

**An Assessment of the Readability Level of EFL  
Textbooks**

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### Abstract

The current study aimed to assess the readability level of the 10<sup>th</sup> and 11<sup>th</sup> grade EFL students' textbooks "Action Pack" in Jordan. The reading texts in both the 10<sup>th</sup> and 11<sup>th</sup> grade EFL students' textbook were examined. There were 34 reading texts in the 10<sup>th</sup> grade student textbook and 30 in the 11<sup>th</sup> grade student textbook. 50% of the number of texts was selected for the study sample. The sample texts in both books were transferred to word document in order to use modern software (wordcounter.net) for analyzing the data in terms of word count, sentence count and syllable count. The instruments of the study were two formulas used for assessing readability of textbooks worldwide. These formulae are: Flesch reading Ease (FRE) formula, and Flesch – Kincaid grade level (FKRE) formula. The results showed that in terms of the FRE formula the 10<sup>th</sup> grade readability level was (64). And the 11<sup>th</sup> grade readability level was (61). Results also showed that according Flesch – Kincaid grade level formula the readability of the 10<sup>th</sup> grade EFL students' textbook was (8) and the readability level of the 11<sup>th</sup> grade textbook was (9). These results show that the readability level of the 10<sup>th</sup> and 11<sup>th</sup> grade EFL students' textbooks are below the intended level. The recommendations based on these findings is for course designers to revise the textbooks reading texts and to check them for readability prior to publication.

**Keywords:** Readability level, EFL textbooks, Readability formulas.

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## تقييم درجة مقروئية كتب اللغة الانجليزية كلغة أجنبية

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### الملخص:

هدف البحث الحالي الى تقييم درجة مقروئية كتاب الطلبة للصفين العاشر والحادي عشر ضمن سلسلة "اكشن باك" في الأردن. تم فحص نصوص القراءة في كتابي الصف العاشر والحادي عشر. حيث وجد 34 نص في كتاب الطالب للصف العاشر و (30) نص في كتاب الطالب للصف الحادي عشر. تم اختيار ما نسبته (٥٠%) من هذه النصوص ليكون عينة الدراسة. تم تحويل هذه النصوص في الكتابين إلى برنامج الحاسوب مايكرو سوفت ورد وبعد ذلك نقلها إلى برنامج ورد كاونتر للحصول على عدد الكلمات وعدد المقاطع وعدد الجمل في تلك النصوص. تكونت أداة الدراسة من معادلة فليش وفليش كندايد لقياس درجة صعوبة النصوص. بينت النتائج ان درجة مقروئية نصوص الصف العاشر هي (64) ودرجة مقروئية نصوص الصف الحادي عشر هي (61) حسب معادلة فليش لدرجة صعوبة النص. كما بينت النتائج ان مقروئية نصوص الصف العاشر هي (8) ودرجة مقروئية نصوص الصف الحادي عشر هي (9) حسب معادلة فليش كندايد لدرجة صعوبة النص. هذه النتائج تدل على أن مستوى مقروئية النصوص المتضمنة في الكتب أدنى من المستوى الفعلي لهذة الصفوف. اقترحت الدراسة بناء على هذه النتائج أنه على مصممي المناهج مراجعة النصوص والتأكد من مقروئيتها للصفوف المصممة من أجلها قبل نشرها.

**الكلمات المفتاحية:** درجة مقروئية، كتب اللغة الإنجليزية، معادلات المقروئية

## 1. Introduction

In Jordan schools rely on the ministry of Education to provide them with textbooks for teaching EFL. The textbook is considered the main material used in the classroom. Many teachers rely entirely on the reading passages of the textbook in their classes with no reference to outside reading material that may be included, due to lack of time for extracurricular material. Researchers in the field (Gunantar, 2017, Johns 1997, Hutchinson & Torres,1994, Brown 2000) have emphasized the importance of the textbook to both the students and the teachers alike. Since the textbook is an important resource in the classroom and is the medium of teaching it is important to determine the readability level of the textbook for the age group it is intended for, (Hong e.t. al 2018). A textbook is usually written by experts in a particular field, and the material is carefully checked and used in pilot studies before it is published and distributed argues (Cunningsworth & Tomlinson, 1984). It is designed in a way to help language learners improve their skills.

According to Nuttal (2005) a good textbook needs to fulfill three main objectives. First it should be suitable in terms of content to the specified students. It should be interesting enough, entertaining, and challenging for that age group. Second it should be exploitable which means it should be set in a way to achieve specific language goals through different teaching approaches. And the third objective mentioned by Nuttal (2005) is readability i.e. its lexical and structural difficulties in addition to its proper level of difficulty for the students. Hence checking the readability of textbooks is essential especially for EFL textbooks in order to achieve its goals.

Textbooks which are the main tool used for teaching EFL in Jordanian Educational system, need to be checked for readability levels. Readability refers to the difficulty level of a written text. In doing so, researchers have used the different Readability formulas over the years. Some of these formulae are Dale-Chall formula, Fry Graph formula, Gunning's Fog-index formular, Flesch Reading Ease (Henceforth, FRE) formula and the Flesch Kincaid formula (Henceforth, FKRE). Most of these fromulas have been used to investigate the level of difficulty of the written text for the intended age group (Richards 1992). The current

research used the Flesch Reading Ease formula and the Flesch Kincaid formula to investigate the readability of the 10<sup>th</sup> and 11<sup>th</sup> grade EFL student's textbooks in Jordan.

### **1.1 Statement of the Problem and Research Questions:**

The readability level of the student's textbook is an essential component of a good textbook, (Nuttal, 2005). And since in Jordan the textbook is the main source of material for reading in the EFL classroom the idea for this research was established. It was necessary for the researcher to examine the readability level of two students' textbooks in the secondary level, especially that these two grade levels precede the 12<sup>th</sup> grade high school (Tawjihi) level. It was important for the researcher to examine whether the readability levels of these two grade levels (10<sup>th</sup> and 11<sup>th</sup>) were within the level of difficulty for their age group according to the FRE, and Flesch Kincaid (FKRE) grade level formulae. As a result, the study attempted to answer the following research questions:

1. What is the readability level of the 10<sup>th</sup> and 11<sup>th</sup> grade EFL Student's textbooks according to Flesch Reading Ease formula?
2. What is the readability level of the 10<sup>th</sup> and 11<sup>th</sup> grade EFL student's textbooks according to the Flesch Kincaid grade level formula?
3. Is there a difference in the Readability level of 10<sup>th</sup> and 11<sup>th</sup> grade EFL textbooks according to both Flesch Reading Ease formula and the Flesch Kincaid reading formula?

### **1.2 Purpose of the Study:**

The purpose of the current study is to examine the readability level of the reading texts in both the 10<sup>th</sup> and 11<sup>th</sup> grades EFL "Action Pack" textbooks in Jordan in order to determine their levels of difficulty.

### **1.3 Significance of the Study:**

The study is significant in that, based on its results, recommendations to the ministry of Education and textbook designers are made to either keep the books reading texts as they are or to change them either to a readability level that is lower than the current one or higher depending on the results. It is important that the readability level of EFL textbooks to be within the "fairly difficult" level specified by

Flesch Reading Ease score for the 10<sup>th</sup> and 11<sup>th</sup> grade level. Especially that these two grade levels in Jordan immediately precede the tawjihi exams which determine students' entrance to Universities. Students need to be prepared well in the previous secondary level grades to meet the demands and needs of the tawjihi exam. Therefore, the textbooks in previous years leading to 12<sup>th</sup> grade need to be helpful and beneficial for students' preparation for that borderline leading to university admission. Here lies the main significance of this research. Identifying the readability level of the 10<sup>th</sup> and 11<sup>th</sup> grade textbook will enable the textbook designers to write the text in a way to be accessible to the targeted audience. The main significance of this research is to ensure that the textbooks reach and affect the students in the way they are intended to.

#### **1.4 Operational Definitions:**

**Readability:** "what makes some texts easier to read than others" Dubay, (2004, p.3). in the current study it refers to the level of difficulty of the texts in the 10<sup>th</sup> and 11<sup>th</sup> grades action pack textbooks in Jordan.

**Readability formula:** "a readability formula is an equation that gives an estimate of the readability of a text. The estimate is generally in terms of the number of years of education one needs to have to comprehend that text" (Kondru, 2006, p.7). In the current study they are formulas used to check the difficulty level of the reading texts found in the 10<sup>th</sup> and 11<sup>th</sup> student's EFL textbooks "Action pack" in Jordan based on syllable, word, and sentence counts.

#### **1.5 Limitations of the Study:**

This study is limited to the reading text passages of the 10<sup>th</sup> and 11<sup>th</sup> grade EFL student's textbooks in Jordan. It is also limited to the version printed for the academic year 2023-2024.

## **2. Literature Review**

Different research has undertaken the attempt to investigate the readability of the written text in different countries and for different grade levels.

Carcamo, (2022) conducted a readability study of the texts used in EFL Chilean textbooks compared to texts used in the Cambridge B1 preliminary exam. He created his own formula for analysis. the results

showed that the texts in the Chilean textbook were more difficult than the texts in the B1 Cambridge exam.

Hanifah, et. al.(2022) conducted an investigation of the readability level of a high school EFL textbook in Indonesia. They used the Flesch Reading Ease formula and the Flesch Kincaid grade level formula. They analyzed 26 passages from the textbooks using coh-matrix software. The results showed that the texts were below the level of the students they were intended for. Which means English teachers would have to supplement the textbook with outside reading material suitable for the students' reading level.

Abusa'aleek, R., & Khataybeh, A. (2020) investigated the readability level of 12<sup>th</sup> grade EFL textbooks in Jordan using the Fry Graph readability level. They selected 20 texts out of 36 texts and analyzed them. They found that 80% of the 20 texts selected were below the grade level of the 12<sup>th</sup> grade in Jordan. They also reported that 15% of the texts were invalid and only 5% were within the 12<sup>th</sup> grade level. Recommendation included EFL textbook publishers should be more aware of the readability text in order to take into account students' needs and abilities.

Kodom, G, W., & Pearl S., D. (2019) investigated the readability level of English language textbooks for diploma students at the university of Cape coast. They used the Flesch Reading Ease and the Flesch Kincaid grade level indexes to measure the difficulty level of the reading passages of the textbooks. The results revealed that the level of the textbooks was between "fairly difficult" and "difficult". This result was found to be statistically different from the readability of the recommended public documents. Recommendation to revise the textbooks and write them in a readability level that serves the purpose of the intended group.

Rahmawati, Y. I., & Lestari, L. M. (2012) conducted a study of the readability level of reading texts in 10<sup>th</sup> grade English language textbooks namely "Developing English Competencies for grade X" published by the department of National education and "English Today 1" Published by Quadra. Six texts from each book was selected as the



sample of study. the researchers used the Flesch Reading Ease formula and the Fry Graph formula for analysis. Both formulas showed that the Readability of the texts was for grade seven, which means it was under the level of the 10<sup>th</sup> grade which they were intended for. The results also showed that the texts in “Today’s English 1” were more difficult than texts in the “Developing English Competencies for Grade X”. They suggest that teachers should give more guidance when teaching from “Today’s English 1”

The current research also attempts to investigate the readability level of the 10<sup>th</sup> and 11<sup>th</sup> grade EFL student’s textbooks in Jordan. Both the Flesch Reading Ease formula and the Flesch Kincaid formula are used.

### 3. Methodology:

#### 3.1 Study Population:

The population of the study are all the reading texts included in both the 10<sup>th</sup> and 11<sup>th</sup> grade EFL textbooks in Jordan printed for the academic year 2023-2024. All the reading texts in the main units and in the exercises were counted for the population as shown in table (1) for each grade level. It was found that there were 34 reading texts in the 10<sup>th</sup> grade textbooks and 30 reading texts in the 11<sup>th</sup> grade textbooks.

Table (1) number of text in both the 10<sup>th</sup> and 11<sup>th</sup> grades EFL textbooks

Grade level	Number of texts
10 <sup>th</sup> grade	34
11 <sup>th</sup> grade	30

#### 3.2The Study Sample

Table (2) reveals the number of sample texts selected by the researcher to be analyzed using the wordcounter.net in order to calculated the readability level according to the Flesch Reading Ease formula and the Flesch Kincaid reading grade level formula. The selected samples comprised of 50% of the population texts.

Table (2) samples selected from population

Grade level	Number of sample texts	Percentage of the population
10 <sup>th</sup> grade	17	50%
11 <sup>th</sup> grade	15	50%

### 3.3 Research Instrument:

The research instruments used for the current study are two readability formula used to check readability of reading texts. Readability formulae have been used by researchers to determine the difficulty level of written texts. These formulae have been validated by many researchers as suitable instruments for difficulty level. Dubay (2004, p1) points out “that results of the formulae are accepted in many research in different academic fields and even in courts. He adds that “over 80 years of research and testing have contributed to the worldwide use in many languages of the readability formulas”.

The formulae used are the Flesch Reading Ease readability formula which is stated as:

$$\text{FRE formula} = 206.835 - (1.015 * \text{ASL}) - (84.6 * \text{ASW})$$

Where ASL is the Average sentence length which is calculated by dividing the number of words by the number of sentences.

And the ASW is Average syllable per word which is calculated by dividing the number of syllables by the number of words.

According to the FRE readability formula the number zero is the highest level of difficulty and the number 100 is the lowest number of difficulty as stated in the following sections. The Flesch reading Ease readability formula is the most popular formula among researchers (Heydari, 2012)

The second instrument is the Flesch Kincaid grade level readability formula which is a calibration of the original Flesch formula

$$\text{Flesch Kincaid grade level} = (0.39 * \text{ASL}) + (11.8 * \text{ASW}) - 15.59$$

Where ASL is the Average sentence length calculated (number of words divided by number of sentences). And the ASW is the Average syllable per word calculated by (number of syllables divided by number of words).

To ensure the validity of the total number of syllable, words and sentences the researcher used the software wordcounter from wordcounter.net.

For the current study the researcher selected to use the Flesch reading ease formula and the Flesch Kincaid grade level formula for they have been widely used by many researchers.

**3.4 Procedures of the Study:**

The procedures followed for the current study were as follows; digital copies of the Action pack EFL student’s textbooks for the 10<sup>th</sup> and 11<sup>th</sup> grade were obtained. Then the reading texts in each book were calculated and transferred onto a separate MS word document. Then the wordcounter software was used to calculate the number of syllable, words and sentence each text had. Then the researcher calculated each formulae by hand and transferred the results onto the tables. The results were compared to each formula’s scale to determine the level of difficulty. Based on the results, conclusions and recommendations were made.

**4.Results**

In order to arrive at the results of the study, the raw data was fed to the wordcounter software to calculate its words, syllable and sentences. From wordcounter results the ASL (Average sentence length) and ASW (Average syllable per word) were obtained by calculating the number of words divided by the number of sentences for the ASL. And by dividing the number of syllables to the number of words for the ASW. The Average ASL and ASW was calculated by hand. The results were later used in the Flesch Reading Ease formulae to obtain the Readability Ease score which was then compared to the Scale in table (3)

Table (3) The Flesch Reading Ease difficulty levels scale

RE score	Difficulty level	Grade
0-30	Very difficult	College graduate
30-40	Difficult	13 <sup>th</sup> -16 <sup>th</sup> college grade
50-60	Fairly Difficult	10 <sup>th</sup> -12 <sup>th</sup> grade
60-70	Standard	8 <sup>th</sup> -9 <sup>th</sup> grade
70-80	Fairly Easy	7 <sup>th</sup> grade
80-90	Easy	6 <sup>th</sup> grade
90-100	Very Easy	5 <sup>th</sup> grade

**4.1 Results Pertaining to the first Research Question:** What is the readability level of the 10<sup>th</sup> and 11<sup>th</sup> grade EFL Student’s textbooks according to Flesch Reading Ease formula?

In order to answer the first research question concerning the readability level of the 10<sup>th</sup> and 11<sup>th</sup> grade EFL student’s textbook according the Flesch Reading Ease formula, the sample texts were fed into the wordcounter.net program and results obtained through the formula which is:

$$\text{FRE formula} = 206.835 - (1.015 * \text{ASL}) - (84.6 * \text{ASW})$$

Where ASL is the Average sentence length which is calculated by dividing the number of words by the number of sentences.

And the ASW is Average syllable per word which is calculated by dividing the number of syllables by the number of words. The researcher manually applied the formulae to the obtained data from the wordcounter software. The results for the 17 sample text from the 10<sup>th</sup> grade EFL student’s Textbook are shown in table (4)

Table (4) 10<sup>th</sup> grade Flesch Reading Ease score

10 <sup>th</sup> grade							
Text	word	Syllable	sentence	FRE Score	Description	level	appropriateness of the text to the 10 <sup>th</sup> grade level
1.A young inventor	276	416	18	64	Standard	8-9 <sup>th</sup> grade	Below
2.A hidden world	243	352	14	67	Standard	8-9 <sup>th</sup> grade	Below
3. the oldest trees on Earth	156	215	16	81	Easy	6 <sup>th</sup> grade	Below level
4.Emeralds in Egypt	212	337	14	58	Fairly difficult	10-12 <sup>th</sup> grade	Appropriate
5.super scientists	239	349	20	71	Fairly easy	7 <sup>th</sup> grade	Below level
6Ibn Alhatham	169	238	9	69	Standard	8-9 <sup>th</sup> grade	Below level
7.Jordan a pioneer in higher education	161	283	8	38	Difficult	College grade	Above level
8.Polar Bears	276	384	18	74	Fairly easy	7 <sup>th</sup> grade	Below level

and Penguins							
9.A trip to Antarctica	150	322	13	14	Very difficult	College graduate	Above level
10.Sea turtles	178	242	11	76	Fairly easy	7 <sup>th</sup> grade	Below level
11the longest swim	210	322	15	63	Standard	8-9 <sup>th</sup> grade	Below level
12.one world many climates	264	381	21	72	Fairly easy	7 <sup>th</sup> grade	Below level
13.Earth’s Climate story	231	352	15	63	Standard	8-9 <sup>th</sup> grade	Below level
14.Volcanoes	264	372	17	73	Fairly easy	7 <sup>th</sup> grade	Below level
15.Alhambra Palace	293	436	19	66	Standard	8-9 <sup>th</sup> grade	Below level
16.The dead sea	185	264	11	70	Fairly easy	7 <sup>th</sup> grade	Below level
17The power of Imagination	309	452	17	65	Standard	8-9 <sup>th</sup> grade	Below level
Average				64	Standard	8-9 <sup>th</sup> grade	Below level

The results in table (4) show that out of the 17 texts selected from the 10<sup>th</sup> grade Student’s textbook, text number 3 “The oldest trees on earth” showed FRE of (81) which is suitable for 6<sup>th</sup> grade. Six texts (text 5, 8, 10, 12, 14 and 16) were suitable for 7<sup>th</sup> grade with an FRE score ranging from 70 to 76 which is fairly easy according to the Flesch readability scale in table (3). The results in table (4) also show that text (7) “Jordan pioneers in higher education” was difficult and suitable for college grade. Also text number 9 “a trip to Antarctica” had a FRE score of 14 which is considered very difficult and suitable for college graduate according the Flesch readability scale in table (3). Seven texts namely (1, 2, 6, 11, 13, 15, and 17) had an FRE score that ranged between (63-69) which is standard and suitable for grades 8<sup>th</sup> and 9<sup>th</sup>. Only one text which is text number 4 “Emeralds in Egypt” received an RE score of 58 which is fairly difficult and suitable for grades 10-12 and considered appropriate for the tenth grade level. The Average FRE score for the 17 texts selected was (64) which is considered to be Standard and suitable for grades 8 and 9 and is Below the tenth grade level for whom it is designed.

Table (5) shows the results of the FRE scores of the 15 sample texts in the 11<sup>th</sup> grade EFL student’s Textbook.

Table (5) 11<sup>th</sup> grade FRE score of the sample texts

11 <sup>th</sup> grade							
Text	word	Syllable	Sentence	FRE Score	Description	level	Appropriateness of the text to the 11 <sup>th</sup> grade level
1.Importance of sleep	229	321	15	73	Fairly easy	7 <sup>th</sup> grade	Below level
2.Costums and traditions across the world	318	452	20	71	Fairly easy	7 <sup>th</sup> grade	Below level
3.welcoming new babies into the world	355	496	19	70	Fairly easy	7 <sup>th</sup> grade	Below Level
4.Special Olympics	344	572	23	51	Fairly difficult	10-12 <sup>th</sup> grade	Appropriate
5.Charlotte Dujardin British female rider	411	578	22	69	standard	8-9 <sup>th</sup> grade	Below level
6.cycling, past, present, and future	251	370	13	63	standard	8-9 <sup>th</sup> grade	Below level
7.Olympic opening ceremony	219	383	13	43	Difficult	College grade	Above
8.Interview with Sana Nuclear Physicist	348	505	28	72	Fairly easy	7 <sup>th</sup> grade	Below
9.Crude oil	120	192	6	51	Fairly difficult	10-12 <sup>th</sup> grade	Appropriate
10.Mastermind	289	478	27	56	Fairly difficult	10-12 <sup>th</sup> grade	Appropriate
11 water resources in Jordan	272	495	18	38	Difficult	College grade	Above
12.Charles Dickens	251	380	18	65	Standard	8-9 <sup>th</sup> grade	Below
13.Oliver Twist	380	562	16	58	Fairly difficult	10-12 <sup>th</sup> grade	Appropriate
14.The language of Braille	293	466	21	58	Fairly difficult	10-12 <sup>th</sup> grade	Appropriate
15.Different cultures different food.	237	337	20	77	Fairly easy	7 <sup>th</sup> grade	Below Level
Average				61	Standard	8-9 <sup>th</sup> grade	Below Level

Table (5) above shows the results of (15) texts selected for the 11<sup>th</sup> grade student's textbook in Jordan. The 15 texts chosen comprise of (50%) of the total texts in the textbook. The results show five texts namely (1, 2, 3, 8, and 12) to have an FRE in the range of (70-77) which is fairly easy and suitable for 7<sup>th</sup> grade, hence Below the 11<sup>th</sup> grade level.

Results also showed three texts namely (5, 6, and 15) to have an FRE ranging between (63-69) which is standard and suitable for grades 8 and 9 which is Below the 11<sup>th</sup> grade level. Five texts however are appropriate and within the 11<sup>th</sup> grade readability level. These texts are (4, 9, 10, 13, and 14). The FRE score of these appropriate texts ranges between (51-58) which is fairly difficult and suitable for 10-12<sup>th</sup> grades. Two of the 15 texts are college grade level having an FRE of 43 and 38 which are considered difficult according the Flesch reading Ease scale. The overall readability of the 15 texts was 61 which is standard and suitable for grades 8-9 hence falling Below the 11<sup>th</sup> grade level.

In table (6) an overall result of the FRE formula for both textbooks (10<sup>th</sup> and 11<sup>th</sup>) are displayed.

Table (6) overall results of the FRE readability of both 10<sup>th</sup> and 11<sup>th</sup> grade EFL textbooks.

	Number of texts	RE score	Description	Level	Appropriateness to grade level
10 <sup>th</sup> grade EFL	17	64	Standard	8-9 <sup>th</sup> grade	Below level
11 <sup>th</sup> grade EFL	15	61	Standard	8-9 <sup>th</sup> grade	Below level

The results in table (6) show that both 10<sup>th</sup> and 11<sup>th</sup> grade student’s EFL textbooks in Jordan are Bellow the readability level according to the Flesch Reading Ease score formula. The FRE scores is 64 and 61 respectively which is considered suitable for grades 8-9. Which are below the level of 10<sup>th</sup> and 11<sup>th</sup> grades.

**4.2 Results Pertaining to the Second Research Question (Flesch kincaid) formula:** What is the readability level of the 10<sup>th</sup> and 11<sup>th</sup> grade EFL student’s textbooks according to the Flesch Kincaid grade level formula?

The second question was devised and included in the study in order to double check the results of the Flesch Reading Ease formula presented in the first question. The Flesch kincaide formula was devised as recalibration of the original Flesch Reading Ease formula. It rates texts on a U.S. grade school level. For example, a score of 6 means the text is suitable for sixth graders a score of 7 mean a seventh grader can

understand the text and so on. Because the formula is set for U.S grade levels (Native speakers of English)) the researcher of the current study made a slight modification to grade level acceptance since readers of action pack are non-native speakers of English. She expanded the reading level each score corresponds to. For example, Flesch Kincaid score of 5 means it is suitable for grade five and six in Jordan because it is not their native language. This is reflected in table (7)

Table (7) Flesch Kincaid scores devised for Jordanian EFL readers scale (modified by the researcher)

FKRE score	Grade level suitability
1	1 <sup>st</sup> and 2 <sup>nd</sup> grades
2	2 <sup>nd</sup> and 3 <sup>rd</sup> grades
3	3 <sup>rd</sup> and 4 <sup>th</sup> grades
4	4 <sup>th</sup> and 5 <sup>th</sup> grades
5	5 <sup>th</sup> and 6 <sup>th</sup> grades
6	6 <sup>th</sup> and 7 <sup>th</sup> grades
7	7 <sup>th</sup> and 8 <sup>th</sup> grades
8	8 <sup>th</sup> and 9 <sup>th</sup> grades
9	9 <sup>th</sup> and 10 <sup>th</sup> grades
10	10 <sup>th</sup> and 11 <sup>th</sup> grades
11	11 <sup>th</sup> and 12 <sup>th</sup> grades
12	12 <sup>th</sup> and college grade
13	College grade and college graduate
14	College graduate

The scale modified in table (7) is used to read the results in the following tables for the second question. Table (8) presents the results of the Flesch Kincaide Grade level formula for the 10<sup>th</sup> grade reading texts. Table (8) Results of the Flesch Kincaide grade level formula for 10<sup>th</sup> grade texts

10th grade							
Text	word	syllable	sentence	FKRE Score	level	Modified levels	appropriateness of the text to the 10th grade level
1.A young inventor	276	416	18	8	8th grade	8-9	Below Level
2.A hidden world	243	352	14	8	8th grade	8-9	Below level



3. the oldest trees on Earth	156	215	16	4	4th grade	4-5	Below level
4.Emeralds in Egypt	212	337	14	9	9th grade	9-10	appropriate
5.super scientists	239	349	20	6	6th grade	6-7	Below level
6Ibn Alhaitham	169	238	9	8	8th grade	8-9	Below level
7.Jordan a pioneer in higher education	161	283	8	13	College grade	College to college graduate	Above level
8.Polar Bears and Penguins	276	384	18	7	7th grade	7-8	Below level
9.A trip to Antarctica	150	322	13	14	College grade	College graduate	Above level
10.Sea turtles	178	242	11	7	7th grade	7-8	Below grade level
11the longest swim	210	322	15	8	8th grade	8-9	Below grade level
12.one world many climates	264	381	21	6	6th grade	6-7	Below grade level
13.Earth's Climate story	231	352	15	8	8th grade	8-9	Below grade level
14.Volcanoes	264	372	17	7	7th grade	7-8	Below grade level
15.Alhambra Palace	293	436	19	8	8th grade	8-9	Below grade level
16.The dead sea	185	264	11	8	8th grade	8-9	Below grade level
17The power of Imagination	309	452	17	9	9th grade	9-10	appropriate
Average				8	8th grade	8-9	Below grade level

Results in table (8) show that the lowest mark was for text number (3) the oldest trees on earth” with a FKRE score of 4, which is suitable for grade four in U.S grade level and for grades four and five for the modified scale in table (7). This indicates that it is Below 10<sup>th</sup> grade EFL students level in Jordan. The results also show that the texts (7 and 9)

“Jordan Pioneers in higher education and A trip to Antarctica” received FKRE scores of 13 and 14 respectively which is suitable for college grade and college graduates. These scores are above the level of the 10<sup>th</sup> grade students they are devised for. Texts 4 and 17 which are “Emeralds in Egypt and the power of imagination” were within the students level the FKRE score was 9 which is suitable for the 10<sup>th</sup> grade according to the modified scale. These results except for text 17 “the power of imagination” are exactly the same results reached in table (4) through the Flesch reading Ease formula. The rest of the text including the overall average of all the texts were Below students grade level of readability.

Table (9) shows the results of the Flesch Kincaid Reading Ease formula scores for the 11<sup>th</sup> grade reading texts.

Table (9) Results of the Flesch kincaide grade level formula for 11<sup>th</sup> grade texts

11 <sup>th</sup> grade							
Text	word	Syllable	Sentence	FKRE Score	level	Modified level	Appropriateness of the text to the 11 <sup>th</sup> grade level
1.Importance of sleep	229	321	15	7	7 <sup>th</sup> grade	7-8	Below level
2.Costums and traditions across the world	318	452	20	7	7 <sup>th</sup> grade	7-8	Below level
3.welcoming new babies into the world	355	496	19	8	8 <sup>th</sup> grade	8-9	Below level
4.Special Olympics	344	572	23	10	10 <sup>th</sup> grade	10-11	Appropriate
5.Charlotte Dujardin British female rider	411	578	22	8	8 <sup>th</sup> grade	8-9	Below level
6.cycling, past, present, and future	251	370	13	9	9 <sup>th</sup> grade	9-10	Below level
7.Olympic opening ceremony	219	383	13	12	12 <sup>th</sup> grade	12-college grade	Above
8.Interview with Sana	348	505	28	6	6 <sup>th</sup> grade	6-7	Below level

Nuclear Physicist							
9.Crude oil	120	192	6	11	11 <sup>th</sup> grade	11-12	Appropriate
10.Mastermind	289	478	27	8	8 <sup>th</sup> grade	8-9	
11 water resources in Jordan	272	495	18	12	12 <sup>th</sup> grade	12-college grade	Above
12.Charles Dickens	251	380	18	8	8 <sup>th</sup> grade	8-9	Below level
13.Oliver Twist	380	562	16	11	11 <sup>th</sup> grade	11-12	Appropriate
14.The language of Braille	293	466	21	8	8 <sup>th</sup> grade	8-9	Below level
15.Different cultures different food.	237	337	20	6	6 <sup>th</sup> grade	6-7	Below level
Average				9	9 <sup>th</sup> grade	9-10	Below level

Table (9) shows the results of the Flesch Kincaid Reading Ease formula scores. The table indicated that texts (7 and 11) “Olympic opening ceremony and water resources in Jordan” were ranked above 11<sup>th</sup> grade level. Their FKRE scores are 12 for each which is considered above grade 11 with the original scale corresponding to grade 12 and the modified scale corresponding to grade 12 and college grade. Only three texts were ranked as appropriate for the 11<sup>th</sup> grade readability level. These texts are: first text (4) “Special Olympics” with a FKRE score of 10 which is appropriate for grade 11 according to the modified FKRE scale. The second text is (9) “Crude Oil” its FKRE score is 11 which is appropriate in its original scale and the modified scale. Third text 13 “Oliver Twist” with a FKRE score of 11 also appropriate for the 11<sup>th</sup> grade readability level. These results correspond to a high degree with the results of the FRE formula results presented in table (5) above, both agree that texts (7 and 11) are above grade level. Both agree that text (9 and 13) are appropriate level. Finally they both agree that texts (1, 2, 3, 5, 6, 8, 12, 15) are all below grade level. Both formula results also agree that the overall average of the sample text of the 11<sup>th</sup> grade EFL student’s textbook is below students’ readability level.

3. **Results of the third research question:** Is there a difference in the Readability level of 10<sup>th</sup> and 11<sup>th</sup> grade EFL textbooks according to both Flesch Reading Ease formula and the Flesch Kincaid reading formula?

Table (10) overall results of the Flesch Reading Ease and the Flesch Kincaide Reading Ease formulae

Formula	Grade	Readability Score	Description	Predicted grade	Appropriateness
Flesch Reading Ease formula	10 <sup>th</sup> grade	64	Standard	8-9 <sup>th</sup> grade	Below level
	11 <sup>th</sup> grade	61	Standard	8-9 <sup>th</sup> grade	Below Level
Flesch Kincaid formula	10 <sup>th</sup> grade	8	NA	8 <sup>th</sup> and 9 <sup>th</sup> grade	Below Level
	11 <sup>th</sup> grade	9	NA	9 <sup>th</sup> and 10 <sup>th</sup> grade	Below level

Table (10) shows that there are no differences in the results of the Flesch reading Ease readability formula and the Flesch Kincaid reading Ease readability formula for the 10<sup>th</sup> and 11<sup>th</sup> grades EFL students' textbooks in Jordan. Both formulas showed that the text samples selected from both textbooks were below the readability level of each grade level. This ensures that the measurements are reliable. The researcher used the same samples for each formula with the same automated software was used for the count of sentences, syllables and words. But the actual formulas were calculated by hand. Both textbooks fall one to two grade levels back in both formulas.

### 5. Discussion:

Discussion of the results of the study are presented in this section. First of all, pertaining to the first research question table (4) showed that the average readability of the tenth grade student's textbook in Jordan was Below their level. The RE score for the tenth grade textbook was (64) which is standard and suitable for grades 8-9. It is obvious that the course designers are underestimating the students' abilities in the English language. The material for the students is being watered down to a level less than their expected level. According to Krashen's (1985) comprehensible input hypothesis students gain knowledge from comprehensible input that is just above what they already know. If the input is equal to or Below their level

no learning takes place, in order for it to take place it needs to be above what they already know. This research finding is similar to the finding reached by Alsa'aleek and khtaybeh (2020) in their analysis of the 12<sup>th</sup> grade textbooks in Jordan. They too found that the readability level of the textbook is under the students' level. But their instrument of analysis was the Fry Graph scale. In the tenth grade textbook there were two texts that are college level and college graduate level. These texts need to be made easier for students to be within their readability level as they are they are too difficult for the students to read and comprehend.

As for the readability level of the 11<sup>th</sup> grade textbook there were more appropriate text included where five of the texts were appropriate, yet two texts were above the readability level and eight were Below the 11<sup>th</sup> grade readability level. The “difficult” texts those suitable for college grade need to be revised to be made easier and the eight “fairly easy and standard” texts need to be revised to be made a bit more difficult to meet the “fairly difficult” level required to become appropriate for the 11<sup>th</sup> grade. Perhaps the reason both textbooks according to the Flesch Readability Ease formula came out to be Below level is that the course designers of “Action pack” series have based their textbook to gradually rise in students' level but that they have started out in the first grade with a level much Below students' level. This requires a research for the first three grades of the series to check their readability.

Pertaining to the second research question, the overall FKRE score for all the texts was 8 which means it is suitable for grade 8 according to the original scale system and suitable also for grade nine according to the modified scale by the researcher for EFL learners. In both cases the result is Below the grade level of the 10<sup>th</sup> grade students in Jordan for whom it is designed. This result is similar to the result found for the same texts in the FRE formula in table (4). This is to reassure that the analysis of the texts using the FRE formula is correct and results are reliable for the current research. Even at the individual texts the FKRE score correspond to the FRE scores in terms of suitability to grade level. Both formulas showed that text 3 “the oldest trees on earth” was the lowest grade level. Both formulas also showed that text 4 “Emeralds in Egypt” was appropriate and both formulas showed that texts (7 and 9) are college level which are above the 10<sup>th</sup> grade EFL students' level.

With respect to the 11<sup>th</sup> grade, the FKRE scores revealed that the overall rank of the 15 sample texts is below the grade's readability level. It also showed that texts (7 and 11) were both above level while texts (4, 9, 13) were appropriate and the rest of the text were below readability level. Again the results of the FKRE formula were in accordance to a great extent with the results obtained by the FRE formula.

Both the FRE and FKRE formulas agree that the texts within the 10<sup>th</sup> and 11<sup>th</sup> grade EFL students' textbook in Jordan are below the students' readability level. Both formulas showed that the level of the texts in the examined textbooks fall one to two grades back of the grade it is intended for. This result is very similar to the results of Hanifah et. al.(2022). They also found that the texts in an Indonesian EFL textbook were below students' reading abilities they too relied on the Flesch Reading Ease readability formula and the Flesch Kincaid grade level formula. Results in this study are also similar to Kodom & Pearl (2019) study, where they used the same formulas to investigate the textbook for diploma students at the university of Cape cost. Results were between fairly difficult to difficult.

### **6. Conclusions and Recommendations:**

The conclusion for the current research is that according to both the Flesch Readability formula and the Flesch Kincaid readability formula, 10<sup>th</sup> and 11<sup>th</sup> grade textbooks in Jordan are Below the students' grade readability level. In order for students to progress and learn more of English they need to be challenged they need material that is within their level according to the readability formulae. It will not be difficult for the students but it will be appropriate. Having a few texts in the textbooks that are above students' grade level will not change the overall score of being below students' readability level. All texts need to be made within the students' levels. Course designer may use modern software to calculate the difficulty of the texts before the texts are approved for publication. Revisions can be made until suitable texts from a readability perspective are maintained. As for linguistic complexity or word density these could be recommendations for further studies by other researchers. Recommendation also include conducting further studies for other grade levels to check readability.

## References

- Abusa'aleek, R., & Khataybeh, A. (2020). Analyzing the Readability Level of the English Textbooks Used in Jordan. *Research in English Language Pedagogy* 8(2), 334-348
- Brown, H. D. (2000). *Principles of language learning and teaching* (Vol. 4). New York: Longman.
- Carcamo, Benjamin. (2022). The Issue of Readability in the Chilean EFL Textbook. *How*, 30(2), 135-155.
- Cunningsworth, A., & Tomlinson, B. (1984). *Evaluating and selecting EFL teaching materials*. Heinemann Educational.
- Dubay, W. H. (2004). *The principles of readability*. Costa Mesa: Impact Information
- Flesch, R. (1948). A new readability yardstick. *Journal of Applied Psychology*, 32, 221-233.
- Fry, E. B. (1968). A readability formula that saves time. *Journal of Reading*, 11, 513-516
- Gunantar, D. A. (2017). Textbook analysis: Analyzing English as a Foreign Language (EFL). *Language Circle: Journal of Language and Literature*, 11(2), 173-182. <https://doi.org/10.15294/lc.v11i2.9590>
- Gunning, R. (1952). *The technique of clear writing*. New York: McGraw-Hill
- Hanifah, M., Wahyuni, D, S., & Haryati, S. (2022). The Readability of Reading Texts in English for Indonesian Senior High School Using Coh-matrix. *English Educational Journal*. 10(2), 81-92.
- Heydari, Pooneh. (2012). The Validity of Some Popular Readability Formulas. *Mediterranean Journal of Social Sciences* 3, 423-435.
- Hong, D. S., Choi, K. M., Runnals, C., & Hwang, J. (2018). Do textbook address known learning challenges in are measurement? A comparative analysis. *Mathematics Education Research Journal*, 30(1), 1-27. [http:// dx.doi.org/10.1007/s13394-018-0238-6](http://dx.doi.org/10.1007/s13394-018-0238-6).
- Hutchinson, T., & Torres, E. (1994). The textbook as agent of change. *ELT Journal*, 48(4), 315–328.
- Johns, A. M. (1997). *Text, role and context: Developing academic literacies*. Cambridge, UK: Cambridge University Press

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- Kodom G, W., & Pearl, S, D. (2019). Readability of English language textbooks for diploma students of the University of Cape Coast. *International Journal of Research Studies in Language Learning*, 8(1), 107-115.
- Kondur, J. (2006). *Using part of speech structure of text in the prediction of its readability*. Unpublished master's thesis, University of Texas, Arlington, U.S. Retrieved November 13, 2008, from <http://proquest.umi.com/pdqweb?did=1216761731&sid=1&Fmt=2&clientId=46449&PQT=309&VName=PQD>
- Krashen, S. (1985). *The Input Hypothesis: Issues and Implications*. Harlow: Longman.
- Nuttal, C. (2005). *Teaching reading skills in a foreign language* (new edition). Oxford: Macmillan Education.
- Rahmawati, Y. I., & Lestari, L. M. (2012). The Readability Level of Reading Texts in the English Language Textbook of the Tenth Grade. *Halaman Gasal: Penggalan Judul Artikel Jurnal*. 01(1), 1-17.