A Multimodal Analysis of English Textbook for Vocational High School: A Study of English For Specific Purposes

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Abstract. As part of English for specific purposes, English books for vocational high schools in Indonesia have been widely studied. Many previous researchers have studied need analysis in English books for Vocational High Schools, while studies related to a multimodal approach are still lacking. Therefore, a study of visual and verbal components in the textbook is conducted in this research. The data is taken from multimodal teaching materials in the English book "Forward: for Vocational High School Grade X" and the textbook user. The data are selected from the images along with the text. Miles and Huberman's perspective on the qualitative method is used in the study. Besides, A combination of Grammar visual design by Kress and Van Leeuwen and Systemic Functional linguistics by Halliday, as the multimodal framework, identifies elements of multimodal existing in the textbook and investigates whether the textbook images assist students' understanding of the text. As the result of the study, three patterns of visual elements and ideational functions of verbal elements are revealed in this study. Also, pedagogical benefits are given to the presented visual elements to understand the text. Nevertheless, the analysis of visual images in the textbook and the responses of teacher and student show that the colour and size of visual elements should be improved.

Keywords: ESP, multimodality, grammar visual design

1 Introduction

Vocational high school is one of the educational institution in Indonesia which focus on preparing the students' careers based on practical activities or occupation. It is different from the usual scientific field education. There are several specific concentrations of various majors in vocational high school, such as accounting, machinery, vocational agriculture, chemistry, electronics, tourism, and other specializations. ELT materials can commonly be considered both as targets and sources of learning culture (Stec, 2018) [16]. They can be used to help students

in preparing to learn English in a different context and finding cultural identity in language programs.

In vocational high school, ESP is called English for Vocational Purposes (EVP) (Widodo, 2014) [18]. Belonging to English for Specific Purposes, English In VHS which is purposed to unite the particular learners' needs can be described as an approach to language teaching. This is in line with the statement by (Paltridge & Starfield, 2014) [15] that ESP is a teaching and learning process of English as a foreign or second language in a particular demand. The language used in ESP should be effective and efficient in receiving and conveying messages for work or professional objectives (Bhatia et al., 2011) [2]. Students' language requirements will be decided solely by the language they utilize in their line of work. As a result, one of the most critical parts of ESP is the learning material.

Everything which can be used to facilitate learning is referred as learning material. In teaching and learning process, the textbook is widely known as the main resource of knowledge in the classroom. Brown (2001) [4] added that in supporting language instructions, the most common obvious and common form of material that can be used is textbooks.

A textbook according to Tiwari (2005) [14] is an instrument to achieve the aims of learning, to assistant teachers in preparing assignments, materials, and managing the class, and to be students' guidance in the classroom and at home. As the result, it is critical to create an adequate textbook for improving and assisting students in learning a certain language, particularly in learning language. Liu and Qu (2014) [9], mentioned that multimodal language textbooks have a high correlation with the efficiency and effectiveness of teaching and learning. Since the textbook is designed to assist student to learn material alone of with teacher's guidance, a good textbook will support increasing students' interest and motivation in learning language. As a solution, a multimodal textbook can be created to help students in the process of making through a combination of visual and multimodal.

A multimodal approach addresses the bias of focusing on only one mode of communication - language - by drawing attention to the particular and distinct communicative "activity" of other modalities. It places what is written or said alongside all other modes of communication - image, gesture, gaze, body posture, space, and so on - and begins with the assumption that they all contribute to meaning. To continue, a mode is a semiotic resource for producing meaning, such as image, writing, layout, music, gestures, voice, moving picture, soundtrack, and 3D objects (Kress, 2010, p. 79) [8]. Each mode has a unique potential for meaning creation.

Several studies on vocational high school textbooks have been carried out, many previous studies have examined the need analysis in textbooks, such as those which carried out by (Arianti et al., 2018 [1]; Indraawati et al.,2021 [6]; Syakur et al.,2020 [13]) but research number on multimodal in indonesian vocational high school textbooks is still low. Therefore, in this study, researchers will examine the multimodal visual and verbal in English textbooks used in vocational schools.

2 Literature Review

2.1 Social Semiotic

A social semiotic is a field that analyses human actions in specific social and cultural contexts and considers meaning-making as a social practice. Signs, also known as semiotic resources in semiotics, are the core idea of semiotics. Speech, writing, and image-making are not the only semiotic resources. "Almost everything we do or make can be done or made in different ways, allowing, at least in principle, to articulate different social and cultural meanings" (Van Leeuwen, 2005: 4) [17]. Social semiotics, also known as semiotic modes, focuses on all sorts of social meaning-making behaviors, whether verbal, visual, or aural. The term modes is often used to describe multimodality.

Languages emerge, according to Halliday (1978) [5], as systems of meaning potential or assets of resources that determine what the speaker can achieve with language in a given social environment. For example, the grammar of the English language is a system arranged for three goals (metafunctions). Due to the growing prominence of sound and visual images and how communication modes are mixed in both traditional and electronic media, social semiotics is late enhancing this common system by going further than linguistic. Leeuwen extended Halliday's theory by developing new language structures for various semiotic modes. With meaning produced by the semiotic formed and variable collections of available resources.

2.2 Ideational Function

The phenomena of things (living and non-living, abstract and concrete), what is going on (what the things are or do), and the conditions surrounding these happenings and doings are covered by ideational functions. The area of discourse concerning the topic of the text influences the ideational functions, resulting in sentences performing as representations (Halliday, 1978) [5]. The experiencing function and the logical function are both ideational functions. Participants are individuals or entities who participate in the process. Verbalized processes connect participants. The doer 'of an action, the experiencer 'or perception 'of a condition or sensation, the sayer 'of something, and the carrier 'of an attribute were all active participants. In passive roles, participants might be someone or something impacted by, affected by, done to, or received by the processes—the labels of participants change as the process changes. Circumstances is another part that answers the when, where, why, and how of the process described in the text. Accompaniment illustrates the situation of being with or without something or someone.

2.3 Visual Grammar

Visual grammar, according to Leeuwen and Kress, can accomplish Halliday's three main functions through the following patterns: Representational, interactional, and compositional patterns. The representational pattern indicates the resources of visual used to convey conceptual relationships and interaction between the individuals, things, and places presented in the image, and links to 'ideational' metafunction by Halliday. Interaction patterns are defined by Halliday's interpersonal metafunction and relate to the resources that form a relationship between the picture maker, the persons portrayed in the image, and the viewer. Patterns of composition, corresponding to Halliday's textual meta-function, concern how interactional and representational patterns cohere into meaningful wholes. All of these patterns are realized by

the elements in the visual pictures. Certain aspects are linked to specific patterns in the image and the viewer. Patterns of composition lead to how representational and interactional patterns cohere into meaningful wholes, which correspond to Halliday's textual meta-function. All of these patterns are realized by the elements in the visual pictures. Certain elements are linked to distinct patterns.

3 Method

3.1 Research Design

The research method employed in this study is the descriptive qualitative method. According to Monsen, E.R., and Horn (2008) [11], "descriptive qualitative is an excellent technique to obtain information used in formulating hypotheses and suggesting associations" (p.5). Coding, data reduction, and interpretation are all part of data analysis. This method was appropriate for this study because data was collected, categorized, and analyzed. The results were then utilized to interpret different texts used by teachers in the classroom in the final process.

3.2 Participants

This research was carried out at one of vocational high schools in Lampung Tengah Regency. There were sixty people who took part in this research, sixty students, while the other two were the teacher's response. As part of the data collection technique, document collection, questionnaire, and interview were used in this process. As the main subject, The Forward for English textbook was analyzed while the data received from Students and teachers were simply to be aware of their perspective on how to use the book.

3.3 Data collection and data analysis

To elicit meaning, gain insight, and develop knowledge, data must be evaluated and interpreted (Corbin & Strauss, 2008 as referenced in Bowen, 2009) [3]. The document was gathered from the selected textbook, specifically the reading passages images along with images The second set of data was gathered via interviews and questionnaires. While the questionnaire is sent to both teachers and students, only the teacher is interviewed. The data were divided into two steps for analysis. First, the visuals and texts from the textbook are evaluated using Halliday (1978) [5]. And the findings of the interview and questionnaire were reviewed in order to confirm the hypothesis that visuals can aid in the comprehension of text.

4 Findings and discussions

After exploring the textbook, it is revealed that it contains two modes, which are visual and verbal. The visual element is the image presented along with the picture, while the verbal elements are the reading passage. The visual elements are determined based on picture patterns that produce meaning. Meanwhile, The verbal elements are investigated using one of Hallyday's metafunction theories, an experience function, to discover the process, participants, and conditions. Under the ideational function of Halliday's systemic functional linguistic, the verbal process element in this textbook covers process, participants, and circumstances.

There are several processes found in the textbook, such as material, verbal, mental, behavioral, relational, and existential process. The relational process is the dominating process (40%), followed by the material process (24%). Participants in the mental process account for 36.5 percent of the textbook participants, whereas the most dominating phenomenon accounts for 63.5 percent. Participants in relational processes include relational identifying and relational attributive processes, which have the same percentage, 50 percent each. In the behavioural process, the participants consist of two behavers. The Participants in the verbal process are 62.5 percent behaver, 37.5 percent verbiage and in the existential process found is present.

Since the visual features discovered include the pattern of representation, the pattern of interaction, and the pattern of composition, which is described more in Figure 1

Figure. 1. Image from a dialogue in the Forward for vocational high school grade X: introducing yourself.

Source: Forward for vocational high school grade X. (2014, p. 4)

The picture displayed allows the learner to identify the key characters, their interactions, and the situations. The two major characters, interacting, are presented in a specific social environment, which appears to be an office. The students may deduce this by evaluating the representation, which focuses just on two persons with no additional background participants. The participants are standing up and staring at each other, and their motions, which are mostly portrayed by their shaking hands and facial expressions, indicate that they are actively engaged in a dialogue.

Identifying the representational picture, it is safe to say that they imply a transactional reaction. It shows that a vector emits from the man eyes on the left side toward the man on the right side and vise versa. They're shaking hand and smile each other may gesture that they have a pleasant with each other. Furthermore, the man on the right side utters "Hello, my name is Brian, what's your name?" , "Tamada" the man on the left side replied. Looking at the qualities of the participants can also help viewers comprehend who these people are and what activities they are taking. Salience is also found as a compositional feature in the photograph, reflected by the participants' positioning in the front (medium shot), assembling the environment and contextualizing the tale.

Aside from being shown in a medium shot, which gives them more visibility in the action, the primary participants are depicted in black and white, which makes it less appealing. As a result,

viewers may notice that the focus of the dialogue is on the two persons in the front, and the image does not include any other participants. The visual analysis of Image 1 as a sample demonstrates that the interpretation of the picture supported by the three metafunctions may aid students in understanding the written content.

Perceptions of students and teachers regarding the presented image and text to aid comprehension of the reading passage. This study includes seventy students from. Sixty are from learners, while 2 are from instructor responses. There are three sections to the questionnaire. The first category considers if the image displayed enables learners grasp the text. The second question is if the image given entices readers to read the content. Finally, what aspects of the displayed image should be improved? In the first and second situations, students respond positively to the visuals offered since they assist them understand the idea of the text and the photos are quite interesting.

The following comment concerns students' and instructors' perspectives of what should be polished in the image. The researcher suggests four aspects that could be improved: color and sharpness, size, color, and size, and the position of the picture in the book. The replies are shown in Table 1. The interview results support the questionnaire finding that the visuals have pedagogical value. The interview results demonstrate that the supplied graphics have instructional value in understanding the texts. This book was used by the teachers in the tenth grade of vocational school for two years. The pictures appear in nearly every student exercise and reading passage. According to the teacher, the book helps learners comprehend the content by providing context.

Table 1. Students' & teachers' response of the picture improvement

Size and framing	Colour and size	Picture's position	Colour and sharpness	
7.2%	49.1%	13.7%	34**%**	

"I ask my students to look at the picture that is displayed with the text and then assume what the text will describe. It assists students in developing the text's context. For example, in chapter 1, two persons hold a chat in the office, indicating to my students that the discourse will be about business."

Furthermore, the color of the book is important in drawing students' attention in reading the material. Even if it is frequently required for young learners, adult learners from this vocational school have indicated that the more vivid image fascinates them.

"The visuals must be interesting; even I, as the instructor, will be drawn to the text more if the images are colorful; it may also pique students' interest in reading the material, and it won't tire them."

According to the interview, the teacher is aware of the requirement for high-level multimodality in the textbook. It is a method of capturing the attention and interest of kids. Furthermore, the textbook will increase the pupils' willingness to study English. The results of the questionnaire and the teacher interview show that visuals are significant in capturing students' interest and attention to the text in the educational setting. It reveals that visuals effectively aid students by

captivating students and making it easier for students to understand the context of the passages provided.

4.1 Discussion

The verbal and visual elements of the Forward for vocational high school grade X textbook were examined, and some conclusions were drawn. This study focuses on the verbal parts of the reading passage while assessing the visual portion by utilizing Hallidey's (1978) [5] ideational meaning. The results reveal that the verbal portion completed Halliday's criterion for good writing in terms of ideational meaning (1978) [5]. Text is a functional linguistic tool in its environment. By incorporating the text's ideational meaning, it is crucial to offer its clear meaning. Even though the material process predominates, it demonstrates that the students interpreted the text as including clear physical action of what happened and what is done (Halliday, 1978) [5].

While the dominating relational process suggests that the students may identify the situation that occurred in the text so that they can better understand the text. The visual analysis of pictures retrieved from the Forward for vocational high school grade X revealed that the three metafunctions provided by assist the image interpretation. According to Leeuwen (2005) [17], representational, interactional, and compositional meaning can aid students in interpreting the transcribed or written discourse accompanied by the offered visuals.

Multiple cues, such as the act of shaking hands, countenance, and participants' stare at the position of the characters inside the image, give evidence that will help students grasp the textual material supplied within the image. The results of the questionnaire and interviews suggest that the graphics given with the text help students commprehend the passage in a pedagogical way. It mostly aids students in developing context before reading the material. This conclusion is corroborated by who claimed that visual resources have the potential to improve language learning since they serve as communication tools and influential factors in the construction of students' knowledge about the actual world.

The result demonstrates that the visuals help students perceive the text in a pedagogical way. Images engage students' interest and motivate them to learn the language in a more reactive manner, developing students' attention and understanding, lowering cognitive load, inspiring students to study, and relating students to acquire information in a meaningful way.

Nevertheless, the composition and salience pattern in terms of color and sharpness are lacking because the image exhibited is merely black and white. To draw students' attention and encourage them to read more text, Color and sharpness are important (Olurinola & Tayo, 2015) [15].

5. Conclusion

First, the English textbook content in Chapters 1-11 is divided into six process kinds. The relational process dominates with 40% and the material process with 24%. The conceptual meaning described in the Forward for vocational high school grade X in chapters 1-11 is understandable. The relational and material processes were prominent because, presumably, the texts under examination belong to a procedural genre that strongly relies on material processes.

Second, the picture study has proven Leuween's theory, which contains, a pattern of interaction, a pattern of representation and a pattern of composition. The act of shaking hands, countenance, and participants' stare at the position of the characters in the image give evidence that will help students identify the textual material presented inside the image. It is also reinforced by the questionnaire and interview results, which reveal that the graphics and words offered help students interpret the passage in a pedagogical way.

Nonetheless, particularly in terms of the picture's color and scale, there is a lack of composition pattern. There should be some improvement in terms of visuals. It should be more colorful rather than monochromatic ones, so that will stimulate students to read the reading text. As a result, this study may provide the textbook developer with fresh ideas for improving the Forward for vocational high school textbook's multimodality, notably in the graphics given. As a result, students will be more motivated to learn English with this textbook, which will have an impact on the learning outcome.

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