

SUDAN ENGLISH LANGUAGE SYLLABUS: EVALUATING READING COMPREHENSION QUESTIONS USING BLOOM'S TAXONOMY

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ABSTRACT: *This study focuses on reading comprehension as one of the major language skills in learning English language. The problem of the study is based on the hypothesis that SPINE 3 (Sudan Practical Integrated National English) provides learners with a great number of reading texts which aim at promoting learners' comprehension abilities but they do not focus on High Order Skills. The comprehension questions in SPINE3 do not cover the range of thinking skills according to Bloom's taxonomy. The major significance of the study is to assist syllabus and material designers in writing comprehension questions so as to improve learners' comprehension abilities. The study is descriptive analytical in nature, it adopts the content analysis approach. The findings indicate that 89% of the questions in the sample are actually Low Order Thinking Skills questions, 59% are remembering and 30% are understanding. None are geared to the High Order Thinking Skills. The study recommends that a revision of the comprehension questions in SPINE3 has to be done and new language textbooks should take into account that the comprehension questions and activities should confirm with Bloom's taxonomy of educational objectives. The questions and activities should aim at developing both Low and High Order Thinking Skills.*

KEYWORDS: High/ Low Order Thinking Skills, Bloom's taxonomy, reading comprehension questions, SPINE Series.

INTRODUCTION

Reading comprehension is an important skill that learners have to develop. Without reading comprehension no true reading can be assumed. The main purpose of reading is to get information from the text being read. To do this, the reader has to be able to process the text correctly in order to extract meaning from the text. A well written reading passage provides information to the reader in a systematic manner. Writers use different techniques in order to convey meaning to the readers. So, the process of meaning making is an activity that has to take place between the two parties so as to get the message in the easiest and the most correct way. To do this, readers need to use several skills which will help them extract meaning from text. These skills are comprehension skills. Language textbooks normally present learners with reading passages. These texts do two things; they introduce new words and attempt to develop reading comprehension skills. They ask learners to read the texts and then to answer some questions to check if they have understood the passage.

The textbooks that have been in use in schools in Sudan for the past twenty years is the SPINE series. This series was written by Sudanese experts with the help of some experts who are native. The series focuses on reading a great deal. The amount and variety of reading texts throughout the series (six books) is very great. Virtually every single reading passage is followed by comprehension questions to be answered by the learners or some other tasks they can do to show that they have understood the meaning of the text in question.

For comprehension questions to be effective, they need to be constructed in such a way that they develop comprehension skills systematically. To do this, a scientific framework has to be adopted for structuring such questions. Bloom's Taxonomy represents a suitable framework for this.

Statement of the problem

The Sudanese English Language Syllabus (SPINE series) provides learners with a great number of reading texts. The aim is to develop learner's ability to understand reading comprehension passages. However, these questions concentrate mainly on the Low Order Thinking Skills. They mainly ask learners to provide answers to questions that just require them to remember something they have just read or to mention a fact of knowledge that the passage has presented. They do not attempt to challenge learners to use advanced skills (i.e. High Order Thinking Skills). This being the case, the learners will never be able to develop any skills other than those ones required for remembering elements which need nothing more than memorization of events or factual details. Learners need to develop High Order Thinking Skills in order to cope with the challenges of their future academic, professional and personal lives.

Objectives

1. To explain how comprehension questions are set with reference to Bloom's Taxonomy.
2. To find out the strengths and weaknesses of the comprehension questions in SPINE 3 and provide suggestions.

Research questions

1. What type of skills do the comprehension questions in SPINE concentrate on?
2. What type of skills do the comprehension questions in SPINE neglect?

Hypotheses

1. The comprehension questions in SPINE 3 do not cover the whole range of thinking skills in Bloom's taxonomy.
2. The comprehension questions in SPINE3 cover the whole range of thinking skills in Bloom's taxonomy

Significance of the study

The study will help syllabus designer and material writers to consider Bloom's Taxonomy when they write comprehension questions. This study provides practical suggestions to improve comprehension questions in the current SPINE series.

Limits

The study is limited to the investigation of the reading comprehension questions in Spine 3 , in Sudan , during the school year 2013-2014.

LITERATURE REVIEW

Bloom's taxonomy of cognitive domain

Work on the three-domain taxonomy (cognitive, affective and psychomotor) started in 1948 and work on the cognitive domain was completed in the 1950s by a group of educators headed by Benjamin Bloom (Huitt, 2011). Bloom et al (1956) ordered the levels as follows:

1. Knowledge
2. Comprehension
3. Application
4. Analysis
5. Synthesis
6. Evaluation.

Revised Bloom's Taxonomy

As the years passed, great changes occurred in the field of education. This made it necessary to revise the taxonomy. Another group of educationalist, headed by Lorin Anderson (a former student of Bloom) met for the purpose of updating the taxonomy. They saw the need for the taxonomy to meet the needs of students and teachers in the 21st century. They worked for six years and their new version was published in 2001. Anderson & Krathwohl (2001: 67-68) define the new terms as follows:

1. **Remembering:** *Retrieving, recognizing, and recalling relevant knowledge from long-term memory.*
2. **Understanding:** *Constructing meaning from oral, written, and graphic messages through interpreting, exemplifying, classifying, summarizing, inferring, comparing, and explaining.*
3. **Applying:** *Carrying out or using a procedure through executing, or implementing.*
4. **Analyzing:** *Breaking material into constituent parts, determining how the parts relate to one another and to an overall structure or purpose through differentiating, organizing, and attributing.*
5. **Evaluating:** *Making judgments based on criteria and standards through checking and critiquing.*
6. **Creating:** *Putting elements together to form a coherent or functional whole; reorganizing elements into a new pattern or structure through generating, planning, or producing.*

Previous studies

This section will present some of the studies which were carried out in the same area.

The first study: *“Evaluating the Higher Order Thinking Skills in Reading Exercises of English for Palestine Grade 8”*.

This study was conducted in The Islamic University- Gaza , Faculty of Education , by Ayat Abd Al-Qader in 2012. It aimed at evaluating the availability of higher order thinking skills (HOTS) in the reading exercises of English for Palestine Grade 8 . The researcher used two tools to collect data: content analysis and a structured interview. She came up with these results:

1. Only 15 out of the 26 items i.e., % 58 evaluate the reading comprehension exercises.
2. The skills available are not well-distributed in the SB neither in the WB.
3. The analysis skill got % 51.92. The synthesis skill got % 41.35. The evaluation skill got the least score (% 6.73).

The interview showed an agreement among the 8th grade English language teachers that there was a shortage in the HOTS in the reading exercises and they were not well-treated.

The researcher recommended modifying the reading exercises by providing them with more enrichment material that include HOTS. English language supervisors are advised to organize workshops to train English language teachers how to enhance such skills in students' mentalities.

The second study: *“Cognitive Levels of Questions Used by Iranian EFL Teachers in Advanced Reading Comprehension Tests.”*

This study was by Narjess Khorsand. The study examined the cognitive levels of questions used by Iranian EFL teachers in advanced reading comprehension tests. Twenty teachers participated in the study and generated 215 questions which were then categorized according to Bloom's taxonomy. The results of the study showed that the most dominant question type was the 'knowledge' (54.21 %) followed by 'comprehension' questions (38.74 %). This indicated that, 92.43% of the questions aimed at the first two levels of the taxonomy. Next to these , the teachers' questions aimed at 'synthesis' (2.33%), 'application' (1.86 %), 'evaluation' (1.39%) and 'analysis' (0.47 %) , respectively. Thus only 4.19% teachers-generated questions were directed toward the three higher levels of Bloom's taxonomy, and 95.81% questions were aimed at the three lower levels. So, the study indicated that Iranian EFL teachers geared their teaching and testing primarily to the low cognitive levels. So the importance of developing higher level thinking skills was stressed and suggestions were offered.

The third study: *“An Evaluative Analysis of Comprehension Questions’ Level of Difficulty: A case of 12th Grade Palestinian English Student’s Textbook.”*

This study was conducted at Alquds University, Palestine by Omar Abu Humos in 2012. It aimed at analyzing the reading comprehension questions’ levels of difficulty . The researcher investigated whether the questions prepare students for future college experience. It also sought to identify the compatibility of the 23 reading comprehension objectives in “English for Palestine” syllabus with higher thinking skills. Through descriptive analysis, the researcher found that the largest proportion of the questions in the 12th grade textbook were literal level questions represented with around 60% of the textbook total number of questions exceeding the syllabus objectives with %29.9. The reorganization, inferential, and appreciation questions were under represented compared to the syllabus objectives percentages. Only the evaluation questions were compatible

with higher thinking skills taxonomy as projected by the syllabus. The second question in this research was about the syllabus reading comprehension objectives which were found to be reasonably compatible with higher thinking skills. The researcher recommended the incorporation of these findings in the student's textbook.

METHODOLOGY

Method

This study is descriptive analytical in nature. The sample questions will be discussed in context and will be related to the different levels of Bloom's taxonomy – the new version.

Sampling

The focus of the study will be on SPINE 3 which is taught to Grade 8 of the Basic Level School in North Sudan. This textbook has six units, most of them are reading texts. The texts vary in length and cover a wide spectrum of topics. The sample texts (nine texts) have been selected randomly, but great care has been taken so that they spread over the six units and across the different themes covered by the reading passages. It was also important to take into account the varying lengths of the texts. The comprehension questions were left as they were in the textbook.

Procedure

The texts have been copied and the answers to the questions have been placed under them. If the answer does not appear in the text, it will be written in **bold** and *italicized*. The questions are discussed one by one and are related to both the text and the levels of the taxonomy. The discussion shows how the learners will deal with the questions in order to find the answers. This will show the level of the Thinking Skill required by the learner.

Data Analysis

Analysis of questions

- **Text One: Revision Unit Lesson (1 : B)**

P.O. Box 406, Omdurman, 12 th January 1994
Dear Samia ,
Thank you for the nice holiday we enjoyed together.
Jegel Mara is really beautiful in summer . But in Khartoum the summer months (March, April, May and June) are always hot.
The best time to visit Khartoum is December or January . Please come and see us and we shall go together to see nice places.
All the best,
Shiraz and Reel

1. Who enjoyed the holyday together ?

Samia , Shiraz and Reel .

2. When were they on holiday together ?

In summer

3. In the second paragraph the months December and January are in the season of... ?

Winter

4. What is the name of the place they visited ?

Jebel Mara

5. How many months are mentioned in the letter ?

6 months

Table (4.1): Frequency Distribution of Thinking Skills (1)

	Rem	Und	App	Ana	Eva	Crea
Who enjoyed the holy day together ?		✓				
When were they on holiday together ?		✓				
In the second paragraph the months December and January are in the season of... ?		✓				
What is the name of the place they visited ?		✓				
How many months are mentioned in the letter ?	✓					
Total	1	4	0	0	0	0

Question 1

The answer is not explicitly stated in the text. The learner has to understand that the senders (Shiraz and Reel) are writing to Samia about the holiday they spent together.

Question 2

The text does not explicitly say that the holiday was in summer. The learner has to link the idea of the first sentence with the idea of the second sentence to infer the answer.

Question 3

The writers did not use the word 'winter' in their letter. This is left to the learner to link the idea about summer in Khartoum (March, April, May) is hot with the idea of December and January being 'the best time to visit Khartoum'.

Question 4

The learner has to understand the link between the first sentence and the second sentence to infer that "Jebel Mara' is the place of the holiday

Text Two: Unit Two: Lesson (2).

Question 5

This question relates to the order of ‘remembering’. All what the learner is to do is just to count the names of the months mentioned in the letter and provide the answer.

Text Two: Unit Two : Lesson 2

At Dinder National Park

My friend Kamal went on holiday to Dinder National Park. He went there by bus. The park is **about forty kilometres** from the town of Dinder.

On the way to the park **he saw many people travelling in the same direction**. They were using different kinds of transport: lorries, buses, cars and even camels. The journey took about four hours. It was a long but comfortable journey. Kamal was glad he was in a bus and not on a camel.

The park was full of beautiful green trees and grass. The animals are not in cages; they move freely among the trees. Visitors cannot walk in the park **because some animals are dangerous**. The **visitors go around the park in a special car**.

1. How far is the park from the town ?

About forty Kilometers

2. What did he see on the way ?

He saw many people travelling in the same direction .

3. Why can't visitors go on foot around the park ?

Because some animal are dangerous .

4. How can visitors see the animals ?

Visitors go around the park in special cars.

Table (4.2): Frequency Distribution of Thinking Skills (2)

	Rem	Und	App	Ana	Eva	Crea
Where did Kamal spend his holyday?	✓					
What did he see on the way ?	✓					
Why can't visitors go on foot around the park ?		✓				
How can visitors see the animals ?		✓				
Total	2	2	0	0	0	0

Question 1

The clues in the first questions (Kamal, holiday, where) will lead the learner to do nothing other than remembering the idea in the first sentence. The learner will not exert any mental effort to find the answer.

Question 2

The phrase (see on the way) in the question indicates the place of the answer in the text. The learner will do nothing but scan the text for the phrase and that will lead him/her to locate the answer.

Question 3

In order to answer this question, the learner should be able to understand that “go on foot around the park” in the question means the same thing as ‘walk in the park’.

Question 4

The learner has to see the relationship (which is not overtly stated in the text) between the last sentence and the one just before it. S/he has to combine that the fact that ‘some animals are dangerous’ with the other two facts that “visitors cannot walk in the park” and ‘going around in special cars’ in order to understand the question and to provide that answer.

• **Text Three: Unit Two : Lesson (9)**

Farming and Industry

A big textile factory was built in Hasahisa in the Gezira. It is a good place because it is near cotton fields. **The factory uses very large electronic machines.** These machines weave **cotton and make it into cloth.** Your jalabiya is made of cotton. Cotton is grown in the Gezira and the Nuba mountains.

There are a lot of other factories in Sudan. They produce different things which are made from what is grown on farms. Sugar factories produce sugar – what is it made from? **Flour** factories produce flour which is **made from wheat** or ‘dura’.

A lot of things we eat come from the farm. The factories take what is grown on the farms and produce things from it.

1. What does a factory use ?

It use very large electric machines

2. What is made from wheat ?

Flour

3. What are clothes made of ?

They are made of cotton

4. Name something produced in a factory ?

powder milk

5. Is flour made from wheat ?

Yes

Table (4.3): Frequency Distribution of Thinking Skills (3)

	Rem	Und	App	Ana	Eva	Crea
What does a factory use ?	✓					
What is made from wheat ?	✓					
What are clothes made of ?	✓					
Name something produced in a factory ?			✓			
Is flour made from wheat ?	✓					
Total	4	0	1	0	0	0

Question1

The learner can easily get the answer by just remembering the key words in the question (*factory* and *use*). Then s/he will scan the text to locate the answer.

Question2 and Question 5

The phrase (made from wheat) in the question will automatically trigger off the process of remembering the location of the answer in the text. The learner will scan the text quickly and find the answer.

Question3

If the learner remembers the words (cotton, cloth and jalabiya), s/he will not fail to provide the answer. This does not require a lot of mental effort on the part of the learner.

Question4

Here the learner has to apply the knowledge s/he has gained from the passage and combines it with his/her knowledge of the world in order to give an example of a product other than the ones mentioned in the passage. By doing this, the learner will demonstrate the application of the High Order Thinking Skill of 'applying'.

•Text Four: Unit Three: Lesson (3)

Great Rivers

The **river Nile**, which is **the longest river in the world**, flows through the **Sudan**. It has its sources in **Lake Victoria** and runs through rocky country, then it runs through flat land until it enters Lake No. Here **it is joined by the Bahr-el-Ghazal**. From this point until Khartoum it is called the White Nile. The Blue Nile, which begins in the Ethiopian Highlands, joins the white Nile in Khartoum.

Many people live on the river banks. They use ferries to cross the river. The river is very useful for transport and irrigation.

1. Where is the Source of the Nile ?

At Lake Victoria

2. Where does it flow ?

It flows through the Sudan.

3. What happens at Lake No ?

It joins Bahr Al Ghazal .

4. Why is the river important for people?

It is very useful for transport and irrigation.

5. Which is the longest river in the world ?

The River Nile .

Table (4.4): Frequency Distribution of Thinking Skills (4)

	Rem	Und	App	Ana	Eva	Crea
Where is the Source of the Nile ?	✓					
Where does it flow ?	✓					
What happens at Lake No ?	✓					
Why is the river important for people?		✓				
Which is the longest river in the world?	✓					
Total	4	1	0	0	0	0

Question1

The word (source) in the question will make the learner remember the location of the fact in the text. Then the learner will search for the word in the passage. Finally s/he will find the answer.

Question2

The mnemonic word in this case is the word 'flow'. It will activate the memory of the learner and in this way s/he will remember the answer.

Question3

The question contains a very clear indicator to the answer (Lake No). Seeing this in the question, the learner will remember the location of the fact in the text. Then s/he will just pick up the answer.

Question4

This question requires the learner to understand that the word 'useful' in the text matches the idea of 'the river being important for people' in the question.

Question 5

The phrase 'the longest river in the world' is identical in both the question and the text. The learners will automatically remember the place where they have seen it in the text.

- **Text Five: Unit Three: Lesson (6)**

People and Pastimes

My name is Malwal. **My hobby is writing letters.** I write to about ten people in about six different countries. They tell me about life in their country and I tell them about life here. I started **writing four years** ago.

I found the addresses of my pen-friends in newspapers.

I think **it is important to learn about how other people live.** This makes the world seems smaller.

1. What is Malwal's hobby ?

Malwal's hobby is writing letters

2. For how long has he been writing ?

He has been writing for four years

3. Where did he find his friend's addresses ?

He found them in newspapers .

4. Why did he write to them ?

He thinks that it is important to learn about .how other people live

5. What is your favorite hobby ?

My favorite hobby is reading

Table (4.5): Frequency Distribution of Thinking Skills (5)

	Rem	Und	App	Ana	Eva	Crea
What is Malwal's hobby ?	✓					
For how long has he been writing ?		✓				
Where did he find his friend's addresses ?	✓					
Why did he write to them ?		✓				
What is your favorite hobby ?			✓			
Total	2	2	1	0	0	0

In this text, four questions belong to the Low Order Thinking Skills of remembering and understanding” (questions 1 and 3 and questions 2 and 4 respectively). One question (question 5) belongs to the High Order Thinking Skill of ‘applying’.

Question 1

This question is a remembering question . The learner will just look at the key words in the question and these will lead him/her to remember where the answer is located in the text.

Question 2

This question belongs to the level of ‘understanding’ because the learner has to work out the relationship between the past simple sentence in the text ‘*I started writing four years ago*’ and the present perfect expression in the question ‘*how long has he been writing*’.

Question 3

This is a question that needs no great mental effort. The learner will use the key words in the question (where, find, friend’s addresses) to find the answer in the text, which has the same words.

Question 4

The answer to this question is not explicitly stated in the texts. It is imbedded in the expression ‘*I think it is important to learn about how other people live.*’ The learner will have to deduce the answer from this expression.

Question 5

This question requires the learner to apply the information in the text in order to extend it to their own experience. They have to apply the knowledge to their own personal life.

- **Text Six: Unit Four : Lesson (7)**

Keeping our Country Green

(1) **How can you keep your country green?**

I can keep my country green by planting trees. Trees make places beautiful. Trees are very useful. **They keep the air fresh. They give us oxygen during the day. They give shade for animals and people. They are also a source of food and medicine for people and animals.** We must protect our trees.

(2) **How can you stop the desert from advancing?**

I can stop the desert from advancing by not cutting down trees. Trees take a long time to grow. They also need a lot of water. Trees keep water in the air. **They protect the soil from erosion.** They keep the desert away.

(3) **We must not cut down trees.** We must grow many trees to make forests.

Some people cut down trees to get wood. They make charcoal from it. If you cut down trees, you must grow others to replace them.

1. What do trees do to the air ?

They keep the air fresh

2. How do they help animals and people ?

They give shade for animals and people they are also source of food and medicine .

3. Is it good to cut down trees ?

No

4. How do trees stop the desert from advancing ?

They protect the soil from erosion

5. Do you grow trees ? why ?

Yes , to give shade and make the air fresh .

Table (4.6): Frequency Distribution of Thinking Skills (6)

	Rem	Und	App	Ana	Eva	Crea
What do trees do to the air ?	✓					
How do they help animals and people ?		✓				
Is it good to cut down trees ?		✓				
How do trees stop the desert from advancing ?		✓				
Do you grow trees ? why ?			✓			
Total	1	3	1	0	0	0

Question 1

The two key words in the question (*trees* and *air*) will work as indicators for the learner as where to find the answer. The learner has just to remember where the fact is mentioned in the text and pick it up.

Question 2

Here the answer is not stated explicitly in the text. It comes within a list of items about the roles of trees. The learner has to look for the answer by linking a number of facts and pieces of information and brings them together in order to arrive at the correct answer.

Question 3

The answer to this question is scattered throughout the text. The learner has to link a number of facts mentioned in the text and in different expression. Unless the learner is able to understand these, s/he will not be able to provide the correct answer.

Question 4

To answer the question, the learner has to be able to see the cause-and-effect relationship between the two ideas in the text (a) *They protect the soil from erosion*, and (b) *They keep the desert away*.

Question 5

This question invites learners to think beyond the text and the book boundaries and to think of a practical application of the theme of the text in their own personal life.

- **Text Seven: Unit Four : Lesson (11)**

Great Men and Women (2)

1- Jabir Ibn Hayyan

Jabir Ibn Hayyan is a famous Arab scientist. He lived in Damascus in the eighth century. That is about one thousand two hundred years ago. **He did many experiments in chemistry.** He had a laboratory to work in. **He wrote 80 books on chemistry.** Unfortunately, many of them were lost.

He **carried out** many experiments in heat and oxygen. He discovered many chemical compounds. **He invented a special type of paper. It didn't burn when set on fire. He invented a special type of ink. It could be read in the dark. He also invented a substance to prevent iron from rusting.** He wrote books on how to protect people from harmful things. He said that chemical laboratories should be built far away from residential areas.

1. Did Jabir do an experiment in chemistry or physics?

He did an experiment in chemistry.

2. How many books did he write?

He wrote 80 books.

3. What did he invent?

He invented a special type of paper it didn't burn when set on fire . He invented a special type of ink it could be read in the dark . He invented a substance that prevented iron from rusting

4. The writer used (did many experiment) in paragraph 1 . what is the verb the writer used in paragraph 2 to give the same meaning ?

He used carried out

5. Why was each of his invention important ?

Because they were useful and important in life.

6. Why should chemical laboratories be build away from towns ?

Because they affect human health .

Table (4.7): Frequency Distribution of Thinking Skills (7)

	Rem	Und	App	Ana	Eva	Crea
Did Jabir do an experiment in chemistry or physics ?	✓					
How many books did he write ?	✓					
What did he invent ?	✓					
The writer used (did many experiment) in paragraph 1 . what is the verb the writer used in paragraph 2 to give the same meaning ?		✓				
Why was each of his invention important ?					✓	
Why should chemical laboratories be build away from towns?					✓	
Total	3	1	0	0	2	0

Question 1

In this question, the two key words (*experiments* and *chemistry*) will start the process of remembering in the learner's mind. S/He will use them as guide words to locate the answer in the text and points it out.

Question 2

Seeing the words (how many, books, write) in the question, the learner will just scan the text in order to remember where s/he has seen the number that refers to the books written by Jabir Ibn Hayyan.

Question 3

The word *invent* in the question will lead the learner to remember where s/he has seen it in the text. In fact, the word *invented* is repeated three times in three successive sentences. This will lead the learner to remember the answer and pick it out.

Question 4

This question requires the learner to think about two words that have the same meaning used in different parts of the text (did many experiments – in paragraph 1 and carried out – in paragraph 2). The learner will have to rely on his/her linguistic knowledge as well as their experience with inferencing to provide the answer to this question.

Question 5

In order to answer this question, the learner will have to use their background knowledge to make an evaluation of the inventions. The learner will have to think , judge and come with a suitable answer for this question.

Question 6

This question requires the learner to read between the lines in order to make an evaluation of the situation relying on his/her past experiences and knowledge of the world.

• Text Eight: Unit Five : Lessons (5 and 6)

Al-Gadaref (1)

Al-Gadaref is a town in Eastern Sudan. It is an important agricultural town. It has rich soil and heavy rains. It is famous for growing sorghum and sesame seeds. Both sorghum and sesame seeds are cash crops. They provide our country with hard currency when they are exported. The people of AL-Gadaref are farmers and merchants

People from all over the country live in Al-Gadaref. **They come to AL-Gadaref to work in agriculture** . The railway line and the main road, which join the town with most parts of the country, make it easy for people to move from to and from AL-Gadaref whenever they wish.

AL-Gadaref (2)

Most people of Al-Gadaref live in huts which are made of straw and grass. The huts are cool in summer and warm in winter. There are also very fine modern buildings in the town like hotels, houses, government buildings, hospitals and a university.

AL-Gadaref has a problem with drinking water. **Usually in summer (March – April – May) people suffer from shortage of water. The water is pumped to the town from the River Atbara at Eshwawak. The River Atbar is not always full of water. It dries up in summer.**

1. What makes a lot of people go to Al. Gadaref ?

They come to AL-Gadaref to work in agriculture.

2. What sort of buildings do most of the people in the town live in?

They live in huts

3. When is there a shortage of drinking water in Al. Gadaref?

In summer; March, April and May.

4. What causes this shortage of drinking water?

The water is pumped to the town from the river Atbara and it is not always full of water. It dries up in summer.

Table (4.8): Frequency Distribution of Thinking Skills (8)

	Rem	Und	App	Ana	Eva	Crea
What makes a lot of people go to Al. Gadara?	✓					
What sort of buildings do most of the people in the town live in ?	✓					
When is there a shortage of drinking water in Al. Gadaref?	✓					
What causes this shortage of drinking water?		✓				
Total	3	1	0	0	0	0

Question 1

The answer to this question does not require the learner to do any kind of processing of information in order to arrive at it. The learner will simply look at the words in the question that are mentioned in the text which are “ people – come/go – AL-Gadaref” and they will just pick up the answer.

Question 2

The words “most – people – live” in the question will lead the learner to the answer without applying any of the High Order Thinking Skills. They are the same words in the text. The learner will just have to remember where in the text s/he has seen them and s/he will simply pick the answer up.

Question 3

The answer to this question needs no application of High Order Thinking Skill. The words in the question (shortage – drinking water) will lead the learner to the location of the answer in the text. All that the learner will have to do is to remember the position of these words in the text. Then s/he will simply get the answer.

Question 4

The answer to question 4 is not stated explicitly in the text. In order to get the answer to this question, the learner will need to exert some mental effort to see the logical connection between the last three sentences in the text and the one before them. S/he will need to see the cohesive feature represented by the use of the words “ a problem with drinking water” and “shortage of water” in the first two sentences in the last paragraph and the words “not always full of water” and “dries up” in the last two sentences in the same paragraph. Without seeing this feature of cohesion and coherence, the learner will not be able to answer the question.

• **Text Nine: Unit Six : Lesson (1)**

Robinson Crusoe

Robinson Crusoe was **English sailor and merchant. He was going on a journey** when a storm destroyed his ship. But **he was saved when a big wave carried him to the shore of a small island.** Robinson Crusoe lived there for twenty-eight years. Although he was alone, **he worked all the time. He built a house, he grew corn and vegetables and he reared animals.**

After twenty-five years, he found a man on the island. **The man was in trouble,** Robinson Crusoe helped him and the man became his servant. **He called him Friday. He taught him to speak English and to do many things.** Friday was very useful to him.

Three years later, **a ship came to the island.** Robinson Crusoe **met the captain and his companions.** They were in trouble. **He helped** them. Then he returned home with them in the ship.

1. Who was Robinson Crusoe?

He was an English Sailor and merchant.

2. What was he doing when a storm destroyed the ship?

He was going on a journey.

3. How was he saved?

He was saved when a big wave carried him to the shore of a small island.

4. What did he do all the time he was on the island?

He worked all the time. He built a house. He grew corn and vegetables. He reared animals.

5. What was wrong with the man he found on the island?

He was in trouble.

6. What did Robinson Crusoe call the man?

He called him Friday

7. What did he teach him?

He taught him to speak English and to do many things.

8. What happened three years later?

A ship came to the island.

9. Who did Robinson Crusoe meet on the island at the time?

He met the captain and his companions.

10. What did he do for them?

He helped them

Table (4.9): Frequency of Thinking Skills (9)

	Rem	Und	App	Ana	Eva	Crea
Who was Robinson Crusoe?	✓					
What was he doing when a storm destroyed the ship?	✓					
How was he saved?	✓					
What did he do all the time he was on the island?	✓					
What was wrong with the man he found on the island?		✓				
What did Robinson Crusoe call the man?	✓					
What did he teach him?	✓					
What happened three years later?	✓					
Who did Robinson Crusoe meet on the island at the time?	✓					
What did he do for them?	✓					
Total	9	1	0	0	0	0

Question 1

This question is a typical remembering question. The learner will just have to remember that Robinson Crusoe was a sailor and a merchant. This is very clearly stated in the text. It requires no application of any High Order Thinking Skill.

Question 2

The learner will have to do nothing other than to remember where s/he saw the phrase ‘when a storm destroyed his ship’ in the text. Then, s/he will just pick up the answer without exerting any mental effort of processing information or making links between parts of the text to arrive at the answer.

Question 3

The answer to this question requires no application of any High Order Thinking Skills. By using the word “saved” as a clue, the learner will simply remember the answer and picks it directly from the text.

Question 4

By using the phrase “all the time’ in the question, the learner will just scan the text to pick up the clue and locate where the answer is. S/he will need no more than remembering where s/he has seen that in the text.

Question 5

The answer to this question is not literary stated in the text. The question uses the expression “what was wrong with the man” to refer to the fact that the man was ‘in trouble’. The learner has to make the link between the phrase in the question and the one in the text to come to the answer. S/he has to understand (and not to remember) the facts.

Question 6

This question is a remembering question. The learner will just look for the name given to the man by Robinson. S/he might not even need to refer to the text because the name ‘Friday’ will have stuck in his/her memory as it is a day of the week.

Question 7

The answer is very clearly stated in the text. All that has to be done by the learner is to know that the past tense of ‘teach’ is ‘taught’, which does not relate in any way to the application of any one of the High Order Thinking Skills.

Question 8

The learner can see that the phrase ‘three years later’ is in the question and is in the text with the same wording. The answer will be very easy and straight forward. The learner will just have to locate the phrase in the text and the answer will be there ready for him/her to pick up.

Question 9

The word ‘meet’ is a hint to the answer to this question. The learner who knows that the past form of ‘meet’ is ‘met’ will need no other clue to remember the answer.

Question 10

The answer to this question is clearly and explicitly stated in the text. The learner will just have to remember it. It does not require him/her to do any job related to the High Order Thinking Skills.

FINDINGS

The findings can be summarized as follows:

1. 89.5% of the questions in the sample belong to the Low Order Thinking skills; 59.2% of which relate to ‘remembering’ and 30.2% relate to ‘understanding’.

2. 10.2% of the questions in the sample belong to High Order Thinking Skills; 6.1% of which relate to ‘applying’ and 4.1% relate to ‘evaluating’
3. No questions belong to any of the other High Order Thinking Skills (i.e. Analyzing” and ‘Creating”).

It is clear that SPINE 3 does not cover the whole range of thinking skills in Bloom’s taxonomy.

RECOMMENDATIONS

In the light of these findings the following recommendations can be made:

- (1) A revision of the comprehension questions in SPINE 3 has to be made immediately.
- (2) Writers of any new language textbooks have to take into account that the comprehension questions and other language activities have to conform with Bloom’s taxonomy.
- (3) Teachers need to be trained to prepare their own comprehension questions in order to develop the learners’ thinking abilities in accordance with Bloom’s taxonomy.

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