

CHAPTER III

METHODOLOGY

This chapter provides the methodology for conducting the research and the description of the research procedure. This chapter contains the research design, site, and participants of the study, research procedures, data collection, and data analysis techniques. The research method used to answer these research questions: (1) How does the transduction and transformation process occur in the stages of teaching descriptive texts to 7th graders; (2) How do the process of transduction and transformation from textbook content into teachers' teaching media influence the teaching of descriptive texts to 7th graders; (3) What types of modes are used by the teacher in teaching descriptive texts to 7th graders.

3.1 Research Design

This research was conducted using a qualitative method framework, specifically a descriptive case study. A qualitative method is used to provide a deeper understanding, detailed description, and examination of a constrained system of social phenomena (Silverman, 2005; Merriam, 2009). In this research, the phenomena which are investigated are the types of modes employed by teachers in teaching descriptive texts to 7th graders. Additionally, it seeks to understand the process of transduction and transformation in aligning lesson plans with selected textbook content and multimedia resources. Furthermore, the research investigates how the transduction and transformation from textbook content to teachers' instructional media impact the teaching of descriptive texts to 7th graders. Furthermore, a case study was employed in the design of this study to explain the phenomenon related to the context. According to Creswell (2012) case study research originates with identifying a specific case (a concrete entity, such as an individual and a small group) (Creswell, 2013). The design is suitable for this study since it has the characteristics of a case study in which this research focused on a

single case, in this case, transduction and transformation process during the teacher's teaching practices. The reason for choosing a case study in this research is that the investigation of transduction and transformation is conducted by an English teacher using the Genre-Based Approach. This choice is influenced by the teacher's approach, impacting data processing and the presentation of data based on the stages of GBA.

A case study aims to retain real-life events' holistic and meaningful characteristics through in-depth data from a variety of sources (such as observations, interviews, and documents), and reporting a case description (Creswell, 2017; Yin, 2003). In this study, resources used to collect in-depth data were taken: (1) documents in the form lesson plan, selected textbook content, and teacher's teaching media; (2) interview; and (3) observation.

The reason behind choosing the participant as a unique case was the teacher used digital platforms in which content was taken from a textbook. The position of the textbook was source media as it was published by the Minister of Education, however, he made several innovative and digital-based adjustments. Thus, it was the uniqueness of the participant.

3.2 Research Context

The broader environment and circumstances surrounding a specific research study were referred to as the research context. It included all relevant aspects of the background context of the research. Understanding the research context is significant because it informs limitations that might influence the results of the research. The following is a detailed elaboration of the research site and research participants:

3.2.2 Research Participant

The participants in this research study included a single English teacher, selected for his extensive experience in teaching using multimodal texts. The selection process involved a series of informal interviews, during which the teacher emerged as the most suitable candidate among other potential

participants. In these interviews, the teacher provided a comprehensive account of his experiences in organizing and employing multimodal learning media in their teaching practices. Notably, the teacher articulated a conscious and deliberate approach to multimodal instruction, citing examples of using visual, aural, and verbal modes. This was because he joined several workshops or seminars on Multimodality. The teacher's engagement with multimodality was described as a process that started with the careful selection of learning media based on targeted skills and students' interests. Furthermore, the participant highlighted his active use of various modes during teaching sessions and detailed the adaptation of learning media from the source material. This thorough description not only showcases the diversity of modes employed but also emphasizes the decision-making process and adaptability in response to the specific needs of the instructional context. Overall, the participant's experiences, as outlined in the interviews, present an understanding of multimodal teaching, making him a pivotal and representative contributor to the research study.

3.2.3 Research Site

This study was conducted at one of the Junior High Schools in Bandung. Several considerations guided the selection of this particular school. First, the site's accessibility was crucial for conducting research. Second, the school demonstrated support for administrative needs. Third, the facilities at the school, where the participant taught, were complete, providing a diverse range of multimodal media for the teacher to utilize.

Moreover, the availability of comprehensive educational facilities played a significant role in choosing this research site. The classroom where the teacher conducted lessons was equipped with a projector, interactive screen, and speaker. Additionally, students were allowed to use their personal phones for educational purposes. This comprehensive infrastructure facilitated the study by enabling the teacher to incorporate a variety of multimodal media, including textual text,

pictures, audio, and interactive features. These multimodal tools are essential for teachers to employ diverse teaching styles and engage students in learning English. A well-equipped school empowers teachers to explore multimodal resources, offering multiple options to incorporate various modes, aligning with the objectives of this research.

It is worth noting that the teacher was responsible for instructing a 7th-grade class in Junior High School, comprising approximately 20 students. Throughout the week, the teacher conducted English lessons twice for this particular class.

In summary, the factors of accessibility, administrative support, and school facilities influenced the choice of this Junior High School in Bandung for the research study. These factors contributed to establishing a multimodal learning environment, allowing the researcher to investigate the modes used by the teacher and students in the context of teaching and learning English.

3.4 Research Procedure

Stage 1: Context Analysis and Instrument Development

In the initial phase of the research process, the focus is on identifying the research context. This involves a comprehensive examination of the setting, conditions, and parameters that frame the study. By clearly understanding the context, the instruments were developed and adjusted so that the data could be obtained.

Once the research context has been identified, the next crucial step is the design of research instruments. This involves creating tools and methodologies tailored to the specific characteristics and requirements of the identified context. The instruments serve as the means through which data will be collected and analyzed. Precision and relevance are key considerations during this phase to ensure that the instruments effectively capture the research context, enabling a thorough and accurate exploration of the research questions. The thoughtful design of research instruments is fundamental to the entire research, laying the groundwork for the subsequent stages of data collection, analysis, and reporting.

Stage 2: Data Collection

Moving on to the next phase of the research process, the designed instruments were implemented in a specific flow, such as observation, interview, and documents from lesson plans, selected textbook content, and teaching media. This involves putting the methodologies into practice within the designated context.

Following the implementation, the focus shifts to the collection of data derived from the applied instruments in the field. This stage requires observation and documentation of the outcomes, ensuring that the data gathered reflects the application of the research instruments. The goal is to capture meaningful insights and information that will contribute to the subsequent stages of analysis and interpretation, ultimately advancing the research objectives.

Stage 3: Data Analysis and Interpretation:

Moving forward in the research process, the collected data undergoes as researchers apply appropriate analysis methods tailored to the specific type of data amassed during the implementation phase.

Once the data analysis is complete, the focus shifts to interpreting the findings. This involves delving into the results to extract a profound understanding of the implications and insights garnered from the data. Researchers strive to unravel the nuances and patterns embedded within the information, seeking to draw meaningful conclusions that contribute to the overall comprehension of the research questions. This interpretative phase serves as a crucial bridge between raw data and meaningful insights, guiding the research toward its ultimate objectives.

Stage 4: Reporting Results:

- a. Compile a research report including
 - i. Introduction: Context, research objectives, and research questions.
 - ii. Methodology: Detailed description of instruments, data collection flow, and analysis methods.
 - iii. Findings: Presentation of analysis results and data interpretation.
 - iv. Conclusion: Summary of key findings and their implications.
 - v. Recommendations: Suggestions for further research or practical applications.

3.5 Data Collection

The research involved the utilization of three distinct data instruments: documents, observations, and interviews. Each of these instruments played a crucial role in gathering comprehensive information for the study. The primary data are document collection and observation. For the secondary data, interviews were conducted to supplement the primary data. The following sections will provide a detailed breakdown of how each data instrument was employed and the specific insights derived from them.

3.3.1 Documents

This research employed documents as the primary data set. According to Creswell (2012, p. 223), a document is "a valuable source of information in qualitative research." In this study, the collected documents included lesson plans, textbooks, and the teacher's teaching media. The description of the document collection is provided below:

A. Teacher's Lesson Plans

Harmer (1997) describes lesson plans as frameworks for lessons, outlining the destination teachers aim for their students to reach and providing an outline of how to achieve those educational goals. In an ideal lesson plan, teachers incorporate a set of activities designed to span a class period, including steps, goals, objectives, media and equipment, procedures, and evaluations (Brown, 1994). However, harmer (1997) argued that the results of lesson plans vary widely, ranging from highly formal and detailed to written notes. Nevertheless, even these brief notes can be considered a form of planning, he continued.

Teacher's lesson plans, in this study, was not in the formal format. It was made in table form so that it could help to track and guide him in designing and teaching the lesson. Teacher's lesson plan in this research aimed to see how the teacher planned the modes that would be used in the classroom. Thus, it showed his decisions which represented the classroom teaching. As stated by Harmer (1997) lesson plan can be observed to gain a distinct understanding of the teacher's intentions and assess the

extent to which those intentions are carried through. The number of lesson plans collected from a teacher was five documents. Of the lesson plans that were analyzed only two it was related to which meetings were highlighted to be analyzed deeply (meeting 1 and 2). In those meetings, teacher's uses of modes were more varied than in the other meetings. The example of the lesson plan can be seen below:

Detailed Classroom Activities	Teacher's Activity	Skills Utilization	Learning Materials	Learning Stage
The teacher recalls the students' previous meeting materials in order to prepare them for the next materials (sentence construction)	The teacher asks the students on the previous meeting materials on how to describe school festivals that they have experienced which focus on their knowledge of adjectives.	Listening and speaking		Modeling of the Text
The teacher will provide a video on how to construct simple present tense while also explaining it to the students. Additionally, some examples are also analyzed	The teacher shows the students the video on how to construct simple present tense and then asks the students on their knowledge of the tense. Later, the teacher also provide thorough explanation on the use of verb and verb (s/es) to the students while also providing several examples to be analyzed so that the students have a better understanding on the tense. Further, the teacher also provide a "cheating" method to remember what subject uses verb or verb (s/es) such as (ayudewi ga suka es)	Listening and viewing	Interactive Power Point web: https://view.genial.ly/64104465c5d01e0010accd8e/interactive-content-sentences-escape-room-1	

Figure 3. 1 Teacher's Lesson Plans

In the Figure 3.1, the teacher made lesson plan in the table form. The lesson plan included a teaching plan, detailed classroom activities, teacher's activities, skills utilization, learning media, and learning stage. Thus, the points that the researcher needs to analyze must be interpreted from the teacher's self-made lesson plan regarding the aims, students' objectives, learning media, and modes. Those points were implicitly written in the teacher's lesson plan. For the modes, the teacher did not write it specifically. While the teacher didn't explicitly specify the modes, he included media in the form of links for access, along with specifying the skills intended for instruction. For instance, as depicted in Figure 3.1, the media accessible through the links were categorized into visual, verbal, and aural modes, aligning with the targeted skills for practice.

B. Textbook: *English for Nusantara*

Textbooks are critical in determining the direction, content, and strategies for delivering a lesson (McGrath, 2002). The textbook acted as the teacher's guide in this study, offering a thorough framework for instructional delivery. The textbook was the resource used by the teacher to structure and present the lesson. The textbook analysis focused on identifying the types of semiotic representations incorporated within the media, such as images and texts that were used by the teacher in his teaching. By examining the textbook's content, the study sought to understand how the guidelines were translated into instructional media and whether the textbook aligned with the teacher's lesson plans and teaching practices. However, since this research focused on transduction and transformation, the analyzed content in the textbook was the media which modes were changed by the teacher into other modes in his teaching materials.

In this research, the teacher utilized the *English for Nusantara* textbook, a suggested book from the Ministry of Education, published in 2022 by Ika Lestari Damayanti and her team. The book is structured into two components: the Student Book and the Teacher Book. Aligned with the Merdeka Curriculum, the textbook serves as a flexible framework designed to accommodate students' skills.

Comprising five chapters, each with learning objectives, three small units, audio links, and worksheet links. The specific chapter employed by the teacher for instruction was Chapter 5: "This is My School," which is further divided into three units covering school buildings, extracurricular activities, and school festivals. Within this chapter, various modes such as visual (illustrations, maps, etc.), verbal (written text), and aural (listening audio) are presented. These modes are thoughtfully organized to create engaging and effective content for teaching.

However, it's noteworthy that the teacher selectively utilized content from the chapter. Specifically, he focused on aspects related to school buildings, items within the school, extracurricular activities, and school festivals. These chosen elements were then adapted into his teaching media for teaching descriptive texts. Below is the example of content in the textbook:

Section 6 – Your Turn: Reading

a. Read the text 'Pipit Likes Pencak Silat'. See the Wordbox.

Pipit Likes Pencak Silat

Pipit likes pencak silat because it makes her move a lot. The practice is every Tuesday from 3 pm to 5 pm in the school yard. Before practicing, Pipit and all other students in pencak silat have some warming up activities. They have a coach called Pak Amin. In the practice, Pak Amin teaches the students to kick and punch. He also teaches how to block an opponent in a pencak silat match. Pipit joins pencak silat as an extracurricular activity in SMP Merdeka.

b. Look at the following personal schedules from Monita, Galang, Andre, and Pipit.

Day	Time	Activity
Monday	3 - 5 PM	English club
Thursday	3 - 5 PM	Scout
Friday	1 - 3 PM	Choir

Day	Time	Activity
Monday	3 - 5 PM	Science club
Wednesday	3 - 5 PM	Basketball
Thursday	3 - 5 PM	Scout

Figure 3. 2 Example of Textbook Content

Figure 3.5 shows the written text that can be used to teach in the textbook. It was categorized as descriptive text as it describes the character's favorable extracurricular. The descriptive text is short as the targeted learners are 7th graders. This was suitable with the teacher's students who are also in the 7th grade and the teacher's lesson plan that focuses on teaching descriptive text. While Figure 3.5 contains verbal modes (written text). Below is an example of visual mode in the textbook:

Section 4 – Viewing and Writing

a. Look at the Picture 5.12



Picture 5.12 School exhibition

b. Complete the chart based on the picture



Figure 3. 3 Example of Textbook Content

Figure 3.3 shows one of the visual modes in the textbook. It was an illustration of art festival in the school. Based on the descriptions, it aims to be used in viewing and writing practices. This is also useful and relateable for teaching descriptive text.

C. Teacher's Teaching Media

Media in language teaching encompasses technological innovations in language learning, mechanical accessories, and refined audiovisual aids (Brinton, 2001). She further categorizes media into two types: non-technical media, which includes whiteboards, and technical media, which involves audio players, radio, record players, CD players, and other similar tools. Thus, teaching media is the tool or technology that displays the teaching materials.

The documents that were analyzed beside the textbook (in this case, the main source of teaching media) were teacher's self-made learning media using various modes. Those were analyzed by using Bezemer and Kress (2008) in terms of modes (explained in the observation section) and transduction (related to the observation results from the classroom). It aims to articulate a set of rhetorical principles for multimodal communication in a particular setting, with any technology, medium, or social environment. An example of a teacher's learning media can be seen below:



Figure 3. 4 Teacher's Learning Medias

The teacher's learning media in Figure 3.3 were in the form PPT and interactive web platform. Additional tools were needed for presenting his learning media such as a projector and speaker. The teacher used a projector to show the digital content from the PPT presentations and the interactive online platform on a bigger screen, making it visible to all students in the classroom. The speaker system provided that audio sections such as narration or music were heard. Within those platforms, teachers inserted modes such as written texts, visuals, audio, and audio-visuals. Thus, the teacher's learning media were resourceful to be analyzed, especially the transduction and transformation within the learning media and also in the practices.

3.3.2 Observation

Observation is the practice of acquiring firsthand information by observing people and places at a research site (Creswell, 2014). In this research, the observation was conducted in the classroom. Classroom observations involved the recording of six meetings and capturing the diverse modalities employed by teachers during lessons using checklists and descriptions. The duration of one meeting was 70 minutes, it consisted of preparation/opening and the teaching process. The observations allowed the exploration of how the media from the EfN textbook were transformed and presented in various formats, such as images, writing, layout, speech, and moving images, among others. Moreover, how the learning media were used and the students' responses towards the teacher's modes. This research used observation lists that were constructed from Bezemer and Kress's (2008) theory. It aims to check the availability of modes in the classroom as well as the changes within them (transduction and transformation). The observation lists also provide additional notes which the researcher used to add other descriptions.

The second primary data set in this research was collected through observation to see the teacher, students, and their interactions regarding the teacher's uses of modes. Its process enabled the researcher to investigate in what way the learning media were transduced and transformed to the other modes as well as the changes that were conducted in the classroom. However, in this case, the teacher was the

main object that observed. Thus, the researcher observed and wrote the field notes during the lessons since observation aimed to seek information on the retrieved behavior in the setting (Cresswell, 2014). The field notes and observation checklists were written immediately in the classroom, however, it was added while the researcher rewatched the recorded videos to add missing points. The observation checklists and field notes were written in both English and Indonesian.

The observation lists were constructed mainly based on Bezemer and Kress's (2008) theory. To see and understand a set of modes that was used by the teacher in the classroom, there are several points to be considered. Table 3.1 below summarizes those points.

Table 3.1 Observation Checklist

Adapted from Bezemer and Kress (2008)

Modes	Checklist	Details	Notes
Visual	V	<p><u>Meaning and situated use:</u> The teacher provided visual media such as real-life images, illustrated decoration of his slides, video, and animated visuals (in motion).</p> <p><u>Medium:</u> PowerPoint on the screen, accessible interactive web (on the screen and students' phones), he also played a video on the screen to explain tenses.</p> <p><u>Design:</u> as the teacher taught Junior High School students, the teacher used variative colors in the interactive web, while on the PPT teacher used a plain template and highlighted the image that he wanted to discuss with the students. Then he used video to re-explain his explanation about tenses.</p>	<p>Visuals are used as decoration, enhancement, and translation. Students are allowed to use their own phone, it helps them to access the media and visuals easily.</p> <p>Video is used. Partly. The teacher gave explanation before played the video then also give explanation after the video. All of the substances are in line – transduction from verbal – audio visual – verbal.</p>

<u>Verbal</u>	V	<p><u>Meaning and situated use:</u> The teacher used the written verbal PPT and spoken verbal to initiate discussion about school festival pictures.</p> <p>He also used a whiteboard and spoke verbally to explain tenses that are used in writing descriptive text.</p> <p><u>Medium:</u> PowerPoint on the screen, whiteboard, speech.</p> <p><u>Design:</u> verbal is used both spoken and written to help the teacher explain the tenses and concepts, and also initiate students' engagement/discussion.</p>	<p>The teacher use oral and written verbal.</p> <p>Written verbal are in the form of writing in the whiteboard and text in the slides.</p> <p>The content he wrote on the whiteboard is the form of re-explanation from the content in the screen.</p> <p>The teacher attempted to help students understand more with something familiar to them.</p>
<u>Audio</u>	-	<p><u>Meaning and situated use:</u></p> <p><u>Medium:</u></p> <p><u>Design:</u></p>	
<u>Others</u>	V	<p><u>Meaning and situated use:</u></p> <p><u>Medium:</u></p> <p><u>Design:</u></p>	<p>Added gestural when explaining using verbal and visual.</p> <p>The result of students who asked the GIF in the teacher's slide. He instantly, talk about the GIF and did the gesture to make the students understand that the GIF was portrayed as mental action.</p>

Regarding the descriptions of the details: (1) Meaning and situated use: Focus on the potentials and limitations of the medium being used, the agency of sign makers, and the significance of all sign-making actions; (2) Medium: It has both a physical and a social dimension. Medium is the physical substance in and through which meaning is realized and made accessible to others. E.g. textbook, web, film, newspaper, classroom, etc; (3) Design: It is the practice of gathering information about the meaning and medium to portray the teacher's purposes and interests based on the characteristics of the audience.

3.3.3 Interview

In this research, the interview is also used to complete the primary data. The interview technique discovers information that allows the participants to express their interpretation without any forces from the researcher's perspective (Creswell, 2014). The participant's point of view enriched the data and validated some decisions he had in preparing his teaching teaching in the classroom.

The interview was conducted in the middle of the observation phase, after the third meeting. It was also aimed to ask regarding the teacher's practices from the previous meetings. During the interview, both the researcher and teacher used English and Indonesian language. The researcher prepared several questions which led to other unplanned questions to dig deeper into his perspectives and answers. Thus, this research used semi-structured interviews. This type of interview establishes a basic structure or framework for the discussion while allowing the interviewee to openly share their opinions and ideas (Berg, 2007; Cohen et al., 2007). By using this type of interview, the researcher provided key topics and structure, yet was open to deeper information that was beneficial to enrich the data. The interview prompts were adapted from Sakulprasertsri (2020). The framework of the interview was chosen as Sakulprasertsri (2020) also explored the teachers' practice and perspectives on their integration of multimodality into EFL classrooms. Some adjustments were made as this research has a specific focus on the multimodality field: the process of transduction and transformation of modes. Table 3.2 below shows the categories and questions for the interview.

Table 3. 2 Semi-structured interview

Prompts were adapted from Sakulprasertsri (2020)

No	Categories	Questions
1	Exploring teacher's knowledge	<ul style="list-style-type: none">· Have you ever heard the term "modes" in English language teaching and learning?· If yes, can you explain what it is? If not, can you define this term in your own words?

2	Planning and designing	<ul style="list-style-type: none"> · What modes would normally you use in your English classroom when you design your English lessons? Why? · What are your considerations when designing and applying your learning media? Why? · Are there any source media that you used as guidelines in making your learning media? Why? · What are the changes in modes from the source media to your learning media? · What considerations for such changes?
4	Classroom practices	<ul style="list-style-type: none"> · Which modes engage your students the most? · And why do you think so? · Besides your learning media which contain several modes, do you use other modes to enhance the meaning of the source media? (e.g. from visual to help the students learn better, you add gestural and verbal explanations). · Why do you do that? · What are the benefits of such practices?
5	Challenges	What are the challenges of changing from one mode to the other in your teaching planning and practices?

3.6 Data Analysis

Interviews, document analysis, and observational data were all used to collect information that was then analyzed to provide information about the teacher's modes in the classroom with sub questions: (a) what modes are transduced in designing lesson and classroom practices; (b) what modes that are transformed in designing lesson and classroom practices. The following sections look over the data analysis for the current study in further detail. The primary data are document collection and observation. For the secondary data, interviews were conducted to supplement the primary data.

There are three data from this research (1) data from documents; (2) data from observation; and (3) data from interviews. Those data were analyzed to answer the research question: How are modes used by an English teacher to teach 7th graders: (a) What modes are transduced; (b) What modes are transformed? In addressing the research question, the data analysis is conceived as an intricate interpretive exercise, where qualitative data is systematically scrutinized to unveil patterns and themes in the utilization of modes within the classroom context.

In tandem with the document analysis, observational data offer real-time glimpses into the classroom dynamics. Observations yield critical information regarding the

pedagogical practices associated with mode implementation. This data strand facilitates the identification of transformed modes, shedding light on how these resources are creatively reimagined and harnessed within the instructional environment. Furthermore, interviews with the English teacher serve as a rich source of his perspectives. It provides a window into the teacher's pedagogical rationale, decision-making processes, and perceptions regarding the transduction and transformation of modes.

It is pertinent to note that, in this section, we offer a partial illustration of data analysis. The comprehensive rendition of this analysis is presented in the next chapter.

Documents Analysis

The data from documents were analyzed using content analysis. Content analysis is a valuable method in qualitative research, as it allows researchers to systematically analyze textual data and uncover patterns, themes, and meanings embedded in the documents (Creswell, 2012). It was employed to examine the teacher's lesson plans and learning media, including the textbook and teacher-generated resources such as PPT and interactive web platform.

Through the document analysis, specific chapters of the EfN textbook, lesson plans, and teacher's learning media that were used in teaching were analyzed using variative frameworks which will be explained in detail below. This examination provided a deeper understanding of the semiotic representations present in the media and how they were transduced into other learning resources. Here are the details of each document:

Data Analysis from Lesson plan

In qualitative content analysis, 'situations, settings, styles, images, meanings, and nuances are key topics' (Altheide, 1987, p. 68), and the procedural approach involves simultaneously coding raw data and creating categories that capture essential elements of the document's content, as outlined by Merriam (2009). The

data from the lesson plan was obtained using content analysis from Neuman's theory (2013) which stated that content analysis is a method of assessing the content or details and symbols found in written documents or other forms of communication media (for example, school textbooks, paper, etc). To do a content analysis, we first choose a body of media to be analyzed (for example, school textbooks) and then devise a system for capturing certain features of its content. Content analysis is most commonly used for descriptive purposes. Thus, the content analysis here aims to describe the teacher's lesson plan.

The data from the teacher's lesson plan was analyzed using content analysis in terms of its components which cover aims, students' objectives, and learning media (Harmer, 2007). The teacher's lesson plans served as a crucial source of information to understand the instructional strategies and decision-making processes behind classroom teaching. By analyzing the lesson plans, the research also aims to identify the types of modes (such as visual aids, text, audio, gestures, etc.) the teacher intended to employ during the teaching process. Moreover, any differences between the planned modes and the actual implementation in the classroom were noted, providing insights into the teacher's adaptability and responsiveness of the dynamic learning environment. The table below shows the lesson plan analysis:

Table 3. 3 Lesson Plan Analysis

Meeting	Objectives	Targeted Skills	Learning medias	Modes
1. Building Knowledge of the Field	Students are able to have vocabulary for describing school	Listening, Viewing, Speaking, and Representing	Power Point	Aural, visual, verbal
2. Modeling of the Text	Students are able to construct sentence in descriptive text	Listening, viewing, speaking, and representing	Interactive web: https://view.genial.ly/64104465c5d01c0010accd8e/interactive-content-sentences-escape-room-1	Aural, visual, verbal
3. Modeling of the Text	Students able to construct paragraph in descriptive text	Listening, reading, speaking	Interactive web: Interactive gamified web: https://view.genial.ly/641ae9f96429540010f922da/interactive-content-paragraph-deconstruction-breakout	Visual, verbal

4. Joint Construction of the Text	Students are able to write descriptive text collaboratively	Listening, viewing, representing and speaking	Interactive web: https://view.genial.ly/646388e7c79f53001838ef33/interactive-content-media-remembering-breakout?from=editor Microsoft Word	Visual, verbal
5. Joint Construction of the Text	Students are able to write descriptive text collaboratively	Listening, viewing, writing, and representing	Microsoft word, and interactive projector screen	Visual, verbal

Table 3.3 portrays the lesson plans which were created by the teacher. He used Genre-Based Approach to teach descriptive text. He included several targeted skills in the lesson plan: listening, viewing, speaking, reading, writing, and representing. Particularly, the progression of the lesson plans suggests that while various skills were cultivated throughout several stages of the Genre-Based Approach, writing emerged as the concluding target skill, reflecting the teacher's intentional sequencing of instructional activities.

Transduction Analysis from Textbook and Teacher's Teaching Media

Data from the textbook and teacher's teaching media are in the form of a chapter that was taught to the students by the teacher. It is analyzed using Kress and Bezemer (2023) MDA (Multimodal Discourse Analysis) theory in terms of the how content of the media is conveyed and what modes are used in the textbook. MDA, focusing on the theory and analysis of semiotic resources and the resulting semantic expansions in multimodal phenomena, emphasizes the central role of 'inter-semiotic' or inter-modal relations, known as inter-semiosis, in multimodal research (Jewitt, 2014; Kress & Bezemer, 2023). It is a method of discourse analysis (DA) that focuses on how meaning is formed by combining several channels of communication rather than only language (Fairclough, 1997). As outlined by O'Halloran (2011), MDA extends beyond the study of language alone to examine language in combination with various resources such as images, symbolism, action, music, and sound. He added that, MDA encompasses the design, production, and distribution of multimodal resources including modes in social settings. The selection and emphasis on specific aspects of modes are reflections of work done

in response to social considerations, focus, interest, and needs (Kress & Bezemer, 2023).


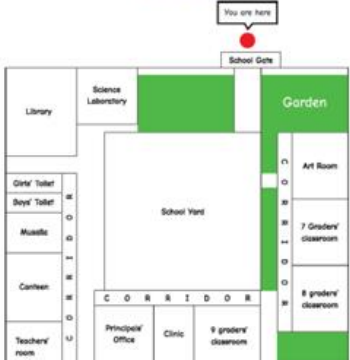









Individually or in combination, distinct modes provide their affordances and restrictions (Chalibonena, 2016). They also offer analytical obstacles in terms of the nature of the medium, the scope and depth of analysis, and the complications that arise from the integration of modes across the medium (O'Halloran & Smith, 2010).

The consideration of mode and agency is vital in Multimodal Discourse Analysis (MMDA), posing questions about whose semiotic work is involved and which modes are employed in that work (Kress & Bezemer, 2023). In the context of learning and teaching, understanding whose semiotic work is involved and the modes utilized is crucial as knowledge only takes shape when it is materialized in a specific mode, making it accessible (Kress & Bezemer, 2023).

With such an explanation, Kress and Bezemer (2023) theory was chosen as it is related to the aims of this research. Thus, the analysis of the textbook was intercorrelated with the analysis of the teacher's lesson plan and learning media. The analysis of each medium is limited since the highlight is the transduction and transformation process. Below is the sample of multimodal discourse analysis from the selected textbook content to teacher's teaching media:

Originally, in the textbook, there were several parts aimed at practicing speaking skills. When the teacher read the textbook, he decided to select the content that was suitable according to his lesson plan and finally adapted it to his learning media with different media and targeted skills. Regarding the modes, most of them are the same. The different mode is aural; the teacher added audio in his lesson plan and learning media as he planned to also practice students' listening skills. Thus, the changes in the modes by the teacher can be included as his transduction. The details can be seen in Table 3.3 below:

Table 3. 4 Multimodal Discourse Analysis from Selected Textbook Content to Teacher's Teaching Media

No	Selected Textbook Content	Teacher's Teaching medias
1.	<p>Section 6 – Your Turn: Speaking </p> <p>Asking for and Giving Directions</p> <p>a. Look at a school map at Picture 5.6.</p>  <p>Picture 5.6 SMP Merdeka's map</p> <ul style="list-style-type: none"> • Objectives: asking and giving directions. • Targeted Skills: speaking and listening. • Modes: visual, written text, speech. 	<p>CAN YOU TELL ME WHICH ROOM IS IT BASED ON THESE CLUES?</p> <ul style="list-style-type: none"> Spacious  Equipped with facilities Clean  Either fun or boring place Organized  A place to know new things  <ul style="list-style-type: none"> • Objectives: describe the school rooms. • Targeted Skills: speaking and listening. • Modes: visual, written text, speech.
2.	<p>Section 5 – Fun Time: Speaking </p> <p>Treasure Hunt</p> <p>Now, let's play treasure hunt. Make a team of five or six.</p> <p>Tools:</p> <ol style="list-style-type: none"> Paper A pencil or a pen A book or a pencil case (for the treasure) <p>How to play the game:</p> <ol style="list-style-type: none"> Put something (a pencil case or a book) as the treasure. Choose any room in school and you can put it in front of that door. You can also stick your treasure on the door of a room that you chose or you can also put your treasure in a flower pot in front of the room that you chose.  <p>Picture 5.2</p> After that, write two clues using direction. <p>For example:</p> This is your first clue. To find the second clue, go outside the classroom. Go straight ahead until you walk past the library. Turn right. The second clue is in front of the teachers' room.  <p>Picture 5.3</p> <p>Write each clue on a piece of paper.</p> Put the second clue at the place based on the first clue. Give the first clue to your opponent's team. Your opponent must find the second clue using the directions from the first clue. After they find the second clue, they  <p>Picture 5.4</p> <ul style="list-style-type: none"> • Objectives: play treasure hunt and practice speaking. 	 <ul style="list-style-type: none"> • Objectives: describe the school rooms through an escape room game. • Targeted Skills: speaking and listening.

	<ul style="list-style-type: none"> • Targeted Skills: speaking and listening. • Modes: visual, written text, speech. 	<ul style="list-style-type: none"> • Modes: visual, written text, speech, audio.
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As shown in Table 3.3 above, it reveals that the teacher used the textbook as source media. However, he designed the learning media based on his objectives to teach descriptive text. The lesson plan described above is the first teaching session. Based on the approach used by the teacher, was Building Knowledge of the Field. At this stage, he attempted to introduce the main topic of the school (buildings and things in the school). In this way, he provided the students with a foundational understanding of how to describe objects and concepts related to their environment, making the learning experience more relatable.

His objectives seemed different from the objectives in the textbook. In the first section of the textbook, school buildings/rooms are aimed to help students practice speaking and learn about direction. However, the teacher adapted the objectives to suit his teaching goals, which were aimed at focusing on teaching students some vocabulary and introducing descriptive concepts.

From the sample above, the teacher's decision to use the textbook as source media reflects his consideration of social factors, focusing on the needs and interests of his students. The adaptation of objectives in designing the learning media demonstrates the teacher's agency in determining the focus of the lesson, aligning with his teaching goals. The selection of the "Building Knowledge of the Field" in the first meeting indicates a deliberate choice in addressing the needs of students and making the learning experience more relatable by introducing the main topic of the school. Here, the teacher's semiotic work involves a conscious decision-making process, reflecting the mode of adaptation and modification in response to his instructional objectives.

Observation Analysis

This research used observation lists that were constructed from Bezemer and Kress's (2008) theory. It aims to check the availability of modes in the classroom

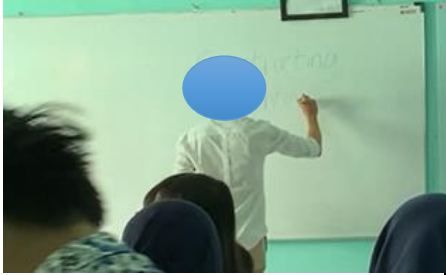
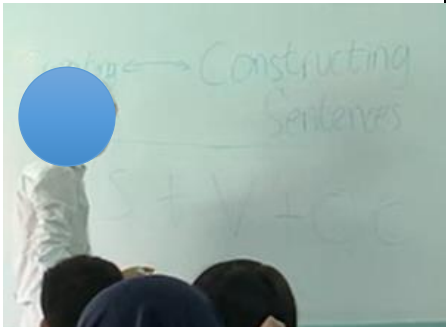


as well as the changes within them (transduction and transformation). The observation lists also provide additional notes which the researcher used to add other descriptions. The checklist informed the modes employed by the teacher to answer the research question and confirm the existence of transduced learning media from the textbook (also the descriptions). Not only using checklist, the researcher also recorded the teaching session.

For the recording, the researcher made the transduction and transformation table that was done by the teacher for the overall report. After that, the researcher chose one video where transduction and transformation were done more often in one meeting than the others to be analyzed deeper using Bezemer and Mavers (2011)'s Multimodal Transcription framework (*transcription as 'transduction'*). 'Translations' between (ensembles of) modes are constantly made while describing social interaction in transcripts. Researchers come to see things differently after remaking footage as a multimodal transcript. Transduction changes are not only necessary, but it is precisely the re-creation of observed activity in a transcript that might lead to discoveries. As a result, a social semiotic viewpoint on transcription challenges differences between "description," "analysis," and "interpretation."

In addition, several videos were recorded during the observation. It was aimed to see the process of transduction and transformation in the classroom, here are the details in Table 3:

Table 3. 5 Multimodal Discourse Analysis Transcription on Transduction in the Classroom

Written Text	Visual	Speech
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<p>The teacher wrote “constructing sentence” on the whiteboard.</p>		<p>T: Do you know what is constructing a sentence? Ss: Don't know. No T: We arrange words so that it can be a complete sentence. ... T: We will learn to make sentences so that we can play a web game.</p>
<p>On the white board, teacher wrote present simple's formula.</p> <p>S+V+O</p>	  <p>Opening video in the slides about Present Simple.</p>  <p>Teacher played the video, which then stopped in several minutes, to add explanation (beside from the video), and he</p>	<p>*The video played *Stopped</p> <p>T: So this is the first form, <i>ada S+V yang tadi kalian tulis formulanya. Lalu kalau pakai do di depan, artinya untuk bertanya, kalau pakai not itu negative. This is only a brief discussion.</i></p>

	<p>added gestural to show what he already explained before on the whiteboard.</p>	
<p>The teacher explained what already stated on the video to make sure the students understand the concepts and also gave an easy way to understand the sentence formula.</p>	<div data-bbox="711 371 1161 663" data-label="Image"> </div> <p>The teacher stopped the video. Then he started to explain using spoken and written verbal on the whiteboard.</p> <div data-bbox="711 837 1059 1180" data-label="Image"> </div>	

Transduction that happened in the classroom was not only from one mode to another but also found changes from a digital written text – verbal – gesture – visual. The process seemed natural and unplanned. The modes that were available first in the slide were verbal (written texts) and visual. Nevertheless, the application of modes in making meaning was spontaneous.

In the teaching process, social considerations, focus, interest, and needs are evident in the teacher's semiotic work and the modes employed. Firstly, the teacher's decision to write "Constructing a sentence" on the whiteboard reflects a focus on the students' needs and the objective of enhancing their descriptive text skills. The use of a slide with audio-visual content demonstrates the teacher's consideration of varied modes to cater to different learning styles and interests. The incorporation of a video, supplemented with explanations, gestures, and verbal communication, reflects the teacher's awareness of social considerations and the diverse needs and

interests of the students. The process of transduction is evident as the teacher adapts and combines various modes, including written text, audio-visual content, video, gestures, and verbal communication, to convey the concepts of constructing sentences in the present tense form. This demonstrates the teacher's agency in utilizing multiple modes to address the diverse needs, interests, and social dynamics of the classroom.

Interview Analysis

Data collected from the interview is crucial as it revealed the teacher's perspectives in designing, organizing, and applying his learning media from the source media (in this case textbook). Additionally, the semi-structured interview with teacher offered unique perspectives on their knowledge, planning and designing process, classroom practices, and challenges regarding their modes of use. Semi-structured interview prompts were adapted from Sakulprasertsri's (2020) surroundings the teacher's knowledge of modes, planning and designing, classroom practices, and challenges in designing and using various modes in learning media.

Collecting data from the interview started by transcribing the interview recording, and then the transcription was filtered to separate trivial events and important data (Patton, 2002). The results were categorized by using thematic analysis (Merriam, 2009; Krippendorff, 2004). By analyzing data from these various sources, the research aimed to answer the research questions and explore innovative approaches to teaching and learning. The findings from the data analysis would contribute to a deeper understanding of how the teacher practiced transduction and transformation in planning and teaching his learning media.

The data needs to be filtered and labeled with coding. The coding process aims to make sense of text data by segmenting it into text or picture segments, labeling the segments with codes, examining codes for overlap and duplication, and collapsing these codes into broad themes (Creswell, 2008). Thus, to analyze the data from interview, here are the phases of coding:

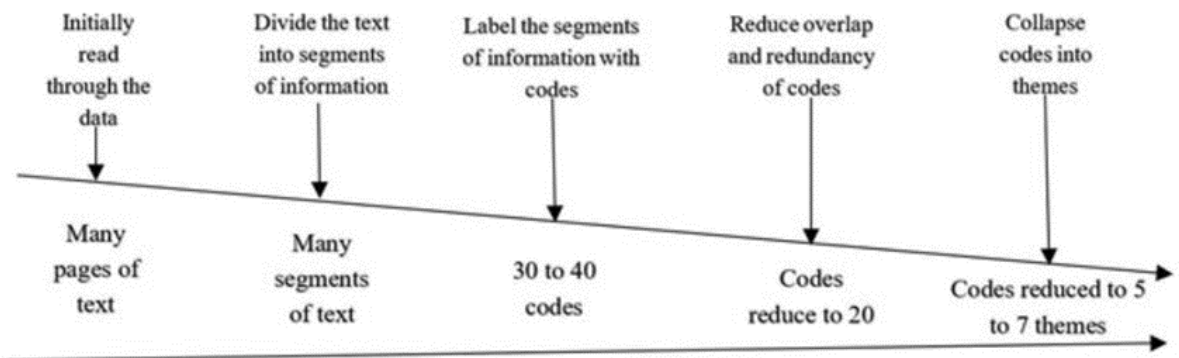


Figure 3. 5 A Visual Model of the Coding Process (Cresswell, 2008)

Figure 3.4 illustrates the process of filtering the interview transcripts from numerous pages of text. It depicts the transformation of the transcripts into text segments and subsequently into several codes, culminating in the saturation of codes into a few key codes. Additionally, this research follows the open, axial, and selective coding data analysis steps as outlined by Strauss and Corbin (1998, cited in Creswell, 2008). During the open coding phase, the researcher categorizes information, justifying each categorization with evidence. This is followed by the structuring of categories into a model during the axial coding phase (Creswell, 2008).

Table 3. 6 Process of transition from open codes to axial codes

Open Codes	Axial Codes		Example
	Categories	Properties	
Mode, learning objectives, students' needs	Selecting modes within learning media	Efforts conducted by teacher to use certain modes in his teaching	An English teacher explained the selection of modes in his teaching. <i>I use <u>audio only</u> to teach <u>listening</u>, sometimes I add <u>visual</u> too. And the question on why, it depends on the <u>learning objectives</u> and <u>students' preferences</u>.</i>

Text, transduction, meaning and teaching media	Selecting images	Discuss how the meaning in the written text aligns with the images.	An English teacher gave an analogy on how he selected appropriate images for written text. <i>According to the written description, <u>it is a small black cat. It is impossible for me to show a big yellow cat.</u> How to choose the image based on the content in the text.</i>
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After transforming open codes to axial codes, selective coding was done by integrating all of the correlated categories in the axial codes into one main category. In comparison to axial coding, selective coding created a bigger category. The following tables provide examples of themes created throughout the coding process of the interview:

Table 3. 7 Generating themes

Open Codes	Axial Codes	Selective Codes	Themes
Mode, learning objectives, students' needs	Selecting modes within learning media	Considering students and educational goals	Practices on using modes
Teaching media, content	Highlighting relateability of content in teaching media		
Text, transduction, meaning and teaching media	Selecting images that appropriate to one mode	Understanding principled modes	
Affordances and limitation	Exploring each mode's potential and limitation		
Descriptive text, structure, grammar	Focusing on concept of descriptive text and text's structure	Establishing the genre-based approach	Practices on using teaching descriptive text

Building knowledge, scaffolding	Teaching based on the stages of GBA		
Adaptation, independent, classroom practices	Actively adapting in classroom practices	Dealing with challenges in the classroom	

3.7 Concluding Remark

This section has discussed the research methodology employed to analyze the data of the study. It covers a brief discussion of the method that has also been reviewed in this section.