CHAPTER I

INTRODUCTION

A. Background of Study

"Thinking Skills are seen as an essential part of all aspects of general education" (Thomas et al, 2010.88). Another point of view, Martha (2010:104) stated that "first: an important goal in education is to develop and enhance learners' abilities to think critically about their knowledge, their actions, and their beliefs. Second, developing critical thinking skills in college students have been set as a primary goal and learning outcome in higher education". According to the statements above, it is quite necessary to look back, to what primary orientation broadly applied in a textbook based on the new curriculum. Since that is an essential background in education.

In 2013 a new curriculum is written in Indonesia that emphasize four domains, These four domains included the domain spiritual, the domain of social interaction, the domain of cognitive, and the domain of skills.

According to its objective of education, the researcher thinks that English as a foreign language (EFL) textbook should be designed parallel to the goal of education or to the curriculum. Particularly for English instruction; in order that the students become responsible and creative learners who can use language more effectively. As a result, many books were written for all levels of school; elementary to senior high school. Among these books, there are a series English course books entitled *Pathway to English* for 10th grade. The book is written based on the new 2013 curriculum

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in Indonesia and it is considered the most commonly used in Senior High School in Palangka Raya

The goal of the new curriculum provides the aforementioned standards for teaching and learning. According to this objective, the researcher perceives the one that the main goal of this curriculum is to develop the ability of students' thinking skills (Ministry of Education, 2018). So that is why, the researcher choose *Pathway to English a series* textbook for 10th grade and to investigate the cognitive domain area. Besides, the researcher wants to explore these books, to what degree it helps a teacher to develop students' thinking skills, and to what extent it leads students to use the various levels of the cognitive domain according to Bloom's Taxonomy for developing correct thinking skills. This will be assessed by examining the total WH- question in the textbooks.

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Igbaria, et al (2013:201) said in the following:

> As it is known, the role of a teacher is emphasized transmitting material to students who are defined as a passive learner. In order to lead the students towards a situation in which they can know, comprehend, apply, analyze, synthesize, and evaluate the learning material, textbooks that are considered first priority among all teaching aids assist teachers. Therefore, importance must be devoted to the textbook, and it must constantly be analyzed in order to examine its contribution to the educational system in general, and to an area of students' creative thinking in particular.

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Torrance (1962) conducted research on creative thinking that "the thinking process that is operated by students is essential for mental health, high achievements, and professional success in life" Joe Y (1968) states that "our thinking directly affects our life through the choice we make".

Marksberry (1963) in her book *"Foundation of Creativity"* explains that the curriculum must provide thinking skills and correct thinking methods together with knowledge. For the same token, a teacher must provide students with the knowledge and teach them how to think. This is accomplished by utilizing all of the level questions in the cognitive domain described in Blooms's Taxonomy."

Bloom's taxonomy has several characteristics that make it the most commonly used in the field of education:

1. Educational: distinguishing between the groups of objectives that teachers use for writing curricula, study programs, and lesson plan.
2. Logical: the levels are clearly and logically defined.
3. Psychological: in accordance with a psychological phenomenon.
4. Pyramided: ranging from the simple to complex with each level resting upon the preceding one.
5. Continuous: each objective leads to the one following it.
6. Comprehensive: each objective can be categorized according to taxonomy.

The researcher feels that question is one of the important factors in developing thinking among students through a textbook. As educators, have to teach students how to think and how to use their higher order thinking processes (Igbaria, 2013.201). Consequently, this study will analyze the content of English textbook to determine its influence on developing thinking among students. This analysis will determine whether the book merely leads

students to memorize the material, or actually encourages and fosters their ability to analysis, synthesis, and evaluate or to use their higher thinking skills.

Bull and Andre (1973, 1979) claim that "questions direct the thinking process towards one of the following objectives:

1. Recalling previously taught the material.
2. Examining new material with the purpose of organizing it and benefiting from it (comprehension, application, analysis, and synthesis).
3. Drawing a connection between old and new learning material by means of mental processes that students operate (evaluation)".

Igbaria, et al (2013:201) explain that "Questions are extremely important for examining students' understanding of the learning material, and can be used to measure the level of thinking among students. Questions are considered a means of leading students' thinking". In a similar though, "Question also can be used as a teaching tool to assess students' knowledge, promote comprehension, and stimulate critical thinking"(Tofade, et al,2013:1)

By the aforementioned explanations, researcher, therefore see fit to take this aspect and conduct a study: **The Use Of Wh Questions In Pathway To English Based On Bloom's Taxonomy Adaptation Of Cognitive Domain.**

B. Research Problem

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As we know, a book is the main aid for teaching and learning. It is one of the elements of a classroom. It is also the representative of the curriculum. Ministry of Education has made lots of effort to revise the curriculum, and it is should be applied for all educational institution (Elementary to Senior High School) in 2018 (Ministry of Education, 2018). As a result, many books were written based on the new curriculum. Therefore, the aim of this study will investigate whether books written meet the main curriculum goal. The English textbook *Pathway to English a series course books* **Kurikulum 2013 yang disempurnakan** were introduced in 2017 based on revised a new 2013 curriculum in Indonesia. English is the essential subject in Senior High school.

High~~At 10th, 11th, and 12th grade, that~~ is the crucial level of learning. This leads the researcher to chose *Pathway to English a series course books.* and to investigate to what level the book really helps the teacher develop student's thinking, and to what level it encourage students to use various levels of the mental process for developing correct thinking skills. The method will be determined the quality of WH – question in the books. And determining their cognitive level according to Bloom's Taxonomy. This analysis will interpret whether or not the question in the book quite helps developing thinking, or if they are merely questions that call for a lower level of thinking – which will obligate the teacher to think differently about the book and the question it is present.

C. Research Question

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As mentioned earlier, the textbook is a mean aid of teaching tool for many teachers. It leads the researcher to choose the textbook 10th grade, to investigate to what degree the book really develops students' thinking and to what degree it encourages students to use the various levels of mental processes for developing thinking skills ability.

This study deals with the analysis of *Pathway to English* textbooks for 10th grade ~~, 11th grade and 12th grade~~ and will be done according to the following questions:

1. What is the most use~~frequent~~ of WH-questions contained in *Pathway to English* textbooks based on Bloom's Taxonomy of cognitive domain?
2. How do the *Pathway to English* textbooks encourage students to use the various levels of the cognitive domain of Bloom's Taxonomy for critical ~~developing~~ thinking skills ability?

D. Objective of the Study

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The objectives of this study are first, to discover the most frequent of WH-questions contained in *Pathway To English* textbooks based on Bloom's Taxonomy of cognitive domain. Secondly, to analysis *Pathway to English* textbooks how they encourage students to use various levels of the cognitive domain of Bloom's Taxonomy for developing thinking skills ability.

E. Scope and Limitation

This research has the following limitations:

1. The English textbook (*Pathway To English* kelompok peminatan for 10th ~~11th, 12th~~ grade. ~~)~~

2. All the WH-questions in the textbook (What, Where, Why, Who, When, Which, Whom, And How Question)
3. Bloom's taxonomy for analyzing WH-questions.
4. The cognitive domain six levels of Bloom's Taxonomy.

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F. Significance of the Study

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The significances of this study are expected to be a beneficial contribution to the teachers and the authors:

1. Theoretically, to support bloom's taxonomy theory
2. Practically, to give pedagogical contribution to teachers and authors.

G. Definition of Key terms

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1. ***Pathway To English***: a series of English course books for senior high school students.
2. **Question**: Investigating statement that appears through the units in the English textbook and calls on the student for some level of cognitive functioning to provide answers (Longman, 1984).
3. **WH-Question**: a question in English to which an appropriate answer is to give information rather than to answer "yes" or "no": typically introduced by the word who, which, what, where, when, or how. Also called: information question. ("Collins dictionary",2016)
4. **Bloom's taxonomy** is a general taxonomy that includes six levels for examining the fulfillment of the goals of the cognitive domain among

students: knowledge, comprehension, application, analysis, synthesis, and evaluation. Bloom et al. (1956)

5. **Cognitive Domain**: knowledge and the development of intellectual skills (Bloom, 1956)

IAIN PALANGKARAYA

CHAPTER II

REVIEW OF RELATED LITERATURE

This chapter presents the related literature and will discuss previous studies that have dealt with the analysis of questions in textbooks that are connected to this study, which will also analyze WH-questions in a textbook for teaching English.

A. Related Studies

A study was conducted, Igbaria (2013) analyzed the frequencies and percentage WH-question in EFL textbook of *Horizon* in Jordan, the result revealed the level that appeared most frequently was the comprehension level 29.66%. The second level most appeared was knowledge level 23.09%.

This study conducted in 2014 by Assaly.et al analyzed listening and reading activities in the EFL textbook of master class, the result showed that 114 activities emphasized levels of cognition representing lower order thinking skills, while only 59 activities emphasized higher order thinking skills, the activities in the class textbook place a great deal of emphasis upon comprehension, which is one of the lower order thinking skills.

Alzu'bi (2014) carried out a study, the extent of adaptation bloom's taxonomy of cognitive domain in English questions included in general secondary exam, The result of the study revealed that the total percentage of the first three levels (comprehension, knowledge, and analysis) is (69.6) but the total percentage of the last three level (application, synthesis, and

evaluation) is (30.4) so it indicates that English question in general secondary examination emphasize low order thinking skill.

Zareian, et al (2015) analyzed the types and levels of questions contained in two English textbooks, namely, *English for the Students of Sciences* (ESS) and *English for the students of Engineering* (ESE) taught in Iranian universities for several academic years. The objective of the analysis was to evaluate the questions in the light of the revised version of Bloom's (1956) Taxonomy of learning objectives. To this end, a coding scheme was developed and the data was modified based on Bloom's Taxonomy. Results from the codification of a total of 218 questions(100 questions in ESS and 118 questions in ESE) showed that most of the questions were organized with remembering, understanding and applying as the three lower-level categories, while analyzing, evaluating, and creating as the three higher-level categories consisted the lowest frequency in the two textbooks. The result indicates that the textbooks fail to encourage students in the questions requiring high order thinking skills.

Mizbani and Chalak (2017) analyzed reading and writing activities of Iranian EFL textbooks for 3rd High School based on Bloom's Revised Taxonomy, to decide in which category of lower levels or higher levels of learning objectives these activities are classified. The analysis of the data indicated that the reading and writing activities of the book were mostly categorized in the lower levels based on learning objectives of the cognitive domain. Hence, they were not encouraged to develop the activities of high

levels of thinking processes such as analyzing, evaluating, and creating among Iranian students.

B. English Questions

1. What are the WH Questions?

Collin online dictionary (2016) defines WH-Question is a question in English to which an appropriate answer is to give information rather than to answer "yes" or "no": typically introduced by the word who, which, what, where, when, or how. Also called: information question. The Similar idea according to Cambridge online dictionary (2016) WH-question is a question in English that request for information. WH-question usually starts with a word beginning with wh-, but "how" is also included. The wh-words are: what, when, where, who, whom, which, whose, why, and how.

2. *WH*-Questions lead students to be interactive

According to Day and Park (2005) Questions beginning with *where*, *what*, *when*, *who*, *how*, and *why* are commonly called *wh* questions. In our experience, we have found that they are excellent in helping students with a literal understanding of the text, with reorganizing information in the text, and making evaluations, personal responses and predictions. They are also used as follow-ups to other questions forms, such as *yes/no* and *alternative*. In particular, *wh*- questions about *how/why* are often used to help students to go beyond a literal understanding of the text. As the beginning and intermediate readers are often reluctant to do

this, using *how/why* questions can be very helpful in aiding students to become interactive readers.

3. What Is a Good Question?

In order to teach well, it is widely believed that one must be able to question well. Asking good questions fosters interaction between the teacher and his/her students. Rosenshine (1971) found that large amounts of student-teacher interaction promotes student achievement. Thus, one can surmise that good questions fosters student understanding. However, it is important to know that not all questions achieve this. Teachers spend most of their time asking low-level cognitive questions (Wilen, 1991). These questions concentrate on factual information that can be memorized (ex. What year did the Civil War begin? or Who wrote "Great Expectations"?). It is widely believed that this type of question can limit students by not helping them to acquire a deep, elaborate understanding of the subject matter.

High-level-cognitive questions can be defined as questions that requires students to use higher order thinking or reasoning skills. By using these skills, students do not remember only factual knowledge. Instead, they use their knowledge to problem solve, to analyze, and to evaluate. It is popularly believed that this type of question reveals the most about whether or not a student has truly grasped a concept. This is because a student needs to have a deep understanding of the topic in order to answer this type of question. Teachers do not use high-level-cognitive questions

with the same amount of frequency as they do with low-level-cognitive questions. Ellis (1993) claims that many teachers do rely on low-level cognitive questions in order to avoid a slow-paced lesson, keep the attention of the students, and maintain control of the classroom.

4. What Is a Bad Question?

When children are hesitant to admit that they do not understand a concept, teachers often try to encourage them to ask questions by assuring them that their questions will neither be stupid or bad. Teachers frequently say that all questions have some merit and can contribute to the collective understanding of the class. However, the same theory does not apply to teachers. The content of the questions and the manner in which teachers ask them determines whether or not they are effective. Some mistakes that teachers make during the question and answer process include the following: asking vague questions (ex. What did you think of the story that we just read?), asking trick questions, and asking questions that may be too abstract for children of their age (ex. asking a kindergarten class the following question: How can it be 1:00 P.M. in Connecticut but 6:00 P.M. in the United Kingdom at the same moment?). When questions such as those mentioned are asked, students will usually not know how to respond and may answer the questions incorrectly. Thus, their feelings of failure may cause them to be more hesitant to participate in class (Chuska, 1995), evoke some negative attitudes towards learning, and hinder the creation of

a supportive classroom environment.

5. The 5-Step Guide to Forming Questions In English Grammar

a. Asking Yes/No Questions

Yes/No questions are the most basic type of question. You can use them to ask for a simple yes or no answer. They usually begin with a verb, including auxiliary verbs (a "helping" verb that comes before the main verb) or modal verbs (such as *can* or *would*).

b. How to Form a Yes/No Question

Let's start with the example sentence we used above. It is windy today.

To change this sentence into a question, **simply move the verb to the beginning**. If the sentence has an auxiliary or modal verb, that's the one you'll need to move.

Is it windy today?

Let's look at a few more inversions to form yes/no questions:

She is sad. → **Is she** sad?

The boat is sinking. → **Is the boat** sinking?

He can bake. → **Can he** bake?

If the sentence has no auxiliary verb and the main verb isn't "to be," things are a little different. You'll need to put "do" or "does" at the beginning of the question. Be sure to use the correct tense and form, for example, "did" if the sentence is in the past tense.

Nina plays the violin. → **Does Nina play** the violin? (Notice the new form of "to play" to accommodate the new structure.)

Nina played the violin. → **Did Nina play** the violin?

Nina and Thomas play the violin. **Do Nina and Thomas play** the violin?

Once you've had more practice turning basic sentences into questions, you can skip the first step of starting with a sentence and go directly to forming the question.

c. Asking "Five W" Questions

The "five Ws" are the question words *who*, *what*, *when*, *where* and *why*. However, just to make things trickier, there are actually other question words in this category too, like "how" and phrases that start with "how." So you may also hear these referred to as "five W and H" questions or simply "wh-" questions.

Here's a list of common question words in this category and what each is used for:

What? Which? (to ask about things)

Where? (to ask about locations)

Who? (to ask about people)

When? (to ask about time)

Why? (to ask for the reason)

How? (to ask about the way things happen or are done)

How many? How much? How often? (to ask about the number or amount)

d. How to Form a Five W Question

Again, let's start with a basic sentence. For these questions, we'll need to replace part of the sentence with a wh- word. We'll usually need to invert the word order as well, but not always. Here's our basic sentence:

Nathan is playing basketball in the park.

When you're asking about the subject (in this case, "Nathan") forming a sentence is pretty easy. You just replace the subject with a wh-word. Since "Nathan" is a person, our wh- word is *who.*

Who is playing basketball in the park?

If you're not asking about the subject, there'll be some word order inversion.

Let's say we wanted to ask about the object in this sentence. We'll replace it with our wh- word. The object is "basketball," a thing, so our wh- word is *what.*

Nathan is playing **what** in the park?

Now we need to restructure the sentence like this:

What is Nathan playing in the park?

Notice how the subject also has to get moved in between the auxiliary verb and main verb for this type of sentence.

We can also use *where* to ask about the location. We replace "in the park" with *where*, then move *where* to the beginning of the sentence:

Where is Nathan playing basketball?

Five W questions can get pretty confusing and can require lots of practice to master.

e. Using Indirect Questions for Polite English

A direct question is used to ask for information such as, “Which train goes to Bangkok?” or “How much does this box of oranges cost?” These are the types of questions we just covered above.

However, sometimes a direct question **may sound too blunt or unfriendly**, especially if you’re asking someone for help or when you don’t know the person well.

But don’t worry, there’s a way you can sound more polite and friendly. Use an indirect question instead. It’s simple: just attach a phrase like “Could you please tell me…” or “Do you know…” before the direct question.

f. How to Form an Indirect Question

Direct question: Where is the bookstore?

Here’s how you can change this into an indirect question:

Could you please tell me where the bookstore **is**?

Do you know where the bookstore **is**?

Note the inversion when forming an indirect question. In the direct question, the verb “is” comes **before** the subject “bookstore.” But in the indirect question, the verb is **moved to the end**.

g. Asking Tag Questions

A tag question is simply a sentence with a question tag at the end. It's **used to check or confirm that you've understood** something correctly. For example:

The train leaves at 9 a.m., **doesn't it**?

You could also use it to confirm whether something you already know or think you know is true. You will bring the cake, **won't you**?

h. How to Form a Tag Question

To form a tag question, you simply add the question tag using the opposite form of the verb/auxiliary or modal verb used in the sentence. So if the verb in the sentence is positive (e.g. "is"), you need the negative version (e.g. "is not"). The basic formula is below.

[Sentence] + , + [opposite form of the same verb used in sentence] + [subject pronoun]?

It **is** raining now. → It **is** raining now, **isn't** it?

Your father **isn't** working today. → Your father **isn't** working today, **is**he?

The students **are** visiting the museum. → The students **are** visiting the museum, **aren't** they?

Notice that we used the contractions "isn't" instead of "is not" and "aren't" instead of "are not." **Contractions are usually used in negative tags**. Notice also how the subject pronoun is used instead of the subject

itself in the tag. In the examples above, “father” becomes “he” and “the students” become “they.”

When there’s no auxiliary verb, use the “do” verb form in the question tag.

Adam walks to class on Tuesdays. → Adam walks to class on Tuesdays, **doesn’t** he?

i. Asking Negative Questions for Confirmation

A negative question is a question that contains the word **not** or a negative verb contraction like **didn’t** (did not), **weren’t** (were not), etc.

Similar to question tags, you can use a negative question to confirm something you believe to be true. In the example below, you’re pretty sure everyone has heard the news but you just want to confirm. So you ask:

Didn’t you hear the news? Sally won the marathon.

A negative question can also show your surprise that something you expect to happen hasn’t happened yet. In the example below, you expected him to call back soon and you’re surprised he hasn’t. So you ask:

Hasn’t he called back yet? It’s been two hours.

j. How to Form a Negative Question

Verb contractions are usually used in negative questions. The basic formula is below.

[Negative verb contraction] + [subject] + [main verb] + [other information]?

Wouldn't you like another cup of coffee?

In more formal settings, you might use "not" instead of a contraction.

[Auxiliary verb] + [subject] + **not** + [main verb] + [other information]?

Has she **not** handed in her assignment?

C. Teacher Questions as One Way to Foster Students' Critical Thinking

1. The Function of teachers Question

In classroom instruction, questioning is regarded as one of the most popular teaching modes (Brualdi, 1998) and also it is one of the most frequently used instructional strategies. Zepeda (2009) states that questions can elicit students' responses which can range from simple recall of information to abstract processes of applying, synthesizing, and evaluating information. Therefore, EFL teachers can use questions to help students build understanding and think critically and creatively. Alnofal (2018) explains that Good questions are educative and they serve as a means of organizing knowledge. One way of enhancing the quality of classroom questions was identifying the intellectual level of teacher questions. Questions were classified into two cognitive categories: lower order and higher order.

2. **Open-Ended Question**

The ability to ask *open-ended questions* is very important in many vocations, including education, counseling, mediation, sales, investigative work, and journalism.

An open-ended question is designed to encourage a full, meaningful answer using the subject's own knowledge and/or feelings. It is the opposite of a *closed-ended question*, which encourages a short or single-word answer. Open-ended questions also tend to be more objective and less leading than closed-ended questions. Open-ended questions typically begin with words such as "Why" and "How", or phrases such as "Tell me about...". Often they are not technically a question, but a statement which implicitly asks for a response.

D. Description of *Pathway* To English

Pathway to English Kelompok peminatan is a series of English course books for senior high school students (10th, 11th, and 12th Grade). The teaching framework and learning English are compiled based on ***KI/KD kurikulum 2013 yang disempurnakan.***

E. The importance of a Good book

Books are an important medium, not only for effective teacher instruction but also for an efficient student as well as for an interesting, lasting, and hence genuinely educative inter-action between teacher, learner, and subject matter.

A good book or a good idea is one that is well-written, well-researched or well-formulated and, as such, is a fountain of more effective learning and, indeed a spring-board to more information and challenge to search for more ideas. A good book should inform the learner, and not misinform or bore him; it should lead and motivate the learner towards higher levels of understanding and not mislead or demotivate him; it should educate the learner through the provision of relevant and exemplary cases, and not miseducate him leave him intellectually stunted. (Biswalo, et al, 1987.i)

F. The Role of Course Books in English Language Teaching

A course book is always used as suitable teaching and learning instruction materials in ELT especially in the settings where English is used as a foreign language. "They are best seen as a resource in achieving aims and objectives that have already been set concerning learners' needs", (Cunningsworth, 1995). Course books are overriding principle for teaching and learning process. They have prime roles as the manual that provide clear instructions for teachers and students they design and organize to promote certain objectives for the learners within certain level of needs.

Course book defined here as textbook refers to as a published book especially designed to help language learners to improve their linguistic and communicative abilities (Sheldon, 1987). And also textbooks are used as supporting teaching instruments (O'neil 1987, Ur 1996).

Hutchinson, T. and Torres, E. (1994) argue that textbook have very important and a positive parts to play in teaching and learning English.

Hutchinson and Torres describe course books (using the terms textbooks) as suitable teaching materials that provide lessons, instructions, and exercises/activities for the students in order to acquire knowledge.

However, textbooks are sometimes purchased without careful analysis (Green 1926, Mukundan 2007). Frequently, a textbook selection is not based on its intrinsic pedagogical value, but of the perceived prestige of the authors and of the publisher (Green 1926, McGrath 2002), or skillful marketing by the publishers (McGrath 2002).

Ibtihal Assaly, Abdul K. I. (2014) summarized Ibrahim (1998), an Iraqi researcher who analyzed questions in a 6thgrade history book according to the cognitive domain in Bloom's taxonomy. His sample, which included 87 questions, revealed 72% knowledge questions, 25.4% comprehension questions, and only 2.2% evaluation questions, while no questions addressed the levels of synthesis or analysis.(p.28).

On the other hand, Riazi and Mosalanejad (2010) carried out a content analysis of Iranian senior high school and pre-university English language textbooks to investigate the types of learning objectives represented in these textbooks using Bloom's New Taxonomy of learning objectives. The findings revealed that in all grades lower-order cognitive skills were more common than higher-order ones. In addition, the difference between the seniorhigh schools at the pre-university textbooks in terms of the levels of the Taxonomy was significant since the pre-university textbook used some degrees of high-order learning objectives.

Furthermore, Zamani, G. & Rezvani, R. (2015) investigated three Iranian University English textbooks that attempt to evaluate higher order thinking skills pertaining to the specialized courses; that is, Methodology, Language testing, and Linguistics. The researchers based on Anderson and Krathwohl, (2001) New Bloom Taxonomy of the cognitive domain. The exercises and activities of the textbooks were codified and the frequencies and percentages of occurrence of different thinking processes were calculated. The most important finding emerging from this study is that in all the textbooks lower-order thinking skills were more frequently targeted and represented than higher-order ones.

Ibtihal Assaly, Abdul K. I. (2014) conducted a Content Analysis of the Reading and Listening Activities in the EFL Textbook of Master Class in Israel, stated that the results show that the author of *Master Class* placed emphasis on the lower thinking processes of comprehension. This is acceptable since the activities relate to the two sections of Mastering Reading and Listening. These results do not contradict with the goals of the new curriculum that attempts to offer students opportunities to obtain and make use of information from a variety of sources and media. On the other hand, the author has increased the number of activities that deal with higher thinking processes. The activities that work on the three levels of analysis, synthesis and evaluation constitute about one third of the total number of activities that appear in the sections of Mastering Reading and Listening in the six units.

This implies that the author has also succeeded in adapting activities to the objectives of the new curriculum.

Gholamreza Zareian, & Mohammad Davoudi, (2015), investigating the types and levels of questions available in two ESP coursebooks, namely, *English for the Students of Sciences* and *English for the Students of Engineering* taught in Iranian universities based on Bloom's New Taxonomy of learning objectives. The overall findings of this study was that the most prevalent learning objectives pursued in the above-mentioned course books in Iran were lower-order cognitive processes, that is, *remembering*, *understanding* and *applying*.

In other words, the majority of the questions assessed the three lower level cognitive domains and only few questions were found to address higher cognitive processes among the six levels of Bloom's New Taxonomy. Therefore, it can be concluded that, based on the results of this research, the main objectives of the two ESP course books were the development of lower-order cognitive skills. Hence, it is suggested that in order to improve the content of the course books and make a balance between lower-order questions and higher-order ones, multilevel questions should be devised and incorporated at the end of each passage.

G. Why Evaluating Textbooks

The reasons for materials evaluation activities are also many and varied. One of the major reasons is the need to adopt new course books. Another reason as Cunningsworth (1995) emphasized is to identify particular

strengths and weaknesses in textbooks already in use. Tomlinson (1996) also states that the process of materials evaluation can be seen as a way of developing our understanding of the ways in which it works and, in doing so, of contributing to both acquisition theory and pedagogic practices. It can also be seen as one way of carrying out action research.(p.238).

Grant (1987, p.8) claimed (the) 'Perfect book does not exist', yet the aim was to find out the best possible one that will fit and be appropriate to a particular learner group. Sheldon (1988) suggested that textbooks did not only represent the visible heart of any ELT program, but also offer considerable advantages for both students and the teachers when they were being used in ESL/EFL classrooms.

Cunnigsworth (1995) argued that textbooks were an effective resource for self-directed learning, an effective source for presentational material, a source of ideas and activities, a reference source for students, a syllabus where they reflected pre-determined learning objectives, and supported for less experienced teachers to gain confidence. In addition to that, Hycroft (1998) stated that one of the primary advantages of using textbooks was that they were psychologically essential for students since their progress and achievement could be measured concretely when they were used.

On the other hand, evaluation is universally accepted as an integral part of teaching and learning. It is one of the basic components of any curriculum and plays a pivotal role in determining what learners learn.

ReaDickins and Germaine (1994) stated that "evaluation is an intrinsic part of teaching and learning" (p.4).

Cunningsworth (1995: 7) suggested that the materials selected should reflect [the needs of the learners and the aims, methods and values of the teaching program. One other reason for textbook evaluation is that it can be very useful in teachers‟ development and professional growth. Ellis (1997) suggested that textbook evaluation helps teachers went beyond impressionistic assessments and it helped them to acquire useful, accurate, systematic and contextual insights into the overall nature of textbook material.

H. Domains of Learning

1. Three Levels of the Mind

Learning is everywhere. We can learn mental skills, develop our attitudes and acquire new physical skills as we perform the activities of our daily living. These domains of learning can be categorized as cognitive domain (knowledge), psychomotor domain (skills) and affective domain (attitudes). This categorization is best explained by the Taxonomy of Learning Domains formulated by a group of researchers led by Benjamin Bloom in 1956.

Bloom's taxonomy consisted of three domains:

a. Cognitive—knowledge-based domain
b. Affective—attitude-based domain
c. Psychomotor—physical skills-based domain

Table 1
Outlines the three domains of Bloom's original taxonomy

Domain	Overview	Abilities
Cognitive	Content and intellectual knowledge: What do I want learners to know?	• Conceptualization • Comprehension • Application • Evaluation • Synthesis
Affective	Emotional knowledge: What do I want learners to think or care about?	• Receiving • Responding • Valuing • Organizing • Characterizing
Psychomotor	Physical/mechanical knowledge: What action(s) do I want learners to be able to perform?	• Perception • Simulation • Conformation • Production • Mastery

(Cecelia, Rubin, 2013)

2. Bloom's Taxonomy

Bloom's taxonomy is a general taxonomy that includes six levels for examining the fulfillment of the goals of the cognitive domain among students: knowledge, comprehension, application, analysis, synthesis, and evaluation.

Bloom et al. (1956) define the six levels of the cognitive domain in Bloom's taxonomy as follows:

Knowledge: It is defined as the remembering of previously learned material. This may include the recall of various material, from specific facts to complete theories, but all that is required is the bringing to mind of the appropriate information. Knowledge represents the lowest level of learning outcomes in the cognitive domain. Observation and recall of

information Knowledge of dates, events, place Knowledge of major ideas Mastery of subject matter.

Comprehension: It is defined as the ability to understand the meaning of the material. translating material from one form to another (words to numbers), by interpreting material (explaining or summarizing), and by estimating future trends (predicting consequences or effects). These learning outcomes go one step beyond the simple remembering of material and represent the lowest level of understanding. Understanding information, translate knowledge into new context Interpret facts, compare, contrast Order, group, infer causes Predict consequences.

Application: It refers to the ability to utilize the learned material in new and concrete situations. This may involve the application of such things as rules, methods, concepts, principles, laws, and theories. Learning outcomes in this area require a higher level of understanding than those under comprehension. Use information Use methods, concepts, theories in new situations Solve problems using required skills or knowledge.

Analysis: It refers to the ability to specify material into its component parts so that its organizational structure may be understood. This may include the identification of parts, analysis of the relationship between parts, and recognition of the organizational principles involved. Learning outcomes here represent a higher intellectual level than comprehension and application because they require an understanding of both the content and the structural form of the material. Seeing patterns

Organization of parts recognition of hidden meanings Identification of components.

Synthesis: It refers to the ability to set up parts together to form a new whole. This may involve the production of a unique communication, a plan of operations (research proposal), or a set of abstract relations (scheme for classifying information). Learning outcomes in this area stress creative behaviors, with major emphasis on the formulation of new patterns or structure. Use old ideas to create new ones Generalize from given facts Relate knowledge from several areas Predict, draw conclusions.

Evaluation: It is concerned with the ability to assess the value of material for a given purpose. The assessments are to be based on definite criteria. These may be internal criteria (organization) or external criteria (relevance to the purpose) and the student may determine the criteria or be given them. Learning outcomes in this area are highest in the cognitive hierarchy because they contain elements of all the other categories, plus conscious value judgments based on clearly defined criteria. Compare and discriminate between ideas Assess the value of theories, presentations Make choices based on reasoned argument Verify value of evidence Recognize subjectivity. (Developed by Igbaria, 2013)

Table 2
Summary of categories in Bloom's Taxonomy

Bloom's Category	Definition	Question Cues
Knowledge	It is defined as the remembering of previously learned material	list, define, tell, describe, identify, show, label, collect, examine, tabulate, quote, name, who, when, where, etc.
Comprehension	It is defined as the ability to grasp the meaning of material. translating material from one form to another (words to numbers), by interpreting material (explaining or summarizing), and by estimating future trends (predicting consequences or effects).	summarize, describe, interpret, contrast, predict, associate, distinguish, estimate, differentiate, discuss extend
Application	It refers to the ability to use learned material in new and concrete situations.	apply, demonstrate, calculate, complete, illustrate, show, solve, examine, modify, relate, change, classify, experiment, discover
Analysis	It refers to the ability to break down material into its component parts so that its organizational structure may be understood.	analyze, separate, order, explain, connect, classify, arrange, divide, compare, select, explain, infer
Synthesis	It refers to the ability to put parts together to form a new whole.	combine, integrate, modify, rearrange, substitute, plan, create, design, invent, what if?, compose, formulate, prepare, generalize, rewrite
Evaluation	It is concerned with the ability to judge the value of material for a given purpose.	assess, decide, rank, grade, test, measure, recommend, convince, select, judge, explain, discriminate, support, conclude, compare, summarize

Table 3
Bloom's Taxonomy six levels and keywords

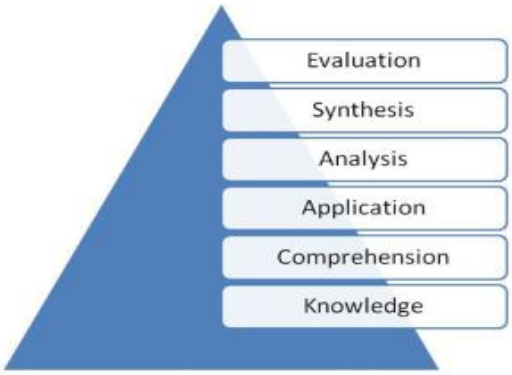
	Skill	Definition	Verbs
Level 1	Knowledge	Recall information	Indentify, describe, name, label, recognize, reproduce, follow
Level 2	Comprehension	Understand the meaning paraphrase a concept	Summarize, convert, defend, paraphrase, internet, give, examples
Level 3	Application	Use the information or concept in a new situation	Build, make, construct, model, predict, prepare
Level 4	Analysis	Break information or concepts into parts to understand it more fully	Compare/contrast, break down, distinguish, select, separate
Level 5	Synthesis	Put ideas together to form something new	Categorize, generalize, reconstruct
Level 6	Evaluation	Make judgments about value	Appraise, critique, judge, justify, argue, support

(Developed by Cecelia, Rubin, 2013)

3. Cognitive Hierarchy of Bloom's Taxonomy

The cognitive domain of Bloom's taxonomy has six levels organized in a hierarchy (Figure 1). The base of the pyramid is the foundation of all cognition, knowledge. Each ascending level of the pyramid depends on the one below it.

Figure 1 the six levels of the cognitive domain of Bloom's Taxonomy



(Developed by Cecelia, Rubin, 2013)

I. Effects of Higher-Lower Cognitive Levels

Questioning is a techniques of thinking instruction but not all questions can be counted as thinking questions (McTighe, 1985). Swartz and Perkins (1989) claim that asking higher level questions will promote thinking skills rather than asking for simple recall. However, if students are expected to analyze or evaluate information, then they must be engaged in higher-level questioning (Hunkins, 1995). Therefore, the types of questions used in the classroom depend on the purpose of the lesson.

Gall (1984) also synthesized the research on teachers' questioning and found that the factual questions are more effective for young students' achievement whereas the higher level questions are more effective for older students or students of high ability. Therefore, teachers who use factual questions with young students should also include some higher cognitive questions to foster advanced thinking (Elijah & Legenza, 1978).

Some studies (Al-Kaleefah, 1996; Wilen, 1991) have indicated that most teachers spend most of their time asking low level questions which

concentrate on factual information. It is assumed that such questions limit learners' critical thinking and deep understanding of the material. On the other hand, Brualdi (1998) suggested that high level cognitive questions which require students to employ higher thinking skills enable teachers to make sure whether a student has truly internalized a concept.

Costa and Lowery (1989) suggested that when teachers use terms such as "predict," "compare," "conclude," and "hypothesize" in their questions, these may also encourage students' thinking skills. Chin (2004) found that teachers believed that they had to focus on asking open-ended questions in order to give students opportunities to develop their thinking skills. But open-ended questions were not the most frequently asked questions during classroom discourse. The researcher also suggested that asking more questions does not necessarily guarantee higher level thinking; rather, the types of questions asked were the most important factor in influencing the level of thinking operations attained by students.

J. Concept of Critical Thinking

1. Definition of Thinking

Thinking is reasoning, and that reason is a chain of simple ideas, and linked by applying strict rules of logic. Another definition, "thinking is a process and the emphasis lies in the quality of that process rather than solely on the quality of the product resulting from that process" (Thomas et al, 2010.85).

2. What is Critical Thinking?

There is no standard or universally accepted framework to describe or evaluate the construct critical thinking (Myrick, 2002). Literature offers a variety of definitions for critical thinking that differ to some extent (Atkinson, 1997) but have noticeable overlap if one scrutinizes them carefully (Davidson, 1998).

In early definitions, critical thinking was considered as "learning how to ask and answer questions of analysis, synthesis, and evaluation" (Paul, 1985, p. 37) that "encompasses two interconnected processes, namely, identifying and challenging assumptions, and imagining and exploring others" (Brookfield, 1991, p. 229). Critical thinking was also considered to be "the educational cognate of rationality" (Siegel, 1988, p. 32) and the "reasonable and reflective thinking that is focused upon deciding what to believe and do" (Norris & Ennis, 1989, p. 3). Later more dimensions have been added to the construct and it can be regarded as:

a. the scientific method applied by ordinary people to the ordinary world to solve problems (Schafersman, 1991);
b. an active and systematic cognitive strategy to examine, evaluate and understand events; make decisions on the basis of sound reasoning and valid evidence (Levy, 1997);
c. "reflective thinking involving the evaluation of evidence relevant to a claim so that a sound conclusion can be drawn from the evidence" (Bensley, 1998, p.5); 4."the use of those cognitive skills or strategies

that increase the probability of a desirable outcome,….thinking that is purposeful, reasoned, and goal oriented" (Halpern, 2003, p.6).

Critical thinking is viewed as a process rather than an endpoint or objective (Petress, 2004) that leads to high quality decisions and judgments through analysis, assessment and reformulation of thinking (Giancarlo & Facione, 2007). Critical thinking has been found to be a tool of inquiry and thus it is very helpful both in education and life as a critical thinker is well-informed, open-minded, flexible, honest, careful in making judgments, skillful in seeking relevant information, and focused in inquiry (Diestler, 2001; Halpern, 2003; Petress, 2004).

While some scholars believe that critical thinking is a part of individuals' genetic make-up, research shows that critical thinking skills are both teachable and learnable (Halpern, 1993). It is also suggested that improving critical thinking skills among special groups of students who want to pursue certain professions such as nursing, law, medicine, and teaching is a paramount concern (Bessick, 2008). When teachers are trained on how to improve their critical thinking skills, they can transform these skills to their students by bringing tasks that need critical thinking and reasoning; and bymodeling how to solve problems using critical thinking skills (Beyer, 1987).

Critical thinking is the process of applying reasoned and disciplined thinking to a subject ("Effective Questioning", 2010). Critical thinking allows a person to acquire and clarify goals, examine and

discover possibilities, discern hidden values, evaluate evidence, facts and knowledge; also critical thinking lets one accomplish actions and constantly assess & revise conclusions (“MoDB”, 2018).

a. Critical Thinking Skills

These skills are used concurrently. There is no one linear process or correct sequence of thinking. The skills are applied in accordance with the nature of the thinking task. Some may well be used in a self-determined sequence, but this requires that students are independently familiar and confident in the selection and use these skills.

1) Reasoning
2) Evaluating
3) Analyzing
4) Problem Solving
5) Making Decision

b. The 14 Characteristics of Critical Thinkers:

1) Independently ask pertinent questions.
2) The Reason, analyze and weigh statements and arguments.
3) Have a sense of curiosity and wonder, being interested in finding out, new information or solutions.
4) Can define criteria for analyzing ideas and problems.

5) Are willing to examine beliefs, challenge assumptions and opinions, weigh them against facts(distinguishing between fact, opinion, bias, and prejudice).
6) Listen respectfully and carefully to others so that they are able to give feedback.
7) Suspend judgment until all facts have been gathered and considered.
8) Looks for evidence to support assumption and beliefs.
9) Are able and flexible enough to adjust opinions when new facts are found.
10) Examines problems closely and looks for proof.
11) Able to identify and reject information that is incorrect or irrelevant.
12) Make assertions based on sound logic and solid evidence.
13) Able to admit a lack of understanding or information.
14) Recognises that critical thinking is a lifelong process of self-assessment. (as cited in "Effective Questioning",2018)

3. The Nature of Critical Thinking

Tofade, et al, (2013:1) define Critical Thinking is thinking clearly and rationally. It involves thinking precisely and systematically, and following the rules of logic and scientific reasoning, among other things. In the words of Lai (2011), "Critical thinking includes the component skills of analyzing

arguments, making inferences using inductive or deductive reasoning, judging or evaluating, and making decisions or solving problems"(p.2).

Learning to think is the central purpose of education. For the term "Critical Thinking", its most recent definition was put forward in the book *Asking the Right Questions: Guide to Critical Thinking by Browne and Keeley (2007)*. They defined "Critical Thinking" as "an awareness of a set of interrelated questions, an ability to pose and answer critical questions at an appropriate time and a desire to actively use the critical questions"(p.2). Although the definition they provide has some similarities and is in the same trend with the precedent definitions, their emphasis has been placed on asking questions.

"A critical thinker is someone who is able to do the following:

1. Understand the logical connection between ideas
2. Formulates ideas succinctly and precisely.
3. Identify, construct, and evaluate arguments.
4. Evaluate the pros and the cons a decision
5. Evaluate the evidence for and against a hypothesis.
6. Detect inconsistencies and common mistake in reasoning
7. Analysis problem systematically
8. Identify the relevance and importance of ideas

4. The importance Skills of Critical Thinking

Harizaj and Hajrulla (2017) explain that they are many factors that influence a student's performance to communicate in EFL/ESL classes, such

as; motivation, classroom environment and teaching-learning context. The major factor that affects a student's in communicating is the ability to think critically. Through critical thinking, learners progress the ability to communicate in English better. Therefore, raising critical thinking stimulates independence learning. Also, critical thinking skills make students reflect and to become creative.

5. Some Misconceptions about Critical Thinking

However, critical thinking is sometimes thought to be too confrontational. Some people think critical thinking means criticizing others all the time, which is not constructive. But this is a misunderstanding. Critical thinking is not a purely destructive force. First, by rejecting bad ideas, we become better at finding the truth. Second, thinking critically does not mean we criticize people all the time.

When other people are right, we don't have to disagree. And when other people are wrong, critical thinking helps us recognize the mistakes being made, but it does not follow we have to publicly denounce them. Sometimes mistakes do not matter. Sometimes we have to be polite, and sometimes we can help people reason better not by criticizing them but by other indirect means—for example, by giving hints and suggestions. A critical thinker can be sympathetic and constructive rather than confrontational." (Tofade, et al,2013:1)

6. The Teachability About Critical Thinking

Critical thinking has been regarded as an essential outcome of education *(*Thomas et al,2010. Martha, 2010). , it is critical for EFL learners to strengthen their critical thinking skills. In order to achieve this goal, EFL learners need to receive formal instruction and training. Fortunately, "many critical thinking researchers maintain that critical thinking skills and abilities can be taught" (Lai, 2011, p.29). Halpern (2003) claims that when critical thinking is explicitly taught by using various examples from academic disciplines, students will be able to learn to improve their thinking ability and habits. The key to this instructional approach is that EFL teachers have to learn to "ask the right questions" (Browne & Keeley, 2007).

7. Critical Thinking And Language Learning

In the history of educational psychology, close relationships between language and thinking skills have been recognized by theorists and educators (Piaget, 1971; Vygotsky, 1962). Supplemental instruction in critical thinking and abstract reasoning skills are considered as one of the tools that help students to improve learning outcomes at all levels (Stern, 2001).

The importance of promoting higher-order thinking skills in language classrooms has also been the focus of interest among language experts (Chamot, 1995). As students learn critical thinking skills through content course instruction (Fisher, 2001), integrating problem solving activities that need critical thinking in language classes is of vital importance. In this way, how to think rather than what to think is emphasized (Barjesteh & Vaseghi,

2012) and students are encouraged to participate actively in language classes. Research shows that critical thinking skills are related to English overall proficiency (Rashid & Hashim, 2008), reading comprehension ability (Fahim, Bagherkazemi, & Alemi, 2010), vocabulary knowledge (Fahim & Komijani, 2010), and use of language learning strategies (Nikoopour, Farsani, & Nasiri, 2011).

It is also evident that teachers play a key role in promoting students' critical thinking skills as "teaching is a complex activity that is influenced by many elements of teacher quality. Teachers and teacher quality is a powerful predictor of student performance" (Ghaemi & Taherian, 2011, p.9). Therefore, in order to affect students' critical thinking ability, teachers should be trained to improve their thinking skills. Critical thinking instruction helps teachers to make a shift from using mechanical activities to problem solving types in their classes (Bessick, 2008). Possessing critical thinking abilities helps teachers become more successful and effective language teachers (Birjandi & Bagherkazemi, 2010; Ghaemi & Taherian, 2011).

8. Critical Thinking and EFL Learners' Performance

Stimulating thoughts make students become aware of the potential of vocabulary that they are going to use. In every language context, students activate the known vocabulary. Speaking, reading, listening, and writing skills help students to enhance their communication. Through critical thinking, students learn independently and make their own decisions in various tasks.

As mentioned earlier, many factors motivate and affect foreign learners' critical thinking. The ability to think is a basic requirement for students' success in inquiry learning (Clark & Starr, 1991). It is very fundamentals for a foreign language learner to improve critical skills and then to use these skills to improve language skills and to become more aware of language potential and their capacity to improve language proficiency (Harizaj and Hajrulla,2017. 132)

K. Teaching and Learning Contexts

Nowadays, different methods of teaching are applied to teach students how to think critically. This strategy is being applied not just in foreign language, but in other subjects as well. In EFL classes, the learner tries to relate all knowledge and put in practice what is learned. A language teacher based on language curriculum exposes students to communicative activities, simulations, and other role-playing and problem-solving activities. Since the main aim of learning a language is to be used in and for communication, it is very important to use an effective teaching methodology.

Traditional language classroom, based on translation method, is replaced with communicative one. The design and selection of teaching methods must take into account not only the nature of the subject matter, but also how students learn (Davis, 1997). Nowadays, the concept of learnercentered classes is feasible. Learning English language and practicing it means negotiation. While the teacher explains something new, students take

notes. They should learn to become successful listeners and thinkers. The teacher should take time to think which strategy works best to adopt his/her teaching method. The teacher's task primarily is to develop students thinking skills in problem solving. On the other hand, students should be aware of independent thinking, thus, autonomous learning. If they are trained well, they will be successful learners.

As the aim of teaching and learning is focused on Communicative Language Teaching and communicative competence, it is important for both the teacher and the learner to focus on this aspect. The role of the teacher is indispensable for the learner to enhance communicative competence. Communicative competence includes different aspects of language knowledge.

The task of the teacher is to help the language learner master his/her language skills. Teachers are responsible for promoting critical thinking in the learners other than helping them to go from one educational level to the next. (Lipman, 2003) Language is a vivid thing that must be used continuously. All these aspects of language knowledge that a learner has to master, requires the use of different strategies by a learner. In such a case, the teacher has to use his/her own strategies to make students understand what learning strategies they have to use, how to develop thinking skills, and how to use them wisely for different purposes and in different situations.

CHAPTER III

RESEARCH METHODS

The aim of this study is to analyze the frequency of *WH*-question in *Bahasa Inggris* textbook according to adaptation Bloom's Taxonomy of cognitive domain. This chapter outlines the methods that the researcher follow in conducting the research.

A. Research Design

In order to achieve the objectives of this research, three methods will be used; firstly, extensive literature will comprehend to strengthen the theory and literacy of the study. Through this literature study, the researcher will be able to acquire a more comprehensive understanding of the general context of the knowledge. Secondly, the textbooks chosen will be based on the 2013 new curriculum. It is the very basic thing on this study since this study will be relevant to issues concerning new Indonesian's curriculum. Besides, the ministry of education and culture obligates to educational institutions to apply the new curriculum. Thirdly, technical qualitative will be conducted to analyze the books, whether the textbooks are compiled based on the goals of the new curriculum to lead students to achieve High Order Thinking Skills (HOTS). Through these steps, the researcher is hoping that it will be able to know how the learning material should be compiled.

The researcher will utilize qualitative methodology to conduct the study. The purpose of research, to discover answers to questions through the

application of systematic procedures. Theoretically, “qualitative research properly seeks answers to questions by examining various social settings”(Bruce, 2001). Lawrance (2014) explains that, in conducting qualitative research, we infer from the empirical details of social life. *To infer* means to pass a judgment, to use a reasoning, and to reach a conclusion based on evidence. A qualitative explanation can be either highly unlikely or highly plausible. To verify research findings, it has to provide supportive evidence from theoretical explanations to increase the plausibility.

B. Research Technique

This technical qualitative requires the Taxonomy Bloom thinking level of the cognitive domain. In the field of this study, The researcher chooses content analysis type. Since it has its own approach to analyze data that stems largely from how the object of analysis, content, is conceived. According to Klaus (2004) “content analysis is a research technique for making replicable and valid interferences from texts (or other meaningful matters) to the context of their use. As a technique, content analysis involves specialized procedures. It is learnable and divorceable from the personal authority of the researcher.

As a research technique, the content analysis provides new insight, increases a researcher's understanding of particular phenomena, or informs practical action. Content analysis is a scientific tool".

C. Source of data

The source of data of this study is from the textbook *Pathway* to English for senior high school at 10th ~~, 11th, 12th~~ grade *Kurikulum 2013 yang disempurnakan Kelompok Peminatan*. It published by Penerbit Erlangga in

2017 and compiled by Thresia Sudarti & Eudia Grace. All of WH- Question in the textbook.

D. Research Instrument

The researcher prepares a guide for the levels of questions based on the cognitive domain in Bloom's taxonomy. This guide includes a description of the level of each question together with its criteria. This tool will be designed to allow the researcher to calculate the frequencies of each level of the question in the textbook.

A Guide for the Levels of Questions Based on the Cognitive Domain in Bloom's Taxonomy	
Competence / Level	**Definitions and Skills Demonstrated**
Knowledge	It is defined as the remembering of previously learned material. This may involve the recall of a wide range of material, from specific facts to complete theories, but all that is required is the bringing to mind of the appropriate information. Knowledge represents the lowest level of learning outcomes in the cognitive domain. Observation and recall of information Knowledge of dates, events, place Knowledge of major ideas Mastery of subject matter
	Question Cues: list, define, tell, describe, identify, show, label, collect, examine, tabulate, quote, name, who, when, where, etc.
Comprehension	It is defined as the ability to grasp the meaning of material. translating material from one form to another (words to numbers), by interpreting material (explaining or summarizing), and by estimating future trends (predicting consequences or effects). These learning outcomes go one step beyond the simple remembering of material and represent the lowest level of understanding. Understanding information Grasp meaning Translate knowledge into new context Interpret facts, compare, contrast Order, group, infer causes Predict consequences

	Question Cues: summarize, describe, interpret, contrast, predict, associate, distinguish, estimate, differentiate, discuss extend
Application	It refers to the ability to use learned material in new and concrete situations. This may include the application of such things as rules, methods, concepts, principles, laws, and theories. Learning outcomes in this area require a higher level of understanding than those under comprehension. Use information Use methods, concepts, theories in new situations Solve problems using required skills or knowledge
	Questions Cues: apply, demonstrate, calculate, complete, illustrate, show, solve, examine, modify, relate, change, classify, experiment, discover
Analysis	It refers to the ability to break down material into its component parts so that its organizational structure may be understood. This may include the identification of parts, analysis of the relationship between parts, and recognition of the organizational principles involved. Learning outcomes here represent a higher intellectual level than comprehension and application because they require an understanding of both the content and the structural form of the material. Seeing patterns Organization of parts Recognition of hidden meanings Identification of components
	Question Cues: analyze, separate, order, explain, connect, classify, arrange, divide, compare, select, explain, infer
Synthesis	It refers to the ability to put parts together to form a new whole. This may involve the production of a unique communication, a plan of operations (research proposal), or a set of abstract relations (scheme for classifying information). Learning outcomes in this area stress creative behaviors, with major emphasis on the formulation of new patterns or structure. Use old ideas to create new ones Generalize from given facts Relate knowledge from several areas Predict, draw conclusions
	Question Cues: combine, integrate, modify, rearrange, substitute, plan, create, design, invent, what if?, compose, formulate, prepare, generalize, rewrite

Evaluation	It is concerned with the ability to judge the value of material for a given purpose. The judgments are to be based on definite criteria. These may be internal criteria (organization) or external criteria (relevance to the purpose) and the student may determine the criteria or be given them. Learning outcomes in this area are highest in the cognitive hierarchy because they contain elements of all the other categories, plus conscious value judgments based on clearly defined criteria. Compare and discriminate between ideas Assess the value of theories, presentations Make choices based on reasoned argument Verify value of evidence Recognize subjectivity
	Question Cues assess, decide, rank, grade, test, measure, recommend, convince, select, judge, explain, discriminate, support, conclude, compare, summarize
Adapted from: Igbaria, A. K (2013) a content analysis of the WH – Question in EFL textbook of *Horizon*, International Education Studies; Vol. 6, No. 7.	

E. Data Collection Procedure

1. **The First Step**: The researcher obtains the *textbooks* and use the books to collect the WH-questions.
2. **The Second Step**: The researcher use identical tables with four columns for collecting the questions and recording the data. The first column contains the serial number of the question, the second contains the question, and the third and fourth columns are used for recording the level of the question and the page number in the book on which the question appeared.

~~NO~~	~~THE QUESTIONS~~	~~LEVEL~~	~~PAGE~~
	~~chapter 1~~		
~~1~~			
~~2~~			
~~3~~			

~~4~~			
~~5~~			
~~6~~			
~~7~~			
~~8~~			
~~9~~			
~~10~~			
~~11~~			
~~12~~			

F. Data Analysis Procedure

In analyzing data, the researcher will utilize *Inductive data analysis* approach. "In inductive data analysis, the goal is generally for research findings to emerge from the frequent, dominant, or significant themes within the raw data, without imposing restraints as is the case with predetermined coding or analysis schemes. Inductive data analysis is determined by multiple examinations and interpretations of the data in the light of the research objectives, with the categories induced by the data. The frameworks for analysis often shaped by the assumptions and experiences of the individual researcher (Alisaon and Susan, 2005).

The data analysis will be conducted by the following steps below :

The first step: The researcher categorizes all questions again using the research instrument.

The second step: When categorizing the questions is finished the researcher will begin counting the frequency that each level of Bloom's taxonomy appears on his table.

The third step: analyzing the percentage to discover the quality of the book, whether it leads students to achieve their continuous thinking.

G. Data Endorsements

1. Credibility of the Research Instrument

Validity in research is relative. It can be used in quantitative and qualitative as well. It depends on the case of the research. Validity concerns the accuracy or truthfulness of the findings. The term most frequently used by qualitative researchers to refer to this characteristic is credibility (Ary et al. 2010). Bell (2010) also explains that validity refers to what a research instrument measures in relation to what it claims to measures.

In order to establish the credibility in this study will use two strategies. First, the researcher utilizes *theory triangulation*. Ary et al (2010) explain that theory triangulation involves consideration of how the phenomenon under study might be explained by multiple theories. Considering different theories, the researcher may gain better insights.

Second, *evidence-based on consensus*, As cited in Ary et al (2010) Validity based on consensus is defined as "agreement among competent others that the description, interpretation, evaluation, and thematics" are correct. This kind of validity is primarily showed through two methods: peer review and investigator triangulation. In peer review**,** also called peer debriefing**,** the question is asked, "Given the evidence presented, is there a consensus in the interpretation?" Investigator triangulation involves having multiple researchers collect data independently and compare the collected data. If multiple investigators agree in their description of the context, in

their description of events, and in their reporting of what was said, internal validity is enhanced.

As explained above there are two strategies that researcher use to enhance the validity. The researcher will adopt the research instrument, which was developed by Igbaria (2010). The reason is, the research instrument was presented to a committee of experts. There are five judges from the Faculty of Education in Sakhnin College. The researcher (Igbaria,2010) asked the committee to examine the definitions of the levels according to the skills and behaviors demonstrated for each level. After examining the research instrument, the judges reported that it was valid for the purposes of this research.

2. Transferability

Ary et al (2010) define transferability in qualitative research is the degree to which the findings of a qualitative study can be applied or generalized to other contexts or to other groups. To enhance transferability of this study, researcher utilizes cross-case comparisons strategy. The data finding will be compared to several related studies in order to establish the accuracy and provide more complete data description.

3. Dependability

Qualitative researchers speak of dependability rather than reliability. Recall that reliability in quantitative research has to do with consistency of behavior or the extent to which data and findings would be

similar if the study were replicated. This is referred to as dependability or trustworthiness (Ary et al, 2010)

To enhance dependability the researcher use coding agreement strategy. The method is the code – recode. As explained by Ary et al (2010) that code – recode is a strategy of coding the data, leaves the analysis for a period of time, and then comes back and recodes the data and compares the two sets of coded materials. Another strategy to enhance the dependability, the researcher presents the documented data to the 1st and 2nd advisor to check – recheck the reliability.

4. Confrmability

Confrmability is the idea of neutrality or the extent to which the research is free of bias in the procedures and the interpretation of results (Ary et al, 2010). To enrich Confrmability, the researcher uses triangulation method to check the criteria of the data, then its criteria is presented to both of my advisors.

CHAPTER IV

RESEARCH FINDINGS AND DISCUSSION

This section discusses the results obtained after analyzing the activities from the *Pathway to English* textbook. This analysis helps the researcher to answer the research questions about the most use~~frequent~~ of WH-questions contained in *Pathway To English* textbooks based on Bloom's Taxonomy of cognitive domain and the way of *Pathway to English* textbooks encourage students to use the various levels of the cognitive domain of Bloom's Taxonomy for critical ~~developing~~ thinking skills ability.

A. Data Presentation

In order to answer the research question, the researcher analyzed all the textbook questions, and then collected all the results. These results are shown in table (4) which shows the level of the question and the frequency and percentages for each level in each learning unit of the book.

Table 4
Examples of WH – Question in The six levels of Boom's Taxonomy

1	**knowledge**	**Question**	**Page**
A	Chapter 1	How much did Amalia withdraw from her saving?	2
B	Chapter 2	Who do you usually go to talk about your problem?	19
C	Chapter 3	How long super Junior be staying in Indonesia?	42
D	Chapter 4	Where do you live?	73
E	Chapter 5	What do the following numbers refer to in Ismail Marzuki's life?	83
F	Chapter 6	How many classes does Mr Tina have now?	106
G	Chapter 7	Who will be the target consumers?	122
H	Chapter 8	Which one is a gadget?	146
I	Chapter 9	What has four legs and flies?	180

J	Chapter 10	When do people sing a song?	192
2	**Comprehension**	**Question**	**Page**
A	Chapter 1	What is the function of the form?	3
B	Chapter 2	How did you feel?	19
C	Chapter 3	What is the dialogue about?	40
D	Chapter 4	Why do we need correlative conjunction in sentence?	61
E	Chapter 5	what is the text mainly about?	85
F	Chapter 6	Why did Mr Andi congratulate Mr Waluyo?	106
G	Chapter 7	What is the purpose of the advertisement?	122
H	Chapter 8	What is general classification telling you about?	154
I	Chapter 9	What is taken before you get it?	181
J	Chapter 10	What is the song about?	195

3	**Application**	**Question**	**page**
A	Chapter 1		
B	Chapter 2		
C	Chapter 3	What do the sentences with "will/wont' + verb I" imply?	40
D	Chapter 4	How can we make sentences using correlation conjunction?	61
E	Chapter 5		
F	Chapter 6	What is the function of "too" and enough?	106
G	Chapter 7	How did you advertise it?	130
H	Chapter 8	When do we use "is used" ore "are used"?	168
I	Chapter 9		
J	Chapter 10		

4	**Analysis**	**Question**	**Page**
A	Chapter 1		
B	Chapter 2	Why did it happen?	24
C	Chapter 3	What does Prita think about Benjamin's plan?	40
D	Chapter 4	Why do we need correlative conjunctions in sentences?	61
E	Chapter 5	What's the author's purpose in writing the book?	78
F	Chapter 6	How is the relationship between Mr Tisna in the dialogue?	106
G	Chapter 7	How does the event reach out to you?	120
H	Chapter 8	What does an electric torch consist of?	153
I	Chapter 9	Why is water like horse?	180
J	Chapter 10	Why do people sing a song?	192

5	Synthesis	Question	Page
A	Chapter 1		
B	Chapter 2		
C	Chapter 3		
D	Chapter 4		
E	Chapter 5		
F	Chapter 6		
G	Chapter 7		
H	Chapter 8		
I	Chapter 9		
J	Chapter 10		

6	Evaluation	Question	Page
A	Chapter 1		
B	Chapter 2	How was Ben's weekend?	24
C	Chapter 3		
D	Chapter 4		
E	Chapter 5		
F	Chapter 6	How did the series of crashes happen?	122
G	Chapter 7		
H	Chapter 8		
I	Chapter 9		
J	Chapter 10		

Tabel 5
Frequency And Percentage Of Wh- Questions In The Six Levels Of Cognitive Domain In Bloom's Taxonomy
IN EACH LEARNING CHAPTER IN THE TEXTBOOK
PATWAY TO ENGLISH

Level of Question	CHAPTER										Total	%
	1	2	3	4	5	6	7	8	9	10		
Knowledge	11	11	9	6	2	7	15	16	9	5	91	42.12%
Comprehension	5	6	4	2	3	4	11	13	5	5	58	26.85%
Application	0	0	3	3	0	4	4	2	0	0	16	7.41%
Analysis	0	4	1	1	3	9	11	6	10	4	49	22.69%
Synthesis	0	0	0	0	0	0	0	0	0	0	0	-
Evaluation	0	1	0	0	0	1	0	0	0	0	2	0.93%
TOTAL	**16**	**22**	**17**	**12**	**8**	**25**	**41**	**37**	**24**	**14**	**216**	**100%**

B. Research Findings

The researcher acquired these results by thoroughly studying and learning all the contents of the textbook *Pathway to English* and listing all the WH- questions that appeared on each page. The analysis of the book began on page 2 and ended on page 198. The researcher collected 216 questions (Appendix) and then used the research instrument to analyze the questions and calculate the percentage for each level of the cognitive domain according to Bloom's taxonomy. These same results are also presented in table (4) to show the frequencies and percentages of the WH-questions in the six levels of the cognitive domain in Bloom's taxonomy in the whole textbook *Pathway to English.*

C. Discussions

Research Question: What is the most use~~frequent~~ of WH-questions contained in *Pathway To English* textbooks based on Bloom's Taxonomy of cognitive domain.?

Table 6
Frequencies and Percentages of the WH-Questions in the Six Levels of the Cognitive Domain in Bloom's Taxonomy in the Textbook *Pathway to English*

Level of question	Frequencies	Percentage
Knowledge	91	42.12%
Comprehension	58	26.85%
Application	16	7.41%
Analysis	49	22.69%

Synthesis	0	-
Evaluation	2	0.93%
TOTAL	216	100%

Table 5 shows the frequencies and percentages of the six levels of cognitive domain in Bloom's taxonomy. The frequencies in the table range from 2 - 90, while percentages range from 0.93% to 41.67%. The level that appears most frequently is the knowledge level.

Research Question: How do the *Pathway to English* textbooks encourage student s to use the various levels of the cognitive domain of Bloom's Taxonomy for critical ~~developing~~ thinking skills ability.?

Table 6
summary of the findings of all chapters of 10th Grade English course book

Level of Thinking	**Frequencies**	**Percentages**
Lower Level Thinking Skills		
Knowledge	91	42.12%
Comprehension	58	26.85%
Application	16	7.41%
Higher Level Thinking Skills		
Analysis	49	22.69%
Synthesis	2	-
Evaluation	2	0.93%
TOTAL	216	100%

Table 6 shows the summary of the percentage of two distinguished levels of lower and higher level of cognitive domain within the six levels of

Bloom's Taxonomy across the activities of the ten units of Pathway to English.

This finding is not surprising since it confirms the results of all the other studies that were discussed in the review of related literature in this present study. The evaluation and Synthesis level receive the lowest percentage and frequency. This finding also appeared frequently in all the studies discussed in the review of related literature.

The outstanding finding in this study as opposed to other studies was that the analysis level appeared at a frequency of 49 and a percentage of 22.85% which is almost equal to the comprehension level. The remaining two levels of application at a percentage 7,41%, and synthesis receives 0,0% while evaluation receives 0,93%.

The results show that the authors of *Pathway to English* place the greatest emphasis on the lower thinking processes of knowledge, comprehension and application. This implies that the authors of this textbook are perhaps still influenced by the old English curriculum for English instruction, which emphasized grammar translation method. The grammar translation method is used to learn non-native language. The approach is focusing more on reading and writing, with little consideration of speaking and listening (Jawarskowa and Porte,2007). Presumably most of the questions at the time called for lower thinking processes.

As cited in Reswari (2018) According to Tantra (2015), KTSP is a modification of the 2004 genre-based curriculum. It uses four stages, namely:

(1) building students' knowledge, (2) modeling texts, (3) constructing joint texts, and (4) constructing independent texts. That is why teachers will focus more on the reading ability of students rather than students' communicative skills.

This is supported by Yulia (2014) who conducted a case study of English teachers in Yogyakarta, Indonesia, related to an evaluation of the KTSP

curriculum. Results of the study indicated that teachers tend to emphasize reading skill over other skills. This is because; students ultimately need to take a national examination which focuses on reading skills.

In the old English curriculum called for limited answers rather than higher thinking processes of interpretation, analysis, or evaluation. It can therefore be assumed that the authors of the textbook were largely influenced by these questions and still apply the same types of questions. The book was written for students whose mother tongue is not English, and presumably the authors want to make it easier for the students to cope with the learning material by posing questions that called for lower thinking processes, whose answers are clear and do not demand analysis or evaluation.

The book is intended for heterogeneous classes with advanced, intermediate, and weak students, and the authors consequently chose to emphasize questions of the lower thinking processes to fit the student population - most of who are intermediate or weak. The table, however, also shows that the authors related to the other three levels of questions that

required higher thinking processes. The first, the analysis level, appears more than the other two levels of synthesis and evaluation.

The researcher feels that there are several reasons for this. These types of questions are a result of the new curriculum for English instruction. . This new curriculum emphasizes these three levels. Therefore, the authors succeed to a certain degree in integrating these levels - particularly the level of analysis. All educators are aware of the fact that this is the first level of higher thinking processes, and therefore it would not be difficult for students to cope with such questions. Presumably the authors receive guidance in writing questions that called for higher thinking processes after the new English curriculum was written. The authors also took the advanced students in the heterogeneous class - who must be encouraged and challenged by exposure to higher levels of questions – into consideration.

The evaluation level receives almost no reference. Presumably the authors believed that most students in the heterogeneous class are at a low or intermediate level of learning and consequently cannot cope with this type of question.

CHAPTER V

A. Conclusion

The textbook, *Pathway to English*, attempts to vary students' thinking processes. However, the authors of this textbook places emphasis mainly on the lower thinking process of knowledge and comprehension. The old English curriculum generated these types of questions, and consequently had a significant impact upon the types of questions posed in the textbook *Pathway to English.*

The modern trend in education concentrates on shifting from teacher-centered approach to learner-centered approach so the questions should concentrate on high levels of thinking instead of low levels of thinking. It is necessary for the questions to be suitable for the all thinking levels to achieve critical thinking.

B. Recommendation

Several recommendations for future study:

1. The questions in textbooks for English instruction that are intended for heterogeneous classes must be assessed carefully, and questions that encourage higher thinking processes among students should be encouraged. Workshops should also be organized to teach textbook authors how to formulate all levels of questions. Educators with expertise in formulating questions should be involved in writing textbooks, and these textbooks should be written by more than one author in order to provide more variety in. thinking and formulating questions.

2. Workshops should be conducted to familiarize textbook authors with the new curriculum for English instruction. These workshops would serve to encourage authors to place more emphasis on critical thinking processes when planning and writing textbooks.
3. The researcher also feels that the book Pathway to English for 10th grade should be analyzed again regarding the level of questions in relation to the affective and psychomotor domain.
4. For another researcher textbook for 11th and 12th grade should also be analyzed concerning cognitive level.
5. In order to support the findings of this research the next researcher is expected to test the students by using Wh Questions of Pathway to English for 10th grade.

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IAIN PALANGKARAYA

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