A COMPARATIVE STUDY ON EFL TEXTBOOKS IN TURKISH AND GERMAN SECONDARY PUBLIC SCHOOLS*

Reyhan Ağçam
Asst. Prof. Dr., Kahramanmaraş Sütçü İmam University, reyhanagcam@gmail.com
ORCID Number: 0000-0002-5445-9031

M. Pınar Babanoğlu
Asst. Prof. Dr., Kahramanmaraş Sütçü İmam University, pinarbab@hotmail.com
ORCID Number: 0000-0001-8166-974X

Received: 20.02.2018 Accepted: 15.06.2018

ABSTRACT
In foreign language educational systems of Turkey and Germany, as in most other countries in the world, textbooks are used as a primary source of instruction in public schools. The books in concern are selected by the Ministry of National Education (MoNE) in Turkey while they might vary across federal states in Germany which has its own education programme, schools and standards although overall educational policies are set by the Ministry of Education and Research (BMBF). This study was motivated to compare EFL textbooks introduced public secondary schools in Turkey and the Federal State of North Rhine-Westphalia, Germany to reveal whether reading comprehension texts in the two books significantly differ with regard to lexical density (complexity) and readability. Data were compiled from reading texts in these books, and quantitatively analysed through an online text analysis programme. The findings showed that both textbooks include reading texts with high lexical density and readability. Besides, EFL textbook used in Turkey contains comprehension texts with higher lexical density and readability than the one used in Germany. The study presents a couple of practical implications on these findings, and concludes with a few suggestions for further research.

Keywords: English as a Foreign Language, textbook, complexity, readability.

* Findings of this study were previously presented at 14th International Conference on Teaching, Education and Learning (ICTEL) held in Lisbon, Portugal on 23-24 May 2017.

INTRODUCTION

In EFL/ ESL teaching and learning, a textbook/ course book (two terms are used interchangeably, Richards, 2018), is accepted as the vital point that not only designates the content of the course but also is an essential instrument to specify the success of learners. Sheldon (1988: 238) points out that they are perceived by many to be the route map of any EFL programme, laying bare its shape, structure, and destination, with progress, programme, and even teacher quality being assessed by learners in terms of sequential, unit-by-unit coverage and that wrong selection can be a significant reason for regret. An English textbook is a basic resource to determine the quality of language input and the language practices during teaching-learning process in an EFL/ ESL courses. It functions not only as guidance of teaching and learning but also developing material as well as a substantial and observable component of pedagogy content (Graves, 2000: 151). Reading material is one of the contents of the textbook besides listening instruction, some exercises, writing task and some conversation scripts. Accordingly, Harmer (1998: 68) states that reading text provides opportunities to study language; vocabulary, grammar, punctuation, and the way we construct sentences, paragraphs and texts. Students’ success on reading mainly depends on the quality and complexity of reading texts. Nesia & Ginting (2014) underline that students may have difficulties in comprehending long or dense texts that causes them to get bored easily. Difficulty of a text is related to its lexical density; that is, the more lexical items a reading text includes, the more difficult to comprehend it. Accordingly, containing reading-skill related input, English textbooks are commonly used materials worldwide in EFL teaching and learning process; so, they should be carefully selected. In this regard, textbook analysis and/ or evaluation might be helpful to uncover weaknesses and strengths of particular textbooks in order to select the most appropriate one or provide EFL practitioners with insights into how they could be benefited most.

LITERATURE REVIEW

Lexical Density & Readability of a Textbook

Lexical density is the term extensively used for describing the proportion of content words (nouns, verbs, adjectives, and adverbs) to the total number of words in either spoken or written form of language (Ure, 1971; Johansson, 2008). Halliday (1985) basically defines it as a kind of complexity that is typical of written language and proposes that a typical average lexical density for written English settles down somewhere between 3 and 6, depending on the level of formality in the writing. In respect of the significance of lexical density, Johansson (2008:65) advocates that the lexical density is related to the notion of an information packaging which means a text with a high proportion of content words (nouns, verbs, adjectives and adverbs) contains more information than a text with a high proportion of function words (pronouns, propositions, conjunctions, interjections and count words). In this vein, Camiciottoli (2007: 73) advocates that lexical density appears to be affected by a number of factors linked to the type of text in question, and that there is a general consensus from the pedagogical perspective that high lexical density is associated with more propositional content and greater complexity, which can render language more difficult to process particularly for non-native speakers (McNeill, 1994; Ventola, 1996; Hartnett, 1998).
Readability, on the other hand, refers to the ease with which a reader can read and understand the text (Oakland & Lane, 2004) and it “depends on several factors including the average length of sentences, the number of new words contained, and the grammatical complexity of the language used in the passage” (Richards et al., 1992: 306). Concerning readability, Jauss (1982) is of the opinion that characteristics such as readers’ background, their language and instructors’ curricular goals determine the suitability of a text, whereas several factors such as average length of sentences, the number of new words contained and the grammatical complexity of the language used in the text are also effective on a text being readable (in Richards et al., ibid). Stephens (2000) asserts five style factors likely to affect the readability of a text as the number of pronouns, average number of words in sentences, percentage of different words and number of prepositional phrases. Table 1 demonstrates reading scores, style descriptions and estimated reading grade as a result of a scientific research conducted in USA.

Table 1. Flesh’s Reading Ease Score (DuBay, 2004: 21)

<table>
<thead>
<tr>
<th>Reading Score</th>
<th>Style Description</th>
<th>Estimated Grade</th>
<th>Reading Grade</th>
<th>Estimated Percent of U.S. Adults</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-30</td>
<td>Very difficult</td>
<td>College students</td>
<td>4.5%</td>
<td></td>
</tr>
<tr>
<td>30-50</td>
<td>Difficult</td>
<td>13th to 6th grade</td>
<td>33%</td>
<td></td>
</tr>
<tr>
<td>50-60</td>
<td>Fairly difficult</td>
<td>10th to 12th grade</td>
<td>54%</td>
<td></td>
</tr>
<tr>
<td>60-70</td>
<td>Standard</td>
<td>8th-9th grade</td>
<td>83%</td>
<td></td>
</tr>
<tr>
<td>70-80</td>
<td>Fairly easy</td>
<td>7th grade</td>
<td>88%</td>
<td></td>
</tr>
<tr>
<td>80-90</td>
<td>Easy</td>
<td>6th grade</td>
<td>91%</td>
<td></td>
</tr>
<tr>
<td>90-100</td>
<td>Very easy</td>
<td>5th grade</td>
<td>93%</td>
<td></td>
</tr>
</tbody>
</table>

Readability formulas were initially developed in the 1920s. They sprang from the need to match reading materials with specific audiences, and they have been widely used by teachers and administrators in the educational system, especially in the United States, to select reading materials for the classroom (Davison & Green, 1988). In the mid-1930s, textbook publisher Robert Gunning realized that much of America’s reading problem was actually a writing problem. He informed that news and business writing was full of “fog,” or unnecessary complexity, and founded the first readability consulting firm in 1944. As informed on the official website of The Gunning Fog index, during the next few years, Gunning tested and consulted with more than 60 newspapers and magazines, and correlated magazine reading levels with total circulation (The lower the Fog, the higher the circulation.). He developed the Fog Index in 1952, and worked with the United Press, helping bring the reading level of front-page newspaper stories from the 16th to the 11th grade. Lastly, it is reported that the circulation of The Wall Street Journal significantly increased from less than 50,000 to more than 1 million in a decade via his efforts to reduce its level from 14th to 11th grade.
EFL Textbooks

An English textbook is a basic resource to determine the quality of language input and the language practices during teaching-learning process in EFL/ ESL courses. As noted in Graves (2000), it serves two essential functions as guidance of teaching and learning, and developing material as well as constituting substantial and observable component of pedagogy content. Owu-Ewie (2014) claims that the aim of any textbook, especially English language textbooks for second language learners is to help readers improve their competence in this language, and that this aim is defeated when students cannot read texts intended for them. The researcher goes on to state that one factor which makes a reading material unreadable is the complexity of the language used in relation to the reading ability of the reader. As the main focus of the present study, it is crucial to emphasize that EFL textbooks are primary sources of instruction for teachers working at public schools in Turkey and Germany. They are selected by Ministry of National Education (MoNE) in Turkey, whereas their selection varies across states in Germany where standards are set by Ministry of Education and Research (BMBF). The following section offers previous research on textbook evaluation in terms of lexical density and readability.

Previous Studies

In the early 1980s, Johnson (1981) attempted to reveal effects of cultural origin, and semantic and syntactic complexity of reading texts on reading comprehension of Iranian ESL students, and found that cultural origin of the reading texts was more effective than the level of semantic and syntactic complexity of the English language. In Greece, Economou (1994) compared upper secondary school students’ writing in the history exam and the texts in Greek history books in terms of lexical density to see whether they imitate the language used in the textbook or reproduce them. She reported that the students tend to produce text with lower lexical density than the original texts in the books, and that they produce lexically denser texts than some of the original ones in the book. To et al. (2013) examined the lexical density and readability of four texts from English textbooks, and found little evidence of an increase of lexical density and readability in accordance with the increase of text levels as well as little indication relating to the connections between text levels, readability and lexical density. Likewise, Tabatabaei & Bagheri (2013) studied the readability of reading comprehension texts in Iranian senior high schools regarding students’ background knowledge and interest, and reported that students mostly had an average and a low level of interest and background knowledge regarding reading passages in their English textbooks. The researchers concluded that the students’ interest level and their background knowledge level are significantly correlated. Ina similar study conducted in Ghana, Owu-Ewie (2014) examined readability of comprehension passages in junior high school (JHS) English textbooks, and found that most of the passages were above the age of learners and therefore difficult for them to read and comprehend. Examining lexical density of English textbook of second year of senior high school, Pratiwi and Mulatsih (2014) informed that the average lexical density of the 15 reading texts is categorized medium between 4 and 4.9, and that most of them are easy enough to understand. In a comparative research, Ji & Zhang (2015) evaluated English textbooks offered in Chinese high schools and colleges from learners’ perspective in terms of readability and
lexical density. They reported that reading vocabulary difficulty increases year by year, and that the teaching materials used in college is less difficult and textbooks are more readable than those in high schools, which triggers dissatisfaction among college students for learning English. They also concluded that readability of the textbooks does not increase from high school to college. Larki & Gorjian (2015) investigated the effect of lexical density awareness (LDA) on reading comprehension skills among Iranian high school students, and concluded that it has positive effects on the students’ reading comprehension. In the same year, Foltz and Rosenstein (2015) examined first-grade core-reading texts, spanning seven editions (1962, 1971, 1983, 1993, 2000, 2007 and 2013) through the Reading Maturity Metric, and found that passage complexity has increased from 1962 to 2013. More specifically, they informed that passages from earlier decades tend to be more coherent, but less like standard written English, and that passages which appeared in later decades introduce new words at much higher rate and use words of greater difficulty. Ariska (2016) analysed lexical density of reading texts in an English textbook for 9th grade in junior high schools in Indonesia, and found that the texts are easy to understand and suitable for the students. Bush and Sanford-Moore (2016) addressed text complexity of reading passages in a set of English textbooks approved and accredited for use by the Ministry of Education in South Korea for primary and secondary schools, and reported that while text complexity varies within grade, there is a general increase in text complexity as grade level increases. Concerning the dramatic increase in the complexity of the texts across grades, the researcher proposes that an adjustment to the complexity of Grade 9 materials in the form of a higher level of complexity and a slight reduction in the complexity of materials at Grade 10 may create a more even pattern of increasing text difficulty across primary and secondary English instruction. In a more recent research, Anwar (2017) studied the lexical density of reading passages in English textbook for 10th graders, and reported that they are fairly easy to understand.

Aim of the Study

The current study is set out to compare EFL textbooks introduced in 6th Grade in Turkish secondary public schools and in the Federal State of North Rhine-Westphalia, Germany. It specifically aimed to explore whether the reading comprehension texts in the selected textbooks significantly differ with regard to lexical density (complexity) and readability. Accordingly, three research questions were raised.

Q1. Is there a significant difference between EFL textbooks offered in Turkish and German secondary schools with respect to lexical density (complexity) of the reading comprehension texts?
Q2. Is there a significant difference between EFL textbooks offered in Turkish and German secondary schools with respect to readability of the reading comprehension texts?
Q3. How do lexical density and readability of the texts change throughout EFL textbooks offered in Turkish and German secondary schools?

The following section provides information about methodological design of the study describing data collection and analysis.
METHOD

Data

As the document analysis method was used in line with the research objectives of the study, a corpus-based design has been adopted to analyze the aforementioned EFL textbooks. At the time of the study, *English Net 6* was introduced to 6th graders attending Turkish state middle schools. The book was prepared by a group of six people (an editor, a philologist in English, a programme developer, an expert in assessment and evaluation, an expert in guidance and counselling, and a graphic designer), and recognised as textbook for EFL course (Grade 6) in academic year 2014-2015 to be taught for the following five years. It mainly comprised of 10 units, a workbook that includes exercises to reinforce the newly learned subjects, irregular verb list, vocabulary list and suggested materials. The units introduce such topics as daily routines, weather conditions, emotions, occupations and saving the planet. It is significant to note that each unit includes such sections as listening, speaking and reading, and that listening and speaking are emphasised over reading. Communicative skills are considerably highlighted through pair- and group works that encourage students to use the target language for real purposes. Lastly, each topic is enriched with illustrations, and cultural and intercultural components. Figure 1 illustrates the cover page and table of contents of the book.

The second set of data was obtained from *Lighthouse* that was introduced as EFL textbook in middle schools located in the Federal State of North Rhine-Westphalia, Germany. It was produced by a more crowded committee including a project manager, a project coordinator, a graphic designer and an advisory team. Its second edition was released in 2017 to be taught as textbook for EFL course (Grade 6/ 7) in the state for the following four academic years. It comprised of 6 units, word-bank, text file, language file, skills file, vocabulary and dictionary. The units offer such topics as reunion, neighbours, teen talk, health and health problems, and adventures. As for language skills, it could be stated that all four skills are emphasised through collaborative activities. It is noteworthy that reading is more emphasised in *Lighthouse* than *English Net* and writing is introduced from the very beginning of the former. As in the case of *English Net*, *Lighthouse* is also visually...
enriched with photos, drawings and posters that include authentic language. Figure 2 presents the cover page and table of contents of the book.

![Figure 2. EFL Coursebook Taught in State Secondary Schools in Germany](image)


Two sets of corpora were manually compiled from reading comprehension texts in the above-mentioned EFL textbooks used in secondary schools in Turkey and Germany. The first set was comprised of 1221 words (TR) while the second included 2240 words (GER).

**Tools and Analysis**

The data were analysed through textalyzer (http://textalyser.net/) to count lexical density (complexity) and readability of the reading comprehension texts. The results were evaluated in accord with the Fog Scale (Gunning FOG Formula) that compares syllables and sentence lengths. The underlying message of the scale is that short sentences written in Plain English achieve a better score than long sentences written in complicated language. The ideal score for readability with the Fog index is accepted 7 or 8, and anything above 12 is considered too hard for most people to read. For instance, The Bible, Shakespeare and Mark Twain have Fog Indexes of around 6 while the leading magazines such as Time, Newsweek, and the Wall Street Journal average around 11.

**RESULTS AND DISCUSSION**

The first question of the research investigated whether EFL textbooks used in Turkish and German public secondary schools significantly differ regarding complexity (lexical density) of the reading comprehension texts they include. Figure 3 shows the related results.
The analysis results have indicated that EFL textbooks used in public secondary schools include reading comprehension texts with high lexical density both in Germany and Turkey (GER: 65.7%; TR: 79%). This finding contradicts with Pratiwi and Mulatsih (2014), Ariska (2016) and Anwar (2017) who previously reported that reading texts in EFL textbooks are easy to understand due to low lexical density. Concerning the comparison of the results for the countries, it could be concluded that the textbook used in Turkish public secondary schools include reading comprehension texts lexically denser than the one used in their German counterparts.

The second research question, on the other hand, scrutinized whether EFL textbooks used in the two countries significantly differ with respect to readability of the reading comprehension texts they contain. Figure 4 and Figure 5 display statistical comparison of the related results.
As illustrated in Figure 4 and Figure 5, reading comprehension texts in both EFL textbooks are readable for the students. This finding in contradiction with Owu-Ewie (2014) who concluded that reading texts in EFL textbooks are difficult for junior high school students in Ghana to understand due to low readability, and partly complements with Ji and Zhang (2015) who reported difficulty of reading vocabulary in EFL textbooks in Chinese high schools increases across grades, and that textbooks used in college are more readable than those in high schools. The analysis results have also revealed that the reading comprehension texts in EFL textbook used in Germany are less readable than those in Turkey (GER: 5.86; TR: 7.42. The ideal score is 7 or 8. Anything above 12 is too hard for most people to read.)

The last research question inspected how lexical density and readability change across levels in the reading comprehension texts in English textbooks used in the two countries. However, this result is not surprising especially when considering Berber Sardinha (1996) who reported that lexical density can vary significantly within the same text. The results have demonstrated that the reading comprehension texts in the textbook used in Turkish public secondary schools follow a steadier curve, and that those in the one introduced in German public secondary schools are more fluctuating in terms of complexity and readability. In the light of these findings, a couple of practical implications were developed for EFL textbook designers and practitioners in the non-English speaking countries.

PRACTICAL IMPLICATIONS

The findings of the present research have displayed that EFL textbooks employed in secondary education both in Germany and Turkey include reading comprehension texts with high lexical density and readability. This seems to be a pleasing result since these two factors are considered to facilitate students’ learning and improve their reading skills in the target language. Even though EFL is introduced in schools from primary to higher education in both countries to raise competent users of English within the framework of the Constructivist Approach, reading is emphasized as an essential skill especially in Turkey due to the fact that students’ proficiency in EFL is extensively evaluated through conventional methods. Namely, students attending primary and secondary schools are generally administered written tests at certain intervals during a semester, and supposed to take nationwide tests that heavily rely on reading comprehension. In other words, they are not tested over their communicative competence in EFL through questions that evaluate their competence in speaking and listening. Furthermore, they are not required to display their writing proficiency through relevant questions. Hence, in order to facilitate their students’ success in the nation-wide tests, most of the teachers necessarily emphasize reading comprehension over other language skills in their teaching and evaluation practices no matter how strongly communicative skills are stressed throughout the EFL teaching programme designed by the Ministry of Education (MoNE, 2017). Therefore, well-selected reading texts are believed to increase students’ motivation to read in the target language, to help them develop positive attitude toward learning that language, and to contribute to their school success. Besides, when considering the positive correlation between (extensive) reading and writing, comprehension texts of high lexical density and readability could play a crucial role in improving students’ proficiency in EFL writing. It is hereby significant to
mention that Ngan and Thao (2016) evaluated the lexical density and readability in the writings of freshmen attending a double degree programme (Mathematics and English) at a pedagogical university in Vietnam, and concluded that students can only achieve the average level of both lexical density and readability, which suggests that they need to enhance their writing skills with more complex grammar and vocabulary.

Camiciottoli (2007), conversely, draws our attention to the consensus that high lexical density is associated with more propositional content and greater complexity, which can make it challenging to process the language particularly for non-native speakers (McNeill, 1994; Ventola, 1996; Hartnett, 1998). Similarly, Crossley et al. (2006, cited in Young, 1999) suggest that second language reading texts must be simplified at the beginning and intermediate levels in order to make the text more comprehensible for second language learners and to help prepare them for more authentic texts. In this regard, Owu-Ewie (2014) notes that writers of second language materials cannot simplify a reading text when they are not aware of the difficulty level of the text. So, when considering all these into account, EFL teachers who use textbooks including reading texts with high lexical density should act carefully while assigning them to their students. Namely, they could be recommended to scan these texts painstakingly before telling their students to read, and to modify them—if necessary and as much as possible. Alternatively, they might be suggested to assign their students reading tasks that require pair-work and/or group-work for making it easier for them to process the newly learnt language.

As for readability, it can be improved by the use of simple, precise and unambiguous sentences, well-structured text and use of familiar or cultural-friendly texts/genres. Textbook writers should be provided with adequate training, especially how to write for second language learners. Teachers have a major role to play to turn a text with low readability to one which will be easy to read and understand.

EFL teachers are also suggested to check their students’ written assignments through statistical programmes in terms of lexical density and readability in order to see whether there is a significant difference between them and reading comprehension texts in their textbooks. Accordingly, they might be recommended to plan their teaching, to develop strategies, and/or to change their techniques in teaching reading in the target language.

LIMITATIONS & SUGGESTIONS FOR FURTHER RESEARCH

This particular study was limited to the investigation of two selected EFL textbooks regarding lexical density (complexity) and readability of reading comprehension texts. So, it might be furthered to examine a larger number of EFL textbooks (or textbooks for other languages) that are offered in schools of different educational levels in various countries since this particular study was confined to Turkey and Germany. It might also be extended to compare selected textbooks in terms of other types of activities (writing, speaking, listening, and vocabulary etc.). Alternatively, comprehension questions in a set of books might be scrutinized in a further research in order to reveal whether they significantly differ across grades.