

# Evaluating *Four Corners* Textbooks in Terms of Cognitive Processes Using Bloom's Revised Taxonomy

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## Abstract

This study evaluated 2 ELT textbooks (*Four Corners, Book 2* and *Four Corners Book 3*) drawing on Bloom's revised taxonomy (BRT); it examined the extent to which these ELT textbooks could demonstrate the 6 cognitive categories of the BRT (i.e., remembering, understanding, applying, analyzing, evaluating, and creating) in their activities. To this end, content analysis was done to obtain the frequency and proportion of various cognitive processes. Results revealed the prevalence of the processes of remembering and understanding in the textbooks. Also, creating process constituted the lowest percentage of processes in both textbooks. Furthermore, the lower-order categories (i.e., remembering, understanding, and applying) were more frequently represented than the higher-order ones (i.e., analyzing, evaluating, and creating). However, the chi-square test did not show a significant difference between *Book 2* (a less advanced-level textbook) and *Book 3* (a more advanced-level textbook) in terms of the 6 levels of cognitive skills. The results indicate that the above textbooks, much against expectations, fail to engage learners so well in the activities requiring higher levels of cognitive ability, prerequisites of autonomous language learning. By implication, some of the activities in the more advanced-level textbook should be adapted to make learners become more intellectual contributors to their language learning.

**Keywords:** Bloom's Revised Taxonomy; *Four Corners*; Evaluation; Textbook

## 1. Introduction

Teaching materials are among the most important constituents of any language programs. They provide L2 learners with adequate input to practice and are mostly considered as reliable sources of ideas for inexperienced teachers to plan and teach lessons in their classrooms (McDonough & Shaw, 2003; Richard, 2001). As far as the available teaching materials are concerned, commercial textbooks, together with other supplementary materials such as cassettes, DVDs, CDs, and teachers' guides, constitute the most prevalent types of instructional materials to be used in language classrooms (Richards, 2001). Textbooks can play the role of a syllabus and a self-study source for learners (Çakit, 2006), and "represent the

fundament[al] on which teaching and learning are based” (Roberts, 1996, p. 375). Such great interest in textbooks may be because of the time pressure placed on teachers, teachers’ uncertainty about their language competence, the greater appeal of the textbooks for learners, and finally “the need for a yardstick of progress both for learners and for others looking in on the situation” (Roberts, 1996, p. 375).

Thus, the important role designated to the textbooks in language programs and the fact that they, in Ndura’s (2004) terms, can affect learners’ viewpoints and their choice of language in L2 communication makes textbook evaluation indispensable. Among the different existing frameworks and criteria for textbook evaluation, Bloom’s revised taxonomy (BRT) can be a good choice to assess the basic skills and aligning teaching materials and learning activities with the cognitive thinking processes such as remembering, understanding, and analyzing. BRT is a practical tool for course evaluation (Marzano & Kendall, 2007) and helps L2 teachers form alignment between assessment and course objectives (Krathwohl, 2002). Unfortunately, there are only a few studies (e.g., Razmjoo & Kazempourfard, 2012; Sultana, 2001) to offer the potential illustration of this influential framework in EFL contexts, given that in such contexts, ELT textbooks are the main medium of instruction. As Hanna (2007) points out, this taxonomy “aligns learning objectives, curriculum, and assessment to link the complexity of learning with the cognitive . . . domains” (p. 9).

The present study, therefore, aims at evaluating *Four Corners, Book 2* and *Four Corners, Book 3* (Richards & Bohlke, 2012) in terms of cognitive processes by drawing on BRT. The reason behind choosing this framework for evaluating the textbooks lies in its effectiveness in curriculum development and the ways it helps language teachers and administrators. As Krathwohl (2002) states, it aids teachers to “align activities and assessments with objectives,” and to “raise the learning targets themselves” (p. 234). Moreover, BRT has had a substantial influence on evaluation for evaluating lesson objectives (Marzano & Kendall, 2007). Considering the abovementioned issues, evaluating ELT textbooks based on BRT bears significance for both L2 learners and teachers as well as materials developers.

## 2. Literature Review

When creating a curriculum, Bloom (1956) challenged teachers to categorize their current curriculum based on cognitive demands to reveal missing pieces; he stated that by “comparing the goals of their present curriculum with the range of possible outcomes [this comparison] may suggest additional goals they may wish to include” (Bloom, 1956, p. 2).

Bloom’s initial taxonomy included six cognitive levels including knowledge, comprehension, application, analysis, synthesis, and evaluation, each of

which contained some subcategories with the exception of application. Table 1 illustrates the complete structure of the levels and their subcategories:

Table 1. *The Original Taxonomy*

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<b>1. Knowledge</b>
1.1. Knowledge of Specifics
1.1.1. Knowledge of Terminology
1.1.2. Knowledge of Specific Facts
1.2. Knowledge of Ways and Means of Dealing With Specifics
1.2.1. Knowledge of Conventions
1.2.2. Knowledge of Trends and Sequences
1.2.3. Knowledge of Classifications and Categories
1.2.4. Knowledge of Criteria
1.2.5. Knowledge of Methodology
1.3. Knowledge of Universals and Abstractions in a Field
1.3.1. Knowledge of Principles and Generalizations
1.3.2. Knowledge of Theories and Structures
<b>2. Comprehension</b>
2.1. Translation
2.2. Interpretation
2.3. Extrapolation
<b>3. Application</b>
<b>4. Analysis</b>
4.1. Analysis of Elements
4.2. Analysis of Relationships
4.3. Analysis of Organizational Principles
<b>5. Synthesis</b>
5.1. Production of a Unique Communication
5.2. Production of a Plan, or Proposed Set of Operations
5.3. Derivation of a Set of Abstract Relations
<b>6. Evaluation</b>
6.1. Evaluation in Terms of Internal Evidence
6.2. Judgments in Terms of External Criteria

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With the emphasis on higher level thinking taking root in 1980s and a shift to standards-based curriculum, the need for analyzing and revising the taxonomy started to emerge (Marzano & Kendall, 2007). Anderson et al. (2001) updated the framework for a revised taxonomy. The number of categories was the same, but some significant modifications were made. First, all the category names were changed to verb forms to adjust for the way they are employed in objectives. Second, the presence of metacognition appeared, so comprehension was named “understand” (Anderson & Krathwohl, 2001, p. 306) and synthesis was named “create” (Anderson & Krathwohl, 2001, p. 306). Changes in structure included addressing the confusion over knowledge, and the reversal of the top two cognitive levels (Anderson & Krathwohl, 2001). Thus, the knowledge category was renamed

and synthesis changed places with evaluation. Finally, all the subcategories were changed into the gerund forms.

BRT, as described by Anderson and Krathwohl (2001, pp. 67-68), orders cognitive process from simple remembering to higher-order critical and creative thinking process:

- Remember: Retrieve relevant knowledge from long-term memory.
- Understand: Construct meaning from instructional messages, including oral, written, and graphic communication long-term memory.
- Apply: Carry out or use a procedure in a given situation.
- Analyze: Break materials into parts and determine how the parts relate.
- Evaluate: Make judgments based on criteria and standards.
- Create: Put elements together to form a coherent or functional whole; we organize elements into a new pattern or structure.

The review of the related literature shows that there has been an ongoing tendency to evaluate different areas in ELT textbooks. But a close examination indicates that most studies carried out on textbook evaluation employed such tools as questionnaires or checklists. For instance, in a study by Kırkgöz (2009), the English textbooks for the learners of English at Turkish primary education were evaluated through a 5-point Likert scale questionnaire, containing five components of layout and design, language, subject and content, language skills, as well as methodology and overall. Alongside, in another study, Litz (2005) evaluated *English Firsthand 2*, used in Kyun Kwan University EFL program, in terms of layout and design, range and balance of activities, skills appropriateness and integration, social and cultural consideration, subject content, and language type through questionnaires for teachers and students. In an Iranian context, Jahangard (2007) evaluated the EFL textbooks taught at public high schools through a checklist, examining 13 criteria including explicit description of the book's objectives in introduction, vocabulary explanation, periodic review, grammar presentation, and attractive layout.

There are some surveys evaluating L2 textbooks through BRT with the aim of helping L2 teachers understand their curriculum objectives better. Riazi and Mosalanejad (2010), for instance, conducted a study about the types of learning objectives in Iranian senior high school and preuniversity textbooks based on BRT learning objectives. The findings disclosed the dominance of lower-order cognitive skills in all the grades. On the other hand, the preuniversity books contained more higher-order learning objectives in comparison with senior high school textbooks. In another study, making a critical thinking checklist, mostly based on BRT, Birjandi and Alizadeh (2012) investigated the extent to which critical thinking skills in *Top Notch*, *Interchange*, and *English File* series were involved. They reported

that these three textbooks mostly included skills such as knowledge, comprehension, application, and building community of thinkers and lacked other types of skills. Similarly, learning objectives in the *Interchange* series was evaluated by Razmjoo and Kazempourfard (2012), using BRT. The findings revealed the prevalence of lower-order thinking skills including remembering, understanding, and applying in these books. Moreover, the results revealed lack of metacognitive knowledge. Finally, Rezvani and Zamani (2012) applied the taxonomy to evaluate translation thinking in Iran's officially published translation university textbooks. The findings revealed that in the translation textbooks, the creative thinking skills (i.e., higher-order cognitive skills) did not serve a significant role.

The above evaluation studies have contributed to a better understanding of EFL curricula and learning objectives as well as the body of knowledge on the weakness of some textbooks used in EFL programs. However, a few studies (e.g., Razmjoo & Kazempourfard, 2012; Riazi & Mosalanejad, 2010) have aligned the cognitive domain of BRT with the ELT materials to offer potential illustrations of what EFL learners should learn or what materials they should be provided with in their classrooms. There is still more need to use BRT, particularly the revised one, which is, according to Coleman (2013), one of the most influential educational frameworks used for assessment, curriculum development, and instruction to evaluate ELT materials. This study was an attempt to fill the gap in the literature as regards two ELT textbooks. More specifically, by drawing on the cognitive domain of the BRT, the current study aimed to evaluate *Four Corners, Book 2* (Richards & Bohlke, 2012) and *Four Corners, Book 3* (Richards & Bohlke, 2012) in terms of six categories, that is, remembering, understanding, applying, analyzing, evaluating, and creating. The reason for choosing the above textbooks is that they are among the most recent ELT textbooks published in some counties like Iran and many language schools in Iran have replaced the older ELT textbooks like *New Interchange* series (Richards, Hull, & Proctor, 2009) with *Four Corners* series (Richards & Bohlke, 2012). It is, thus, important to see whether these teaching textbooks are better alternatives, compared with other available textbooks in the market, and to see whether they represent various levels of cognitive processes, both lower- and higher-order thinking skills. It is expected to have more activities representing higher level thinking processes in more advanced level of these textbooks, as learners' English proficiency level advances. In light of the above issues, the following research questions were addressed:

1. Which levels of cognitive processes in BRT are predominant in *Four Corners* series?
2. Is there any significant difference between *Four Corners, Book 2* and *Four Corners, Book 3* in terms of various levels of cognitive domain in BRT?

### 3. Methodology

#### 3.1 Materials

For the purpose of this study, two English textbooks, that is, *Four Corners, Book 2* (Richards & Bohlke, 2012) and *Four Corners, Book 3* (Richards & Bohlke, 2012) were selected. Each book contains 12 units, with four lessons per unit, focusing on one or several components of language (e.g., vocabulary, grammar, or pronunciation). Both are published by Cambridge University Press. *Four Corners, Book 2* is designed for the basic user level group, following Common European Framework of Reference for Languages (CEFR). *Four Corners, Book 3* is written for the independent user level group, following CEFR. The former is supposed to take L2 learners from novice (i.e., beginning) to low-intermediate level, whereas the latter takes the low-intermediate level to more advance level.

#### 3.2 Procedure

The study was carried out both qualitatively and quantitatively. Setting BRT as the framework, this study collected the data from the two volumes of *Four Corners*. Two raters carried out content analysis to find out the frequency and proportion of the cognitive processes based on the cognitive domain in BRT. To facilitate analyzing and evaluating these textbooks, an agreement was made between the raters to codify the six levels of the cognitive dimension in BRT. Then, five units of each book were randomly selected. The selected units for the analysis included Unit 1, Unit 4, Unit 7, Unit 9, and Unit 12. It is worth mentioning that the number of pages in each unit of the above textbooks is the same. It was assumed that by analyzing different activities in the above units, the findings can be generalized to other units of the abovementioned textbooks and the progress of the students through different levels of cognitive processes can be depicted. To increase the dependability of the main data, the interrater index was calculated. The raters' agreement on designating the appropriate cognitive process to the activities was 94%, which was a good measure of interrater consistency. However, the raters were invited to attend two other sessions to resolve their remaining disagreements so as to further increase the dependability of the data.



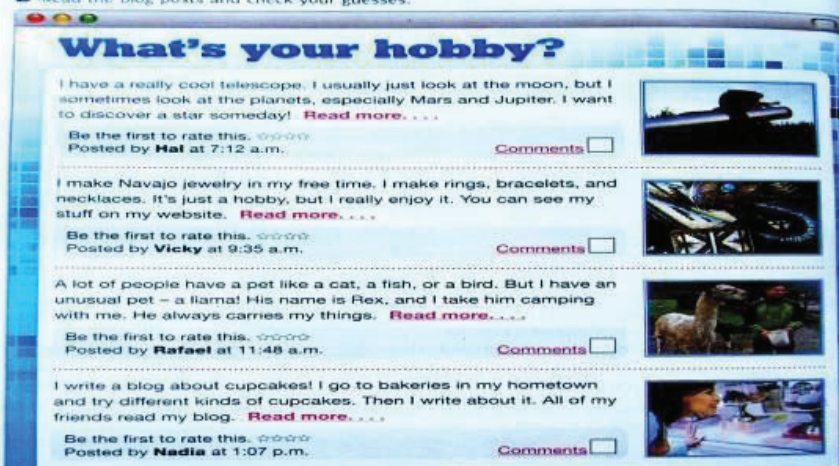
### 3.3 Sample Activities

This part includes some selected sample activities derived from the abovementioned textbooks, along with some explanation for codifying and evaluating the activities:

**1 Reading**

**A** Look at the pictures. What is each person's hobby? Guess.

**B** Read the blog posts and check your guesses.



**C** Read the blog posts again. Which comment follows each post? Number the comments from 1 to 4.

1. Your stuff is great! Do you sell it?	3. Good luck! Oh, what would you name it?
2. So where's a good place to get one?	4. I love the picture. What does he eat?

**D Pair work** Rate each blog post and write a comment for one of the people. Discuss your ideas.

Figure 1. A Sample Shot of Reading Activity  
(Taken From *Four Corners*, Book 2, p. 12)

The activity displayed in Figure 1 contains four parts. In Part A, EFL students are required to look at the pictures and guess each person's hobby. By doing this, they are intended to recall and retrieve some background knowledge about each field. This part can be subsumed under the knowledge of terminology subcategory within knowledge (i.e., remembering) domain. According to Bloom (1956), in every field, there are a large number of symbols, verbal or nonverbal, which refer to particular entities. In fact, they "represent the basic language of the field" and "the individual reader of the communication must have the knowledge of the symbols and their referents before he can comprehend or think about the phenomena of the field" (p. 64). Thus, EFL students make guesses about the unfamiliar entities, based on the recalled knowledge about the familiar entities or referents.

In Part B, EFL students are required to read the blog posts, which entails recalling and identifying the necessary terminology and referents, as well as understanding the whole content of each blog post. According to Bloom (1956),

when students encounter a communication, they make use of the stated ideas within the communication for different purposes whether the communication is in oral or written form, in verbal or symbolic form. He adds that there are three subcategories to understanding: translation, interpretation, and extrapolation. Any communication is first assumed to include an arrangement of ideas. When it is interpreted, those ideas are reordered into a new arrangement in the mind of the individual. It is assumed that this activity triggers the second subcategory of understanding which is interpretation. Looking for the important ideas within a communication, discovering the relationship between the different parts, and their relevance to the generalizations within that communication are also considered as parts of interpretation process.

Going through Part C, an EFL learner is required to read the posts again and match some written comments with the posts. By rereading the texts, the learner confirms his or her understanding of the ideas communicated in each post, involving his or her understanding of those comments, too. Then, the learner should compare each comment with the ideas within each post to see which comment goes to which post. This activity, thus, demonstrates understanding process.

Finally, EFL students are asked to rate each comment in Part D, which requires them to analyze different parts of each post and then to compare them with their likes and dislikes. As Bloom (1956) asserts, analysis involves finding the organization of a communication, but it can be deemed as “an aid to fuller comprehension or as a prelude to an evaluation of the material” (p. 144). In this part, after analyzing and comparing each post, the readers are to rate the posts, which entails their evaluation of each written text. Evaluation is “making of judgments about the value of ideas, work, solutions, methods, materials, etc.” (p. 185). Here, the readers can make use of some criteria for appraising the ideas and estimating to what extent they are satisfying and precise. In this part, the readers are made to consider all the previous steps and processes of the task like recalling the information about the texts, interpreting the content, analyzing parts, and evaluating materials so as to create or write an appropriate comment about the post. Therefore, this activity can represent a higher-order cognitive process within the taxonomy.

The activity in Figure 2 includes two parts. In Part A, EFL students are asked to complete the conversation using the previously taught grammatical structure. To carry out the task, the students need to go through the first, second, and third phases of the cognitive domain, represented as remembering, understanding, and applying, respectively. First, the remembering process is activated because the students are required to recall and then identify some previously learned rules and structures in the activity. This can be subsumed under the knowledge of conventions subcategory, which refers to those “such varied phenomena as conventional



symbols, rules of social behavior, rules, styles, and practices commonly employed in scholarly fields” (Bloom, 1956, p. 69). Second, they are required to understand both the content of the activity, which is in the form of a conversation, and the necessary structure. Finally, they should complete the blanks in the conversation using the correct form of the previously learned grammatical structures, which triggers the third category of cognitive dimension, that is, applying.

**3 Grammar** **Simple past; ago** **unit 9**

Who did you write about?  
I wrote about Jacques Cousteau.  
I didn't write about his son.

What did he do?  
He made documentaries.

Did you finish your report?  
Yes, I did. No, I didn't.

**Period of time + ago**  
I finished the report **two days ago**.  
I researched it **a week ago**.  
I saw a documentary **four years ago**.  
He died **a long time ago**.

**A** Complete the conversation with the simple past form of the verbs.  
Then practice with a partner.

A: Why \_\_\_\_\_ you \_\_\_\_\_ (decide) to write about Mia Hamm for your report?  
B: Well, I \_\_\_\_\_ (want) to write about an athlete. And I think she's very inspiring. In 1997, she \_\_\_\_\_ (start) the Mia Hamm Foundation. It helps women in sports. Then in 2000, she \_\_\_\_\_ (write) the book *Go for the Goal*.  
A: Does she play soccer now?  
B: No, she \_\_\_\_\_ (play) her last game in 2004, and then in 2007 she \_\_\_\_\_ (have) twin girls!

**B Pair work** Ask and answer questions about when Mia Hamm did these things. Use *ago* in the answers.

have twins    play her last game    start a foundation    write a book

Figure 2. A Sample Shot of Grammar Activity  
(Taken from *Four Corners, Book 2*, p. 91)

Through Part B, EFL students are prompted to ask and answer questions about the character in Part A. For undertaking this activity, the students are required to recall some factual knowledge of grammatical rules and apply them in the form of asking and answering. Therefore, remembering and applying processes are activated. Additionally, owing to the fact that the students are engaged in a conversation, they should understand their addressees' intentions and illocutionary acts. Thus, the second level of cognitive thinking is also required or engaged:

Figure 3 shows one activity in the vocabulary section from *Book 3*. First, EFL students are asked to match the presented words with the appropriate pictures. Through doing this part, some relevant knowledge is to be retrieved by looking at the pictures and the words in the box, requiring having knowledge of terminology which is acquaintance with a large number of words (Anderson, et al., 2001). Also, understanding occurs by interpreting the perceived ideas based on the remembered information. The meaning is constructed from the instructional messages, which is here written and graphic information. By looking at the crying face of the boy, for

instance, and remembering a similar experience, the students find the word *upset* as the best choice to describe the boy's feeling. They are, then, asked to check the answers. For accomplishing this, they need to compare their written answers with the oral ones; therefore, they have to understand the oral message to recognize whether the answers are right or wrong. Moreover, translation, that is, changing the form of communication, might take places by changing the oral message into the written one:

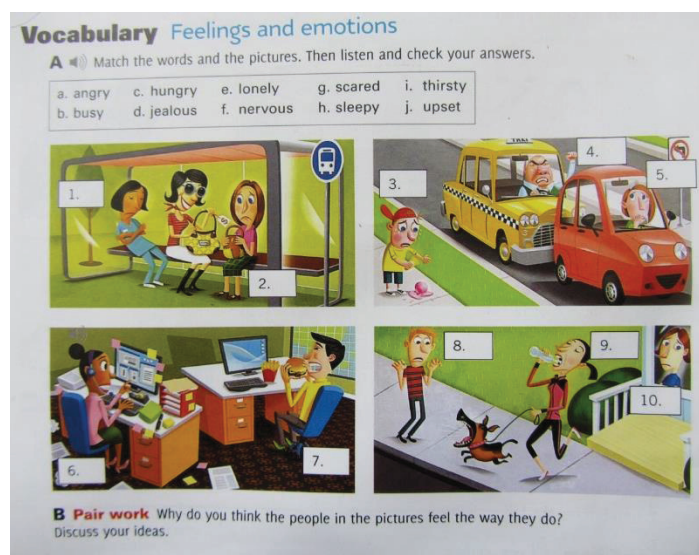


Figure 3. A Sample Shot of Speaking Activity  
(Taken from *Four Corners*, Book 3, p. 121)

In Figure 3, part B, EFL learners are encouraged to think and give reasons for people's feelings, involving analysis; they can break the pictures into parts and analyze the graphic information. By analyzing the pictures, the learners are able to give reasons to defend their way of thinking. For doing the last part (i.e., discussion) the learners should interpret and understand their own ideas and those of others reciprocally. They represent their own learning from the given information and convey it to others. In sum, this vocabulary activity can start with the lower-order thinking levels (i.e., remembering and understanding) and progress toward a higher-order one (i.e., analyzing).

Finally, the activity in Figure 4 invites students to imagine having a chance to go anywhere they like in the world. Then, they are asked some questions related to the trip, including the places they want to visit, the activities they want to do there, and the transportation system which they utilize; the learners should design and plan an abstract trip in their mind, so the activity can involve the creating process. The learners put elements from their previous knowledge together, such as

the pictures they have seen about countries, to form what Anderson et al. (2001, p. 162) call “a functional whole.” As the activity concerns about the kind of trip and places learners like to visit, they have to retrieve information from their long term memory to answer the question, evoking remembering. Also, they are asked about their reasons, progressing toward analysis. Again, they are invited to exchange questions for more information, involving remembering because they ought to remember what they had imagined before. As they remember the vocabularies in the previous part, they have to implement them in the new situation and show their understanding, too.

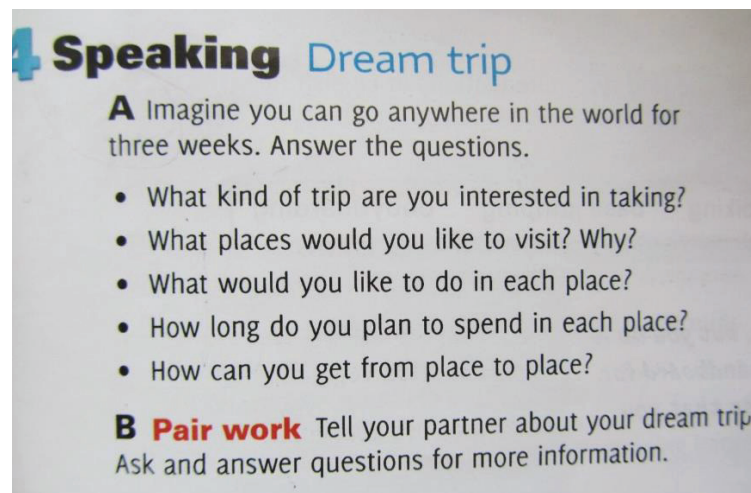


Figure 4. A Sample Shot of Speaking Activity  
(Taken from *Four Corners, Book 3*, p. 121)

#### 4. Results

Quantitative research procedures were also employed in this study. To answer the first research question, investigating the dominant cognitive categories in the two volumes of *Four Corners* series by drawing on BRT, the frequencies and percentages of all six cognitive categories were calculated. To provide a better display of cognitive processes, the results are summarized in terms of lower- and higher-order cognitive processes in Table 2. As Table 2 displays, the remembering process received the highest percentages of cognitive processes in both textbooks (38.63 and 40.16); the evaluating and creating processes received the lowest percentages of cognitive processes in *Four Corners, Book 2* and *Book 3*, respectively. Moreover, the frequencies of the lower-order categories in *Book 2* were 221, 179, and 121 for remembering, understanding, and applying, respectively, which constitute a large proportion (about 90%) of the all processes. The frequencies of the same processes for *Book 3* were 237, 179, and 101, which made up a high percentage (about 87%) of the cognitive processes. This suggests the

predominance of lower-order cognitive processes over the higher-order ones in both textbooks. Moreover, the proportion of the applying process in *Four Corners, Book 2* was more than that of *Book 3*:

Table 2. *Frequencies and Percentages of Six Cognitive Levels of Bloom's Taxonomy*

Cognitive Processes	Book 2		Book 3	
	Frequency	Percentage	Frequency	Percentage
<b>Lower-Order</b>				
Remembering	221	38.63	237	40.16
Understanding	179	31.29	179	30.34
Applying	121	21.15	101	17.12
<b>Higher-Order</b>				
Analyzing	40	7.00	57	9.66
Evaluating	7	1.23	9	1.53
Creating	4	.70	7	1.19
Total	572	100	590	100

As for higher-order categories, *Book 2* yielded the frequencies of 40, 7, and 4 for analyzing, evaluating, and creating categories respectively, with analyzing receiving the highest percentage and creating the lowest percentage. Similarly, the frequencies obtained in *Book 3* for the three abovementioned categories were 57, 9, and 7, respectively, with analyzing receiving the highest percentage (about 10%) and creating the lowest percentage (about 1%).

To test the significance of the difference in the frequency of categories between the two textbooks, chi-square test of significance was carried out. The results are represented in Table 3:

Table 3. *Chi-Square Test*

Test	Value	df	Sig. <sup>a</sup>
Pearson Chi-Square	6.986	5	.222
Likelihood Ratio	7.053	5	.217
Linear-by-Linear association	.105	1	.745
N of Valid Cases	1162		

<sup>a</sup>2-tailed, with 0.05 as the level of significance

As shown in Table 3, the value for Pearson chi-square was 6.986, with  $p > .05$ . Therefore, no statistically significant difference between *Four Corners, Book*

2 and *Book 3* was found in terms of the six levels of cognitive skills. In addition, in order to evaluate the significance of the observed difference between the values of lower- and higher-order levels in both textbooks, further inferential statistics was carried out. The results of the chi-square analysis showed that in both *Four Corners* textbooks (i.e., *Book 2* and *Book 3*), there was a significant difference between the frequencies of lower- and higher-order cognitive processes ( $\chi^2 = 718.92$ ,  $df = 1$ ,  $p = < .05$ ), with lower-order domains constituting a majority of the proportions.

### 5. Discussion and Conclusion

The results of the current research indicate that the lower-order categories of cognitive domain within BRT are more frequently represented than those higher-level ones in two volumes of *Four Corner* series. Remembering, a lower-order domain, constitutes the majority of the cognitive processes. Activities aligned under the remembering domain type in the aforementioned textbooks include the introduction and recalling hobbies, warm-up activities, answering questions about the things in the past, enquiring information about the learners' personal life, labeling the pictures with available appropriate words, and discussing familiar cultural features (e.g., food, and customs). Also, the readers of the textbooks are instructed with activities such as listening to CD and recognizing some key elements which would activate the relevant background knowledge. Recalling key vocabulary terms is a common practice within this type, too. Therefore, it is not against expectation that remembering as a lower-order cognitive process is frequently demonstrated in the abovementioned ELT textbooks. The predominance of lower-order categories such as remembering domain in these textbooks can be justified by Bloom's (1956) focus on the importance of knowledge and remembering. Knowledge is frequently regarded as basic to all the other goals of education (Krathwohl, 2002). As a person's knowledge or information increases, there will be a development of the person's acquaintance with reality (Gotcher, 2012). Higher-order skills such as problem solving and critical thinking cannot be carried out in a vacuum, but they must be based on past knowledge of our realities, that is, what we remember (Marzano & Kendall, 2007).

Furthermore, the understanding process, ranked second among the six cognitive processes in the corpus collected from both textbooks, has greatly contributed to predominance of lower-order skills in the abovementioned textbooks. As for comprehension, one can agree with Bloom (1956) that it is perhaps the largest and most common intellectual ability to be emphasized in schools and colleges (Forehand, 2005); when learners face a special discourse, they are supposed to make sense of its content and the ideas expressed within it. To get involved in more complex thinking processes, they should first be able to get the meaning embedded in different parts of a communication and, thereby, demonstrate an in-depth understanding of it. It is not, thus, against expectation to find many activities

and tasks in the ELT textbooks requiring this cognitive process, and as such, in the two volumes of *Four Corners*, there exist many activities within the understanding domain type. Examples of the activities given in these textbooks consist of understanding and analyzing grammatical patterns and illustrations (i.e., photos and pictures), and discovering meanings and synonyms in item matching activities to show the learnt knowledge, describing the pictures, comprehending the content of the reading parts, establishing a relationship between the activated background knowledge and the newly introduced information within the listening tasks, and finally answering questions after activities such as listening activities.

Moreover, the results obtained from the present study have revealed that the lower-order categories in *Four Corners, Book 2* are addressed a little more than those of *Four Corners, Book 3* and the higher-level cognitive processes are required a little more while doing activities in *Book 3*. The above results can be taken positively, but they are not very encouraging because the differences between the two ELT textbooks in terms of cognitive domains were not statistically significant, and in both textbooks the lower-order skills were more significantly represented than the higher-order ones. *Book 2* is written for the basic user level groups (Richards & Bohlke, 2012), that is, according to CEFR, it is designed for threshold or elementary level learners. It should prepare EFL learners to enter the next level which is labeled as intermediate. Therefore, it is natural to expect more basic information and lower-order thinking processes as compared with *Book 3*. This way, the learners are equipped with a strong backbone to face the problems and more complex thinking processes in the next level. *Four Corners, Book 3* is however designed for independent user level groups (Richards & Bohlke, 2012), that is, it is supposed to take the intermediate level students to a higher level and prepare them to be more independent in the process of language. It seems, thus, logical to expect more activities engaging the higher-order domains in *Book 3*. That is to say, EFL students studying *Book 3* may need more activities with their critical thinking engaged in doing them. As Mabrouk (2010) argues, critical thinking leads to a kind of curiosity in learners which in place paves the way for independency in learning. Research has also revealed a positive correlation between language proficiency and critical thinking ability (Rashid & Hashim, 2008). Hence, it is expected to have more activities triggering higher level thinking processes in a more advanced-level textbook as learners' English proficiency level advances.

Nonetheless, the results obtained in the present study have indicated some positive effort. For instance, the frequency of the fourth level of the cognitive processes (i.e., analysis) in *Four Corners, Book 3* is noticeably more than *Book 2*, whereas application, a lower-order skill, is more frequent in the *Book 2*. It means that *Book 2* can engage EFL students in applying the comprehended or learned



materials more. Examples of the activities given in the lessons (mostly in *Book 2*) within applying domain include reading and role-playing according to students' interpretation, completing the blanks with grammatically appropriate forms, interviewing or conversing with one's partner using the newly learned grammatical structures, doing a piece of writing based on a given model, and doing oral and pair activities. But examples of classroom activities that aligned with the higher-order fourth, fifth, and sixth cognitive domains are shown through students' rating blog posts and evaluating them, ranking different pictures (e.g., pictures of houses in the world), analyzing their characteristics, comparing and contrasting them against each other, and making decisions about them, writing about an imaginary situation without referring to a model or writing comments on pictures and proposing new ideas for a given topic. These examples are still infrequent and are less observed in the early units of these textbooks.

The number of studies evaluating the English textbooks in terms of BRT is not great to compare the results with and make generalization. Nonetheless, the results of the current study support the previous findings obtained by Riazi and Mosalanejad (2010) and Razmjoo and Kazempurfand (2012) in that the lower-order cognitive skills are more prevalent in ELT textbooks used in Iran and there is more need for incorporating activities for EFL students to self-evaluate, practice, and critique their performance in the classroom.

In sum, the findings of this study revealed the prevalence of the process of remembering (i.e., recovery of pertinent knowledge from long-term memory) and understanding (i.e., constructing meaning from instructional messages and written, oral, and graphic communication) in the aforementioned textbooks. Also, much against expectation, the test of significance in the present study did not reveal a statistically significance difference between the two textbooks in terms of cognitive categories. And, in both textbooks, the frequencies of the lower-order domains were found to be more significant. The results of the present study imply that some of the class activities in ELT textbooks at more advanced levels should be adapted to engage EFL students more in higher-order thinking skills such as peer-critiquing or self-assessing. If we can increase higher-order cognitive skills, in Gordon's (2009) terms, we can expect our EFL students to "become effective, intellectual contributors to construct personal interpretations of the topics of interest" (p. 47).

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