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A Content Analysis of the WH-Questions in the EFL Textbook of *Horizons*

Abdul Kareem Igbaria[1]

[1] The Department of English, Sakhnin Academic College for Teacher Education, Sakhnin, Israel

Correspondence: Abdul Kareem Igbaria, The Department of English, Sakhnin Academic College for Teacher Education, Sakhnin, Israel. E-mail: kareem1@netvision.net.il

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Abstract

This study dealt with analysis of the study units in the textbook *Horizons* for 9th-grade students studying English in mixed ability classes. The study sought to examine the variety in the cognitive level represented by the WH-questions in the textbook according to Bloom's taxonomy. The study also attempted to examine the extent in which the WH-questions in the textbook emphasize high-level thinking, and whether the textbook aided students in developing cognitive skills.

The study attempted to answer the following question:

> **To what extent are the WH-questions in the six levels of the cognitive domain varied or frequent in the textbook of *Horizons*?**

Content analysis was conducted for the six study units in the textbook Horizons. The researcher chose the question as the unit for analysis for his research. The question is defined as a WH-question - in other words - a question beginning with a *wh*-word and ending with a question mark.

The questions were collected, listed, and analyzed according to Bloom's Taxonomy: low order thinking skills: knowledge, comprehension, and application, and high order thinking skills: analysis, synthesis, and evaluation.

The researcher then calculated the percentage and frequencies in which each level of cognition appeared for each separate unit and for all six units combined. The results indicated that the research tools used by the two analysts were valid and reliable.

The results showed that 244 questions emphasized levels of cognition representing lower order thinking skills, while only 137 questions emphasized the three higher order thinking skills. The questions in the *Horizons* textbook place a great deal of emphasis upon comprehension, which is one of the lower order thinking skills.

Additional studies are recommended in the area of content analysis of English instruction textbooks intended for various age levels in the Arab Sector. Such studies would shed light upon the role of textbooks in developing cognitive skills among Arab students.

Keywords: EFL textbooks, bloom's taxonomy, content analysis, WH-questions

1. Introduction

In 2001 a new curriculum for English instruction was written in Israel that emphasized four domains for teaching English. These four domains included the domain of social interaction, the domain of access to information, the domain of presentation, and the domain of appreciation of literature, culture and language. The authors of the textbooks for English instruction in Israel felt that new textbooks should be written according to the new English curriculum or that old textbooks should be modified according to it. As a result, many books were written for all levels from 3rd to 12th grade. Among these books was a 9th-grade textbook entitled *Horizons* - a heterogeneous book for use in both the Arab and Jewish sectors in Israel. The reasons the researcher chose this textbook for this research will be discussed in the section entitled 'Research Tools'.

The goal of this new curriculum is to set standards for the aforementioned four domains of English language learning. According to this objective, the researcher sees that one of the main goals of this curriculum is to develop students' thinking in order that they become responsible and creative learners who can use the English language more effectively. It is known that the role of the teacher was previously emphasized as merely

transmitting material to students, who were defined as passive learners. With the writing of this new curriculum, the teacher's role became more of a facilitator who invites opportunities for students to learn the language in a more responsible and challenging manner. In order to lead the students towards a situation in which they can know, comprehend, apply, analyze, synthesize, and evaluate the learning material, teachers are aided by textbooks that are considered first priority among all teaching aids. 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 area of students' creative thinking in particular.

According to Torrance's research (1962) on creative thinking, the thinking process that is operated by students is essential for mental health, high achievements, and professional success in life. In her book "*Foundations of Creativity"* Marksberry (1963) remarks that the curriculum must not only provide students with knowledge, but also with thinking skills and correct thinking methods. It is true that teachers teach students knowledge, but together with the knowledge that they obtain - teachers must also teach them how to think. This is accomplished by utilizing all levels of questions in the cognitive domain described in Bloom's taxonomy.

The researcher feels that questions are one of the important aspects in developing thinking among students through textbooks. Teachers must teach their students how to think and how to use higher order thinking processes. Therefore, they can assume that textbooks that have the objective of helping their students must also have these same objectives. The researcher therefore sees fit to take this aspect and analyze the book *Horizons* and see how much it contributes to the area of developing thinking among students, and to what extent it leads them from a situation of being students who merely memorize material to being students with an ability to analyze, synthesize, and evaluate.

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

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

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. This method was used by Socrates in the course of his philosophical dialogues (Mar'i et al., 1993).

Several taxonomies have been proposed as a result of numerous studies in the area of questions and objectives, such as those proposed by Guilford, Weaver and Kinscey, and Bloom. These taxonomies clarify the level of three educational objectives by which questions are posed - cognitive, psychomotor, and affective. Bloom's taxonomy, which will be used in this study to analyze the questions in the textbook *Horizons*, is considered the most commonly used in the area of education. 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's Taxonomy is described as having the following characteristics:

1) Educational: Distinguishing between the groups of objectives that teachers use for writing curricula, study programs and lesson plans.
2) Logical: The levels are clearly and logically defined.
3) Psychological: In accordance with psychological phenomenon.
4) Pyramidic: 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 behavioral objective can be categorized according to the taxonomy.

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 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.

- Comprehension: It is defined as the ability to grasp the meaning of material. This may be shown by 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.
- 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.
- 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.
- 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.
- 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.

The researcher thinks that it is necessary to analyze the aspect of questions in textbooks in order to assess the importance of textbooks in the educational system and in developing students' thinking in particular. Content analysis is a systematic, replicable technique for compressing many words of text into fewer content categories based on explicit rules of coding (Berelson, 1952; Krippendorff, 1980). It allows inferences to be made which can then be corroborated using other methods of data collection (Krippendorff, 1980). Analysis of questions is also an extremely important process that lets us know the strong and weak points of questions, and to what extent they contribute to developing students' thinking. The analysis itself offers us the possibility of choosing which questions to save, change, or modify. Analysis also constitutes an indication of the level of the textbook - whether or not the book leads students towards levels that demand higher thinking such as analysis, synthesis, and evaluation.

Analysis of questions is an objective and systematic research method that describes the analyzed material from the quantitative standpoint and emphasizes and clarifies the characteristics and meanings of the material being analyzed.

1.1 Research Problem

As mentioned earlier, the textbook is the main aid for teaching in the Arab sector and many teachers depend upon it. From the researcher's teaching experience and work in many schools at almost every grade level, the researcher has observed and learned that most teachers in the Arab sector who are not native English speakers do not have the time or ability to develop their own learning material for teaching English. Therefore a large number of teachers adhere to the textbook and attempt to teach it from cover to cover - making them totally enslaved to the book. This has led the researcher to choose one of the 9^{th}-grade textbooks at random, and to investigate to what degree the book really helps the teacher develop students' thinking, and to what degree it encourages students to use the various levels of mental processes for developing correct thinking skills. The method by which this will be determined will be examination of the quantity of WH- questions in the book, and determining their cognitive level according to Bloom's taxonomy. This analysis will clarify whether or not the questions in the book truly help develop 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 questions it presents.

1.2 The Research Question

This study deals with the analysis of Horizons textbook. The analysis will be done according to the following aspect:

- The WH-questions as viewed through the six levels of Cognitive domain according to Bloom's taxonomy.

Therefore the research question is:

To what extent are the WH-questions in the six levels of the cognitive domain varied or frequent in the textbook of *Horizons*?

1.3 Objective and Importance of this Research

The importance of this study stems from the difference in results and recommendations of previous studies that dealt with analysis of questions in textbooks including (Alcala, 1971; Zaki,1973; Abu Alaa, 1979; Black, 1980; Abu Halu, 1986; Asfur, 1988; Roberson, 1988; Elsuidi, 1998; Ibrahim, 1998; Hiyagineh, 1998; Al-Khataibeh, 2002). This leaves us unclear picture regarding the type and level of questions in textbooks for teaching English in the Arab sector in Israel. In addition, this study is the first of its kind to analyze a textbook for teaching English that is intended for the Arab sector in Israel. Presumably, it will also -together with other studies- help the population of teachers learn which type and level of questions are emphasized in the book Horizons and where it leads the students from the standpoint of developing thinking. It will also serve as an indication for the authors as to the type, level and efficiency of the questions in the book in regard to developing thinking.

1.4 Limitation of this Study

This study has the following limitations:

1) The textbook *Horizons* which is intended for teaching heterogeneous 9th-grade classes in the Arab sector in Israel.
2) All the WH-questions in the textbook *Horizons.*
3) Bloom's taxonomy for analyzing WH-questions from the textbook *Horizons* according to cognitive domain.

1.5 Definition of Related Terms

1) Horizons: It is a heterogeneous task-based course of study for Junior High School students at Intermediate Level. It was published in Israel in 2002 by Eric Cohen Books Ltd.
2) WH-questions: These questions (also known as constituent questions or information questions), begin with a WH-word such as *who, what, which, where, when,* and *why* and end up with a question mark. The answer to a WH-question is expressed by a constituent / an answer that corresponds to the WH-word in the question. WH-phrases are so called because they generally begin with *WH-* in English (*who, what, which, where, when, why*). *How* counts as a WH-expression by virtue of its meaning, even though it doesn't begin with *WH*.
3) The six levels of the cognitive domain according to Bloom's Taxonomy:

- Knowledge: It is defined as the remembering of previously learned material. Some of the verbs of this level are as follows: Defines, describes, enumerates, identifies, labels, lists, matches, names, reads, records, reproduces, selects, states, and views.
- Comprehension: It is defined as the ability to grasp the meaning of material. Some of the verbs of this level are as follows: Classifies, cites, converts, describes, discusses, estimates, explains, generalizes, gives examples, makes sense out of, paraphrases, restates (in own words), summarizes, traces, and understands.
- Application: It refers to the ability to use learned material in new and concrete situations. Some of the verbs of this level are as follows: Acts, administers, articulates, assesses, charts, collects, computes, constructs, contributes, controls, determines, develops, discovers, establishes, extends, implements, includes, informs, instructs, participates, predicts, prepares, preserves, produces, projects, provides, relates, reports, shows, solves, teaches, transfers, uses, and utilizes.
- Analysis: It refers to the ability to break down material into its component parts so that its organizational structure may be understood. Some of the verbs of this level are as follows: Breaks down, correlates, diagrams, differentiates, discriminates, distinguishes, focuses, illustrates, infers, limits, outlines, points out, prioritizes, recognizes, separates, and subdivides.
- Synthesis: It refers to the ability to put parts together to form a new whole. Some of the verbs of this level are as follows: Adapts, anticipates, categorizes, collaborates, combines, communicates, compares, compiles, composes, contrasts, creates, designs, devises, expresses, facilitates, formulates, generates, incorporates, individualizes, initiates, integrates, intervenes, models, modifies, negotiates, plans, progresses, rearranges, reconstructs, reinforces, reorganizes, revises, structures, substitutes, and validates.

- Evaluation: It is concerned with the ability to judge the value of material for a given purpose. Some of the verbs of this level are as follows: Appraises, compares, contrasts, concludes, criticizes, critiques, decides, defends, interprets, judges, justifies, reframes, and supports.

2. Review of Related Literature

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

Aida Alcala (1971) analyzed questions in 3rd and 4th-grade social studies textbooks and calculated the frequency of questions that appeared according to Bloom's taxonomy. She found that out of a total of 1108 questions, 482 were knowledge level questions, 31 were synthesis level, and 49 were evaluation level. This revealed that the low level of thinking appeared most frequently in the area of education.

Zaki (1973) analyzed questions in 7th - 9th grade science textbooks written for junior high school students in Egypt according to Bloom's taxonomy. The results revealed that knowledge questions constituted 73% of the total, while comprehension questions constituted 26% of the total in the 7th - grade textbook. 87% of the questions in the 8th-grade textbook were knowledge questions, while 12% were comprehension questions.

Hamdi Abu Alaa (1979) analyzed the questions in an 11th grade geography textbook in Qatar in light of the curriculum and learning outcomes. He used Bloom's scale to analyze questions and found that 83 questions out of a total of 129 were knowledge questions. His conclusion was that the book emphasized the lower thinking processes and that the questions were conventional and pushed the students towards rote learning.

Black (1980) analyzed science instruction questions in Nigeria according to Bloom's taxonomy. The research population included 207 schools from which he chose a random sample of 48 schools. He collected one modern test from each school for analysis. The analysis was performed by the researcher and two other experts. The percentage of agreement among the experts was 89%. The results revealed that the knowledge level received the highest percentage, followed by the comprehension level, and application level respectively. The remaining levels did not appear at all.

Abu Halu (1986) also analyzed social studies textbooks for 4th, 5th, and 6th grades in Jordanian elementary schools. He used a questionnaire that was examined by education experts. His results showed that the textbooks placed more emphasis on the knowledge level then on the other levels.

Asfur (1988) analyzed history teachers' questions in junior high schools in Jordan according to the cognitive level of Bloom's taxonomy. Asfur analyzed the questions posed during 90 history lessons given by a sample of 45 history teachers. He received the following results: 83% of the questions were knowledge questions, 11.3% were comprehension questions, while 5.3% were application, analysis, and synthesis questions. There were no evaluation questions.

Roberson (1988) conducted a research in the United States on teachers' questions in 7th grade social studies classes. The research sample included 85 students and four teachers. He used observation and videotaping to record his findings. When he analyzed the observations and videos he found that teachers emphasized knowledge questions and did not use questions that required higher levels of thinking.

Elsuidi (1992) analyzed questions in Moslem religious books for 6th-grade elementary school students in Qatar according to Bloom's taxonomy, and found that 56% of the questions were knowledge questions, 43% were comprehension questions, 1% were application questions, and that there were no questions pertaining to the higher levels.

Ibrahim (1998) analyzed 6th-grade history book questions according to the cognitive domain in Bloom's taxonomy in Iraq. His sample included 87 questions. E received the following results: the percentage of knowledge questions was 72%, questions of the comprehension level were 25.4%, evaluation questions received 2.2%, and the remaining levels scored 0.

Hiyagineh (1998) analyzed examination questions that were written by Arabic language teachers in Jordanian high schools. The questions were analyzed according to the six levels of cognitive domain in Bloom's taxonomy. The sample included 9769 questions from 104 male and female teachers. After analyzing the questions according to the guide of levels that he prepared, he received the following results: teachers used all levels of questions in Bloom's scale, but to different degrees. For example, the knowledge level questions were 44.20%, Comprehension level were 32.40%, application questions were 13.10%, analysis questions were 4.60%, and synthesis questions were 2%, but evaluation questions were only 0.7%. This implies that teachers used all levels

of questions, but need to pay more attention to questions that demand higher thinking. He therefore recommends that teachers undergo a training program to learn to write these types of questions.

Al-Khataibeh (2002) analyzed questions for general high school diploma examinations on the subject of history in Jordan according to Bloom's taxonomy of cognitive domain. She examined questions given to students from 1991 to 2001. The period was divided into two parts: the first period from 1991 - 1996 was before the text was developed, and the second period began when the test was developed in 1997 and ended in 2001. The year 1993 was not included since she did not find the questions in the Jordanian Ministry of Education. The research sample included 535 questions that were chosen purposively. Her research tools were the guide to the six levels of the Bloom scale which she used to categorize the levels of questions in her research. The results for the first period showed that knowledge level questions were the most prevalent among all the levels, followed by comprehension. Analysis and evaluation questions both received a low percentage. The two other levels of application and synthesis, however, received zero. The researcher explained that during this period there was no awareness among those who formulated the examination questions regarding evaluation methods according to Bloom's scale. The second period was not much different then the first. Most questions were knowledge level, followed by comprehension. The application level received zero percentage. The analysis and synthesis levels, however, received a very low percentage. The evaluation level also received zero. The researcher concluded that those who wrote the questions did not want or accept or were not interested in developing thinking according to Bloom.

2.1 Comments Regarding these Studies

- All these studies dealt with questions in textbooks, examinations, or questions posed by teachers in class.

- All these studies used Bloom's taxonomy as a guide for categorizing questions based on the levels of cognitive domain (knowledge, comprehension, application, analysis, synthesis, and evaluation)

- The results of these studies showed that most questions emphasized the knowledge level or the second level of comprehension despite the fact that the studies were conducted at different times, ranging from the 1970s, 1980s, and 1990s with one conducted in 2002.

- The comment in *paragraph c* causes me to hypothesize that the recommendations of the researchers or some of them were not applied and perhaps did not arouse interest.

- The results also show that it is easier for teachers and authors to write knowledge questions than questions on other levels.

- Perhaps the students for whom the questions were written are unable to cope with questions that demand a higher level of thinking.

3. Methodology and Procedures

This chapter describes the procedure that the researcher followed in conducting the research. It discusses the research tools and the choice of the textbook *Horizons* as well as showing how the researcher attained validity and reliability for the tool. Finally, the researcher briefly describes the method he used to attain his results.

3.1 Research Tools

The researcher prepared a guide for the levels of questions based on the cognitive domain in Bloom's taxonomy (Appendix A). This guide included a description of the level of each question together with its criteria. This preparation ended in a consultation with educators from Sakhnin College who hold a PhD and who are experts in measuring and evaluation. The researcher was also aided by studies conducted in this area such as Al Khataibeh (2002), Hiyagineh (1998) and sources on the Internet. This tool has been designed to allow the researcher and a second analyst to calculate the frequencies of each level of question in the textbook *Horizons*.

3.2 The Unit of Analysis

The researcher chose the question as the unit for analysis for his research. The question is defined as a WH-question - in other words - a question beginning with a *wh*- word and ending with a question mark. The researcher gave the second analyst a copy of the textbook *Horizons* and asked him to collect all the question beginning with WH in each of the six study units and instructed the second analyst as to how to collect the questions by providing him with an instruction page (Appendix B). The researcher and the second analyst both found a total of 381 questions.

3.3 Choosing the Grade and the Book

The 9th grade uses six books for English instruction, all of which are of an intermediate level. The researcher chose the 9th grade because it is the last grade in junior high school and is a critical grade for students. Students in this grade must be exposed to all levels of questions in the cognitive domain in order to develop their thinking before they enter high school, during which they will be responsible for choosing their learning track. The choices they must make must stem from serious and balanced thinking. In order to attain this type of thinking, students must have practiced all six levels of questions. Therefore the researcher wished to examine to what extent they are exposed to the six levels of the cognitive domain. The choice of the 9th grade class was therefore purposive.

The choice of the textbook, however, was random since all six books were published by Eric Cohen Books, and all would have rendered similar results.

3.4 Validity of the Research Tool

The researcher established validity of the research tool by presenting it to a committee of experts led by five judges from the Faculty of Education in Sakhnin College.

The researcher asked the committee to examine the definitions of the levels according to the skills and behaviors demonstrated for each level. After examining the tool the judges reported that it was valid for the purposes of this research.

3.5 Reliability of the Research Tool

Inter-Rater Reliability: Establishing the inter-rater reliability was done in two major stages:

The First Stage: In order to establish reliability of the research tool the researcher was aided by a second analyst. The researcher and analyst used the research to categorize the questions according to level in Bloom's taxonomy of cognitive domain.

The researcher then chose a random sample of 50 questions from the 381 questions in the textbook. The sample was analyzed by the researcher and the second analyst and the frequency of agreement and disagreement between them was then calculated. In this way the researcher examined the consistency coefficient between the second analyst and himself. There were 48 questions that were agreed upon and 2 which were not agreed upon. The researcher chose Holsti's equation to calculate the reliability coefficient (Holsti, 1969):

$$\text{Consistency Ratio} = \frac{\text{NO. of Coincident answers}}{\text{NO. of coincident answers} + \text{NO. of different answers}} \times 100 \quad (1)$$

$$\text{Consistency Ratio} = \frac{48}{48 + 2} \times 100$$

$$\text{Consistency Ratio} = \frac{48}{50} \times 100 = 96\%$$

The results show that the research tool is reliable and can be used to analyze all 381 questions.

The Second Stage: In order to establish reliability for the analysis, the researcher computed the agreement coefficient between the findings of the two analyses (the researcher and the other analyst): It is established as follows:

- The total number of questions in the book Horizons: 381
- The number of questions for which the researcher and analyst agreed upon the categorization according to Bloom's taxonomy: 350

$$\text{Percent of Agreement} = \frac{\text{NO. of Coincident answers}}{\text{NO. of coincident answers + NO. of different answers}} \times 100 \quad (2)$$

$$\text{Percent of Agreement} = \frac{350}{350 + 31} \times 100$$

$$\text{Percent of Agreement} = \frac{350}{381} \times 100 = 91.86\%$$

According to the percentage of agreement between the researcher and the second analyst, the agreement coefficient was 91.86%, which is acceptable. The reliability was therefore high in relation to categorization of the questions within the cognitive domain according to Bloom's taxonomy. This also shows that the research tool used by the researcher and analyst was reliable.

3.6 Data Collection

Data was collected in two major stages:

The First Stage: The researcher obtained two copies of the *Horizons* textbooks, and he and the second analyst used the two books to collect the WH-questions. The researcher instructed the second analyst how to find the questions in the book. The research and the second analyst used identical tables with four columns for collecting the questions and recording the data (Appendix C). The first column contained the serial number of the question, the second contained the question, and the third and fourth columns were used for recording the level of the question and the page number in the book on which the question appeared. The tables were also divided into six parts corresponding with the study units in the book. The first results of collecting the questions were identical: both the researcher and the second analyst found 381 questions.

The Second Stage: The researcher and the second analyst categorized all 381 questions again using the research tool. When they finished categorizing the questions the researcher began counting the frequency that each level of Bloom's taxonomy appeared on his table and the analyst's table.

3.7 Summary of the Research Procedure

In summary, the results of this research were obtained using a ten-stage procedure.

1) Defining the research problem and questions.
2) Reviewing the research literature that dealt with the area of this research.
3) Choosing the grade and textbook.
4) Determining the unit of analysis (WH-questions).
5) Collecting all the WH questions from the textbook by both the researcher and analyst.
6) Preparing the research tool for analyzing the questions.
7) Establishing validity and reliability.
8) Analyzing the questions by both the researcher and the second analyst according to the six levels in Bloom's taxonomy.
9) Counting the frequency for each of the six levels of cognitive domain in Bloom's taxonomy.
10) Recording the data in tables (to be shown in the next chapter)

4. Findings and Interpretations

This chapter discusses the results the researcher obtained after analyzing the questions from the *Horizons* textbook. This analysis helped the researcher to answer his research question:

- **To what extent are the WH-questions in the six levels of the cognitive domain varied or frequent in the textbook of *Horizons*?**

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 (1) which shows the level of the question and the frequency and percentages for each level in each learning unit of the book.

Table 1. Frequencies and Percentages of the WH-Questions in the Six Levels of the Cognitive Domain in Bloom's Taxonomy in Each Learning Unit in the Textbook *Horizons*

Level of question	Unit One	Unit Two	Unit Three	Unit Four	Unit Five	Unit Six	Total	Percentage
Knowledge	12	22	11	25	3	15	88	23.09%
Comprehension	17	28	16	13	13	26	113	29.66%
Application	6	7	7	4	13	6	43	11.29%
Analysis	16	19	11	17	6	20	89	23.36%
Synthesis	2	10	8	2	9	8	39	10.24%
Evaluation	1	3	1	0	1	3	9	2.36%
Total	54	89	54	61	45	78	381	100%

The researcher obtained these results by thoroughly studying and learning all the contents of the textbook *Horizons* and listing all the WH- questions that appeared on each page. The analysis of the book began on page 6 and ended on page 129. The researcher collected 381 questions (Appendix C) and then used the research tool 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 (2) 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 *Horizons.*

Table 2. Frequencies and Percentages of the WH-Questions in the Six Levels of the Cognitive Domain in Bloom's Taxonomy in the Textbook *Horizons*

Level of question	FREQUENCIES	Percentage
Knowledge	88	23.09%
Comprehension	113	29.66%
Application	43	11.29%
Analysis	89	23.36%
Synthesis	39	10.24%
Evaluation	9	2.36%
Total	381	100%

Table 2 shows the frequencies and percentages of the six levels of cognitive domain in Bloom's taxonomy. The frequencies in the table range from 9 - 113, while percentages range from 2.36% to 29.66%. The level that appeared most frequently was the comprehension level. This finding is not surprising since it confirms the results of almost all the other studies that were discussed in the review of related literature in this present study. The evaluation level received the lowest percentage and frequency. This finding also appeared frequently in almost 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 89 and a percentage of 23.36% which is equivalent to the knowledge level. The remaining two levels of application and synthesis appeared at almost equal frequencies.

The results show that the author of *Horizons* placed 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 and vocabulary. This curriculum explained to teachers what to teach from the standpoint of grammar and vocabulary that students must learn by heart. Presumably most of the questions at the time called for lower thinking processes.

This evidently still has impact upon the authors of textbooks. This result was also supported in studies conducted by Zaki (1973) and Abu Alaa (1979). This result was also evident in the studies conducted by Black (1980), Abu Halu (1986), and Elsuidi (1998).

Grammar and vocabulary questions 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 applied the same types of questions. The book was written for students whose mother tongue is not English, and presumably the authors wanted 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, appeared 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 succeeded 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 received 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 received 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.

4.1 Examples

Appendix D provides some examples of the six different levels of Bloom's taxonomy of the WH-questions in the textbook *Horizons*.

5. Conclusions and Recommendations

The textbook, *Horizons,* attempts to some extent to develop students' higher thinking processes. However, the author of this textbook places emphasis mainly on the lower thinking processes of knowledge, comprehension and application. The old English curriculum generated these types of questions, and consequently had a significant impact upon the types of questions posed in the textbook *Horizons.*

The author of the present study makes several recommendations: 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.

The author also recommends that workshops 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 higher thinking processes when planning and writing textbooks. Finally, additional activities should be written to accompany the textbook *Horizons* that emphasize questions that encourage higher thinking processes.

The author has several recommendations regarding future research: Other textbooks from the six books intended for 9th grade heterogeneous classes should also be analyzed. In addition, other studies should be conducted to analyze the type and level of questions that teachers use in 9th grade heterogeneous classes.

The author also feels that the book Horizons should be analyzed again regarding the level of questions in relation to the affective and psychomotor domains.

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Appendix A

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, places 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. This may be shown by 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 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

Appendix B

Instruction Page for the Second Analyst for Collecting and Analyzing Textbook Questions

Greetings analyst!

Please read and follow the following instructions carefully for collecting and analyzing the questions in the *Horizons* textbook. We hope your work will be easy and fruitful!

Please read paragraph 9 before you read the remainder of the instructions

1) This textbook includes 6 learning units. Familiarize yourself with the beginning and end of each unit.
2) Study each page in each unit and collect only the WH- type questions.
3) WH-questions are questions that begin with a WH-word and end with a question mark.
4) If you find any questions that consist of more than one part, relate to each as a separate question.
5) Copy the questions into the enclosed table and mark the page on which the question appears.
6) This table will also be used to analyze the questions according to the levels of the cognitive domain in Bloom's scale. When you finish collecting the questions, analyze them according to Bloom's taxonomy.
7) Record the level of the question (Knowledge, Comprehension, etc.) in the third column.
8) After completing the list, return the completed table to the researcher.
9) It is advisable to collect and analyze the questions when you are feeling comfortable and relaxed.

Thank you for your cooperation.

Appendix C

A Table for Collecting WH-Questions from Each Learning Unit in the Textbook *Horizons*

No.	The question	Level	Page
	Unit 1		
1.	Why do you like being friends with them?		6
2.	What does your score mean?		6
3.	What kind of friend is Katy?		6
4.	In what ways are you and Katy alike?		6
5.	In what ways are you and Katy different?		6
6.	Why would you like a friend like Katy?		7
7.	Why wouldn't you like a friend like Katy?		7
8.	What clues helped you?		8
9.	How did David help King Saul?		8
10.	How did Jonathan help David?		8
11.	Why were two good friends fighting each other?		9
12.	How did Kay become the winner?		9
13.	Why did Esther decide not to fight?		9
14.	Why did Dionysius sentence Pythias to death?		10
15.	What did Pythias request?		10
16.	What did Damon do for Pythias?		10
17.	Why was he sorry?		10
18.	Why wasn't he sorry?		10
19.	Which letter is about trusting a friend?		10
20.	Which letter is about saving a friend's life?		10
21.	Which letter is about giving up a big chance for a friend?		10
22.	What tenses are the sentences in?		11
23.	Which tense tells what's happening in David's life?		11
24.	Which tense tells how he feels about what's happening?		11
25.	How do you like it?		11
26.	Who do you turn to when you need advice?		12
27.	Which of these words do you think is in each letter?		12
28.	What should I do?		12
29.	How can I trust her after she betrayed me like this?		13
30.	How could your friend turn down a date with a boy she likes?		13
31.	Which reply do you think gives better advice – A or B?		13
32.	Which of the following comes first in each letter?		13
33.	Which comes second?		13
34.	Which comes last?		13
35.	What advice would you give these people?		13
36.	In what ways are internet letters different from regular letters?		13
37.	How do most letters begin and end?		13

38.	Which words are positive?		14
39.	Which words are negative?		14
40.	Why don't you talk to your friend about it?		15
41.	What kinds of days do you think the poem is about?		16
42.	What does the poet believe friends should do for each other?		16
43.	What does the poet like more often – to be alone or to be with a friend?		16
44.	Why does it feel good to be alone sometimes?		16
45.	When do you enjoy being with one friend?		16
46.	When do you prefer being with a group of friend?		16
47.	When does the poet think it is important "not to be too cheerful"?		16
48.	Why does the poet say, "now you'll be feeling blue"?		16
49.	What do you think?		17
50.	What kind of friendship does each story describe?		18
51.	In what ways do the friends in the stories help one another?		18
52.	Where was Gina?		18
53.	How does your pet show its love for you?		19
54.	How much do you remember?		20
	UNIT 2		
55.	How good is your Geography?		22
56.	How many countries can you see?		22
57.	Which countries are near the North Pole?		22
58.	Which two states are far away from any other?		22
59.	Which state do you think is the coldest?		22
60.	Why do you think it is the coldest?		22
61.	Which of these places are states?		22
62.	Which are cities?		22
63.	Which are both?		22
64.	How do you know?		23
65.	What is it like to live in such a cold climate?		24
66.	What do you wear outdoors?		24
67.	How do you get to school?		24
68.	What do you do all day when it's dark?		24
69.	What special things happen every year in the country?		25
70.	How did the people live in the past?		26
71.	Why are you happy?		27
72.	Which tense would you use to tell about the history of a country?		29
73.	Which tense would you use to tell about the holidays of the country?		29
74.	Which tense would you use to tell about the country's climate?		29
75.	Which tense would you use to tell about things that people do because of the country's climate?		29
76.	Which tense would you use to tell about the way people once lived in		29

	the country?		
77.	What kind of clothes do the villagers wear?		29
78.	How much do you know about the sports in the pictures?		30
79.	Which sports can be done only in cold places?		30
80.	Which need snow?		30
81.	Which need ice?		30
82.	Which use animals?		30
83.	Which can be done indoors?		30
84.	Which must be done with a team?		30
85.	Which are sometimes races?		30
86.	Which do you think are the most dangerous?		30
87.	Why do you think so?		30
88.	How much did you need to read to find out what the Iditarod is?		31
89.	Why do you think the text give an example first?		31
90.	Why is the Iditarod called the last Great Race?		31
91.	Why is the race dangerous?		31
92.	What are three reasons for the Iditarod?		31
93.	Why do some people claim the Iditarod is cruel?		32
94.	Why do others claim it is not cruel?		32
95.	What do you think?		32
96.	In what ways do mushers and their dogs have a special relationship?		32
97.	Why would you like to be in the Iditarod?		32
98.	Why wouldn't you like to be in the Iditarod?		32
99.	Which sentence compares two things?		34
100	Which sentence compares one thing to many other things?		34
101.	How are the words different from each other?		35
102.	What do these words mean in your language?		35
103.	What advice would you give Tom about traveling in Alaska?		36
104.	Which advice did he follow?		36
105.	Which advice didn't he follow?		36
106.	How does Tom decide to save himself?		36
107.	How much do you remember?		38
108.	What makes us enjoy a story?		40
109.	Why did you enjoy them?		40
110.	What makes a great story?		40
111.	What problems do you think she might have?		40
112.	Why did Ugaso leave her home?		40
113.	What are some of her problems?		40
114.	Why did Ugaso leave her home in Somalia?		42
115.	Who could not come with the family to London?		42
116.	Why couldn't he come?		42

117.	What is Ugaso's special dream?		42
118.	Why did Ugaso cry when the teacher told the children to stand near the door?		42
119.	What bad memories does she have?		42
120.	Why do you think these memories still scare her?		42
121.	Why did the computer picture make Ugaso happy?		42
122.	What problems would you have?		42
123.	What problems would your parents have?		42
124.	What does Ugaso do every Friday?		42
125.	What did Ugaso mother say about the computer picture and about Ugaso's dream?		43
126.	What did Dean do to Ugaso?		43
127.	How does Ugaso feel about London?		43
128.	How does Dean think she should feel?		43
129.	Why do you think she acts this way?		43
130.	What did Ugasp's teacher do to help her?		43
131.	What did her school do?		43
132.	What did Patti do?		43
133.	Who does Ugaso think is banging on the door?		44
134.	Who is really banging on the door?		44
135.	Why are Ugaso, Ali and her mother so afraid of the banging on the door?		44
136.	What do you think it reminded them of?		44
137.	Why didn't Ugaso go to school the next day?		44
138.	Why do you think that Ugaso now wants to see a picture of London?		44
139.	What problems did you have?		45
140.	How did you deal with them?		45
141.	What would you say to Dean?		45
142.	What picture from home would you like to see on the computer screen?		45
143.	How does this help us get inside Ugaso's head?		45
	Unit 3		
144.	What do the lines in color mean?		46
145.	Where do you think they belong?		46
146.	What are the places in the song?		46
147.	Why do you think this song was sung at the Olympics?		46
148.	What do you think the Paralympics are?		48
149.	How many of the following words and expressions do you know?		48
150.	Who is the interview about?		48
151.	What goal did she achieve?		48
152.	How does she feel about being disabled?		48
153.	When did you first start swimming?		49
154.	How did you continue swimming?		49

155.	When did you start training for the Olympics?		49
156.	How exactly do you swim?		49
157.	What is a normal day like for you?		49
158	How often do you train?		49
159.	What are your plans for the future?		49
160.	What are you going to do to help the disabled?		49
161.	What would you like to know about the Paralympics?		50
162.	What's Keren's life story?		50
163.	How does Keren feel about being disabled?		50
164.	How does Keren hope to change people's ideas about the disabled?		50
165.	How does she hope to change disabled people's ideas about themselves?		50
166.	What are some of Keren's goals?		50
167.	How are the words in color the same?		51
168.	How are they different?		51
169.	What tenses are used?		52
170.	How do you say these sentences in your language?		52
171.	What are some things you can't do because you are young?		53
172.	What are some things old people can't do?		53
173.	What did Adi learn in her flying lesson?		53
174.	When did Adi decide that she wanted to pilot a plane?		53
175.	How are they connected to wild animals?		54
176.	What does Erica do with the money her company makes from selling toy animals?		54
177.	How do the stars help Stars in the wild?		54
178.	Why did Balamurali decide to become a doctor?		55
179.	What are two things he did when he was 17?		55
180.	What is unusual about the way Judy traveled?		55
181.	Why did she like being a backpacker?		55
182.	How is Welcome different from most other companies?		56
183.	What does Ori want other young people to do?		56
184.	Which of the people did you enjoy reading about the most?		56
185.	Why did you enjoy?		56
186.	What advice do the two older people give?		56
187.	What do you dream of doing?		56
188.	In which sentence could we use can instead of the words in bold?		59
189.	In which sentence could you use must?		59
190.	Which sentences are in the past?		59
191	Which are in the future?		59
192	What do these sentences mean in your language?		59
193	What is the article about?		60
194	What kinds of examples do you think it will include?		60

195	Which successful failure do you think is the funniest?		61
196	Why do you think so?		61
197	How much do you remember?		62
	Unit 4		
198	Which ones can you name?		64
199	Why do you think these landmarks are famous?		64
200	Which landmark is in picture 1?		64
201	Where is the Eiffel Tower?		64
202	When was it built?		64
203	What is it made of?		64
204	What is it used for?		64
205	What do you know about the landmarks on these pages?		66
206	Who designed the Eiffel Tower?		66
207	How many stairs does it have?		66
208	Where is the Empire State Building?		66
209	How many elevators does it have?		66
210	What country is the Sydney Harbor Bridge in		66
211	How long is the Bridge?		66
212	How long did it take to build the Empire State Building?		67
213	Why do the elevators of the ESB feel like rocket ships?		67
214	What tragedies and miracles have happened at the ESB?		67
215	How do we know that the Sydney Harbor Bridge is strong?		68
216	How was the bridge built?		68
217	Why was the bridge special to immigrants?		68
218	What do the words unsafe and disagreed mean?		69
219	How do the prefixes un- and dis- change the meaning of the words safe and agree?		69
220	What do you see?		69
221	Which of the words below have a prefix?		69
222	What do the words mean?		69
223	How many more words do you know with the prefix un and dis?		69
224	Which tense is used when a specific past time is given?		70
225	Which tense is used when no specific time is given?		70
226	How do you say these sentences in your language?		70
227	How much do you know about engineering?		72
228	Which is stronger for building – steal or stone?		72
229	What supports the weight of a skyscraper – the walls, or the frame and the foundations?		72
230	What pulls a modern elevator up and down – servants or an engine?		72
231	What stops an elevator from falling if the cable breaks – the safety brake or the shape of the elevator?		72
232	Why did the Romans use arches in their buildings – because they are		72

	beautiful or because they are strong?		
233	Which kind of bridge is longer – a beam bridge or a suspension bridge?		72
234	Which sentence is active?		77
235	Which is passive?		77
236	How do you know?		77
237	Which sentences tell who or what did the action?		77
238	What verb tense is used in each sentence?		77
239	How do you know?		77
240	What do you think is the one most important invention of all times?		78
241	Why do you think so?		78
242	How much do you remember?		80
243	What do you think make some teenagers “cool”?		82
244	What makes other teenagers not “cool”?		82
245	Why does Seth think Adam is “cool”?		82
246	What story did Adam tell about himself?		83
247	Why did the woman in the blue Toyota almost crash her car?		83
248	How are Seth and Adam different?		83
249	How does Seth try to be like Adam?		83
250	Why do you think that Seth doesn’t leave?		83
251	What do you think Adam will do next?		84
252	Why were the three big guys angry?		85
253	Why didn’t Seth and Adam run away?		85
254	How did Seth decide to answer?		85
255	How did Adam answer?		85
256	What did the husky guy want Seth to do?		85
257	What would you have done in Seth’s place?		85
258	Where do you think he is?		85
259	What reason did Adam give for not helping Seth?		86
	Unit 5		
260	How does a teenager feel?		88
261	What do the paintings mean?		89
262	Which of the paintings do you like best?		89
263	Why do you like it?		89
264	What do the title and the subtitles tell you about the story?		90
265	Where do you think the story takes place?		90
266	What do you know about the Berlin Wall?		90
267	Why couldn’t Frank tell anyone about his parents’ plan?		90
268	What was the plan?		90
269	Why do they want to escape?		90
270	What kind of freedom did they hope to find?		90
271	What things happened to scare Frank?		91

272	How did the families know that they were in West Germany?		91
273	How would you feel in Frank's place?		91
274	Which two tenses are used in the sentences from the story?		94
275	Which tense is used to describe the background to the story?		94
276	Which tense is used to tell the next thing that happened in the story?		94
277	Which sentences tell about things that happened before Frank's family tried to escape?		94
278	What tense is used?		94
279	What was happening outside?		94
280	Where were the people?		94
281	What were they doing?		94
282	What did they see?		94
283	What did they hear?		94
284	What had happened before the story began?		94
285	What happened next?		94
286	How much freedom does she have?		96
287	What subjects do the teenagers discuss?		96
288	What responsibilities does he have?		96
289	What was the most interesting thing that he said?		96
290	Which of these sentences do you think the teenagers say?		99
291	Which do the parents say?		99
292	What is each family arguing about?		99
293	What do the teenagers and their parents think?		99
294	How do you think the arguments will end?		99
295	Who will give in?		99
296	Who do you think is right – the teenagers or their parents?		99
297	Which sentences report statements?		100
298	Which report questions?		100
399	Which reports an order?		100
300	Which word do we use when we report a statement?		100
301	Which words do we use when we report a question?		100
302	How do we report an order?		100
303	What is Keiko's life story?		103
304	How much do you remember?		104
	Unit 6		
305	Which of the activities can you name?		106
306	Which of the activities is a dance?		107
307	Which of the activities is a material art?		107
308	Which of the activities is a sport?		107
309	Who can sit still when music fills the air?		108
310	What are the quizzes and websites about?		108

311	How much do you know about these activities?		108
312	Which website was the most interesting to you?		111
313	Which fact was the most interesting?		111
314	How many of the following words do you and your partner know?		111
315	Which of the words above can you use to talk about music and dance?		111
316	Which of the words above can you use to talk about clothes?		111
317	Which of the words above can you use to talk about slavery?		111
318	How many of the following can you and your partner name?		111
319	What verb does each adverb describe?		112
320	What does the poster advertise?		113
321	What can you learn from it about the nutcracker?		113
322	What can you learn from it about the Israel Ballet?		113
323	What can you learn from it about Natasha Utochkin?		113
324	What can you learn from it about Tchaikovsky?		113
325	What can you learn from it about Clara?		113
326	What facts from the interview did you think were unusual or surprising?		113
327	Which of the following words and expressions do you think will be in the biography?		114
328	When did Savion realize that he wanted to be a tap dancer?		114
329	What is special about Savion's dancing?		114
330	What does Savion want teenagers to learn from him?		114
331	What two kinds of dance does tap dancing come from?		115
332	How does Savion make tap dancing attractive to young people?		115
333	Why does he think this is important?		115
334	How did Mike feel as Sis was dancing?		117
335	Which words give the song a dancing rhythm?		117
336	Which line shows that Sis didn't always like dancing?		117
337	How do we know that dancing became Mike's career?		117
338	How do we know that dancing did not become Sis' career?		117
339	Why do you think that Sis was sent to dance class, and not Mike?		117
340	Who has lost a lot of money?		119
341	Who is young and from a small town?		119
342	Who needs a job?		119
343	Who has the most important part in Pretty Lady?		119
344	Who is hurt on the job?		119
345	Who is old and sick?		119
346	Who wants to stop dancing and get married?		119
347	Who makes people work hard?		119
348	Who takes the place of the leading lady?		119
349	When Julian speaks to the dancers, which sentence shows that he realizes dancing is not all fun?		119

350	Why do you think that none of the dancers leave?		119
251	When Dorothy speaks to Peggy, which sentences show that she was angry but has changed her mind?		119
352	What do you think she means when she tells Peggy to ‘”be so good that you’ll make me hate you”?		119
353	How was Gower Champion’s life similar to the plot of 42nd street, the musical that he directed?		119
354	How was it different?		119
355	How much do you remember?		120
356	Which of these words would you use to talk about good things?		122
357	Which of these words would you use to talk about bad things?		122
358	Which words can be used to talk about both?		122
359	Who told Dorian to enjoy himself while ha was young?		122
360	What did Dorian wish for?		123
361	What do you think “But it was too late” mean?		124
362	Why did Dorian leave Sybil?		125
363	Why was Sybil such a bad actress that night?		125
364	What did Dorian decide to do when he saw the picture?		125
365	How did Dorian feel when he first heard the news about Sybil?		125
366	How did his feelings change?		125
367	Why did his feelings change?		125
368	Who did Dorian finally tell his secret to?		125
369	How did Dorian spend the years after Sybil’s death?		128
370	What happened to the portrait during these years?		128
371	What did Basil tell Dorian to do when he saw the picture?		128
372	How did the picture change after Dorian killed Basil?		128
373	Why did Dorian stab the picture with the knife?		128
374	Who was the man that the servants found on the floor?		128
375	Which face do you think showed the real Dorian?		128
376	Why do you think so?		128
377	What happened when Dorian stabbed the picture?		128
378	What lesson does the story teach us about good and evil?		128
379	How are these words spelled in American English?		129
380	What does he mean by the word mad?		129
381	What would it say?		129

Appendix D

Examples of WH-Questions from Each Learning Unit in the Textbook *Horizons*

No.	The question	Level	Page
	Unit 1		
1.	Why do you like being friends with them?	Analysis	6
2.	What does your score mean?	Synthesis	6
3.	What kind of friend is Katy?	Comprehension	6

4.	Which tense tells what's happening in David's life?	Application	11
5.	Which tense tells how he feels about what's happening?	Application	11
	UNIT 2		
6.	How many countries can you see?	Knowledge	22
7.	Which countries are near the North Pole?	Knowledge	22
8.	Which two states are far away from any other?	Knowledge	22
9.	Which state do you think is the coldest?	Knowledge	22
10.	Why do you think it is the coldest?	Analysis	22
11.	Which of these places are states?	Knowledge	22
12.	Which are cities?	Knowledge	22
13.	Which are both?	Knowledge	22
14.	What do you wear outdoors?	Knowledge	24
15.	How do you get to school?	Knowledge	24
16.	What do you do all day when it's dark?	Knowledge	24
	Unit 3		
17.	Where do you think they belong?	Synthesis	46
18.	What are the places in the song?	Knowledge	46
19.	Who is the interview about?	Comprehension	48
20.	When did you first start swimming?	Knowledge	49
21.	When did you start training for the Olympics?	Knowledge	49
	Unit 4		
22.	Which ones can you name?	Knowledge	64
23.	Why do you think these landmarks are famous?	Analysis	64
24.	Which landmark is in picture 1?	Knowledge	64
25.	Where is the Eiffel Tower?	Knowledge	64
26.	When was it built?	Knowledge	64
27.	What is it made of?	Knowledge	64
28.	What is it used for?	Knowledge	64
29.	What do you know about the landmarks on these pages?	Knowledge	66
30.	Who designed the Eiffel Tower?	Knowledge	66
31.	How many stairs does it have?	Knowledge	66
32.	Where is the Empire State Building?	Knowledge	66
33.	How many elevators does it have?	Knowledge	66
34.	What country is the Sydney Harbor Bridge in	Knowledge	66
35	How long is the Bridge?	Knowledge	66
36.	How long did it take to build the Empire State Building?	Knowledge	67
37.	Why do the elevators of the ESB feel like rocket ships?	Analysis	67
	Unit 5		
38.	How does a teenager feel?	Analysis	88
39.	What do the paintings mean?	Synthesis	89
40	Why do you like it?	Evaluation	89

41.	Why couldn't Frank tell anyone about his parents' plan?	Comprehension	90
42.	What was the plan?	Comprehension	90
	Unit 6		
43.	Which of the activities can you name?	Knowledge	106
44.	Which of the activities is a dance?	Knowledge	107
45.	Which of the activities is a material art?	Knowledge	107
46.	Which of the activities is a sport?	Knowledge	107
47.	What are the quizzes and websites about?	Comprehension	108
48.	Which website was the most interesting to you?	Analysis	111