

## CHAPTER 3

### RESEARCH PROCEDURES

#### 3.1 Method of the Research

This study used content analysis. It is a study method that helps researchers to make accurate conclusions from any kind of mode. Content analysis is a research strategy that allows making correct inferences from verbal, visual, or written data to define and quantify certain occurrences in a systematic and structured way (Downe - Wamboldt, 1992).

Furthermore, when the meaning of your data is less evident, or when interpretation is required, qualitative content analysis (QCA) is used (Schreier, 2012). Content analysis is about more than just collecting; it's about meanings, goals, outcomes, and context (Downe-Wamboldt, 1992). Despite it being most commonly used with text, the content analysis technique can be used with any sort of media, including text, audio, and video (Williamson et al., 2018).

As a result, this method was suited to use as a study design because it may be used by any content that requires to be analyzed in some way. Elo & Kyngäs (2008) argued that content analysis permits the researcher to put theoretical concerns to the proof to better comprehend the facts. Further, Williamson et al. (2018) stated that qualitative content analysis is primarily an interpretive strategy that allows a scientist to explain the subjects and topics that are most relevant to the study's research goals. Therefore, the purpose of this content analysis explains the issues and ideas which are most significant to the authors of the research aims.

Williamson et al., (2018) pointed out there are some steps involved while conducting qualitative analysis based on Schreier (2012) as follows:

##### 1. Focusing Research Objectives on Communication

The focus of the research ought to be detailed to determine the proper mode of communication for the study and also the relevant item. The study's goals should be calcified, and the researcher must choose suitable communication resources. Moreover, the research question must be detailed enough to determine

the best way of contact for the study (Williamson et al., 2018). In addition, the objective of this study explores engagement aspects and representational functions represented in selected parts of the Quizizz website from a systemic functional multimodal discourse analysis.

## 2. Establishing the Frame for the Research

When doing content analysis, scientists must focus on one frame which has an impact to make meaning and interpretation of the study. Moreover, the framework of this research uses engagement taxonomy from Martin & White (2005) and representational functions from Kress & Leeuwen (2006) represented in selected parts of the Quizizz website from the SFMDA perspective.

## 3. Selecting Unit of Analysis, Sampling, and Coding

The researchers emphasized the uniqueness of the information when doing content analysis, emphasizing that it must be meaningful and purposive. The amount and degree of specificity with which you code content is determined by your research goals (Williamson et al., 2018). In this study, the researcher conducted a document analysis. Furthermore, data were selected for various objectives based on the most appropriate data. Purposive sampling was chosen for this research because it gives a complex description of identification. Purposive sampling allows for the identification of complete, precise answers to research questions as well as the presentation of the larger picture; evidence selection may occur throughout the research (White & Marsh, 2006). In this research, after the researcher got the data, the chosen parts (See Enclosure 1) were analyzed to find out whether or not the engagement aspects and representational functions components in the selected parts of the Quizizz website.

## 4. Developing Content Categories

Plenty of the topics come from the beginning of a researcher's conceptualization of a study issue. This research started with a list of ideas and classifications from the study's problem. As soon as the study is arranged, the process of categorization of sources must start.

## 5. Protocol for Analysis

Emphasizing the categorization classification process and the methods that will be employed to assign codes to material helps develop credibility (Williamson et al., 2018). Moreover, the process of categorization identification and the methods for assigning codes to content are both important in establishing reliability (Williamson et al., 2018). This is the stage to think about the validity and reliability of the content in this research. The researcher may choose to work backwards from how precise, comprehensive, or selective the findings have to be to how frequently inevitable defects can affect them to settle on such requirements.

#### 6. Performing Data Analysis and Preparing the Findings

Analytical observations are necessary, especially when the researcher develops detailed summaries and explanatory cases for each classification. It is standard for the researcher to produce a narrative that includes informative analyses and explanations of each categorization, as well as source citations and dispersion of the category that happened.

### 3.2 Data Collection

There are lots of methods in qualitative research to get the data with their specific benefits. One of the benefits of grounded theory studies and qualitative research, in general, is the variety of data sources available (Corbin & Strauss, 2014). It is such as interviews, observations, videos, documents, and others. The key is that you maintain adaptable and receptive to the facts and the study's goals. It is also important to choose a suitable approach to data collection. What matters is that the researcher stays flexible and responsive to the data, the study objective, and the duration of the information which has to dedicate to the interpretation (Corbin & Strauss, 2014).

Hence, this research is a document analysis. As part of a study, documents can be used for a variety of objectives. The analysis document is being used in this study because the details provided can recommend some questions being asked and cases to be observed as part of the study. According to Bowen (2009),

document analysis includes text (language) and pictures that were collected without the participation of a researcher.

Then, document analyses also take on many forms to be utilized for systematic evaluation as part of an experiment (Bowen, 2009). Moreover, A systematic technique for assessing or analyzing documents, both paper, and digital (computer-based and Network) information, is known as document analysis (Bowen, 2009). And document analysis is examining the articles that the investigated create is often an excellent method to grasp the reality of the research (O’Leary, 2017).

The researcher collected the data from selected parts of the platform in the learning process, Quizizz. Seventeen selected parts are analyzed because it’s enough to make a credible and dependable result. Because the one crisis in qualitative research is collecting the data with big numbers without a clear way to investigate, seventeen selected items are sufficient. Forman & Damschroder (2015) argued that collecting huge numbers of data without a clear mechanism to organize or interpret it is a hazard in qualitative research.

It is lined with Heryana (2018) who stated that there is no minimum number established in qualitative research (sample size). A tiny amount of data is typically used in qualitative research. Even in some circumstances, just one informant is used. Hereafter, seventeen selected parts be analyzed to fulfil the principle of data triangulation. For the collection of data, researchers employ a triangulation strategy to produce comprehensive findings (Oesterreich & Teuteberg, 2016). These seventeen selected parts were obtained from students A, B, C, D, E, F, G, and H from grades 6,7,8, 9 and 12 at SC An-Nahl Tasikmalaya, west java who learned English by using a quiz on the Quizizz website.

It investigates the Semiotics which are included in this site to decide the meaning-making in the website, and what engagement aspects and representational functions are represented multimodally in selected parts of Quizizz. The researcher chooses Quizizz for the corpus in the research because this online platform gives lots of benefits to the students such as features that can attract the student’s motivation and engage them in the language learning process.

Quizizz makes learning fun, constructive, multiplayer, and free assessment tool that works on a laptop, smartphone, or mobile (Suharsono, 2020). First, the researcher caught selected parts containing texts and other modes (colours, the figure of the image, and so on) that were obtained from students. Then, the researcher reviewed the part's content. Furthermore, the content of the quiz was classified as the topic. Afterwards, it was analyzed and shown in the findings of this research.

### **3.3 Data Analysis**

The researcher used SF-MDA analytical techniques to investigate what engagement aspects and representational functions are represented multimodally in selected parts of Quizizz. The theory of Systemic Functional Linguistics (SFL) is used to study the linguistic features, while the theory of Multimodal Discourse Analysis (MDA) is used to construct the non-linguistic aspects of SF-MDA (O'Halloran, 2008). The SF-MDA approach is used in this research because it can help in meaning-making through language and visuals in engraved text. O'Halloran (2008) stated that the SF-MDA technique discussed in this report investigates the meaning generated by the employment of text and image representation in written materials.

SF-MDA by the O'Halloran approach is adapted for this study and focuses on interpersonal meaning through the analysis of engagement taxonomy (Martin and White, 2005) for the linguistic elements and representational meaning (Kress & Leeuwen, 2006) for the visual analysis. In step I, after gathering and classifying the data (17 selected parts), the researcher examined them through engagement taxonomy. This is accomplished to acknowledge the linguistic forms that were present in the selected parts. In phase 2, the entire explanation, analysis, and description are then given with particular emphasis on the analysis of linked literature to identify key themes that flow across the sections.

However, Kress & Leeuwen's (2006) visual grammar was used to classify visual parts through representational functions. Individuals' activities can actualize

the representational function, whether it is an alive or artificial entity (Ananda et al., 2019). The position of this action analysis is usually the most noticeable, as seen by its size, contrast, colour, and distance (Guo & Feng, 2017). Furthermore, Kress and Leeuwen (2006) included narrative and conceptual analysis as part of representational function analysis. The narrative process is divided into transactional and non-transactional through the actional process. Hereafter, the conceptual process is divided into overt and covert taxonomy through the classificational process.

### 3.4 Research Schedule

Table 3.1 Research Schedule

No.	Description	Feb-Mar 2022	Apr-May 2022	Jun 2022	Jul 2022	Aug 2022	Sep-Nov 2022	Dec 2022
1.	Research Proposal Writing							
2.	Research Proposal Examination							
3.	Data Collection							
4.	Data Analysis							
5.	Report							
6.	Thesis Examination							