# CHAPTER III

# METHODOLOGY

This chapter presents the research paradigm and approaches used in this study by discussing the methodology and the context in which the study took place. This chapter begins with a discussion of research design, justification for the participants' selection, restatement of the research questions, discussion of data collection methods and elaboration of data analysis related to the instruments used.

## 3.1 Research Design

This study used qualitative methods to explore the challenges EFL learners in preparing digital comic. The researcher determines to use a case study since a case study is a design that explores the processes and activities (Creswell & Creswell, 2017). As qualitative researcher believe that meaning is socially constructed, their research focus is on the participants – how participants experience and interact with a phenomenon at a given point in time and in a particular context, and the multiple meanings it has for them. Creswell and Creswell (2017) suggests that qualitative researcher collects detailed information from participants and then forms this information into categories or themes. In qualitative research, researcher used relexify as inquirers reflect about how their role in the study and their personal background, culture, and experiences hold potential for shaping their interpretations, such as the themes they advance and the meaning they ascribe to the data (Creswell & Poth, 2016).

## 3.2 Setting

This research was conducted at one of higher Islamic education in Kendari, and more specifically at the Department of English Education in Southeast Sulawesi. This research was conducted on fifth-semester students in a foreign language teaching media class in 2021. The researcher believes that many students or creators have obstacles during the design of a digital comic because designing a comic is not an easy thing (Widayanti & Muntaha, 2018).

In the foreign language teaching media (FLTM) class, students are given the material on introducing technical and non-technical learning media for the future when they become teachers. Technical media is how technology helps the learning process, the needs of learners with visual and auditory learning styles. Which can produce an effective learning process for students. Technical media reduces the burden on teachers by freeing them from extensive explanations. Meanwhile, non-technical media are media that do not use technology or written media which include things such as instructions, and descriptions of general information.

In the fifth-semester, the participants did not only study foreign language teaching media, but they also studied teaching English foreign language (TEFL) which made them already know how to make learning materials and learning content. So, it allows them to consult with lecturers about learning materials that students will make for digital comics.

**3.3 Participants**

The participants of this study involve the student of the English Education Department the criteria being students who had already made digital comics and had many obstacles during the process of designing or working on digital comics. Dornyei (2007) argued that research needs to select participants who had similar experiences with the focus. The total number of participants in this study is five English students they are 4 females and 1 male.

The researcher chose the participant by purposive sampling. Purposive sampling represents a group of different non-probability sampling techniques. It is a form of non-probability sampling in which decisions concerning the individuals to be included in the sample are taken by the researcher, based upon a variety of criteria which may include specialist knowledge of the research issue, or capacity and willingness to participate in the research (Rai & Thapa, 2015). Since the researcher did an interview about which the students in English Department that most qualified for this research. The researcher has asked the participants to agree that their identity and information becomes obfuscated. The participants' ages range from 22-23 years old.

**3.3.1 Participants Profiles**

In this section, researcher explains the profiles of each participant from an educational background; creativity will prepare learning media and capabilities in the technology sector. The selection of participants was based on the directions and suggestions from the supervisor, the transcripts of the participants grades were also checked to assess the participants abilities in the field of English

courses. Each participant is assigned a code 'P', as in the examples P1, P2, P3, P4, and P5.

First P1, she is a student with the ability to speak English in the advanced class and is one of the students who is used to teaching English in class. In the ability to develop a learning media, she has excellent creativity to adapt the learning topics she chooses to the learning media she makes. This cannot be separated from her habit of teaching English in classrooms or schools. For the ability to master technology, she is at an intermediate level, such as in the field of design because she has been used to using applications like Canva for a long time.

Second P2, an EFL learner with abilities in writing and reading which are at an advanced level with this making him always get good grades in class. In compiling a learning material, he has a very good ability to make the material he will teach convey well. He also mastered the creativity to design learning materials very well, but for the use of various digital tools to create digital learning media he was at a basic level. He is at the basic level because he is not used to using digital tools, especially in the field of design.

Thirdly P3, participant with capabilities in the field of technology and especially in designing are already at an advanced level because basically she have long been familiar with various kinds of digital tools for designing. However, to make digital learning media, this is still unfamiliar to her because she is only used to designing banners, pamphlets, and so on. As for her ability to speak English, she can be said to be at an intermediate level, so her creativity in teaching English can be assessed quite well.

Fourth, P4, a student with very good English speaking skills or at an advanced level, she is a student who is very fluent in speaking English with very good public speaking skills. In terms of teaching English, she is used to it because she already has a lot of experience teaching in the classroom. In terms of the ability to use technology, in this case making a digital learning media, she is still in the learning stage because she doesn't know much about and uses various kinds of digital tools to design a digital learning media.

Fifth, P5, students who have an advanced level of ability to write and speak English which makes it a complete package to become an English student. With the abilities she has, it is very good for her to teach English in the future. She is actually used to using some tools for design, but the digital tools she uses are just the usual ones or at a basic level.

**Table 3.1 Participants' Profile**

| No | Participants' Names | Gender | Age | Semester | Level Grade for DC content |
|----|---------------------|--------|-----|----------|----------------------------|
| 1 | P1 | Female | 21 | 7 | VIII |
| 2 | P2 | Male | 21 | 8 | IX |
| 3 | P3 | Female | 23 | 8 | VII |
| 4 | P4 | Female | 21 | 7 | VII |
| 5 | P5 | Female | 21 | 7 | IX |

## 3.4 Instrumentation

Researcher used reflection as a research instrument in this study and Google Form is the media that the uses. The written reflections using Google Form shall be distributed online via WhatsApp to elicit the students' challenges in preparing digital comic. Agouridas and Race (2007) contends reflection is a process of personalizing and understanding the contents, process, and the rationales for what we have learned. Written reflection refers to written story template that is comprised of a series questions and blank space where participants drop their answers and responses (Barkhuizen, Benso & Chik, 2014).

Online reflections are made using Indonesian to make it easier for participants to understand the questions and be able to provide answers well. Online reflections are created and shared using Google Forms because they are more accessible to participants. Semi-structured interview questions were conducted after obtaining answers that were still lacking from online reflection participants. Through reflection, can relate our personal experience to a wider perspective, which helps us to see the bigger picture. In this study, the reflection use Indonesian language and participants also answers the reflection with Indonesian language. The researcher also used semi-structured interviews if unclear answers are found or there are good answers that can develop from the participants.

## 3.5 Data Collection

In collecting data the researcher used several ways, first, the researcher write a reflection with questions that had been prepared through the google form

then the researcher shared it via a link to each participant to be fulfilled in one week. Second, checking and collecting the participants' answers, after all the data is clear, the researcher code the data. The data collection phase started after the participants fill the reflection through a google form, the instruments use the WhatsApp application which can be used online, the use of the Whatsapp application can be useful for researcher and participants who can assist researcher in finding and coding data. As for the participants, they can give good answers without hesitation.

**3.6 Data Analysis**

This study apply thematic analysis (Saldana, 2016). This research analyzes the data of students' challenges from themes emerging their answers and responses in reflection that has been filled out through Google form by coding and categorizing. Recognizing the interdependent relationship between data organization and categorization of meaning, coding plays a pivotal role in facilitating the researcher's ability to advance effectively the research process (Williams & Moser, 2019). Data coding uses Microsoft Excel to facilitate researchers in coding, data categorization is arranged per question such as (Q1-Q5) in Microsoft Excel with theme codes that have been determined according to the type of color that has also been determined.

The data were analysed qualitatively in thematic analysis using descriptive coding (Saldana, 2016). When researcher have many types of data collected for one research, such as interview transcripts, field notes, papers, and visual materials like pictures, this coding strategy is especially helpful (Saldana, 2016).

In this study, the researcher examined the challenges of EFL learners in preparing digital comic by adapting theory from scripting story (Wright & Sherman, 1999), design validation (Dewi & Harini, 2021), technology-oriented difficulty, digital-program oriented, design-oriented difficulties, design process, subject-acquisition, and visual content (Akcanca, 2021).

**Table 3.2 Theory analysis of challenges in preparing digital comic**

| Author | Year | Theory Analysis | Description |
|---|---|---|---|
| Wright & Sherman | 1999 | Scripting Story | Before the design of the comic scenes, learners are required to use their imagination and their experiences in listening and reading to stories in order to invent and write their own comic. |
| Dewi, L. K., & Harini, N. W. | 2021 | design validation | - design validation, assessment activities carried out by student who are create their media to test the feasibility of the media. |
| Akcanca, N. | 2021 | Technology-Oriented Difficulties; Design-oriented Difficulties; Design Process; Digital-program oriented; Subject-acquisition; Visual content | - Technology-oriented difficulties, focusing on the difficulties of using technology in creating digital learning media for beginners. <br> - Design process, the stage where the creation of digital learning media is made from determining the theme, concept and character in a digital comic. <br> - Design-oriented difficulties, focus on what obstacles are encountered when designing learning media and how to overcome the obstacles encountered. <br> - Digital-program oriented difficulties, difficulties in using various digital tools in preparing a digital comic. |

| Author | Year | Theory Analysis | Description |
|--------|------|-----------------|-------------|
|        |      |                 | - Subject-acquisition, determine appropriate learning topics and can be loaded into digital comics.<br>- Visual content, referring to digital comics being attractive in appearance |

The use of three themes from Akcanca (2021) is based on the need for this research which discusses challenges in preparing digital comics that are in line with Akcanca's (2021) wherefore become a reference in this study. The three themes used are technology-oriented difficulties, design process, and design-oriented difficulties. Moreover, theory about technology-oriented difficulty (TOD), design-oriented difficulties (DOD), and design process (DP) by Akcanca (2021) were used in analysing the data. EFL learner reflection is read and categorized by researcher using three colors and label. Code TOD and red colour are a mark of technology-oriented difficulties category while code DP blue colour are a mark of design process category while code DOD and green colour are a mark of category design-oriented difficulties. The example of the data as follow:

**Table. 3.3: Example Data Coding**

| Participants | Q1: What were your challenges in the beginning of making this digital comic project? Explanation please | Early Open Coding | Next Open Coding | Axial Coding | Selective Coding | Theme |
|---|---|---|---|---|---|---|
| P1 | At the beginning of making a digital comic project, I was confused about what topic I should use in making this project. There are many topics available, but I can only choose one of them. It took 2 days for me to choose the topic I wanted to raise. This is because I read 3 books first. Apart from that, because the two topics that I wanted had already been picked up by other friends. So, I had to choose the topic I wanted again, and the topic I finally chose was saying congratulations. | At the beginning of making a digital comic project, I was confused about what topic I should use in making this project. There are many topics available, but I can only choose one of them. It took 2 days for me to choose the topic I wanted to raise. This is because I read 3 books first. Apart from that, because the two topics that I wanted had already been picked up by other friends. So, I had to choose the topic I wanted again, and the topic I finally chose was saying congratulations. | I. Preparing concept | Scripting Story  Subject-acquisition | II. Design process | Challenges in Preparing DC Content |
| P2 | My biggest challenge at the start of a digital comic project was how to make comics interesting and interactive for readers. Because it requires making the right decision on how to structure the comic's narrative, as well as thinking about how to incorporate digital elements such as animation, sound, and other interactive features. In addition, when I create digital comics I also have to figure out how to use the right tools and software to create comics, as well as understand the technical aspects of digital comics | My biggest challenge at the start of a digital comic project was how to make comics interesting and interactive for readers. Because it requires making the right decision on how to structure the comic's narrative, as well as thinking about how to incorporate digital elements such as animation, sound, and other interactive features. In addition, when I create digital comics I also have to | I. Preparing concept  II. Preparing technlogy use | II. Scripting Story, Visual content I. Digital-program oriented difficulties | I. Technology-oriented difficulties | Challenges in Preparing DC Content |

| Partici pants | Q1: What were your challenges in the beginning of making this digital comic project? Explanation please | Early Open Coding | Next Open Coding | Axial Coding | Selective Coding | Theme |
|---|---|---|---|---|---|---|
| | such as file types, resolutions, and color palettes. | figure out how to use the right tools and software to create comics, as well as understand the technical aspects of digital comics such as file types, resolutions, and color palettes. | | | | |
| P3 | The challenge that I faced when I first started making digital comics was learning new features in making digital comics because this was a new project for me, so it took quite a long time just to learn about these features, such as using the Canva, Bitmoji, Voice Note applications. etc. In the process I learned through directions from the course lecturer and also Youtube. Even though it requires quite a lot of effort, I enjoy it. | The challenge that I faced when I first started making digital comics was learning new features in making digital comics because this was a new project for me, so it took quite a long time just to learn about these features, such as using the Canva, Bitmoji, Voice Note applications. etc. In the process I learned through directions from the course lecturer and also Youtube. Even though it requires quite a lot of effort, I enjoy it. | I. Preparing Technology use | I. Digital-program oriented difficulties | | Challenges in Preparing DC Content |

| Partici pants | Q1: What were your challenges in the beginning of making this digital comic project? Explanation please | Early Open Coding | Next Open Coding | Axial Coding | Selective Coding | Theme |
|---|---|---|---|---|---|---|
| P2 | My way of overcoming the obstacles that I encountered during the process of making digital comics was time management. Time management is an important part of creating digital comics. I need to plan ahead and set aside specific time to create comics. This will help me stay focused and organized, and prevent me from getting overwhelmed. | My way of overcoming the obstacles that I encountered during the process of making digital comics was time management. Time management is an important part of creating digital comics. I need to plan ahead and set aside specific time to create comics. This will help me stay focused and organized, and prevent me from getting overwhelmed. | III. Problem solutions | III. Design validation | III. design-oriented difficulti es | |

Notes :
P : Participants
Q : Question
Red font represents technology-oriented difficulties,
blue font represents the design process,
green font represents the design-oriented difficulties.
 (Adapted from Bianco, Gasparini, & Schettini,  2014)

The data is coded by differentiating each of the main themes based on the description of Akcanca's (2021) observation. So, the outcome of this study is noticeable and accurate. Additionally, the main themes also have some sub-themes. As for technology-oriented difficulties, there is one sub-theme which is digital-program-oriented. Moreover, the design process has 3 sub-themes. It consisted of subject acquisition, visual content, and scripting the story. Lastly, the design-oriented sub-theme is design validation.