THE CONTENT ANALYSIS OF COGNITIVE AND PSYCHOMOTOR DOMAINS IN AN ENGLISH TEXTBOOK FOR SENIOR HIGH SCHOOL GRADE XI

Debi Maulana Ahsan Halla
English Education Program FKIP Galuh University Indonesia
ahsan@student.unigal.ac.id

Andi Rustandi
English Education Program FKIP Galuh University Indonesia
andru.unigal@yahoo.co.id

Abstract: This research investigated the evaluation of an English textbook. This research aimed to analyze the relevance between the revised edition of the 2013 Curriculum English textbook "Modul Pembelajaran SMA Bahasa Inggris" for Senior High School grade XI to the Core Competence concerning cognitive and psychomotor domains. This research employed content analysis under descriptive qualitative as the research design. The data of this research was collected from the English textbook "Modul Pembelajaran SMA Bahasa Inggris" for Senior High School grade XI. The collected data was categorized into tables and elaborated into each core Competence, Learning Indicator, and Learning process. The data was analysed using a conclusion drawn and then it was interpreted. The results of this research indicated that the relevance between learning indicators to the Basic competencies is adequately relevant for the Cognitive Domain and slightly relevant for the Psychomotor Domain. Besides, the relevance between learning activity to the Basic competencies is barely relevant for the Cognitive Domain and barely relevant for the Psychomotor Domain. The findings came up with the fact that the English textbook has more emphasis on the cognitive domain than the psychomotor aspect. Thus, the teacher should cover the rest of those aspects in the process of teaching and learning so that the students can achieve the Basic competencies optimally.

Keywords: *textbook; cognitive; psychomotor; curriculum.*

INTRODUCTION

A textbook is a book that contains some materials on a particular subject. The textbook is one of the important instructional resources for teachers and students in the classroom. Hamidi et al. (2016) asserted that the textbook is used by teachers to effectively lead teaching and learning activities as well as to assist students in achieving specific learning objectives. In English as a Foreign Language (EFL) subjects, the role of the textbook is significant. Students who struggle to comprehend the teacher's explanation can further their understanding by consulting additional textbooks. Identical-sounding English words with divergent pronunciations can impede a student's ability to follow the teacher's instructions. Thus, textbooks are an invaluable resource for students seeking to improve their understanding.

Three domains of learning need to be understood in the teaching and learning process are among others: the affective, cognitive, and psychomotor domains. Ahmad (2014) mentioned that

the domains of learning directly covered in textbooks are the cognitive and psychomotor domains. The cognitive domains involve students remembering learned material in a very authentic and innovative way by merging and synthesizing new perspectives and materials. Meanwhile, the psychomotor domains engage students to learn in a communicative, independent, and cooperative manner by initiating observations, questioning concerning what has been observed, gathering, and processing information, and presenting and displaying the results of the observations. Therefore, the existence of cognitive and psychomotor domains is very important in textbooks, especially in language learning.

Moreover, textbooks are expected to have quality in their content that matches the current curriculum. Elitasari et al. (2023) reported that there are two curricula currently used in Indonesia, namely the 2013 curriculum and the *Merdeka* curriculum. The 2013 curriculum is currently more widely used than the *Merdeka* curriculum. The Merdeka curriculum was just implemented in 2022 because it is still in the status of an option curriculum and will be evaluated for the success of its implementation in 2024. Besides, there are three levels of curriculum implementation, namely independent learning (*Merdeka Belajar*), independent change *(Merdeka Berubah*), and independent sharing (*Merdeka Berbagi*). Most of the schools that are interested in applying the curriculum are still in the first level. At that level, the schools still use the 2013 Curriculum structure in developing their curriculum and apply several principles of the Independent Curriculum in implementing learning and assessment.

Some researchers have conducted similar studies on the evaluation of the 2013 curriculum-based English textbooks. To begin with, Rivai et al. (2018) found that the English textbook "Forward" content was more relevant to the core and basic competence of 2013. In addition, Sunarko et al. (2019) conducted the same study with a different textbook. The researchers showed that the "Joyful" English textbook met the good criteria of content feasibility. However, another study on the English textbook conducted by Finandiati et al. (2022) revealed that the English Textbook "Headlines" did not fulfill the criteria demanded by National Education Standards. Although referring to different English textbooks and having similar goals and research methodologies, they have different criteria to analyze, such as content, physical appearance, curriculum relevance, and English language skills. However, a few researchers investigated the cognitive and psychomotor domains in the textbook evaluation process.

In the 2013 curriculum, the criteria consider cognitive and psychomotor domains that are formulated in the third and fourth core competence. Bloom's Taxonomy of Educational Objectives, in Adi (2019), it is elaborated that cognitive deals with the knowledge which is related to students' thinking while psychomotor refers to motoric creativity which is related to students' skills. This research filled the gap among the research on curriculum implementation, especially using the criteria in terms of the cognitive and psychomotor domains which are included in the third and fourth core competence in the 2013 curriculum. Accordingly, the present study investigated the relevance of an English textbook with the fundamental competence in the 2013 curriculum revised edition dealing with cognitive and psychomotor aspects.

METHOD

The research employed a qualitative research methodology as the research design. In collecting the data, the researcher employed a set of steps that was adapted from Ary et al. in Masitoh (2019). The researcher then formulated the coding categories. The researcher used the theory of Bloom Taxonomy in terms of Cognitive (Anderson version) and Psychomotor Domain (Dave version) to formulate the coding categories. To form the theory of Bloom Taxonomy become the coding categories, the researcher adapted the example which was shown Saldana (2016). Saldana (Saldana, 2016) showed an example of the coding category, which was used in protocol coding in which it comprised three columns. The first column was the category, the second column was the code that represented the category, and the last one was the definition of each category. This was also in line with Krippendorf (2019) who showed the set of categories

that were developed by Mahl (1959) in which it was not formed into a table. This set of categories consisted of the name of the category, the code of each category, and the definition. Therefore, the researcher adopted the form of coding categories from Saldana (Saldana, 2016) and Krippendorf (Krippendorff, 2019), which consisted of 4 columns. The first column was the category. The second column was the abbreviation which represents each category. C1 – C6 is for Cognitive Domain level 1 until Cognitive Domain level 6. Meanwhile, P1 – P5 is for Psychomotor Domain level 1 until Psychomotor Domain level 5. The third column was the definition of each category. The last column was the list of operational verbs in each category.

The last one was analyzing the textbook. In this stage, the researcher analyzed the learning indicators, and the learning activities of the textbook by applying the coding categories to the list of Basic Competence, learning indicators, and learning activities. The researcher then counted the learning indicators and learning activities that were categorized as relevant. In addition, the researcher gave the calculation of the total number percentage of the learning indicators and learning activities in the textbook adapting the formula from Arikunto in Azizah (2014). After that, the drawing the conclusion and adding interpretations could be done. To conclude, the researcher used the classification criteria of textbook relevance to EFL evaluation from Yudoleksono in Laili and Wahyanti (2018) as follows:

<div align="center">Level of Relevance</div>

0% - 25%   = barely relevant
26% - 50%   = slightly relevant
51% - 75%   = adequately relevant
76% - 99%   = approximately relevant
100%   = completely relevant

RESULTS AND DISCUSSION

The objectives of this research were to analyze the relevance between the English textbook "Modul Pembelajaran SMA Bahasa Inggris" for Senior High School grade XI to the Basic Competence of 2013 Curriculum Revised Edition in terms of cognitive and psychomotor domains. The study was conducted on June, 2023. The data of this research was collected from the English textbook "Modul Pembelajaran SMA Bahasa Inggris" for senior high school grade XI. The collected data was categorized into tables and coded for each Basic Competence, Learning Indicator, and Learning Activity. The data was analysed using a conclusion drawn and then interpreted. The result of the study was displayed in Table 1 which elaborated the relevance of LA and LI of Cognitive Basic Competence and Psychomotor Basic Competence.

Table 1. The connection between Learning Indicators and Learning Activities to the Basic Competences

	Chapter	Learning Indicators			Learning Activities		
		BC	Code	Relevance	BC	Code	Relevance
1	Cognitive	3.1.	C3	R	3.1.	C3	NR
	Psychomotor	4.1.	P3	R	4.1.	P3	NR
2	Cognitive	3.2.	C3	R	3.2.	C3	NR
	Psychomotor	4.2.	P3	R	4.2.	P3	NR
3	Cognitive	3.3.	C4	R	3.3.	C4	R
	Psychomotor	4.3.1. 4.3.2.	Unc. P3	PR	4.3.1. 4.3.2.	Unc. P3	PR
4	Cognitive	3.4.	C4	NR	3.4.	C4	NR
	Psychomotor	4.4.1. 4.4.2.	Unc. P3	PR	4.4.1. 4.4.2.	Unc. P3	PR

Note:
NR = Not Relevant
PR = Partially Relevant
R = Relevant

Table 1 summarized that not all section is connected dealing with the progress of LI from BC. In Cognitive Domain, 3 out of 4 sections are available. However, the Psychomotor Domain only consists of 2 out of 4 sections. Thus, the formula adapted from Arikunto in Azizah (Azizah, 2014) calculates how the percentage of each domain:

1) The Relevance between the Learning Indicators to the Basic Competence of 2013 Curriculum Revised Edition in terms of Cognitive Domain

$$\frac{\text{The number of Basic Competence that are relevant}}{\text{The total number of all Basic Competence}} \text{X } 100 \text{ \%}$$
$$= \frac{3}{4} \text{X } 100 \text{ \%}$$
$$= 75 \text{ \%}$$

2) The Relevance between the Learning Indicators to the Basic Competence of 2013 Curriculum Revised Edition in terms of Psychomotor Domain
3)

$$\frac{\text{The number of Basic Competence that are relevant}}{\text{The total number of all Basic Competence}} \text{X } 100 \text{ \%}$$
$$= \frac{2}{4} \text{X } 100 \text{ \%}$$
$$= 50 \text{ \%}$$

Thus, the relevance between the learning indicators in the English textbook of "Modul Pembelajaran SMA Bahasa Inggris" for eleventh-grade students senior high school to the Basic Competence of 2013 Curriculum Revised Edition is included into adequately relevant concerning Cognitive Domain and slightly relevant in terms of Psychomotor Domain.

Furthermore, Table 1 revealed that the progress of Cognitive BC into LA was only 1 out of 4 chapters classified as relevant. However, based on psychomotor aspect, the development of LA from Psychomotor Basic Competence was none of the entire sections which were classified into relevant. Thus, if they were calculated using Arikunto's formula in Azizah (2014), the result is as follow:

1) The Relevance between the Learning Activities to the Basic Competence of 2013 Curriculum Revised Edition in terms of Cognitive Domain

$$\frac{\text{The number of Basic Competence that are relevant}}{\text{The total number of all Basic Competence}} \text{X } 100$$
$$= \frac{1}{4} \text{X } 100 \text{ \%}$$
$$= 25 \text{ \%}$$

2) The Relevance between the Learning Activities to the Basic Competence of 2013 Curriculum Revised Edition in terms of Psychomotor Domain

$$\frac{\text{The number of Basic Competence that are relevant}}{\text{The total number of all Basic Competence}} \text{X } 100 \text{ \%}$$
$$= \frac{0}{4} \text{X } 100 \text{ \%}$$
$$= 0 \text{ \%}$$

Thus, based on the result above, it could be concluded that the relevance between the learning activities in the English textbook of "Modul Pembelajaran SMA Bahasa Inggris" for eleventh-grade students high school to the Basic Competence of 2013 Curriculum Revised Edition was categorized as barely relevant in terms of Cognitive Domain and barely relevant as well in terms of Psychomotor Domain.

The percentage of the relevance between Learning Indicators and learning activities to the Basic Competences was shown in Table 2.

Table 2. The Percentage of the Relevance between Learning Indicators and Learning Activities to the Basic Competence

BC	LI	LA
Cog.	75 %	25 %
Psy.	50 %	0 %

Table 2 indicates that learning indicators' formulation should be proceeded by sorting action verbs connecting to the level of the taxonomy in what Basic Competence must be followed by the verb which is the name of the level. Even though the existence of lower level or higher level than the actual Basic Competence was enabled. After setting the target (learning indicators) achieved by the students, the next action was constructing the learning activities. Wardani and Lestari (2015) stated that learning indicators was important because it would be practiced to arrange learning activity and evaluation. Thus, learning indicators should become the guidelines in building learning activities that must be developed. In other words, the learning activities development should be developed from the main target and the others were elective.

CONCLUSION

As it is mentioned in the previous section, the research question should be answered by this research: How is the relevance between the English textbook of "Modul Pembelajaran SMA Bahasa Inggris" for eleventh-grade High School' students to the Basic Competence of 2013 Curriculum Revised Edition concerning Cognitive Domain and Psychomotor Domain? In line with the research question, "Modul Pembelajaran SMA Bahasa Inggris" is investigated by analyzing the relevance between learning indicators and learning activities to the Basic Competence of 2013 Curriculum Revised Edition in terms of Cognitive Domain and Psychomotor Domain.

The result of the analysis showed that the textbook has 75% for the connection between learning indicators to the Basic Competences in Cognitive Domain and 50% in the Psychomotor Domain. Meanwhile, for the relevance between learning activity to the Basic Competences, it showed that this textbook has 25% for the Cognitive Domain and 0% for the Psychomotor Domain. It could be concluded that it was already categorized as relevant that makes the actual level of Basic Competence emerge in learning indicators. However, its relevance to the learning activities was labeled as barely relevant both in terms of Cognitive Domain and in terms of Psychomotor aspects.

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