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Investigating the Predominant Levels of Learning Objectives in General English Books*

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Abstract

This study investigated nine General English books (five produced by non-native Iranian speakers and four produced by native speakers) in terms of learning objectives in Bloom's Revised Taxonomy (2001). The aim was to find out which levels of Bloom's Revised Taxonomy are dominant in the books. So, the contents of the books were codified based on a coding scheme designed by Razmjoo and Kazempurfard (2012). The inter-coder and intra-coder reliability of the coding were estimated through SPSS software resulting in 96.5 and 97.3 respectively, which are very high. The data were analyzed and the frequencies and percentages of occurrence of different learning objectives were calculated. The results of the study revealed that in books produced by non-native speakers, A1 (Remembering Factual Knowledge) is the dominant learning objective level used, and in books produced by native speakers, both A1 (Remembering Factual Knowledge) and B1 (Understanding Factual Knowledge) are the dominant levels. Furthermore, lower order thinking skills (the three low levels in Bloom's Revised Taxonomy) are the most prevalent learning levels in books produced by both non-native Iranian speakers and native speakers. However, the percentages of occurrence of higher order thinking skills in books produced by native speakers are higher than those in books produced by non-native Iranian speakers.

Keywords: General English books, non-native Iranian speakers, native speakers, Bloom's Revised Taxonomy

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Introduction

Textbooks have an important role in language teaching and learning. They are indispensable components of any language learning program (Nunan, 1999). A textbook is defined by Tomlinson (2011) as a book “which provides the core materials for a language-learning course” (p. xi). It focuses on the learning needs of learners in a course. It involves activities mostly related to skills, grammar, vocabulary and functions of language.

According to McDonough and Shaw (2003, p. 60), textbook evaluation deserves careful consideration because “an inappropriate choice may waste time and funds and this may have a demotivating effect on both students and other teachers”. It is important to make sure if the textbooks fulfill the teachers’ expected teaching objectives. Inappropriate choice of textbooks negatively affects both teaching and learning, unquestionably (Mukundan, 2007).

This study investigated the learning objectives in two General English books (five books written by non-native Iranian speakers and five books written by native speakers). The evaluation was based on six levels of learning objectives in Bloom’s Revised Taxonomy (2001). The study investigated the levels of learning objectives which are dominant in each textbook. It also investigated the differences in General English books in terms of the learning objectives. Furthermore, a comparison was made of the distribution of higher-order thinking skills and lower-order thinking skills in the books. The following questions were formulated to fulfill the objectives of the study:

1. How Bloom’s Revised Taxonomy learning objectives are represented in General English books produced by non-native Iranian speakers and native speakers?
2. Which levels of Bloom’s Revised Taxonomy are dominant in General English books produced by non-native Iranian speakers and native speakers?
3. Which type of General English books (those produced by non-native Iranian speakers and those produced by native speakers) covers higher-order thinking skills more?

The results of the study are useful for both material developers and teachers. Material developers will be aware of the learning objectives and various cognitive levels in the activities and exercises. They should

consider them when developing their material. In all non-English majors in Iran's universities, the course of General English is taught. Different instructors choose different General English books, either produced by native speakers or non-native Iranian speakers. This study will show the difference in the learning objectives and the required cognitive domain in each book. So, instructors may be able to choose the required book more consciously from the options.

Theoretical Framework of the Study

The theoretical framework of the current study is Bloom's Revised Taxonomy (2001) which emerged out of Bloom's Original Taxonomy. The Original Taxonomy introduced six major categories (Knowledge, Comprehension, Application, Analysis, Synthesis, and Evaluation) representing the hierarchy in the cognitive domain. It was believed that mastery of each simpler category was a prerequisite to mastery of the following more complex category. This model was one-dimensional. The Revised Taxonomy introduced some changes to the original one. There were some changes in the terminologies and complexity order of cognitive domain. The taxonomy was converted to a two-dimensional one, including cognitive domain and knowledge domain. The cognitive domain consists of six levels of increasing complexity including Remembering, Understanding, Applying, Analyzing, Evaluating and Creating. Remembering is defined as retrieving relevant knowledge from long-term memory (i.e. recognizing and recalling). Understanding is determining the meaning of instructional messages, including oral, written, and graphic communication (i.e. interpreting, exemplifying, classifying, summarizing, inferring, comparing and explaining). Applying is carrying out or using a procedure in a given situation (i.e. executing and implementing). Analyzing is breaking the material into its constituent parts and detecting how the parts relate to one another and to the overall structure or purpose (i.e. differentiating, organizing and attributing). Evaluating is making judgments based on criteria and standards (i.e. checking and critiquing). Creating is putting elements together to form a novel, coherent whole or make an original product (i.e. generating, planning and producing). The Knowledge dimension consists of four classifications of knowledge: factual, conceptual, procedural, and metacognitive. Factual knowledge is the basic elements that students must know to be acquainted with a discipline or solve

problems in it. It involves knowledge of terminology and knowledge of specific details and elements. Conceptual knowledge is considered as the interrelationships among the basic elements within a larger structure that enable them to function together. It involves knowledge of classifications, principles, generalizations, theories, models, and structure. Procedural knowledge is related to the way to do something. It involves knowledge of subject-specific skills and algorithms, subject-specific techniques and methods and the criteria for determining when to use appropriate procedures. Metacognitive knowledge is the knowledge of cognition in general as well as awareness and knowledge of one's own cognition. It involves strategic knowledge, contextual and conditional knowledge and self-knowledge (Krathwohl, 2002). Figure 1 shows the structure of Bloom's Revised Taxonomy.

Review of Literature

There are several studies conducted on material and textbook evaluation (Fraidan, 2012; Morgan, 2003; Riazi & Ariashokouh, 2007; Tok, 2010; Tomlinson, 1988; Vellenga, 2004; Xu, 2004; Yen, 2001). Several studies used Bloom's Taxonomy to evaluate textbooks and several studies were done to evaluate text books through Bloom's Revised Taxonomy.

1. Studies Which Used Bloom's Taxonomy as Framework

In their study, Veeravagu, et. al. (2010) used Bloom's Taxonomy to investigate students' performance in reading comprehension test. They examined the relationship between the level of thinking processes in comprehension questions and the students' performance. The findings showed that such a relationship exists. Students used higher-order thinking when they looked beyond the surface of the text to come up with an answer or comprehension. There are some reading strategies that elicit higher-order thinking, for example, predicting, concluding and inferencing. So, it is important to apply higher-order thinking practice in the classroom.

Karamustafaoğlu, et. al. (2003) used Bloom's Taxonomy to analyze the Turkish high school chemistry examination questions. They compared the chemistry examination questions in high schools in two cities in Turkey. The results of the study showed that 96% of the questions were related to the lower-order cognitive skills. The examined questions were not appropriate for students to understand the

basic concepts in chemistry, interpret the chemical events, and link them with real life events and needs. So, the students had to memorize the science concepts without understanding their real meaning. It was interesting to mention that the results were contrary to the questions asked in the university entrance examination, which were related to the higher-order cognitive skills.

Ebadi and Shahbazian (2015) used Bloom's Taxonomy to explore the cognitive level of final exams in Iranian high schools. They realized that all the questions of the first and the second grades were related to the first three levels of the taxonomy (the lower-order thinking skills). As for the first grade questions, 33 percent were at knowledge level, 56 percent were at the comprehension level and, 11 percent were related to application level. Regarding the second grade questions, nearly 12 percent of the questions were related to application of the previous knowledge, 57 percent were related to understanding the meaning of the text and comprehension, and 30 percent were at the knowledge level.

Gordani (2008) analyzed the book in junior high school level entitled "right path to English". He investigated different levels of learning objectives in the book based on Bloom's Taxonomy. The findings showed that all the exercises in the book were related to the first three levels of the learning objectives. Among the lower thinking levels, application was the dominant one, with 65.8 percent of occurrence. Knowledge and comprehension were the next dominant levels respectively, with 26.2 and 8 percent of occurrence.

2. Studies Which Used Bloom's Revised Taxonomy as Framework

Askaripour (2014) evaluated the second edition of "Top Notch English Series" using Bloom's Revised Taxonomy. He codified the content of the book based on the coding scheme designed by Ganbari (2013) and Razmjoo and Kazempoufard (2012). The results of the study showed that all the levels of learning objectives have been considered in the second version of Top Notch series except that of Evaluating. The three first low levels in Bloom's Revised Taxonomy (lower-order thinking skills) were the most dominant levels used in these books, and little attention is paid to higher-order thinking skills. According to him, Understanding, Applying and Remembering were the first, the second and the third most prevalent learning objectives, respectively.

Furthermore, there were differences among the textbooks in their inclusion of different levels of learning objectives. It was concluded that Top Notch series cannot make learners critical thinkers.

Razmjoo and Madani (2013) investigated the University Entrance Exam items using Bloom's Revised Taxonomy. The study aimed to find out the prevalent levels of the taxonomy in these items. The Entrance Exams' items in three majors of Mathematics, Natural Sciences, and Humanities, and in two Universities- State, and Azad- were codified. They found that lower order thinking skills were dominant in the items. Creating was absent among the used levels. They concluded that Iran's University Entrance Exam doesn't help learners to be critical thinkers. As for the type of university, in the Azad University higher levels of thinking were considered. As for the majors, Mathematics had the first rank regarding the levels of thinking. The second field was Natural and the last field was Humanities. When comparing Azad and State Universities, some contradictions appeared. In both types of universities, Mathematics was the first ranked field. The second ranked field in Azad University was Natural Sciences. However, it was Humanities in the State University.

Razmjoo and Kazempur (2012) investigated the Interchange series (2005) in terms of learning objectives in Bloom's Revised Taxonomy. The results of the study showed that lower order thinking skills were the most prevalent learning levels in these books. Moreover, a significant difference was found among the course books in their inclusion of different levels of learning objectives. Furthermore, it was found that the metacognitive knowledge was absent in Interchange series. The researchers claimed that the Interchange series is not suitable for making learners critical thinkers.

Seo, et al (2010) investigated the questions presented at the end of chapters in eight books on Chemistry using Bloom's Revised Taxonomy. Their finding showed that lower order skills were more dominant than the higher order ones. As for the cognitive levels, Evaluating was not seen at all in the books.

Lee (2010) investigated the Christian publishers' elementary reading textbooks and analyzed the levels of thinking skills using Bloom's Revised Taxonomy. He found that A Beka contained 57.6 percent lower level thinking skills and 42.4 percent higher level

thinking skills. However, Bob Jones University Press contained 45.8 percent lower level thinking skills and 54.2 percent higher level thinking skills. Among lower level thinking skills, Remembering was dominant, and among higher level thinking skills Analyzing, Evaluating and Creating were used.

Method

This study is a qualitative one, specifically of content analysis type. In content analysis, the materials are analyzed and their specific characteristics will be identified (Ary, et. al, 2006).

1. Materials

The materials used for the current study consist of nine General English books listed below- five produced by non-native Iranian speakers and four produced by native speakers.

General English books produced by non-native Iranian speakers:

-Rahimi, A. & Mowlaie, B. (2007). *Why not enjoy reading?* Tehran: Jangal.

-Birjandi, P. (2009). *A general English course for university students*. Isfahan: Sepahan.

-Khodaparasti, S., Karimzadeh, S., Sadrian, M. & Abtahi, M. (2009). *Reading and grammar for general English*. Tehran: Rah.

-Einbeigi, M. (2012). *New horizon in English: Reading comprehension and vocabulary development*. Tehran: Tarjoman Kherad.

-Moini, M. (2005). *Expand your reading ability: An enjoyable EFL reader*. Tehran: Jangal.

General English books produced by native speakers:

-Ackert, P. & Lee, L. (2005). *Reading and vocabulary development: Concepts and comments*. USA: Thomson.

-Ackert, P. & Lee, L. (2005). *Reading and vocabulary development: Facts and figures*. USA: Thomson.

- Lee, L. & Gunersen, E. (2011), *Select readings*. New York: Oxford University Press.

-Heyer, S. (2003). *Beyond true stories: A high-intermediate reader*. White Plains: Longman.

The book produced by Rahimi and Mowlaie (2007) has 142 pages and 22 lessons of diverse topics. The focus of the book is on reading. Starting with some warm up questions, each lesson contains a text and exercises on vocabulary matching, part of speech completion and reflecting on underlying idea. The lesson ends with further reading which is accompanied with a glossary.

The 319 page book produced by Birjandi (2009) consists of 14 units. The aim of the book is improving the reading ability and vocabulary knowledge. Each unit consists of two reading texts. The unit starts with some pre-reading questions, followed by the text. Some activities related to reading, vocabulary and grammar are presented. The unit ends with the second reading.

The book produced by Khodaparasti, et. al. (2009) has 124 pages and 12 lessons. The purpose of the book is to improve reading comprehension. Each lesson opens with the definition of the difficult words. The reading passage is divided into two parts following comprehension questions. To help students master the words, there are vocabulary exercises including filling the blank, synonyms and antonyms. A part is on getting the main points to help students to distinguish between important and unimportant points. The grammar section deals with some grammatical points following some questions.

The book produced by Einbeigi (2012) has 150 pages and 11 lessons. The book is to improve learners' reading ability. It starts with some before reading questions to motivate students, following word definitions. Some comprehension questions are presented, including true-false and multiple choice ones. Then, vocabulary, grammar and writing exercises are provided.

The book produced by Moini (2005) consists of 289 pages and 19 lessons. Each lesson consists of several passages related thematically. Vocabulary learning is motivated through presentation of unfamiliar words and collocations. There are some comprehension check activities. Getting the main idea and reading for specific information are dealt with in true-false, multiple-choice and filling the blank formats. Form related aspects of language are focused through asking the students to make several "Wh" questions for each provided sentence. Writing activities are presented through essay type format and some

tasks in the form of summary writing. The lessons also include cloze tests and c-tests.

The 254 page book produced by Ackert and Lee (2005) consists of 5 units. There are 4 lessons in each unit. As the authors claimed, the book presents theme-based approach to reading and focuses on recycling vocabulary. There are some “before you read” questions providing motivation for reading. The important vocabulary items are pre-taught through “context clues” followed by activities focusing on vocabulary through “fill in the blank”. Comprehension questions are presented through true-false and multiple-choice formats. There are some “reading strategy” activities applying the taught reading strategies. Activities related to grammar are followed by “writing” activities.

In their second book (Facts and Figures), Ackert and Lee (2005) presented 7 units, 5 lessons in each, through 262 pages. The organization of the book consists of context clues, “before you read” questions, vocabulary, vocabulary in context, a review on vocabulary, comprehension questions, questions asking about the main idea, and writing.

As Lee and Gunersen (2011) claimed, the goal of their book is to promote English language skills, mainly reading. The authors used both the bottom-up and top-down approaches where appropriate. Each of the fourteen chapters of the book is divided into the following eight sections: opening page, before you read, reading passage, after you read, understanding the text, reading skill, building vocabulary, language focus and discussion, and writing. The activities and exercises involve pair work, group work and individual one.

Heyer (2003) developed the True Stories tradition in eight units. Each unit is based on a real-life story. It opens with a true story in the news, followed by readings and activities that explore the theme in the story. The following facets are emphasized in the book: reading strategies, vocabulary-building activities, discussion and writing prompts.

1.1. Coding Scheme

The coding scheme used in the study is devised by Razmjoo and Kazempour (2012) based on examining Bloom’s Revised Taxonomy. The coding scheme represents a two-dimensional framework including both knowledge domain and cognitive processes. It is presented in

Table 1. The cognitive dimension consists of six levels. The first three levels are considered as lower order learning objectives, and the second three ones are considered as higher order learning objectives. The categories are labeled as A (Remembering), B (Understanding), C (Applying), D (Analyzing), E (Evaluating) and F (Creating). Moreover, the knowledge dimension consists of four types of knowledge: 1) Factual Knowledge 2) Conceptual Knowledge 3) Procedural Knowledge and 4) Metacognitive Knowledge.

1.2. Data Collection and Data Analysis Procedures

Six lessons from each book were selected randomly. The activities in the selected lessons were coded following Razmjoo and Kazempour's (ibid) coding scheme. Activities were considered through six cognitive levels and four knowledge domains.

Although the study is mainly qualitative, some quantitative practices were applied. The frequency of each learning objective was identified. Then, Chi-square test was conducted to investigate if the differences among the observed frequencies were due to chance. Then, frequencies of learning objectives in books produced by non-native Iranian speakers were compared to those produced by native speakers.

1.2.1. Coding a sample of the textbook

The activities of one lesson randomly drawn from the book produced by Ackert and Lee (2005) were coded. The lesson is on art. It starts with the following three "Before Reading" questions:

1. What three adjectives would you use to describe the sand painting?
2. How do you think a sand painting is made?
3. Sand paintings are usually destroyed soon after they are finished. Why do you think this is done?

The first question which is asking to name some adjectives from memory is related to the first cognitive domain, Remembering. As for knowledge domain, it deals with factual knowledge. So, the code is A1 (Remembering Factual Knowledge). The second question is asking about the specific details concerning a procedure. So, the code is A3. The third question asks for providing an explanation (Understanding) of a fact (Factual Knowledge). So, the code is B1.

The next part is “Context Clues” which emphasizes on the important role of contextual factors (i.e. synonyms, antonyms and surrounding words) in guessing the meaning of the words. It provides the learners with some sentences to apply the strategy and mention the meaning of the words. So, the code is C2 (Applying a model and procedure). After the reading passage, two parts on vocabulary are added. In these activities, the learners are provided with some words and some sentences to be filled with the provided words. Since the learners should seize the meaning of the given information, the cognitive domain deals with Understanding. It is related to the knowledge of terminology (Factual Knowledge). So, the code is B1.

The vocabulary exercises are followed by “comprehension Check: True-False”. Some statements are provided. Learners are to judge the truth value of them based on the information given in the passage. Since the learners should recall the information provided in the reading passage, the cognitive domain in this activity is Remembering. As the learners should remember specific details, the knowledge domain is factual knowledge. So, the code is A1 (Remembering Factual Knowledge).

The following part, “Comprehension Questions”, asks some questions to be answered in complete sentences. This activity deals with classifying, explaining and interpreting the specific details mentioned in the passage. So, the code is B1 (Understanding Factual Knowledge).

The next part is “Reading Strategy” which provides some techniques and strategies of reading. Then, learners are asked to apply these strategies in the exercise. So, the code is C3 (Applying Procedural Knowledge).

In “Vocabulary Expansion” part, the learners are provided with a table containing the parts of speech (i.e. verb, noun, adjective and adverb) of ten words. Then, they are asked to complete the sentences using words from this table. In order to complete the sentences with appropriate part of speech, learners should detect the function of the word needed. So, the cognitive domain is Understanding. As they are dealing with terminologies, the knowledge domain is factual. So, the code is B1 (Understanding Factual Knowledge).

In the “Grammar” part, learners are to complete the sentences with an appropriate article. As they are to apply the grammatical point, the

cognitive domain is Applying. The grammar point is dealing with rules and models. So, the knowledge domain is conceptual. The code is C2 (Applying Conceptual Knowledge).

In “Sentence Combining” part, learners are to combine two sentences. This activity deals with creating facts, concepts and procedures. So, the code is F0 (Creating Facts, Concepts, Principles and Procedures).

The last part of the lesson is “Writing”. Students are provided with a topic to write about. So, the activity’s code is F0 (Creating Facts, Concepts, Principles and Procedures).

1.2.2. Reliability of the Coding Scheme

To estimate the inter-coder reliability, a Ph.D. candidate of TEFL at Tehran University coded two lessons of each book based on Bloom’s Revised Taxonomy. Although he was familiar with the taxonomy, he was provided with some examples of the coding scheme. The inter-rater reliability was 96.5 through SPSS software.

To investigate intra-coder reliability, two lessons from each book were selected randomly. The data were coded twice in one month time span by the researchers. The estimated consistency in the two coding attempts was found to be 97.3.

Results and Discussion

Table 2 shows the frequencies and percentages of occurrence of learning objective levels in five General English books produced by non-native Iranian speakers. As it is evident in the table, in the book produced by Rahimi and Mowlaie (2007), A1 (Remembering Factual Knowledge) with 29.5 percentage of occurrence and B1 (Understanding Factual Knowledge) with 15.90 percentage of occurrence are the dominant levels of learning objectives. In this book, A3 (Remembering Procedural Knowledge), B3 (Understanding Procedural Knowledge), B4 (Understanding Metacognitive Knowledge), C3 (Applying Procedural Knowledge), C4 (Applying Metacognitive Knowledge), D4 (Analyzing Metacognitive Knowledge), E4 (Evaluating Metacognitive Knowledge), F0 (Creating Factual, Conceptual and Procedural Knowledge) and F4 (Creating Metacognitive Knowledge) are absent.

In the book produced by Birjandi (2009), A1 (Remembering Factual Knowledge) and B1 (Understanding Factual Knowledge) with 44

percentage of occurrence are the dominant levels of learning objectives. B2 (Understanding Conceptual Knowledge) with 8 percentage of occurrence is the next dominant level of learning objectives. A2 (Remembering Conceptual Knowledge), A3 (Remembering Procedural Knowledge), A4 (Remembering Metacognitive Knowledge), B3 (Understanding Procedural Knowledge), B4 (Understanding Metacognitive Knowledge), C3 (Applying Procedural Knowledge), C4 (Applying Metacognitive Knowledge), D0 (Analyzing Factual, Conceptual and Procedural Knowledge), D4 (Analyzing Metacognitive Knowledge), E0 (Evaluating factual, conceptual and procedural knowledge), E4 (Evaluating Metacognitive Knowledge), F0 (Creating Factual, Conceptual and Procedural Knowledge) and F4 (Creating Metacognitive Knowledge) are absent in this book.

In the book produced by Khodaparasti, et. al. (2009), A1 (Remembering Factual Knowledge) with 38.18 percentage of occurrence is the dominant level of learning objectives. B1 (Understanding Factual Knowledge) with 27.27 percentage of occurrence is the next dominant one. In this book, A3 (Remembering Procedural Knowledge), A4 (Remembering Metacognitive Knowledge), B2 (Understanding Conceptual Knowledge), B3 (Understanding Procedural Knowledge), F4 (Creating Metacognitive Knowledge), C1 (Applying Factual Knowledge), C3 (Applying Procedural Knowledge), C4 (Applying Metacognitive Knowledge), D4 (Analyzing Metacognitive Knowledge), E0 (Evaluating Factual, Conceptual and Procedural Knowledge), E4 (Evaluating Metacognitive Knowledge) and F4 (Creating Metacognitive Knowledge) are absent.

In the book produced by Einbeigi (2012), A1 (Remembering Factual Knowledge) with 49.05 percentage of occurrence is the dominant level of learning objectives. B1 (Understanding Factual Knowledge) with 30.18 percentage of occurrence is the next dominant one. In this book, A3 (Remembering Procedural Knowledge), A4 (Remembering Metacognitive Knowledge), B3 (Understanding Procedural Knowledge), B4 (Understanding Metacognitive Knowledge), C1 (Applying Factual Knowledge), C3 (Applying Procedural Knowledge), C4 (Applying Metacognitive Knowledge), D4 (Analyzing Metacognitive Knowledge), E0 (Evaluating Factual,

Conceptual and Procedural Knowledge), E4 (Evaluating Metacognitive Knowledge) and F4 (Creating Metacognitive Knowledge) are absent.

In the book produced by Moini (2005), A1 (Remembering Factual Knowledge) with 35.71 percentage of occurrence is the dominant level of learning objectives. B1 (Understanding Factual Knowledge) with 32.85 percentage of occurrence is the next dominant one. In this book, A3 (Remembering Procedural Knowledge), A4 (Remembering Metacognitive Knowledge), B3 (Understanding Procedural Knowledge), B4 (Understanding Metacognitive Knowledge), C3 (Applying Procedural Knowledge), F4 (Creating Metacognitive Knowledge), D0 (Analyzing Factual, Conceptual and Procedural Knowledge), D4 (Analyzing Metacognitive Knowledge), E0 (Evaluating Factual, Conceptual and Procedural Knowledge), E4 (Evaluating Metacognitive Knowledge) and C4 (Applying Metacognitive Knowledge) are absent.

Table 3 shows the learning objectives frequencies and percentages in four General English books produced by native speakers. In their book (Concepts and Comments), Ackert and Lee (2005) used B1 (Understanding Factual Knowledge) with 30.12 percentage of occurrence as the dominant level of learning objectives. A1 (Remembering Factual Knowledge) with 28.91 percentage of occurrence is the next dominant level of learning objectives. A2 (Remembering Conceptual Knowledge), A4 (Remembering Metacognitive Knowledge), B3 (Understanding Procedural Knowledge), B4 (Understanding Metacognitive Knowledge), C1 (Applying Factual Knowledge), C4 (Applying Metacognitive Knowledge), D0 (Analyzing Factual, Conceptual and Procedural Knowledge), D4 (Analyzing Metacognitive Knowledge), E0 (Evaluating Factual, Conceptual and Procedural Knowledge), E4 (Evaluating Metacognitive Knowledge) and F4 (Creating Metacognitive Knowledge) are absent in this book.

In their book (Facts and Figures), Ackert and Lee (2005) used B1 (Understanding Factual Knowledge) with 61.11 percentage of occurrence as the dominant level of learning objectives. A1 (Remembering Factual Knowledge) with 37.03 percentage of occurrence is the next dominant level of learning objectives. In this book, A2 (Remembering Conceptual Knowledge), A3 (Remembering

Procedural Knowledge), A4 (Remembering Metacognitive Knowledge), B2 (Understanding Conceptual Knowledge), B3 (Understanding Procedural Knowledge), B4 (Understanding Metacognitive Knowledge), C1 (Applying Factual Knowledge), C2 (Applying Conceptual Knowledge), C3 (Applying Procedural Knowledge), C4 (Applying Metacognitive Knowledge), D0 (Analyzing Factual, Conceptual and Procedural Knowledge), D4 (Analyzing Metacognitive Knowledge), E4 (Evaluating Metacognitive Knowledge), F0 (Creating Factual, Conceptual and Procedural Knowledge) and F4 (Creating Metacognitive Knowledge) are absent.

In the book produced by Lee and Gunersen (2011), A1 (Remembering Factual Knowledge) and B1 (Understanding Factual Knowledge) with 36.60 percentage of occurrence are the dominant levels of learning objectives. A3 (Remembering Procedural Knowledge), A4 (Remembering Metacognitive Knowledge), B2 (Understanding Conceptual Knowledge), B3 (Understanding Procedural Knowledge), B4 (Understanding Metacognitive Knowledge), C3 (Applying Procedural Knowledge), C4 (Applying Metacognitive Knowledge), D4 (Analyzing Metacognitive Knowledge), E4 (Evaluating Metacognitive Knowledge) and F4 (Creating Metacognitive Knowledge) are absent in this book.

In the book produced by Heyer (2003), A1 (Remembering Factual Knowledge) with 40.38 percentage of occurrence is the dominant level of learning objectives. B2 with 21.15 percentage of occurrence is the next dominant level of learning objectives. A2 (Remembering Conceptual Knowledge), A3 (Remembering Procedural Knowledge), A4 (Remembering Metacognitive Knowledge), B3 (Understanding Procedural Knowledge), B4 (Understanding Metacognitive Knowledge), C3 (Applying Procedural Knowledge), C4 (Applying Metacognitive Knowledge), D0 (Analyzing Factual, Conceptual and Procedural Knowledge), D4 (Analyzing Metacognitive Knowledge), E4 (Evaluating Metacognitive Knowledge) and F4 (Creating Metacognitive Knowledge) are absent in this book.

As it is evident in Table2 and Table3, A1 and B1 are the dominant learning objectives used in General English books produced by both non-native Iranian speakers and native speakers.

As the data in the study is of frequency type, Chi-square test was conducted to investigate how five General English books produced by non-native Iranian speakers and four ones produced by native speakers could be compared in terms of the levels of Bloom's Revised Taxonomy. The results of the Chi-square tests for books produced by non-native Iranian speakers and those produced by native speakers are shown in Table 4. The table shows that Chi-square tests yield significant results (Sig=.000) concerning the General English books. That is, the distribution of the levels of learning objectives is not equal in the books.

Six levels of Bloom's Revised Taxonomy are classified into lower and higher order cognitive skills. Table 5 and Table 6 show these two levels for General English books produced by non-native Iranian speakers and native speakers, respectively. Table 5 shows that books produced by non-native Iranian speakers used lower order cognitive skills more than higher order cognitive skills.

Table 6 shows that books produced native speakers used lower order cognitive skills more than higher order cognitive skills. However, in comparison with Table 5, the percentage of occurrence of higher order cognitive skills in books produced by native speakers is much higher than those produced by non-native Iranian speakers.

Another set of Chi-square test was conducted to find out if the differences between the frequencies of the occurrence of higher and lower order skills in the General English books were significant. The result of the Chi-square tests are provided in Table 7 showing significant differences (Sig=.000) in the frequencies of occurrence of higher and lower order skills in the books.

One part of the findings of the present study (investigating the levels of learning objectives in books produced by native speakers) is consistent with those of Askaripour (2014) evaluating the second edition of "Top Notch English Series" using Bloom's Revised Taxonomy, Razmjoo and Kazempur (2012) investigating the Interchange series and Lee (2010) investigating the Christian publishers' elementary reading textbooks. All these studies used Bloom's Revised Taxonomy as the framework. In all these studies, it was found that the three first low levels in Bloom's Revised Taxonomy (lower-order thinking skill) were the most dominant levels used in these

books and little attention was paid to higher-order thinking skill. Furthermore, the frequency of occurrence of the metacognitive knowledge was negligible in all these books.

Another part of the findings of the present study (investigating the levels of learning objectives in books produced by non-native Iranian speakers) can be compared to the study conducted by Ramjoo and Madani (2013) investigating the University Entrance Exam items using Bloom's Revised Taxonomy. In both studies it was found that three first low levels in Bloom's Revised Taxonomy (lower-order thinking skills) were the most dominant levels used in the activities and items, and little attention is paid to higher-order thinking skills.

Conclusion

In this section, the research questions, their subsequent answers and implications of the study are provided.

1.3. How Bloom's Revised Taxonomy learning objectives are represented in General English books produced by non-native Iranian speakers and native speakers?

In all five General English books produced by non-native Iranian speakers, Remembering Factual Knowledge was found to be the most dominant learning level. The frequencies of this level in these books were as follow: Rahimi and Mowlaie (15.90%), Birjandi (44%), Khodaparasti, et. al. (27.27%), Einbeigi (30.18%), Moini (35.71%). The next most frequent learning objective level was Understanding Factual Knowledge. The frequencies in these books are as follow: Rahimi and Mowlaie (29.5%), Birjandi (44%), Khodaparasti, et. al. (38%), Einbeigi (49.05%), Moini (32.85%). Understanding, Applying and Remembering were the first, the second and the third most prevalent learning objectives, respectively.

In four General English books produced by native speakers, a fixed one pattern concerning the prevalent type of learning objective was not seen. Remembering Factual Knowledge was the dominant pattern for books produced by Ackert and Lee (Concepts and Comments) (28.91%) and Heyer (40.38%). In Ackert and Lee (Facts and Figures), Understanding Factual Knowledge (61.11%) was the dominant type of learning objectives. In Lee and Gunersen, both Remembering Factual Knowledge and Understanding Factual Knowledge were the dominant learning levels (36.6%).

By calculating the average of the percentages in four books produced by native speakers, it was seen that Remembering Factual Knowledge was the most frequent code with 39.25% percentage. The next most frequent code was Understanding Factual Knowledge with 30.04% percentage. Remembering Procedural Knowledge, Understanding Procedural Knowledge, Understanding Metacognitive Knowledge, Applying Procedural Knowledge, Applying Metacognitive Knowledge, Analyzing Metacognitive Knowledge, Evaluating Metacognitive Knowledge and Creating Metacognitive Knowledge were found to be the least frequent codes with 0% of distribution.

By calculating the average of the percentages in five books produced by non-native Iranian speakers, it was seen that Understanding Factual Knowledge was the most frequent code with percentage of 28.62%. The next most frequent code is Remembering Factual Knowledge with percentage of 28.58. Remembering Metacognitive Knowledge, Understanding Procedural Knowledge, Understanding Metacognitive Knowledge, Applying Metacognitive Knowledge, Analyzing Metacognitive Knowledge, Evaluating Metacognitive Knowledge and Creating Metacognitive Knowledge were found to be the least frequent codes with 0% of distribution.

1.4. Which levels of Bloom's Revised Taxonomy are dominant in General English books produced by non-native Iranian speakers and native speakers?

As it was specified in the previous part, in books produced by non-native Iranian speakers, Remembering Factual Knowledge was found to be the most dominant learning level. And in books produced by native speakers, both Remembering Factual Knowledge and Understanding Factual Knowledge were found to be the most dominant learning levels.

1.5. Which type of General English books (those produced by non-native Iranian speakers and those produced by native speakers) covers higher-order thinking skills more?

Among the five General English books produced by non-native Iranian speakers, the book produced by Rahimi and Mowlaie (2007) had the highest percentage of higher order thinking skills (11.36%). The other books dealt with lower percentages of higher order thinking skills:

Einbeigi (5.66%), Khodaparasti, et. al. (3.63%), Moini (2.86%) and Birjandi (0%). So, the results were not satisfactory. The books do not provide learners with enough higher order thinking skills.

Among four General English books produced by native speakers, the book produced by Lee and Gunersen (2011) had the highest percentage of higher order thinking skills (17.85%). The other books dealt with lower percentages of higher order thinking skills: Heyer (15.38%), Ackert and Lee's Concept and Comments (14.45%), and Ackert and Lee's Facts and Figures (1.85%).

It is interesting to mention that although the books presented lower percentages of higher order thinking skills, the books produced by native speakers showed significantly higher percentages of higher order thinking skills than those produced by non-native Iranian speakers. That is, they included the three higher levels of learning objectives in Bloom's Revised Taxonomy (Analyzing, Evaluating and Creating) more than books produced by non-native speakers.

This study provides some implications. First, as it is evident in this study, the contents of General English books produced by non-native Iranian speakers present more percentages of lower order thinking skills. In order for the books to be more effective, textbook developers should try to provide the activities that include higher order thinking skills. These activities can be of Analyzing, Evaluating and Creating types. Second, in most of the books analyzed, metacognitive knowledge was absent in the knowledge domain. Material developers can consider this knowledge domain and try to cover it in the textbooks by focusing on contextual, conditional domains and self-knowledge. Third, teachers and students can consult General English books produced by native speakers more than those produced by non-native speakers in their teaching and learning repertoire. Because these books present more percentages related to higher order thinking skills. Fourth, teacher educators can train teachers in developing achievement and diagnostic tests covering all the six levels of learning objectives in Bloom's Revised Taxonomy.

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