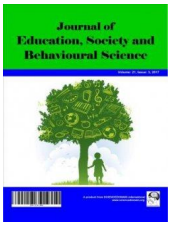

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The Readability of Action Pack for 7th, 10th and 9th Grades

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Authors' contributions

This work was carried out in collaboration between both authors. Author AK designed the study, performed the statistical analysis, wrote the protocol, and wrote the first draft of the manuscript. Author AK managed the analyses of the study and managed the literature searches. Both of authors read and approved the final manuscript.

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ABSTRACT

Reading is a receptive skill - through it we receive information. It is the process of looking at a series of written symbols and getting meaning from them. And we use our brain to convert these symbols into words, sentences and paragraphs that communicate something to us. (Brown [1]) As a result, many readability assessment tools are occurred to help authors and teachers to select the suitable reading materials and to match them with the exact levels of their learners. This research paper is an attempt to shed the light on the readability assessment formulas and their effectiveness in determining the appropriateness of reading materials of the Jordanian curriculum Action Pack 1st, 7th and 9th and to what extent do they match student's exact levels. Fry Graph, Smog Formula and Flesch Chain are used (calculated by hand) to test the level of the readability for presented materials since they are designed for reading materials of the native speakers, whereas, their usage in assessing other foreign languages reading materials are neglected. The findings show that these presented assessments formulas are not effective enough to determine students exact levels and fail to reveal the variations of the texts difficulty. The findings can be useful to adopters, authors,

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editors, and publishers of advanced accounting text books to design other effective assessment formulas which suite the ESL learners and curriculums.

Keywords: Readability; action pack texts books; readability formulas (Flesch, Fog, Smok and Fry graph).

1. BACKGROUND

Efficient reading is an essential prerequisite for success in today`s world. McGovern [2] Venkateswaran [3] defines it as a psycholinguistic process by which the reader reconstructs a message which is encoded by the writer. He views reading as interaction among three factors: background knowledge, conceptual abilities and learning strategies. Phillipson [4] mentions that one of the most important problems of English learning as a foreign language is the difficulty of words that cannot be comprehended. Again, it is difficult to read text. It can be defined by a readability formula. The term readability refers to all factors that affect success in reading and understanding a text. Otto& Wayne [5], mention that readability tests, which are the formulas, were designed to assess the suitability of the books for students at a certain grade level and age. Entin,. and. Klare [6].

DuBay [7] illustrates some studies that showed the importance of assessing readability over years in U.S.A related to the importance of readability in recognizing the texts. "In 1998, traffic accidents caused 46 percent of all accidental deaths of infants and children aged 1 to 14. One study Johnston et al. [8] showed that the risk factor for injury in a traffic accident is the important use of child-safety seats. Another study Kahane [9] showed that, when we use them correctly, child safety seats these instructions can reduce the risk of injury by 71 percent. However; the seats must be fixed correctly. They look into the readability of the instructions and published their findings in the medical journal Pediatrics. When texts reveal the reading ability of readers, they usually stop reading.

1.1 How Old is the Readability Field?

The first readability formula was published in 1923 by lively and Pressey. The readability formulas occur in many reading methods textbooks used in teacher training such as Harris and Sipay [10], Manzo and Manzo [11]. The widely used of formula in schools and with educational publishers in the 1950's 1960's and 1970's was the Dale Chall formula (1948). While in the businesses issues the attempts tended to use the Flesch formula (Flesch Kincaid).

1.2 The Development of Readability Formulas in Short

DuBay [7] explains that the classic readability studies started as early as in the late 19th century and the first formula to measure readability was published in 1923 [12,13]. Since then, more than two hundred different readability formulas are widely used [14]. The readability formula then was generally focused on ,vocabulary such as difficulty, diversity and range. In the late 1920s, the focus turned towards examinations of different aspects which were believed to be the text difficulty. Today, the majority of the readability formulas test the comprehension of a text by using only a combination of the two components syntactic and semantic difficulty. The former measured by average sentence length and the latter measured by words length (counting letters or syllables) or frequency of unfamiliar words. However, readability formulas are still alive as they can be calculated by computers [12]."

1.3 The Readability Formulas

According to Harrison [15] any chosen formulas must be valid and reliable. He illustrates in his book p.51 readability measurers and rates of ease of the text. While, the Flesch Grade and Fry Graph formulas have the highest validity points, but SOMG formulas have less a point. But it is the easiest to be conducted is the SMOG formula.

1.4 Fry Graph Formula

Fry [16] presented the graph to primary levels. In 1977, he illustrated it through the college years Directions:

1. Select samples of 100 words.

2. Find y (vertical), the average number of sentences per 100-word passage (calculating to the nearest tenth).
3. Find x (horizontal), the average number of syllables per 100-word sample.
4. The zone where the two coordinates meet shows the grade score.

1.5 How to Apply this Formula?

1. Randomly select three 100-word segments of your writing.
2. Count the number of syllables in each 100-word block and calculate the average.
3. Count the number of sentences in each 100- word block and calculate the average.
4. Plot the point on the graph (see below) where the numbers from steps 2 and 3 intersect.

If the plotted point falls in one of the black areas on the graph, the grade level scores are not valid. If your points fall in different parts of the graph, select three more 100-word segments. Your Material has a wide range of readability.

1.6 Simplified Measure of Gobbledy Goop (SMOG Formula)

G. Harry McLaughlin [17] published his SMOG formula in the belief that the word length and sentence length should be multiplied rather than added.

The SMOG Readability Formula is a simple method you can use to determine the reading level of your written materials. If a person reads at or above a grade level, they will understand 90-100% of the information. Generally, you need to aim for a reading level of sixth grade or less. In addition, to ensure that the text is clear and readable, read your draft aloud.

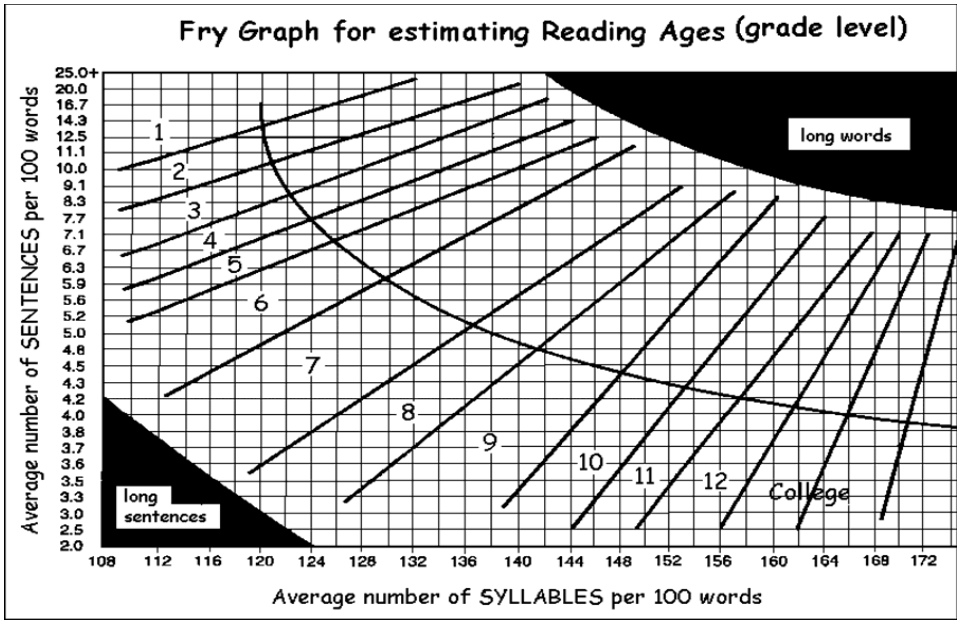
1.7 How to Use the SMOG Formula

1.7.1 For materials containing > 30 sentences

1. Count off 10 consecutive sentences at the beginning, middle and end of the text
2. Count the number of words with three more syllables in the 30 sentence sample
3. Use the answer to step 2 to look up the reading grade level in the chart below

1.7.2 For materials containing < 30 sentences

1. Count the number of sentences
2. Count the number of words with 3 or more syllables in the sample
3. Divided the number of sentences in the sample into 30 (i.e. 30/25) and multiply this number by the number of words from step 3
4. Use the answer to step 3 to look up the reading grade level in the chart



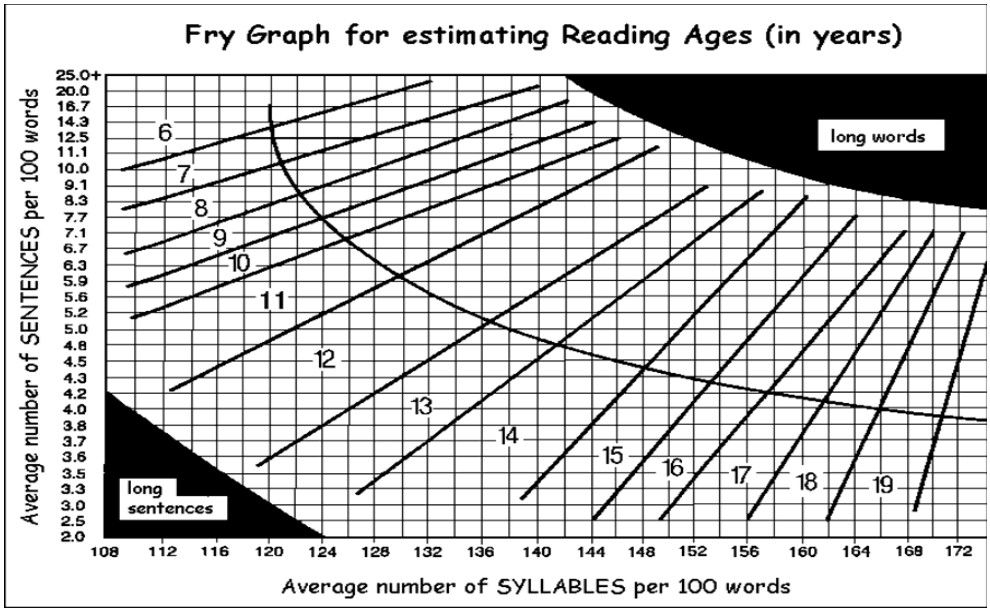


Fig. 1. Fry graph

Table 1. Distributions of syllables and the approximate reading grade

Number of words with 3 or more syllables in a 30 sentence sample:	Approximate Reading Grade Level (plus or minus 1.5 grades)
0 – 2	4
3 – 6	5
7 – 12	6
13 – 20	7
21 – 30	8
31 – 42	9
43 – 56	10
57 – 72	11
73 – 90	12
91 – 110	13
111 – 132	14
133 – 156	15
157 – 182	16

1.8 "SMOG" Conversion Chart

1.8.1 Flesch grade level readability formula

In 1948, Flesch published a second formula with two parts. The first part, the Reading Ease formula, dropped the use of affixes and used only two variables, the number of syllables and the number of sentences for each 100-word sample. It predicts reading ease on a scale from 1 to 100, with 30 being "very difficult" and 70 being "easy." Flesch (p. 225) wrote that a score of 100 indicates reading matter understood by readers who have completed the fourth grade and are, in the language of the U.S. Census barely "functionally literate."

The second part of Flesch's formula predicts human interest by counting the number of personal words (such as pronouns and names) and personal sentences (such as quotes, exclamations, and incomplete sentences).The formula for the updated Flesch Reading Ease score is:

Score = 206.835 – (1.015 x ASL) – (84.6 x ASW)

Where

1- Score = position on a scale of 0 (difficult) to 100 (easy), with 30 = very difficult and 70 = suitable for adult audiences.
2- ASL = average sentence length (the number of words divided by the number of sentences).
3- ASW = average number of syllables per word (the number of syllables divided by the number of words).

This formula correlates .70 with the 1925 McCall-Crabbs reading tests and .64 with the 1950 version of the same tests.

In The Art of Readable Writing, Flesch ([18], p. 149), described his Reading Ease scale in this way (Table 2):

Table 2. Flesch's reading ease formula

Reading ease score	Style description	Estimated reading grade	Estimated percent of U.S. adults (1949)
0 to 30:	Very Difficult	College graduate	4.5
30 to 40:	Difficult	13th to 16th grade	33
50 to 60:	Fairly Difficult	10th to 12th grade	54
60 to 70:	Standard	8th and 9th grade	83
70 to 80:	Fairly Easy	7th grade	88
80 to 90:	Easy	6th grade	91
90 to 100:	Very Easy	5th grade	93

Flesch's Reading Ease formula became the most widely used formula and one of the most tested and reliable [19,20].

1.8.2 Are readability formulas available for other languages?

Klare [13] reported that there are readability formulas for 14 languages. Problem occurs in non alphabetic language like Chinese which is written in characters. The inputs for Chinese are vocabulary. Other languages have problems as in the Spanish words has many longer words than English.

2. STATEMENT OF THE PROBLEM

Reading in the foreign language is nowadays very important since reading is a tool for communication. It is considered an important skill because it helps us develop our thinking. Many researchers emphasized the importance of supporting students with enough reading tasks in order to enhance their thinking abilities [21]. Despite the obvious need for improving Jordanian school students' reading skills, the students' level of proficiency is not good enough and their weakness in reading is still observable (Graber et al. [22] and King et al. [23), the need for developing our school students' reading skill and the need to determine to what extant do the texts match students` levels is a must.

As a result, many formulas, which are related to readability, have been emerged to help teachers and authors in determining the level of the different texts and find out if they are readable for the learners or not. But do these formulas really help teachers in revealing the suitability of the texts levels?, are they suitable to assess texts that are designed for the EFL learners?

2.1 Purpose of the Study

This study aims at exploring the different perspectives for the effectiveness of readability formulas (Fry Graph, SMOG and Flesch Grade) and to shed the light on their effectiveness in assessing the readability of Action Pack reading texts for tenth, seventh and ninth grades in Jordan.

2.2 Questions of the Study

1- To what extent do the readability formulas help in revealing the exact level of the reading texts Which are taken from Action Pack Curriculum and designed for ESL learners?

2.3 Definition of Terms

2.3.1 Readability

Klare [20] defines readability as "the ease of understanding or comprehension due to the style of writing." This definition focuses on writing style far away from content, coherence, and organization.

For experts in the field of reading the term readability is the 'problem of matching reader and text Gilliand, [24] "Readability is what makes some texts easier to read than others.

In this study readability is the degree of how the text can be read by the students.

2.3.2 Readability formulas

Formulas are designed by researchers in order to assess the readability of any given texts. It is designed to help teachers, curriculum designers, students and parents to reveal the level of readability for any text and make decisions concerning choosing the suitable texts to be read

by the learners. They provide an easy and quick way to reveal readability of a text. They are a practical. There are more than thirty readability formulas available for assessing texts for instance Fry Graph, SMOG and Flesch Grade.

2.3.3 Action pack curriculum

It is the curriculum which the Ministry of Education in Jordan sets for the Jordanian students in the elementary stages (from first grade till tenth grade).

2.4 Students` Levels

Students` levels mean the students grades since the elementary stages in Jordan are divided into ten levels starting from grade one till grade ten and according to these grades the Action Pack text books are distributed to ten levels or grades in order to suite each level.

2.5 Limitation of the Study

This study is limited to the Jordanian Curriculum "Action Pack" for 9th, 7th and 1st grades for the academic year 2016/2017.

2.6 Significance of the Study

Due to the importance of reading skill in acquiring the English language specially to the ESL learners and the importance of providing ESL learners with suitable readable texts, the idea of using the readability formulas in assessing the readability of the Action Pack texts books, which are designed to ESL learners, is highlighted since these formulas are widely used. The results may reveal their effectiveness in determining the students` levels or they may not.

3. STUDIED RELATED TO THE FIELD OF READABILITY

3.1 Local Studies Dealing with the Readability of the Textbooks

Jadaan [25] conducted a study aimed at measuring the readability level of the texts in Loughtouna Al- Arabiyya for the fifth grade and to determine the difficulty of the texts. The results of the study showed that the following findings: (22.03%) of the students were in the instructional level. (50.76%) were in the independent level and (27.2%) of the students were in the frustration level. And the texts were not ordered from the easiest to the most difficult, so they need to be ordered.

Rawashdeh [26] investigated the readability level and the degree of the students` involvement in the seventh grade Loughatuna Al – Arabiyya textbook. He used the cloze test to measure the text book readability level. The population of the study consisted of, seventh grade male and female graders enrolled in public school in Karak for the academic year 1995/1996 (4530 students in 129 schools) and the sample consisted of seventh grade textbook "Loughtuna Al-Arabiyya" which included 18 lessons. The findings showed that the readability level was low and the students` involvement through the teaching materials and the activities was appropriate.

Najadat [27] conducted a study to analyze the content of literary text and reading textbooks for the eighth, ninth and tenth graders in the elementary education in the light of readability of (the word, sentence, idea and style). The sample consisted of eleven texts selected by randomly regular stratum method was used which had three texts from the elementary eighth textbook. Four texts from the elementary ninth text book and four texts from the elementary tenth texts book were statistically analyzed for instance repetition and percentages were used so findings revealed that there was not found a balance between or graduation in words, sentences and style fields , while a balance or graduation seems to be found in the idea field.

Masri [28] conducted a study to investigate the readability of the tenth grade text book, the effect of gender and Area of residence. The sample of the study consisted of (308) males and females of the tenth graders during the academic year 2006/2007. The researcher used the cloze test and the descriptive statistics namely the means standard deviations and percentages of the students in the readability level. Results showed that there were significant differences due to the student's gender and Area of residence. There were no significant statistical differences at a=0.05 due to the interaction between the gender of the students and the region they belong to. The results of the study showed that the readability level of the tenth grade English text books was very low which means it is at all frustration level. This means that the students have difficulties in understanding the passages even with the help of the teacher.

3.2 Foreign Studies Dealing with the Readability of the Textbooks

Baldauf et al. [29] assessed the effectiveness of readability indices, standard cloze procedure, and the matching size procedure as determinants of the readability of supplementary English materials for elementary ESL students in a Pacific Island context. A review of readability indices and the standard cloze procure indicated that neither procedure is an adequate measure of text readability, according to the study. Readability indices are identified as not adequately considering differences in sentence and paragraph, structure, which are considered a major factor in difficulty levels of elementary ESL texts. They state that the standard cloze procedure is too difficult for most beginning ESL pupils because of the production skills necessary to complete the task. The matching cloze procedure is said to show excellent reliability, and generally correlated more highly with criterion measures for readability.

Schneider [30] determined the readability of textbooks should allow teachers to select books that appropriately challenge the functional reading skills of their students. Gunning's (1968) FOG index was utilized to determine the average readability of 24 contemporary textbooks that employ a hybrid approach to the basic speech communication course. Twenty-five reading samples from each text were analyzed. Means, standard deviations, and relevant statistics are reported. Pragmatic use of the FOG index is discussed and some strategies for developing reading skills are suggested.

Ward [31] delivered a study to assess the perception that educational materials of the Cooperative Extension Service are difficult to read. The Flesch Reading Ease formula was used to measure readability levels of 130 bulletins used in tourism industry education. Findings indicated that the mean readability level approximated the level of articles found in academic journals .About ninety-percent of the bulletins fell within the readability range of materials that are typically encountered by the readers ranging from sixth grade through some college completed.

Karlinsky and Koch [32] chose a student lab experiment which in which eighty-nine subjects were randomly assigned to four experimental conditions the subjects received either a Code reading or a Commentary reading. The subject's answerer fifteen questions about the reading and rated the complexity of the reading on five dimensions. The subjects assigned to the Code reading had significantly fewer correct responses and took significantly longer to answer the questions than subjects assigned to the Commentary reading. Also, the Code reading was perceived by the subjects to be significantly more complex thing the Commentary reading. These experimental results are in contrast to the Flesch Readability Formula and Gunning Fog Index readability level of the two passages, which showed the two presentation styles (code/legal and com,rr/.erUary/prose) to be of approximate equal difficulty. This experiment gives a specific instance in which the standard readability indexes by themselves are not useful in measuring readability and comprehensibility of income tax material.

Al-Khalifa and Al-Ajlann [33] conducted a research thorough review of the literature on text readability, which covered related work both in the Arabic and English languages. In fact, English language readability research has been thorough, while Arabic readability research is limited and did not get enough attention from Arab researchers. The absence of such automated readability measurement of Arabic texts and the large amount of information in Arabic books and on web sites encouraged us to work on this language, which is the mother tongue of millions of Muslims.

Therefore, their research presents a solution for classifying Arabic texts into readability levels that match their appropriate readers' reading levels. Results show that a combination of three features (average sentence length, word frequency, and statistical language model) is the most effective in the readability classification process. A more accurate classification was reached when we applied such a combination, with a result of 11.77%. This can be considered a reasonable result for a first research project in Arabic text readability. The result achieved in this research showed that it is possible to automate the process of identifying the readability level of Arabic text using machine learning techniques.

Yılmaz GEÇİT and Çayeli-Rize [34] evaluated readability of 9th and 11th grade geography textbooks currently used in schools. CLOZE and FOG tests were used to test the readability of geography textbooks. While the CLOZE test and FLESH formula give information largely on the level of readability of books, the FOG and SMOG

formulas are being used to determine the suitability of books for age level of students. However, these tests and formulae have been developed in accordance with the grammar structure of English on the basis of lengths of syllables, words, and sentences. Thus, the Turkish application may show some anomalies. In this study, previously adopted and translated to Turkish version of the original tests and formula were applied. As conclusion, this study shows that the readability of the 9th and 11th grade geography books in Turkey is very low with respect to the CLOSE test, in medium strength with respect to the FLESH test. With respect to the FOG and SMOG tests, texts in the books are not suitable for age level of students .

Burke and Greenberg [35] explained in their research that there are many readability tools that instructors can use to help adult learners select reading materials. They describe and compare different types of readability tools: formulas calculated by hand, tools found on the Web, tools embedded in a word processing program, and readability tools found in a commercial software program. Practitioners do not need expensive software or extensive training to determine reading levels of materials. Also, they include instructions for using the Flesch Reading Ease, FleschKincaid, SMOG, Dale-Chall, Spache, FORCAST, Fry, and RIX readability formulas and thus to give adults chances to improve their reading skills, so they need to be engaged to authentic texts written at appropriate reading levels.

Moreover they mention that at least one study has shown that reading texts at the correct reading level resulted in fluency gains for adult basic education students. It is important to think about matching the text difficulty with an individual's reading level. In fact, in the general society, most people prefer to read materials that are written two to three grade levels below their educational level therefore, realize that adult literacy learners may also prefer materials written a few grade levels below their reading ability for leisure reading.

Gallagher and Gunning [36] investigated through comparing readability formula to publishers' identified reading levels in science-based elementary readers. Nine well-established readability indices were calculated and comparisons were made with the publishers' identified grade designations and between different genres of text. Results reveal considerable variance among the 9 formula. All formulas tend to inflate readability calculations for nonfiction science-based text, whereas fiction science-based text was more closely aligned to the publishers' grade levels. Implications are discussed for elementary teachers' awareness of readability variances in science-based resources, and the professional learning that is required to support the use of elementary readers, including understanding the limitations of using common readability metrics.

Zamanian, and Heydari, [37] analyzed the predicted readability of six current advanced accounting texts utilizing the Flesch-Kincaid Grade Level index. T-tests are performed to determine whether significant differences in readability exist among the textbooks chosen for the study. No significant differences among the texts in terms of overall readability are found; however, some variation in readability level was discovered within topic coverage.

Begeny and Greene [38] conducted a study to assess the link between level reading passages and students' actual ORFrates.ORF rates of 360 elementary-aged students were used to determine whether reading passages at varying grade levels are, as would be predicted by readability levels, more or less difficult for students to read. Results showed that a small number of readability formulas were fairly good indicators of text, but this was only true at particular grade levels. Additionally, most of the readability formulas were more accurate for higher ability readers.

In short, all the presented studied above tried to use different readability formulas in order to assess the level of readability of textbooks for different grades. Although the results of the some studied supported the usage of the formulas since they were very effective in revealing the levels of the texts for instance the local studies such as Masri [28] and Najdat [27, most of the presented studied were against the usage of readability formulas since they did not help in determining the exact level of the chosen texts such as Burke and Greenberg [35] and Karlinsky and Koch [32].

3.3 The Sample of the Study

The sample of this study consists randomly selection of the reading materials that are taken from the Action Pack texts books which are

adapted by the Ministry of Education for the academic year 2016/ 2017.

3.4 Instruments of the study

The instruments of the study are chosen from the common and widely used readability assessment formulas. Appropriateness of the tested linguistic item is as follows:

1. Fry Graph.
2. Smok |Formula.
3. Flesch-Kincaid Grade level

3.5 Implementation of the Study

The researchers chose reading texts depending on the formulas conditions to have in each texts 100 words and thus to be assessed using any formulas then conducting handed calculations for formulas and contrasting them with the levels they provide to sort and find out the exact levels of the learners

1. Fry Graph: Action Pack for ESL tenth graders. The researcher chose randomly two texts Move Ahead (Mcmillan) for native tenth graders. The researcher chose randomly two texts
2. Smok |Formula: Action Pack for ESL seventh graders. The researcher chose randomly two texts Move Ahead (McMillan) for native seventh graders. The researcher chose randomly two texts
3. Flesch-Kincaid Grade level: Action Pack for ESL first graders .The researchers chose one text Reading lessons (Teach your child how to read) randomly for native pre-school learners.

4. RESULTS

Each Readability assessment tools was used separately with assessing different texts.

The Table 3 illustrates that there are a clear variation in the agreement between the level of the learners and the texts exact levels.

5. DISCUSSION

5.1 To What Extent do the Readability Formulas can Help in Revealing the Exact Level of the Learners for the Native Speakers)?

According to the results that are in presented Table 3 all the readability assessment formulas are not helpful. Due to the variation it can be seen clearly through the wrong matching between the grade exact levels and the levels which are presented by the formulas. In Fray Graph Formula, although the text has many difficult words to pronounce and they are up to the students `level but it matches with ninth graders. While the native curriculum natives for 9^{th} grade it does not match .According to the Fray Graph the selected reading material is suitable for 11^{th} grade.

Table 3. Comparative between the readability assessments tools formulas testing results of the chosen texts

Students grade /ESL or Native speaker	The name of the assessment readability tool	The determined level of the text according to the Readability formulas	The determined level of the text according to the action pack curriculums
ESL 9^{th} Grade	Fry Graph	9^{th} graders although the text has many difficult words to pronounce and they are up to the students `level	9^{th} graders
Native 9th Grade		11^{th} graders	9^{th} graders
ESL 7^{th} Grade		6^{th} graders	7^{th} graders
Native 7^{th} Grade	SMOG |Formula	8th graders	7^{th} graders
ESL 1^{st} Grade	Flesch-Kincaid	We do not have 100 words texts	1^{st} graders
Native 1^{st} Grade	Grade level	Pre-school	1^{st} graders

The results related to the SOMG Formula show that the wrong matches between the selected reading materials for 7th grade (Action Pack) since it is suitable for 6th graders according to the formula. While the results for selected reading materials for natives in 7th grade show that – according to SMOG formula- suitable for 8th grade.

Moreover, the results related to the Flesch-Kincaid Grade level Formula show that the wrong matches between the selected reading materials for 1st grade (Action Pack) since it is we do not have texts contains 100 words .Most of reading texts in the first grade textbook consist of short dialogues. These dialogues contain three up to seven words in the target language. On the other hand, the results for selected reading materials for natives in 1st grade suite the pre-schools.

Finally, according to the results that are in presented Table 3 all the readability formulas are not helpful to determine the readability of the texts for both ESL and International (native language) learners .And thus can be seen clearly through the variation of the results in determining the exact levels and the real level of the given texts. Chall and S. TITLE [19] emphasis on the importance of some factors, such as sentence length and vocabulary, that make texts easy or hard to read and understand. But according to the presented formulas none of them consider these factors.

Al-Khalifa and Al-Ajlan [33] explain that there are some factors affect assessing readability .They classifies them into two categories: reader factors and text factors.

1) Reader Factors : vocabulary , sentence structure, the prior knowledge ,experience, interest, and motivation of the reader affect in one way or another text's readability and of course the presented formulas do not put these factors in calculating
2) Text Factors for instance:

    A. Certain aspects of words such as word length, word frequency, vocabulary load, and using unusual or abstract words
    B. The number of parenthetical clauses. i.e. Topology, metaphor, and simile usually affect the readability and grammatical structure complexity affect text readability.
    C. Spacing between the sentence parts (such as between the subject and the verb), separating pronouns and the words that they refer to, and using the passive voice more than the active voice.

But all the presented formulas deal with the texts ignoring the importance factors that are related to the student's characteristics and their individual differences. Reading levels and readability formulas do not create lifelong readers, these formulas do not help to develop the needed skills that will allow students to read. Carter (2000) illustrates that teachers teach the skills that will allow readers to read.

6. CONCLUSION

Due to the importance of reading skill in achieving the communication goals that teachers, curriculum designers and supervisors are looking for, many readability formulas are emerged since early 1923 to facilitate and enhance reading process since through testing the readability of the given reading materials. As a result, many formulas are conducted wieldy on the reading material for the native speakers while reading materials in other languages are neglected or rarely used these formulas.

It is crystal clear that the three presented formulas in this research paper (Fray Graph, Smog formula and Flesch), which are used to assess the readability of the selected reading materials and to shed the light on the their appropriateness in determining the exact level of, are not effective enough to reveal the exact level of the selected material since after the application process results show the non-matching between the students` levels and the selected materials` levels and thus due to the fact. That English Language in Jordan is a foreign language while it is the mother language for the all designers of these formulas as Fry [12] illustrates the usage of their mother language:

> *"Important influence on American education and the selection of school reading materials. To a lesser extent readability has influenced written communication in the armed services, Industry, government, and law. Some important practical uses of readability outside of Textbooks are: Newspapers - Rudolf Flesh was hired by the Associated Press to bring Down the readability of front page news stories - he did*

(from Grade 16 to Grade 12). Public Health - Schools of Nursing found the need for materials on illness prevention and correction So they include readability formulas in some of their textbooks Insurance - A number of state Insurance Commissioners demand that policies issued in their state be "readable". "

As a result, the learners are different.ESL learners defiantly are not in equal levels with the international or native learners and thus can be difficult to be achieved through these formulas. Therefore, the idea of generalizing these formulas to be used widely in assessing readability in all English Language texts should be rejected since the reading materials that are designed to be taught to the native speakers are totally different from materials that are used for ESL students Armdrustn, Osborn and Davison [39] suggest that:-

"""Readability formulas can be dangerous to your textbooks"""""

Text books that are composed to meet readability formulas are sometimes harder to understand there are more sensible ways to match textbooks and students. Children can read and understand texts within a wild range of difficulty and it is probably to the their advantage to do so.

They strongly urge text books adaption committees and teachers to stop demanding texts books with specific readability levels and we urge authors and publishers to retain from writing to formula. They mention an example for a biology teachers who teaches 6th graders science. In this example they mentions that the teachers can replace some difficult words from the provided text then it becomes readable, although it is assessed as harder text according to the readability formula. The teacher realizes that the text can be read although of the difficult words it has.

Finally, different readability formulas that are widely used determine the difficulty and levels of the text which are designed for the native speakers, while ESL learners they are not effective since the language that are presented to the ESL learners is different in levels and difficulty and thus can be seen through the Action Pack textbooks.

7. RECOMMENDATION

Teachers, researchers, curriculum designers and supervisors to conduct further investigations to reach the expected accuracy level of matching between reading materials and ESL students.

Their research lay out the foundation for developing an automated tool that will potentially help teachers and writers to measure the readability of their writing or to select appropriate reading materials for ESL learners. Another added value of this research is that it will investigate Arabic text readability features and employ advanced computational techniques to extract them.

COMPETING INTERESTS

Authors have declared that no competing interests exist.

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