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Investigating the Attainability of Critical Thinking of English Textbook in Indonesia

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Abstract. This study aimed to investigate the attainability of critical thinking of English textbook in Indonesia. Critical thinking in this study refers to the thinking skill from revised Bloom's Taxonomy level and disposition to support CT skill effectively in the English textbook entitled Bahasa Inggris SMA/MA SMK/MAK Grade XII used by secondary school level education teachers. This study was qualitative research by using an evaluation checklist adapted from Dwyer. Descriptive analysis was applied to evaluate the document and activities that provide the availability of critical thinking (CT) elements and CT disposition in the textbook. The analysis encompassed the content, grammar, levels of the questions, and activities used in this English textbook. The results indicated that Bahasa Inggris English textbook carry out most of the skills established in Bloom's Taxonomy, meaningful critical thinking dispositions, and various activities for teaching critical thinking. Eventually, the author needs to support the textbook with CD for listening activity in order to enhance the students during the learning process.

Keywords: CT disposition, CT skills, English Textbook

1. Introduction

Critical thinking (CT) is the main purpose of higher education because thinking critically means considerately examine the thinking process to interpret our understanding and obtain more intelligent decision [1]. Our current curriculum targeted the CT as desired skills to be implemented in the learning process. Since the CT support students to be effective learners in educational process, to be independent learners, make their own decision, and to be able to investigate and solve problems in their academic work and in life [2]. However, the notion that high school student – adult students have already known "how to think" is unacceptable. The previous research stated in [3] the result showed that only 25% students possess the thinking skills or logical abstract thought. In other words it takes time to be a critical thinker and sometime the word "critical" has negative meaning. Therefore critical thinking means evaluate the thinking process and examine the reason lies within the decision making [4].

Due to the fact that some authors allocate their time to revise this textbook, but only several study deal with exploring the attainability of CT elements in Bahasa Inggris SMA/MA SMK/MAK Grade XII. This case raised the researcher encouragement to explore the availability of CT elements in the English textbook produced by the ministry of education and culture [5]. Beside it is needful to explore the implementation of CT in the high school context and particularly in the English language classroom. As previous research revealed critical thinking is difficult to be implemented in the classroom since the



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low-achieving students were unable to deal with it [6], [7]. In regard to this, investigating the attainability of CT in the English textbook entitled Bahasa Inggris SMA/MA SMK/MAK Grade XII became the main purpose of this study.

This study will be beneficial for the author and secondary school teachers of English in Indonesia as this study will guide the author to revise the current textbook aimed to supplement them with activities in which supported the CT elements. Furthermore, this study will be beneficial for the school teachers to practice and implement the CT during educational process.

CT is a vital topic in modern education. Fostering the students with critical thinking became necessity to prepare them to succeed in the "Information Era" [8], [9]. Hoping that students can evaluate, select, and filter the information critically as the information is rapidly changing. Most of the definitions of CT emphasized the skills to analyze, evaluate, and judge information effectively. While others point out the CT skills are the capability to figure out the problems and form decisions [10].

Since the number of thinking skills are identified in the literature, this study merely focus on the revised Bloom"s Taxonomy of educational objectives in the English language classroom. Bloom and his colleagues examined six categories of the cognitive process dimension: a) remember, understand, and apply – called lower order thinking skill, b) analyze, evaluate, and create – called higher order thinking skill. They believed that to establish the thinking skill practically requires lower order thinking skill – the simplest level to the most complex one – higher order thinking skill [11].

Regarding to lower order thinking skills, starting from remember – the activity of recalling the background knowledge from long term memory, e.g. recognize the vocabulary, language focus, and the dates of important events. The next step is understand – the process of constructing meaning from instructional messages, consists of oral, written, and graphic communication. After that, apply – the process of applying procedure from a familiar task to unfamiliar one. As for higher order thinking, the students can evolve the skill of analyze – the process of differentiating, organizing, and attributing the materials into its constituent parts and decide how the parts relate to one another and to overall structure or purpose. The next process is evaluate – this is the process of making judgment based on the criteria and standards. The last steps is create – the activity of generating, planning, and producing something to form a coherent or functional whole and reorganize the elements into a new pattern or structure.

In reference to those types of thinking skills, senior high school English teachers should engage their students to use their thinking skills when they are involved in the English language teaching and learning process as manifested in the given task generated from macro and micro language skills. In short, the CT elements should be explicitly established in the process of teaching skills: listening, reading, speaking, writing with regard to student's characteristics and the level of education.

A number of activities can be taken as consideration to enhance the students" thinking skills. First, questioning strategies is one of the most regularly employed teaching strategies. It is also considered to be the most important tool to build the students" understanding and to encourage students to think critically [7]. Questioning is essential for teachers to allow students express their ideas. Hence, it is advisable to the author to supplement the textbook with the CT elements questions since most of the teachers" teaching activities are oriented toward exam [12]. Second, collaborative learning strategy is considered to be effective to enhance the students" thinking skills. This strategy highlighted that social learning is necessity since the learning may occurs through interaction with others – between teacher – students and students – students [13].

In regard to this, the purpose of this study was to evaluate the attainability of CT elements in the English textbook entitle "Bahasa Inggris SMA/MA SMK/MAK Grade XII". Thus, the research question was as follows: "What CT elements can be found in Bahasa Inggris?

2. Methods

Bahasa Inggris SMA/MA SMK/MAK Grade XII was designed by the Ministry of Education and Culture in 2018 and developed in line with the national standard of 2013 curriculum. Scientific approach was implemented in this textbook based on standard of competence and core competence of 2013 curriculum.

Both the secondary school level education teachers and high school students in Indonesia used this Bahasa Inggris. The textbook contained eleven chapters as follows: "May I help you?", "Why don"t you



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visit Seattle?", "Creating Captions", "Do you know how to apply for a job?", "who was involved?", "Online School Registration", "It"s Garbage In, Art Works Out", "How to Make", "Do it Carefully!", How to Use Photoshop?", "Let"s Make a Better World for All". Each unit consists of the following parts: 1) Social Function, 2) Text Structure, 3) Language Features, 4) Topics, 5) Skill Focus. All the chapters were analyzed excluding the supplementary sections at the end of the textbook.

Content analysis was used as instrument to measure the availability of CT in Bahasa Inggris and the analysis was accomplished by implementing a checklist adapted from Dwyer [13] (see Table 1) to accumulate qualitative data from the textbook. The checklist was designed to discover the availability of CT elements that was implemented in the textbook, the cognitive domain of Bloom's Taxonomy, the disposition of inquisitiveness, open-mindedness, cognitive maturity, and truth-seeking, and open-ended questions, collaborative work, debate, media analysis, problem-solving, and critical writing.

Descriptive analysis becomes the main procedure to investigate the attainability of CT elements textbook to answer the research question in order to create the theoretical framework of this research. Explicitly, the textbook analysis was done by documenting instructions including activities support the CT elements.

3. ResultThe data in this study was obtained by using checklist adapted from [14]. The list showed in Table 1. Table 1. Checklist used to examine the attainability of CT elements in Bahasa Inggris

Aspects	CT elements	Included (√) /
		not includes (×)
CT skills	- Remember	$\sqrt{}$
	- Understand	$\sqrt{}$
	- Apply	$\sqrt{}$
	- Analyze	$\sqrt{}$
	- Evaluate	$\sqrt{}$
	- Create	$\sqrt{}$
CT disposition	- Inquisitiveness	\checkmark
	 Open mindedness Cognitive maturity 	$\sqrt{}$
	- Truth-seeking	\checkmark
Activities for teaching CT	- Open-ended questions	\checkmark
9	- Collaborative learning	\checkmark
	- Debate	$\sqrt{}$
	- Media analysis	\checkmark
	- Problem-solving	×
	- Critical writing	×

A. Critical Thinking Skills

The previous Table 1 discovers, the textbook accommodates almost all the CT skills found in revised Bloom"s Taxonomy. As for lower-order thinking abilities, students was facilitated to establish the skills of remember. In this case, the textbook provides activities, requires students to recall information e.g. vocabulary builder, pronunciation practice, word finding task activities (chapter 1, p. 2). The student practices this remember CT skills in the following task, e.g. vocabulary exercise; completing the dialogs (chapter 1, p. 8), grammar review exercises; write down the expression of offering services, (chapter 1, p. 11), if you visit Seattle; completing sentences (chapter 2, p. 22). The understand skill is also included in this textbook. The students can enhance the skills by observing the pictures and photos and answering the open ended questions; creating captions (chapter 3, p. 34), work in group activity-discuss the caption messages (chapter 3, p. 38). Moreover, the students foster the skills of understand by answering the reading and listening comprehension questions which are enclosed in each unit in the textbook. The CT



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elements of apply is included in this textbook; students practice the vocabulary words and practicing dialogs with their friends as the textbook provide situational topics to help students to speaks (Chapter 1, p. 13); the students can further practice the skills through role play, discussion (Chapter 2, p. 28), role play-news broadcast (Chapter 7, P. 106-107), group discussion-recipe (Chapter 8, P. 116). In order to develop those skill, reflection sections in the end of each chapter was provided to summarize the lesson and to justify the students" understanding.

Meanwhile, the students practice higher order thinking skills of analysis by writing the questions about the news, and answering reading comprehension HOT questions (Chapter 6, p. 86-87), reading comprehension HOT questions about news item (Chapter 5, p. 73), analyzing the parts of application letters (Chapter 4, p. 59). The skills of evaluate was provided in the end of each chapter – reflection sections, this task requires the students to have self – reflection about their learning progress. The questions to evaluate were given in the textbook. Lastly, the skills of create was enclosed in the textbook in term of the activity of writing sections, e.g. write a procedural text of your own (Chapter 9, p. 132), read and summarize the text from a certain website about tips to improve photo qualities by using Photoshop (Chapter 10, p. 145).

Lastly, a chapter covers all skills and four basic competences as well as the four skills are also assessed in every chapter but in different format and technique. Besides, the textbook also contained the CT elements. Although some HOT questions in the reading comprehension were limited only in the form of "How", "Why", and "give your opinion about..." instead of having a good quality, CD for listening activity is not enclosed to the textbook.

B. Critical Thinking Disposition

Bahasa Inggris textbook provided students with CT disposition as shown in Table 1. According to Halpern, (2014) CT disposition was defined as establishing the attitude of a critical thinker. It has been stated before the word "the critical" sometimes has negative meaning. Thus, shaping the attitude of critical thinker is necessity. Because good thinkers are motivated and having willingness to plan, and examine the accuracy of information and enthusiastic in looking for the problem solving. [14] Dwyer asserted precisely that CT of disposition or attitude and the right knowledge or thinking skills were two components that are crucial in establishing the critical thinking. There were so many CT of disposition that were mentioned in [15]. Yet, this study only focuses on four CT of disposition or attitudes, namely; inquisitiveness, openmindedness, cognitive maturity, and truth-seeking.

According to Dwyer [13] CT disposition of inquisitiveness was defined as a willingness to comprehend and find out the problem solving and to accept whenever the problem was unsolved. The students have chance to work on improving the disposition of inquisitiveness by conducting research e.g. comparing and finding the similarities and differences between your recipe and his/her recipe (Chapter 8, p. 116), observing the text structure (Chapter 9, p. 130), having oral presentation (Chapter 9, p. 131), communicating the procedures in the form of group work presentation (Chapter 10, p. 147) and doing project in groups to identify problems in their surroundings (Chapter 11, p. 158).

CT disposition of open-mindedness means to be cognitively adaptable, allow divergent idea or point of view, and address the diversity alike [14]. To enhance the CT disposition of open-mindedness, the students are commanded to do the project individually e.g. find the example of application letter and analyze the text structure and exchange with your classmates (Chapter 4, p. 59). In this activity students were engaged to be aware of the benefit of group work or peer editing to become open to others" comments and viewpoints (Chapter 5, p. 76).

[16] Wang asserted CT disposition of cognitive maturity was defined as attitude toward expedient or intelligent in making decision that requires self-reflection. The CT disposition of cognitive maturity was founded in the textbook e.g. the dialog or conversation in the textbook was designed as similar as Indonesian situation and the name of the character in the dialog used Indonesian name (Chapter 1, p. 4), the context situation was also designed to adjust Indonesian context (Chapter 1, p. 12-13).

Further CT disposition was the truth-seeking was defined as a desire for knowledge, to be motivated and reflective when finding out the truth [14]. In this point, students are asked to be aware of their surrounding about their culture and refine their own biases and prejudices toward others e.g. observing pictures and photos and finding what message lies inside the pictures or photos (Chapter 3, p. 35), having



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a brainstorm with classmates through song, finding the theme and message of the lyrics (Chapter 11, p.150).

C. Activities for teaching CT

The textbook is an important components in most of EFL classroom [17]. It is one of media to establish activities for teaching CT. [18] asserted a textbook is a guiding tool for teacher and students; a map for what they will do and what they have done. The activities of open- ended questions were founded in some chapters inside this textbook, e.g. in your opinion, what can prevent us from committing such a crime? (Chapter 5, p. 65), what do you think about the acting governor"s response to the parents" protests? (Chapter 6, p. 87), do you think that Irby"s work is significant? Share your opinion (Chapter 7, p. 98). These questions are related to the issues discussed in the reading text; in regard to writing section the students need to revise their writing if any correction before submitting the final works to the teacher (Chapter 4, Chapter 7, and Chapter 9).

The notion of collaborative learning in the textbook is common. The students have a chance to work collaboratively, conduct observation, prepare presentation, role play, carry out the project and peer editing or feedback in writing activity. [19] Collaborative learning requires building relationship and establishing trust, and creates space as well as honest dialogue. In other word, the students have opportunity to communicate and learn from each other by providing evidence to convince each other in the interaction process.

The activity of debate or discussion is also implemented in the textbook. The students are asked to discuss ideas, issues, opinions and "why" questions, e.g. "why do you think living in an apartment is getting popular?" (Chapter 5, p. 68), "why do people prefer public schools to private schools?" (Chapter 6, p. 87), "how can Irby"s idea and works contribute to the betterment of their environment?" (Chapter 7, p. 98), "what do you think about the mayor"s concept on municipal waste management?" (Chapter 7, p. 101). To answer those questions the students should give their opinions and arguments and support it by giving example.

In regards to media analysis the textbook provided students with listening activities — listening to the recording of news item that are played by teachers. After that, the students asked to transcribe the news item they heard (Chapter 7, p. 106), video watching — the teacher will show the students a fragment of a mute film, and the students should guess what is said by the characters in the film (Chapter 3, p. 32). In term of the problem solving, the tasks included in the textbook merely dealing with solving language issues, e.g. grammar rules rather than solving the real life problems. The last activity is creating a critical writing the instruction in the textbook require the students as follows, e.g. to write an application letter based on the format of application letter (Chapter 4, p. 59), write a news item and did peer editing (Chapter 5, p. 74-75). Thus the process of drafting, first draft, revise and the like was absent in this textbook.

4. Conclusion

According to research finding and the discussion the result indicated the textbook is well designed and encouraged students" to be independent learners. Besides the textbook was supplemented with CT elements that become the needs for current trend in education. The finding suggested the textbook consisted with important CT skills, dispositions, and activities. Yet, the textbook author needs to add some extra activities and more variation of HOT questions to enhance the students" level of CT. Since higher order thinking skills e.g. CT skills relied on the memory means that it is impossible for someone who cannot use the skills. Practically, someone needs lower order thinking skills before processed higher order thinking skills. In other words, both LOT and HOT was inseparable.

The analysis of Bahasa Inggris SMA/MA SMK/MAK Grade XII demonstrated that the author aware of CT theory as thinking skills became the main purpose of Indonesian 2013 curriculum. Finally, the implementation of CT elements in developing the textbook materials basically could engage the students to be a critical thinker.

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