be used is a semi-constructed interview. It combines the flexibility of an open

conversation with the focus of a structured interview. This kind of interview follows

pre-planned questions or themes, but it can also flow naturally and change

depending on the interviewee's answers. The interviews were conducted one-on-

one, meaning that each participant was interviewed individually. This approach was

chosen to ensure that interviewees could freely express their opinions, despite being

time-consuming.

The interview was conducted to collect further students' opinions about

using adventure-based games in a narrative text learning process, such as the

Dityoseno Riadussurur, 2024

ADVENTURE-BASED GAME SUPPORT IN LEARNING NARRATIVE TEXT: EMBEDDING GAME INTO

THE IMPLEMENTATION OF BRUNER'S SCAFFOLDING MODEL

Universitas Pendidikan Indonesia | repository.upi.edu | perpustakaan.upi.edu

reflection of the learning, the challenges in the learning using games, and the overall impact that they felt during learning using adventure-based games. This interview was conducted using purposive sampling; the interview involves representatives of students who are actively participating in the class, students who are less active in the class, and students who are moderately active in the class. 2 students were selected from each criterion, and the students who fit into the criteria was found after doing the observation. The researcher used purposive sampling to ensure the diversity of the students. Focusing on the selected students be more likely to provide detailed and insightful data. This is also to increase efficiency because of the time limitation of the research, ensuring the data is manageable, and reliable, while still obtaining comprehensive data. Considering allof the factors to conduct an interview, the researcher proposed a series of question that was adapted from another similar research by Kotukhov (2021), and modified based on constructivist learning framework (Fosnot, 2005).

No.	Questions
1.	Can you tell me about your overall experience with learning English
	as a Foreign Language (EFL)?
2.	How do you generally feel about playing games while using them for
	learning English? Can you elaborate on any positive or negative
	experiences you've had?
3.	Can you describe your first experience with an adventure-based
	game? What were your initial impressions? Did you learn English bit
	by bit to finish the game
4.	In what specific ways do you think adventure-based games have
	impacted your learning experience?
5.	How did you usually behave or feel when learning English? (This
	question will be further discussed based on active and interactive

	learning of the students)
6.	How does adventure-based games compare to traditional EFL learning methods (e.g., lectures, textbooks) in terms of engagement and effectiveness for you? Did you like it or not?
7.	What challenges or difficulties have you encountered when using adventure-based games for learning English? How have you addressed these challenges?
8.	Looking back, how do you think your use of adventure-based games will affect your long-term English language proficiency?

3.4 Research Procedure

In this research the teaching and learning process were conducted in six meetings. To gather data that can answer the research questions, the researcher sought permission to observe students as they learned narrative texts. After obtaining the necessary consent, the researcher conducted initial observations alongside the regular teacher during the first session. In the second, third, and fourth sessions, the researcher took on the role of the teacher, using the game as a learning tool. During the fifth session, the researcher conducted a game review followed by an in-person focus group discussion. Finally, in the sixth session, interviews were conducted with student representatives. During the session where the game was integrated into the learning process, the researcher informed participants about the specific game to be used and explained the procedure for playing it. Once all participants understood the intended learning procedures, data collection began over several meetings. In the first day of the meeting, inside of the classroom from 11.00 A.M to 13.00 P.M the researcher observed how the class activity starting from the beginning of the teaching learning activates until the end of the learning hours. The researcher observed how the class is normally doing without given intervention, obtaining data from students' behavior, how they learn, how the teaching learning process was conducted, and how the learning results in normal teaching class.

Then, in the following steps, the students are given intervention, which is adventure-based games and observed for a total of 3 days. The game that was used in the current research is titled "Adventure with anxiety". In the second meeting, inside of classroom in the same time as previous one, the researcher writes any changes that occur in the learning process after the student were given intervention starting from the beginning of the class until the end of learning process. First, the researcher explained the game that the students would play, outlining what they needed to learn and how it related to the educational objectives. After this, the students played the game while being guided by the researcher. Once the gameplay session was completed, the researcher administered a quiz to assess what the students had learned from the game. During the third session, the students played the game again at the same location and time, and after the session, they took another quiz with questions similar to the previous one. In the fourth session, held at the same location and time, the students were instructed to focus solely on playing the game without having to answer any quizzes or questions.

After the observation session is finished, the researcher conducted an analysis from the field note and everything that has happened in the class, starting from students' action until students' assessment. After concluding the observations, representatives from the participants were instructed to hold a focus group discussion in the following session in the fifth meeting, in the library school from 10:00 A.M to 12:00 P.M. The researcher provided an overview of the topics to be discussed and explained the procedures for the focus group discussion. And to gather more reliable and valid data, the researcher further recorded the discussion to analyze them in the data anlysis process. Additionally, interviews were conducted in the sixth meetings with selected student representatives to explore their experiences with learning narrative texts using adventure-based games, aiming to further enhance the accuracy of the data.

Image 3.3 Game Poster



After the data has been analyzed, the researcher conducted an interview in the school library from 10:00 A.M to 12:00 P.M, based on the criteria that has been made before which is the representative of students who are actively participating in the class, students who are less active in the class, and the students who are moderately active in the class. 2 students were selected from each criterion. The interviews are conducted one-by-one to ensure confidentiality and comfort of the students

After all the data was collected, understood, and analyzed using thematic analysis, one major theme directly related to the research question emerged, revealing that adventure-based games can support narrative text learning. Additionally, two codes from the coding process surfaced, which were interpreted to support and strengthen the identified theme. Based on the collected data, the research question can be answered through the theme, codes, and supporting evidence, including quotations from observations, focus group discussions, and interviews.

From the analyzed data, the results indicate that students participating in this study experienced positive differences when using games in narrative text learning. The participants demonstrated how the use of games indeed supported their learning. The most significant benefits and support the adventure-based game offers were supporting active and interactive learning, as well as enhancing their narrative understanding. Additionally, direct and indirect quotations were provided to further validate the results.

3.5 Data Analysis

The researcher collected all the data from the observation, focus group discussion, and the interview, and after the data is collected, it was further be analyzed. First, the recording of the interview was transcribed verbatim and further be coded using a thematic coding and further analyzed using thematic analysis along with the data from the focus group discussion, observation and field notes to identify patterns, recurring themes, and insight related to the objectives of the research and refined to provide a comprehensive understanding of the data. As stated by Coles (2010), analyzing qualitative data for observation and interview has the same principles, procedure, and processes. It is all analyzed using a coding system.

In managing and analyzing data, the researcher used a thematic analysis to ensure the richness and depth in the analysis. As stated by Creswell (2015), data analysis started with collecting data such as focus group discussion, interview transcript, and field notes, preparing data for analysis, reading through all of the data to gain a general sense of the material that has been obtained, coding the data by assigning text segments and inserting a code label to them, and lastly doing the coding text for description and themes to be concluded and presented in the findings part. All of the data presented was more valid as they were supported by evidence.