

The Readability of the Texts in the Turkish Textbooks in Turkey

Türkiye'de Kullanılan Türkçe Ders Kitaplarındaki Metinlerin Okunabilirlikleri

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Abstract: It is of paramount importance that educational textbook texts are written in a language parallel to the age and development levels of the students. The central question of the present research is determined is: "What are the readability scores and education levels of the texts in the Turkish textbooks in Turkey?" The present study was conducted to determine the length of the words and sentences, the readability and education levels of the texts in the Turkish textbooks was carried out according to a descriptive survey model. The system and sample choices were not used, as the case would be determined in the research. The data of the research was obtained by applying the "Çetinkaya-Uzun Readibility Formula" to the texts in the Turkish textbooks prepared by the MEB publishing house according to new education program. The readability scores and education levels of the examined texts were determined.

Keywords: The mother tongue textbooks in Turkey, texts, readability.

Özet: Araştırmanın problem tümcesi, "Türkiye'deki Türkçe ders kitaplarında yer alan metinlerin okunabilirlik puanları ve eğitim düzeyleri nedir?" olarak belirlenmiştir. Türkiye'deki Türkçe ders kitaplarındaki metinlerin okunabilirlik ve eğitim düzeylerini belirlemek amacıyla yapılan çalışma tarama modelinde ve betimsel niteliktedir. Araştırmanın verileri, "Çetinkaya-Uzun Okunabilirlik Formülü" Türkiye'de MEB yayınevince yeni öğretim programına göre hazırlanan Türkçe ders kitaplarındaki metinlere uygulanarak elde edilmiştir. İncelenen metinlerin okuma puanları ve eğitim düzeyleri belirlenmiştir. Çalışma sonucunda elde edilen veriler ışığında, bilgilendirici ve öyküleyici metinlerin okunabilirlik puanları ve eğitim düzeyleri ilişkisinin farklılık gösterdiği belirlenmiştir. Bilgilendirici metinlerin okurun yaş düzeyini, göz ardı ederek seçilirken, öyküleyici metinlerin bilgilendirici metinlere oranla ulaşılması istenen çocuk okurun eğitim düzeylerine daha uygun oldukları gözlemlenmiştir.

Anahtar Sözcükler: Türkiye'deki anadili ders kitapları, metinler, okunabilirlik.

Introduction

Textbooks are the most important resource in any educational system. In this aspect, the most important role in developing the goals and gains in education is assumed by the textbooks. Textbooks assume a great role in realizing the gains according to the goals of the Turkish course, learning domains and grades in the process of mother-tongue teaching. It is specifically recognize that the conventional textbooks are the main and common instrument for teaching Turkish language" of Turkish Education Program in Turkey (2002). In fact, according to Ceyhan and Yiğit (2004), and Yalçın (1996) cite the textbooks as the main instrument used in education. According to a research conducted by Özbay (2002), the Turkish textbooks ranks the first with a 94.44% score among educational instruments used in classes by the Turkish

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language teachers. While Çoşkun (2003) states that the students from the lower socio-economic levels have difficulty in finding books to read except for textbooks, Sever (2003) suggests that the texts and books that children had access to during the primary education are significant determinants in terms of gaining reading habit. It is significant to point out that the texts in the textbooks are written in a language parallel to the age and development levels of the students. The specification of "The word and sentence structures used should be parallel to the student's level" in the MEB Textbook Regulations (1995). It is determined in the conducted research that there is a directly proportional relation between the age and the sentence length used by the children (Thorndike, 1916; Johnson, 1946; Dökmen and Dökmen, 1988; Acarlar and Dönmez, 1992; Güleryüz and Dönmez, 1992; Ege, Acarlar and Güleryüz, 1998; Acarlar, Ege and Turan, 2002). In this respect, longer sentences should be included in the textbooks as the children grow older. It is also an obstacle for the reader that the length of texts or words and sentences used in the texts are longer or shorter compared to the level of age.

The concept of readability in the Primary Turkish Course 1st-5th grades Education Program is discussed as follows: "The short and simple sentences in the children book increase the readability; it is the same case with the words". The readability is the more or less acceptability of the linguistic features in the text by the reader (Klare, 1963). The concept of readability is described as the easy reading of the words and sentences and this concept is stated as the feature of text clarity (Dubay, 2007). According to Cetinkaya (2010), the readability formula is the prediction instruments aiming to classify the texts in terms of reading difficulties or easiness based on the structural features of the text. Rye (1982) talks about 11 elements affecting the readability of the text: The skill and reading will of the child, physical environment, press type, column width and line spacing, goal of reading, organization of the text, the importance of the subject, the word frequency, the word length and syntax. Chall (1988) states that the readability studies date back to Plato and Aristotle. According to Cetinkaya (2010), "The primary goal of the readability studies is to develop objective solutions in order to match the reading skills of the student and adult with the reading instruments. These efforts focus on developing the formula that can easily be applied and used by teachers and writers". The readability formula developed by Vogel and Washburne in 1928 is the first formula to be considered. Here are some readability formula developed in various countries: " Dale-Chall Formula", "Flesch Formula", "Powers-Sumner-Kearl Readability Formula", "Smog Readability Formula", "Gunning Fog Index", "Fry Graphic Readability Formula", "Coleman Readability Formula" and "Bormuth Average Subtraction Formula". Atesman (1997) created a formula for the Turkish texts based on the Flesh's formula. Flesh's formula, entitled as the "ease of reading", was adapted into Turkish based on the English and Turkish structural differences. According to Çetinkaya (2010: 61), "the statistical analysis forming a basis for the formula in the aforementioned study is not mentioned. On the other hand, the relational match or effect coefficient of the variables, which Flesh based in the aforementioned formula, with the readability of the Turkish texts, and the degree of its effect on the system are not mentioned in the study". "Çetinkaya-Uzun Readability Formula" (Çetinkaya 2010) to be used in the calculation of the readability scores of the texts in the study are developed to measure the readability of Turkish texts; and created for Turkish independent of the formula developed for other languages.

There a number of studies on readability: Ateşman (1997); Kaya (1998); Güneş (2000); Temur (2002); Sönmez (2003); Temur (2003); Budak (2005); Tekbıyık (2006); Çiftçi, Çeçen and Melanlıoğlu (2007); Zorbaz (2007); Demir (2008); Solmaz (2009); Bezirci and Yılmaz (2010); Özcan (2011). The studies are determined for the Turkish textbooks in these studies conducted by Kaya (1998), Temur (2002), Tekbıyık (2006), Çiftçi, Çeçen ve Melanlıoğlu (2007), Zorbaz (2007), Demir (2008); however, Çetinkaya-Uzun readability formula were not used in these studies.

The central question of the research is "What are the readability scores and education levels of the texts in the Turkish textbooks in Turkey?"

The sub-problems of the present research that are sought be solved are as follows:

- 1. What is the length of words and sentences in the informative texts in the Turkish textbooks?
- 2. What is the length of words and sentences in the narrative texts in the Turkish textbooks?
- 3. Does the length of words and sentences change according to text types, informative or narrative?
- 4. What are the levels and scores of readability in the informative and narrative texts in the Turkish textbooks?
- 5. Does the level of readability change according to the text types, informative of narrative?
- 6. Are the scores of readability parallel to the education levels determined?

The main goal of this study is to determine the length of words and sentences, readability and education levels in the Turkish textbooks.

Method and Application

The Research Model and Approach

The study conducted to determine the length of the words and sentences, the readability and education levels of the texts in the Turkish textbooks is a descriptive survey model.

System and Sample

The system and sample choices were not used, as the case would be determined in the research. The examined texts are shown below according to number in the books and types, narrative or informative:

Books	Informative	Narrative	Total	
6. Grade	9	8	17	
7. Grade	11	5	16	
8. Grade	9	10	19	
Total	29	23	52	

Table 1. The distribution of the examined texts to the books and writing style

As is seen in Table I, there are 9 informative texts in the Turkish textbooks of 6^{th} grade, 11 informative texts in the books of 7^{th} grade, 9 informative texts in the books of 9^{th} grade; there are 8 narrative texts in the books of 6^{th} grade, 5 narrative texts in the Turkish textbooks of 7^{th} grade, 10 narrative texts in the books of 8^{th} grade. While there is a balanced distribution between the narrative and informative texts in the Turkish textbooks of 6^{th} grades, the number of informative texts in the Turkish textbooks of the 7^{th} grade is more compared to the narrative texts.

The Collection and Analysis of the Data

According to Temur (2003: 178), a formula used to determine the readability levels of English texts will produce faulty results if they were to be used in a Turkish text; since the number of syllables in a word is the number of vowels in Turkish language; The syllable system in English is rather different.

For example,

There is a book on the table. (*Number of syllables: 8*) Masanın üstünde bir kitap var. (*Number of syllables:10*)

In the readability formula of the Ateşman (1997), frequently used in the readability studies, the Flesh's formula, named as "ease of reading", is adapted into Turkish based on the structural differences between the English and Turkish.

The formula to calculate the readability of the texts in this study is the "Çetinkaya-Uzun Readability Formula" and it is developed to measure the readability of the Turkish texts; and it is formed for Turkish independently of the formula developed for other languages. Two measurements are used in the "Çetinkaya-Uzun Readability Formula": (1) The average word length (AWL) and (2) the average sentence length (ASL). The readability scores (RS) of the texts are determined with the following directives: count the words, count the sentences, count the syllables, find the average sentence length (divide the total number of words with the total number of sentences to find the average sentence length), find the average word length (divide the total number of syllables with the total number of words to find the average word length), calculate the formula. (RS=118,823 – 25,987 x AWL – 0,971 x ASL)

The readability scores of the text is calculated as a result of the process, in which the average sentence length and average word length of the text found as a result of the implementation of the aforementioned process steps are included in the equation of the formula. The readability scores determined as a result of this calculation are evaluated according to the table below:

Table 2. The readability and education levels determined in the light of readability scores in the "Çetinkaya-Uzun Readability Formula"

Readability Score	Readability Level	Education Level
0 - 34	Frustration Level	10 th , 11 th and 12 th Grade
35 - 50	Instructional Reading	8 th and 9 th Grade
51 +	Independent Reading	5 th , 6 th and 7 th Grade

The reading levels used in the table are described as follows: "The Independent Reading Level: it is the level that reader can process and make sense of the text without any help. The Instructional Reading Level: It is level that reader can process and make sense of the text with the help of an educator. The Frustration Reading Level: It is the level that a reader cannot process and make sense of the text over their cognitive level even with the help of an educator". (Çetinkaya 2010).

The research data are obtained from the texts in the Turkish textbooks prepared according to the new education program by MEB publishing house. The number of words is examined for the average sentence length, and the number of syllables is examined for the average word length. The number of sentences in the texts is examined to determine the readability. Afterwards, by applying the "Çetinkaya-Uzun Readability Formula" to aforementioned texts in the light of above-stated directive, the reading scores of each text are determined and these scores are interpreted according to the Table II.

Findings

The findings obtained in the light of sub-problems of the research are as follows:

1. The word and sentence length of the informative texts in the Turkish textbooks

Grade	Name of the Text	Average Length	Word Average Sentence Length
6 th grade	¹ grade Read on		13.34
6 th grade	Atatürk and his great work	2.89	10.43
6 th grade	Appreciation of Women's Social and Political Rights	2.87	12.25
6 th grade	Lifetime of Happiness	2.64	9.53
6 th grade	One Letter	2.91	7.43
6 th grade	Beypazarı	2.89	13.89
6 th grade	Received win or lose	2.72	7.44
6 th grade 6 th grade 6 th grade	Living in blue have lost	2.59	8.87
7 th grade	Mellifluence	2.50	9.6
7 th grade	Cartoon as a Communication Tool	2.91	15.25
7 th grade	Ataturk and Art	2.94	13.23
7 th grade	Ataturk and the Turkish Theatre	2.70	11.1
7 th grade	Turkish Language	2.80	12.78
7 th grade	Opening Doors to Life	2.91	12.04
7 th grade	Pessimism optimism	2.44	10.55
7 th grade	Anatolia Dart Games	2.73	10.23
7 th grade	Steppes Locums	2.60	14.87
7 th grade	Konya thirsty	2.84	10.86
8 th grade	Maiden's Castle	2.61	10.61
8 th grade	Old house in Ankara	2.80	11.54
8 th grade	Ataturk and Science	2.87	18.21
8 th grade	Koca Sinan	2.71	9.35
8 th grade	Nowruz and the Union	2.64	10.35
8 th grade	Aşinasız	2.78	7.87
8 th grade	Press Technology News	3.14	19.17
8 th grade	Computer loneliness	2.94	11.36

Table 3. The average	length of word	l and sentence in	ı the inform	ative texts examined

2. The length of words and sentences in the narrative texts in the Turkish textbooks

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Grade	Name of the Text	Average Length	Word Average Sentence Length
6 th grade	Children's Library the morning Debate	2.63	5.33
6 th grade	The Best Friend	2.60	4.22
6 th grade	Ataturk Memories	2.44	4.52
6 th grade	Ataturk Memories 2	2.66	6.19
6 th grade	Ataturk Memories 3	2.81	5.79
6 th grade	Ataturk and History	2.83	4.90
6 th grade	Meşe with Saz	2.26	4.33

Kuş Konmaz Hotels	2.46	3.39
Riddle	2.33	3.06
Navy floating dry land	2.93	4.69
Memories-Ataturk, before all else, the National	2.61	5.87
Its Universality of Ataturk Sense Memories-Here	2.70	5.06
10th year Speech	2.68	5.33
The old Locksmith	2.48	4.03
Ergenekon Epic	2.48	4.26
Said Çiğdem	2.54	4.50
Path to success in life	2.61	5.87
Two Good Human	2.68	4.85
A Success Story	2.73	5.63
	Hotels Riddle Navy floating dry land Memories-Ataturk, before all else, the National Its Universality of Ataturk Sense Memories-Here 10th year Speech The old Locksmith Ergenekon Epic Said Çiğdem Path to success in life Two Good Human	HotelsRiddle2.33Navy floating dry land2.93Memories-Ataturk, before all else, the National2.61Its Universality of Ataturk Sense Memories-Here2.7010th year Speech2.68The old Locksmith2.48Ergenekon Epic2.48Said Çiğdem2.54Path to success in life2.61Two Good Human2.68

Table 4 (cont.)

3. Does the word and sentence length of the texts change depending on its type, informative or narrative?

The text named as "İyimserlik Kötümserlik" in the Turkish textbook of 7th grade has the lowest average word length with 2.44 rate among the informative texts. The text having the highest average word length is the text named as "Basından Teknoloji Haberleri" in the Turkish textbook of 8th grade with 3,14 rate. The text named as "Bir Mektup (One Letter)" in the Turkish textbook of 6th grade has the lowest average sentence length with 7,43 rate among the informative texts. The text named as "Basından Teknoloji Haberleri" in the Turkish textbook of 6th grade has the lowest average sentence length with 7,43 rate among the informative texts. The text having the highest average sentence length is the text named as "Basından Teknoloji Haberleri" in the Turkish textbook of 8th grade with 19.17 rate.

The text named as "Meşe ile Saz (Oak and Reed)" in the Turkish textbook of 6th grade has the lowest average word length with 2.26 among the narrative texts. The text named as "Karada Yüzen Donanma (The Land Fleet)" in the Turkish textbook of 7th grade has the highest average word length with 2.93 rate. The text named as "Bilmece" in the Turkish textbook of 7th grade has the lowest average sentence length with 3.06 rate; the text named as "Atatürk'ten Anılar 2 (Atatürk Memoirs 2)" in the Turkish textbook of 6th grade has the highest average sentence length with 6.19 rate.

The lowest average word and sentence lengths should be in the texts of textbooks in 6^{th} grade in parallel to age and development level of the children. The highest average word and sentence lengths should be in the texts of textbooks of 8^{th} grade. However, while the text having the lowest average word length is in the Turkish textbooks of 7^{th} grade, the text having the highest average word length is in the textbook of 8^{th} grade in parallel to the development of children in the informative texts as a result of the study. Furthermore, while the lowest average sentence length is in the textbook of 6^{th} grade, the highest average sentence length is in the textbook of 6^{th} grade, the highest average sentence length is in the textbook of 6^{th} grade, the highest average sentence length is in the textbooks of 6^{th} grade, and the highest average word length is in the Turkish textbooks of 6^{th} grade, and the highest average word length is in the Turkish textbooks of 6^{th} grade, and the highest average word length is in the textbooks of 7^{th} grade, the lowest average sentence length is in the textbooks of 7^{th} grade, the highest average sentence length is in the textbooks of 7^{th} grade, the highest average sentence length is in the textbooks of 6^{th} grade. While the lowest average sentence length is in the textbooks of 7^{th} grade, the highest average sentence length is in the textbooks of 6^{th} grade.

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In this respect, the average values of word and sentence length used in the narrative texts are formed regardless of the age and development levels of children. In terms of informative texts, while this assumption is considered in the average sentence length, the fact that the lowest average word length is in the textbooks of 7^{th} grade is contrary to this situation.

4. The readability scores and levels of the informative and narrative texts in the Turkish textbooks

Table 5. The readability score, education levels of the informative texts examined and the compatibility of these two values

Grades	Texts	Readability Scores	Readability Scores (R.S.)	Education Level (E.L.)	Compatibility of R.S. and E.L.
6 th grade	Read on	33.88	Frustration Level	$(E.L.)$ $10^{th}, 11^{th}$ and 12^{th} Grade	INCOMPATIBLE
6 th grade	Atatürk and his great work	33.59	Frustration Level	$\begin{array}{ccc} 10^{\text{th}}, & 11^{\text{th}}\\ \text{and} & 12^{\text{th}}\\ \text{Grade} \end{array}$	INCOMPATIBLE
6 th grade	Appreciation of Women's Social and Political Rights	32.24	Frustration Level	$\begin{array}{ccc} 10^{\text{th}}, & 11^{\text{th}}\\ \text{and} & 12^{\text{th}}\\ \text{Grade} \end{array}$	INCOMPATIBLE
6 th grade	Lifetime of Happiness	40.96	Instructional Reading	8 th and 9 th Grade	INCOMPATIBLE
6 th grade	One Letter	35.98	Instructional Reading	8 th and 9 th Grade	INCOMPATIBLE
6 th grade	Beypazarı	30.23	Frustration Level	$\begin{array}{ccc} 10^{\text{th}}, & 11^{\text{th}}\\ \text{and} & 12^{\text{th}}\\ \text{Grade} \end{array}$	INCOMPATIBLE
6 th grade	Received win or lose	40.91	Instructional Reading	8 th and 9 th Grade	INCOMPATIBLE
6 th grade	Living in blue have lost	42.90	Instructional Reading	8 th and 9 th Grade	INCOMPATIBLE
6 th grade	Kırkikindiler	42.24	Instructional Reading	8 th and 9 th Grade	INCOMPATIBLE
7 th grade	Mellifluence	44,53	Instructional Reading	8 th and 9 th Grade	INCOMPATIBLE
7 th grade	Cartoon as a Communication Tool	28.39	Frustration Level	$\begin{array}{ccc} 10^{\text{th}}, & 11^{\text{th}}\\ \text{and} & 12^{\text{th}}\\ \text{Grade} \end{array}$	INCOMPATIBLE
7 th grade	Ataturk and Art	29.57	Frustration Level	$\begin{array}{ccc} 10^{\text{th}}, & 11^{\text{th}}\\ \text{and} & 12^{\text{th}}\\ \text{Grade} \end{array}$	INCOMPATIBLE
7 th grade	Ataturk and the Turkish Theatre	37.7	Instructional Reading	8 th and 9 th Grade	INCOMPATIBLE
7 th grade	Turkish Language	33.65	Frustration Level	$\begin{array}{ccc} 10^{\text{th}}, & 11^{\text{th}}\\ \text{and} & 12^{\text{th}}\\ \text{Grade} \end{array}$	INCOMPATIBLE
7 th grade	Opening Doors to Life	31.5	Frustration Level	$ \begin{array}{c} 10^{\text{th}}, 11^{\text{th}} \\ \text{and} 12^{\text{th}} \\ \text{Grade} \end{array} $	INCOMPATIBLE
7 th grade	Pessimism optimism	45.17	Instructional Reading	8 th and 9 th Grade	INCOMPATIBLE
7 th grade	Anatolia Dart Games	37.94	Instructional Reading	8 th and 9 th Grade	INCOMPATIBLE

Table 5 (cont	•)				
7 th grade	Steppes Locums	36.81	Instructional Reading	8 th and 9 th Grade	INCOMPATIBLE
7 th grade	Konya thirsty	34.47	Frustration Level	$\begin{array}{ccc} 10^{\text{th}}, & 11^{\text{th}}\\ \text{and} & 12^{\text{th}}\\ \text{Grade} \end{array}$	INCOMPATIBLE
7 th grade	Anatolia Hospitality	35.59	Instructional Reading	8 th and 9 th Grade	INCOMPATIBLE
8 th grade	Maiden's Castle	40.69	Instructional Reading	Grade 8 th and 9 th Grade	COMPATIBLE
8 th grade	Old house in Ankara	34.85	Frustration Level	10 th , 11 th and 12 th Grade	INCOMPATIBLE
8 th grade	Ataturk and Science	26.55	Frustration Level	10 th , 11 th and 12 th Grade	INCOMPATIBLE
8 th grade	Koca Sinan	39.31	Instructional Reading	8 th and 9 th Grade	COMPATIBLE
8 th grade	Nowruz and the Union	40.16	Instructional Reading	8 th and 9 th Grade	COMPATIBLE
8 th grade	Aşinasız	38.93	Instructional Reading	8 th and 9 th Grade	COMPATIBLE
8 th grade	Press Technology News	18.6	Frustration Level	$\begin{array}{rl} 10^{\rm th}, & 11^{\rm th} \\ \text{and} & 12^{\rm th} \\ \text{Grade} \end{array}$	INCOMPATIBLE
8 th grade	Anatolia baht Public Land Train	42.35	Instructional Reading	8 th and 9 th Grade	COMPATIBLE
8 th grade	Computer loneliness	31.39	Frustration Level	10 th , 11 th and 12 th Grade	INCOMPATIBLE

Table 5 (cont.)

Table 6. *The readability score, education levels of the narrative texts examined and the compatibility of these two values*

Grades	Texts	Readability	Readability	Education	Compatibility of R.S.
		Scores	Scores (R.S.)	Level	and E.L.
				(E.L.)	
6 th grade	Children's	45.30	Instructional	8. ve 9.	INCOMPATIBLE
	Library in the		Reading	Sınıf	
	morning Debate		-		
6 th grade	The Best Friend	47.15	Instructional	8. ve 9.	INCOMPATIBLE
			Reading	Sınıf	
6 th grade	Ataturk	51.02	Independent	5.,6. ve 7.	COMPATIBLE
	Memories 1		Reading	Sınıf	
6 th grade	Ataturk	42.98	Instructional	8. ve 9.	INCOMPATIBLE
C	Memories 2		Reading	Sınıf	
6 th grade	Ataturk	40.17	Instructional	8. ve 9.	INCOMPATIBLE
e	Memories 3		Reading	Sınıf	

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Table 6 (cont.)					
6 th grade	Ataturk and	40.52	Instructional	8. ve 9	. INCOMPATIBLE
	History		Reading	Sınıf	
6 th grade	Meşe with Saz	55.88	Independent	5.,6. ve 7	. COMPATIBLE
			Reading	Sınıf	
6 th grade	Istanbul High	42.78	Instructional	8. ve 9	. INCOMPATIBLE
	School Small		Reading	Sınıf	
	Hasan				
7 th grade	Kuş Konmaz	51.60	Independent	5.,6. ve 7	. COMPATIBLE
	Hotels		Reading	Sınıf	
7 th grade	Riddle	55.30	Independent	5.,6. ve 7	. COMPATIBLE
			Reading	Sınıf	
7 th grade	Navy floating	38.12	Instructional	8. ve 9	. INCOMPATIBLE
0	dry land		Reading	Sınıf	
			-		
7 th grade	Last Birds	44.83	Instructional	8. ve 9	. INCOMPATIBLE
U			Reading	Sınıf	
7 th grade	Komşusuzluk	42.89	Instructional	8. ve 9	. INCOMPATIBLE
U	3		Reading	Sınıf	
8 th grade	Memories-	45.29	Instructional	8. ve 9	. COMPATIBLE
8	Ataturk, before		Reading	Sınıf	
	all else, the		e		
	National				
8 th grade	Its Universality	43.74	Instructional	8. ve 9	. COMPATIBLE
U	of Ataturk Sense		Reading	Sınıf	
	Memories-Here		U		
8 th grade	10th year Speech	43.99	Instructional	8. ve 9	. COMPATIBLE
e	5 1		Reading	Sınıf	
8 th grade	The old	50.46	Instructional	8. ve 9	. COMPATIBLE
-	Locksmith		Reading	Sınıf	
8 th grade	Ergenekon Epic	50.23	Instructional	8. ve 9	. COMPATIBLE
C	0 1		Reading	Sınıf	
8 th grade	Said Çiğdem	48.44	Instructional	8. ve 9	. COMPATIBLE
-			Reading	Sınıf	
8 th grade	Path to success	45.29	Instructional	8. ve 9	. COMPATIBLE
-	in life		Reading	Sınıf	
8 th grade	Two Good	44.46	Instructional	8. ve 9	. COMPATIBLE
2	Human		Reading	Sınıf	
			e		
8 th grade	Seagull	44.11	Instructional	8. ve 9	. COMPATIBLE
-	C		Reading	Sınıf	
			0		
8 th grade	A Success Story	42.41	Instructional	8. ve 9	. COMPATIBLE

Table 6 (cont.)

5. Does the readability level change based on the text types, narrative or informative?

When the readability scores of the informative texts are examined; the text entitled as "Basından Teknoloji Haberleri (Media Technology News)" in the textbook of 8th grade has the lowest score with 18.6 and the education level is determined as "Frustration Level – 10^{th} , 11^{th} , 12^{th} grade". The text named as "Iyimserlik Kötümserlik" is in the textbook of 7th grade and has the highest readability score with 45.17. The education level is determined as "Instructional Reading – 8^{th} , 9^{th} grade".

In the narrative texts, the text entited as "Karada Yüzen Donanma" has the lowest readability score with 38.12 and is in the textbook of 7th grade. The education level is determined as "Instructional Reading – 8th, 9th grade". The text named as "Meşe ile Saz" has the highest readability score with 55.88 and is in the textbook of 6th grade. The education level is determined as "Independent reading – 5th, 6th, 7th grade".

6. Are the readability score compatible with the education levels determined?

While 24 out of 29 informative texts are not compatible with the education levels determined, the readability scores of 5 texts are compatible with the education level.

While 9 out of 23 narrative texts are not compatible with the education levels determined, the readability scores of 14 texts are compatible with the education level.

Table 7. The compatibility-incompatibility of the texts examined in terms of readability scores and education levels and the percentage of this situation

	Informative Texts	Percentage %	Narrative Texts	Percentage %
Compatible	5	17.25	14	60.86
Incompatible	24	82.75	9	39.14
Total	29	100	23	100

In this regard, the relation between the readability scores and education levels of the narrative texts and informative texts differs. While the informative texts are chosen regardless of the age level of the target reader, the narrative texts are more compatible to the education levels of the target children compared to the informative texts.

CONCLUSION

This study aims to calculate the readability scores of the 52 informative and narrative texts in the Turkish textbooks with the "Çetinkaya-Uzun Readability Formula" and to determine the education levels of these texts with the obtained readability scores; the results obtained are as follows:

- Within the theoretical framework of the study, it is observed that the lowest average • word and sentence length should be in the texts in textbooks of 6^{th} grade in parallel to age and development levels of children; however, it is observed that the highest average attained is in the texts in textbooks of 8th grade in the light of the study. As a result of the study, while the text having the lowest average word length in the narrative texts is in the Turkish textbook of 7th grade, the highest average word length is in the textbook of 8th grade in parallel to the development of children. Furthermore, while the lowest average sentence length is the textbooks of 6^{th} grade, the highest average sentence length is in the textbooks of 8th grade in parallel to the development of children. In the narrative texts, the text having the lowest average word length is in the Turkish textbook of 6th grade, the text having the highest average word length is in the textbook of 7^{th} grade. While the lowest average sentence length is in the textbook of 7^{th} grade, the highest average sentence length is in the textbook of 6th grade. In this regard, it is determined that the average values of word and sentence lengths used in the narrative texts are formed regardless of the age and development levels of children. In terms of informative texts, while this assumption is considered in the average sentence length, the fact that the lowest average word length is in the textbooks of 7^{th} grade is contrary to this situation. In the light of the data obtained, it is determined whether the word and sentence lengths in the narrative and informative texts in the Turkish textbooks change according to age and education levels and exhibit an improving feature for the students in this aspect.
- In the light of the data obtained as a result of the study, it is determined that the relation between the readability scores and education levels of informative and narrative texts differs. While the informative texts are chosen regardless of the age level of target readers, the narrative texts are more compatible to the education levels of the target children compared to the informative texts. There is incompatibility of the readability scores and education levels of the 82.75% of the informative texts and 39.14% of the narrative texts. The texts, of which readability scores and education levels are

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compatible, are 17.25% in the informative texts and 60.86% in the narrative texts. In the light of this data, it is observed that the informative and narrative texts in the Turkish textbooks are chosen regardless of the age and development level of the children. However, the importance of these texts in gaining the habit of reading for the students at primary school should not be overlooked and the texts should be clear and at optimal length and selected accordingly in order to increase the desire of reading as well as urging them to love reading.

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