

Readability levels of texts in the sixth grade turkish text books

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Abstract. This study aims to determine the readability of texts in Turkish textbooks. This research is descriptive and document analysis was used as a method. In this research, the readability of thirty-four reading texts excluding poems in sixth grade Turkish textbooks that taught in various cities in 2019-2020 academic year, was measured with using the syllables, sentences and word frequencies. Ateşman and Çetinkaya-Uzun formulas were used to measure the readability of the texts. The texts in Turkish textbooks are divided into two main titles as narrator and informative. In addition to the readability formulas, expert opinion was used to determine the difficulty of reading the texts. The data obtained were shared in the tables in the findings section. Based on the findings of the study, it was concluded that the informative texts in Turkish textbooks were less readable than the narrative texts.

Keywords: Textbooks, Text, Readability, Narrator text, Informative text

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Altıncı sınıf türkçe ders kitaplarındaki metinlerin okunabilirlik düzeyleri üzerine bir inceleme

Öz

Bu çalışma, Türkçe ders kitaplarında yer alan okuma metinlerinin okunabilirliğini tespit etmeyi amaçlamaktadır. Bu araştırma betimsel nitelikte olup, yöntem olarak doküman analizi kullanılmıştır. Araştırmada, 2019-2020 eğitim-öğretim yılında çeşitli illerde altıncı sınıflarda okutulan özel bir yayınevine ait olan Türkçe ders kitabında bulunan şiirler hariç toplam otuz beş okuma metninin hece, cümle ve kelime frekanslarından yola çıkılarak okunabilirlikleri ölçülmüştür. Metinlerin okunabilirliğinin ölçümünde Ateşman ve Çetinkaya-Uzun formülleri kullanılmıştır. Türkçe ders kitaplarında yer alan metinler öyküleyici ve bilgilendirici olarak iki ana başlığa ayrılmıştır. Okunabilirlik formüllerinin yanında metinlerin okuma güçlüğü tespit etmek amacı ile uzman görüşüne başvurulmuştur. Elde edilen veriler tablolar halinde bulgular bölümünde paylaşılmıştır. Araştırmadan elde edilen bulgulardan hareketle Türkçe ders kitabında yer alan bilgilendirici metinlerin öyküleyici metinlere göre okunabilirliğinin daha düşük olduğu sonucuna ulaşılmıştır.

Anahtar Kelimeler: Ders kitapları, Metin, Okunabilirlik, Öyküleyici metin, Bilgilendirici metin

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Introduction

The most widely used material by teachers and learners in the classroom environment in both mother tongue and foreign language teaching are textbooks. As in many lessons, in Turkish lessons, teachers use textbooks widely to make teaching mother tongue more effective and to gain students reading skills from four basic language skills. In his research, Özbay (2003) found that the vast majority of Turkish teachers (94,4%) attended the lesson while adhering to the textbooks in the course. Similarly, Zorbay (2007) states that teaching materials are the most frequently used teaching materials at all levels of education. At this point, the importance of reading texts in textbooks becomes apparent. According to Çeçen and Çiftçi (2007), basic language skills are tried to be gained to the student through activities prepared based on reading texts. Turkish education is usually done with literary and instructive texts. These texts are the basic materials of teaching. The studies and examinations carried out with texts reflecting the fluency, simplicity, expressiveness and metaphor power of Turkish and emotion and thought richness bring students a wealth of life (Sever, 2004, p.8-9). It is a known fact that the development of reading skill affects other courses academically. Kaçalın and Benzer (2006) states that reading should not be considered as a skill of Turkish language course only. It also states that reading is the basis for all courses and that students can only be successful in other courses if they understand and read well. Tekşan and Güneş (2006) state that textbooks and texts in the textbooks are very important for students to be eager reading and to make reading continuous. In this context, it is necessary to be very sensitive and careful in choosing the reading texts that will be included in the textbooks. The texts should be appropriate to students' cognitive level, help their cognitive development, be up to date and interesting. In addition, texts that reflect the language taste and characteristics of Turkish and contain cultural elements should be included in Turkish textbooks.

Readability

The readability of the texts should be checked to determine the suitability of the students. Here we come across the concept of readability. According to Dubay (2004), readability appeared in the United States in the early 19th century. It is often confused with the legibility. The legibility is determined by the characteristics of the text such as the font and page shape. On the other hand, readability is the information whether a text in any language can be easily followed by the reader (s) (Bezirci and Yılmaz, 2010, p.50). According to Klare, readability is that the linguistic features in the text are more or less acceptable by the reader (Klare 1963, cite by Çetinkaya and Uzun, 2010, p.141). Also, Ateşman (1997), defined readability as easy or difficult to understand texts for the reader. Ateşman focused on the quantitative characteristics of the texts rather than the qualitative characteristics of the texts, rather than the length of words and sentences. According to Ateşman (1997), to be included short and simple words in a sentence increases the readability of the text. Similarly, Zorbay (2007) states that short sentences are learned better than long sentences, therefore short sentences should be preferred in texts rather than long sentences.

The first quantitative studies on texts were made by clerics in the 9th century to distinguish the important words in the scriptures from the unimportant ones (Ateşman, 1997). Many studies have been conducted on the readability of texts from the dominant languages in the world, especially for English, Spanish, French, German, Swedish, Russian, Japanese and Chinese languages (Al-Ajlan et al., 2008). Dubay (2004) stated that more than 200 formulas and scientific studies have been carried out to measure the readability of English texts. Readability studies for Turkish began in the first 90's. The first study to measure the readability of Turkish texts is the FRES (Fresch Reading Ease Score) formula that adapted to

Turkish, developed by Ateşman. Ateşman examined many texts from different fields and levels and found the average sentence length and average word length in Turkish. According to Ateşman's research, the average sentence length in Turkish is 9-10 words and the average word length is 2,6 syllables. Based on these data, Ateşman adapted the FRES Formula, developed by Flesch, into Turkish and put forward the following formula:

$$RN = 198,825 - 40,175 \times \text{Number of Syllables} / \text{Number of Words} - 2,610 \times \text{Number of Words} / \text{Number of Sentences}$$

RN= Readability Number

Ateşman has created a table where he classifies the numerical values obtained from this formula and indicates the levels of the texts. These levels are seen in Table 1.

Table 1. *Reading Levels According to Ateşman's Formula*

Readability Level	Readability Number
Very Easy	90-100
Easy	70-89
Medium Difficulty	50-69
Difficult	30-49
Very Difficult	1-29

Another formula that developed for Turkish texts belongs to Çetinkaya-Uzun (2010). Similar to Ateşman, Çetinkaya and Uzun developed a new readability formula based on the average word and sentence length in Ateşman formula. The formula developed by Çetinkaya and Uzun is as follows;

$$\text{Readability Score} = 118,823 - 25,987 \times \text{AWL} - 0,971 \times \text{ASL}$$

AWL: It refers to the average word length. To calculate the average word length, it is necessary to apply the following formula;

$$\text{AWL} = \text{Number of Syllables} / \text{Number of Words.}$$

ASL: It refers to the average sentence length. To calculate the average sentence length, it is necessary to apply the following formula;

$$\text{ASL} = \text{Number of Words} / \text{Number of Sentences}$$

Reading levels corresponding to the range of numerical values obtained from Çetinkaya-Uzun formula are shown in Table 2.

Table 2. *Reading Levels According to the Çetinkaya and Uzun Formula*

Readability Level	Readability Number
Disabled Level (10th, 11th and 12th grades)	0-34
Educational Level (8th and 9th grade)	35-49
Independent Level (5th, 6th and 7th grade)	50+

Readability formulas numerically represent the readability level of a text based on word length and sentence length. Because of calculations are made on only two variables, it does not seem possible to obtain an accurate result for the readability of the texts. This is the most serious limitation of readability formulas. It has been expressed by many researchers (Temur, 2003; Bezirci & Yılmaz, 2010; Ateş, Çetinkaya & Yıldırım, 2012; Crossley, Allen & McNamara, 2011) where readability basically offers certain quantitative data but this alone

will not be sufficient to evaluate a text. In this study, expert opinion was consulted in order to determine whether the texts examined in addition to readability formulas are appropriate for the levels of the students in many respects. Expert opinions and readability formulas of texts were shared in the findings section of the research. This study aims to determine the readability levels of reading texts in sixth grade Turkish textbooks. For this purpose, answers are sought for the following sub-problems;

- What are the average word and sentence lengths of the narrative texts in the sixth grade Turkish textbooks?
- What are the average words and sentence lengths of the informative texts in the sixth grade Turkish textbooks?
- What are the readability levels of the narrative texts in sixth grade Turkish textbooks?
- What are the readability levels of informative texts in sixth grade Turkish textbooks?
- What are the expert evaluations of the informative reading texts in the sixth grade Turkish textbooks?
- What are the expert evaluations of the narrative reading texts in the sixth grade Turkish textbooks?

Method

Model of the research

This research is descriptive and document analysis method was used as a method. Cohen et al. (2007) according to document analysis; It is a research technique that consists of organizing, classifying, comparing and extracting theoretical results from texts. According to Yıldırım and Şimşek (2011), document analysis means the analysis of materials that contain information about the phenomenon or facts to be investigated.

Reviewed book

In this research, the Turkish textbook, which belongs to a private publishing house that is taught to sixth grades in public schools in the central district of Uşak in the academic year of 2019-2020, has been examined.

Data collection tool

In the research, the Turkish textbook was used as a data collection tool in the sixth grade in public schools in the central district of Uşak in the 2019-2020 academic year. In addition, two different readability formulas were used to measure the readability of Turkish texts.

Collection and analysis of data

In this research, data collection and analysis consists of three parts:

Collection of data

At the preparation stage of the study, the book to be reviewed for the first time was determined. The researcher's easy access to the book to be examined and the volunteering of the Turkish teachers who teach the sixth grades at the school where the research was conducted was effective in the decision-making phase of the book to be examined. After the

decision to decide the book to be examined, texts whose readability levels will be determined were determined. Poetries are excluded from the scope of the research. Thirty-five narrative and informative texts were included in the study. Each element between the two spaces is considered a word. Each word group ending with a dot (.), Question mark (?), Three dots (...) from punctuation marks is accepted as a sentence. Sentences connected by commas (,), colons (:), and semicolons (;) were calculated as a single sentence. By paying attention to these issues, the texts whose readability scores will be calculated were examined one by one and the syllable, word and sentence frequencies were found. In addition, the average word and sentence lengths of each text were calculated. These obtained numerical data were recorded by the researcher in the Excel file.

As stated in the introduction part of the research, the expert opinion was also consulted in this research, since the readability scores would be insufficient in determining the reading difficulties of a text alone. The three sixth grade Turkish teachers who participated in the study voluntarily evaluated each text in terms of different variables such as word fortune, idiom, proverb, grammatical structures, semantic integrity, suitability for students' cognitive levels, interest and suitability of students for grade level 1 (Very Easy), 2 (Easy), 3 (Medium Difficulty), 4 (Hard), 5 (Very Hard).

Data analysis

At this stage, related literature was scanned and many readability formulas that used for different languages were determined. However, since these formulas do not suitable to the Turkish language structure, three readability formulas for Turkish texts were examined and out of three formulas, it was decided to use Ateşman and Çetinkaya-Uzun formulas. The calculation of Ateşman and Çetinkaya-Uzun formulas according to the word and sentence length variables was effective in choosing these formulas. The other readability formula was not preferred because it does not include single and double syllable words in the calculation. The readability score of each text in the Turkish textbook was calculated according to both Ateşman and Çetinkaya-Uzun formulas and the readability scores obtained were recorded to the Excel file.

Tabulation of data

The data obtained for each sub-problem was tabulated and shared in the findings section of the research. In the tabulation created for the third and fourth sub problems of the research, readability scores obtained from both Ateşman and Çetinkaya-Uzun were compared comparatively.

Findings

In this section, tables on the readability levels of the texts in the sixth grade Turkish course book are given. It is abbreviated as Average word length (A.W.L), average sentence length (A.S.L), readability score (R.S), Ateşman formula (Ateşman F.) and Çetinkaya-Uzun formula (Çetinkaya-Uzun F.).

Findings for the first sub-problem

Findings obtained for the first sub-problem of the research are shown in table 3.

Table 3. *The Average Word and Sentence Lengths of Narrative Texts in Sixth Grade Turkish Textbooks*

Texts	A.W.L	A.S.L
Meşeler	2,5	9,4
Tartışarak Gerçeğe Doğru	2,7	8,1
Elveda Ağustos Böceği	2,3	8,2
Kediyle Kaplan	2,6	7,7
Yeni Bir Sabah	2,6	7,4
Sakarya'nın Değeri	2,6	6,8
Oyun	2,4	8,6
Sel Sularında	2,4	8,2
Bebek	2,3	8,9
Sevgi Dersi	2,7	7,4
Azim	2,5	8,3
Su Sesi	2,4	10,4
Yıldız Yağmuru	2,5	14
Gazlı Göl	2,7	8,2
Forsa	2,6	5,7
Buldum... Buldum...	2,5	6
Yaz Sinemaları	2,6	11,7
Zaman Makinesi	2,4	3,4
Kurtla Köpek	2,4	6,5
Kent Faresi İle Tarla Faresi	2,4	8,5
	2,5	8,17

In table 3, the average word and sentence lengths of the narrative texts in the sixth grade Turkish textbook examined are seen. The average word length of the narrative texts varies between 2,3 and 2,7 syllables. The average sentence lengths of these texts appear to vary between 3,4 and 14 words. The average word length of all the narrative texts in the sixth grade Turkish textbook is 2,5 and the average sentence length is 8.17. Ateşman (1997) examined many texts with different difficulty levels in different fields and as a result of this analysis, it was found that the average length of words in Turkish was 2,6 syllables and the sentences were an average of 9-10 words. Also, according to Ateşman, the word length of the easiest text in Turkish is 2,2 syllables, while the sentence length consists of 4 words. The word length of the most difficult text in Turkish is 3 syllables and the sentence length is 30 words. Based on these results obtained by Ateşman, it is seen that the length of words and sentences in the sixth grade Turkish textbook is close to the average. This data shows that the narrative texts are easy to read.

Findings for the second sub problem

Findings obtained for the second sub-problem of the research are shown in table 4.

Table 4. Average Word and Sentence Lengths of Informative Texts in Sixth Grade Turkish Textbooks

Texts	A.W.L	A.S.L
Milli Mücadele’de Türk Çocukları ve Bir Destan	2,7	16,3
Anadolu İmececi	2,5	9,6
Mardin Müzesi Uçurtma Festivali	2,7	14,8
Kolombiya’da 42. Rüzgâr ve Uçurtma Festivali	2,7	20
Dünyanın En İlginç Uçurtmaları İstanbul’a Geliyor	3,1	18
Kumluca’da Uçurtma Festivali	3,6	9
Tek Parmakla "Azmin Zaferi"	2,9	21,1
İyilik Üzerine	2,7	10,9
Çocuk Kalbi	2,6	16,2
Büyük Keşifler	2,3	12,2
Eski Bir Antivirüs Programı: Ya Kebikeç	3,1	13,7
İnsansı Robotlarla Tanışalım	3	10,6
Müziğin İnsan Sağlığı Üzerine Faydaları	2,9	8,8
Karagöz ve Plastik Tekniği	2,7	11,5
Nazilli Destanı	2,5	11,6
	2,8	13,62

In table 4, the average lengths of words and sentences in the informative texts in the sixth grade Turkish textbook are seen. The average word lengths of informative texts ranged from 2,3 to 3,6 syllables. The average word length of the informative texts was 2,8 syllables, while the average sentence length was 13.62 words. These values are above the average values obtained by Ateşman. These values show that the legibility of informative texts is difficult.

Findings for the third sub problem

Findings obtained for the third sub-problem of the research are shown in table 5.

Table 5. Readability Scores and Levels of Narrative Texts in Sixth Grade Turkish Textbooks

Texts	Ateşman Formula		Çetinkaya-Uzun Formula	
	R.S	Level		R.S
Meşeler	71,537	Easy	43,238	Education
Tartışarak Gerçeğe Doğru	66,966	Medium Diff.	39,359	Education
Elveda Ağustos Böceği	81,574	Easy	48,897	Education
Kediyle Kaplan	73,015	Easy	42,972	Education
Yeni Bir Sabah	73,866	Easy	43,338	Education
Sakarya’nın Değeri	75,781	Easy	44,143	Education
Oyun	79,116	Easy	47,571	Education
Sel Sularında	79,241	Easy	47,352	Education
Bebek	81,251	Easy	49,157	Education
Sevgi Dersi	69,024	Medium Diff.	40,224	Education
Azim	74,742	Easy	44,287	Education

Su Sesi	71,652	Easy	44,063	Education
Yıldız Yağmuru	58,671	Medium Diff.	38,207	Education
Gazlı Göl	65,652	Medium Diff.	38,604	Education
Forsa	75,911	Easy	43,421	Education
Buldum... Buldum...	81,066	Easy	43,983	Education
Yaz Sinemaları	61,057	Medium Diff.	38,135	Education
Zaman Makinesi	90,843	Very Easy	51,444	Education
Kurtla Köpek	83,182	Easy	48,471	Education
Kent Faresi İle Tarla Faresi	76,303	Easy	45,835	Education

In table 5, the readability scores and levels of the narrative texts in the sixth grade Turkish textbook are shown according to Ateşman and Çetinkaya-Uzun formulas. The readability scores of the narrative texts vary between 58,671 (Medium Difficulty) and 90,843 (Very Easy) according to the Ateşman formula. When the readability scores obtained from Ateşman's formula are analyzed, it is seen that 70% (f: 14) of 20 narrative texts in the book are "Easy", 25% (f: 5) are "Medium Difficult", 5% (f: 1) are "Very Easy". No narrative text classified as "Difficult" and "Very Difficult" has been identified. As a result of the data obtained from the Ateşman formula, it is seen that the narrative texts are concentrated on the "Easy" level. The readability scores of the narrative texts according to the Çetinkaya-Uzun formula vary between 38,135 (Educational Level) and 51,444 (Independent Level). When the readability scores of Çetinkaya and Uzun are analyzed, it is seen that 95% (f: 19) of the narrative texts are classified as "Educational Level" and 5% are classified as "Independent Level". No text has been identified in the "Disabled Level". Based on the readability scores obtained from the Çetinkaya-Uzun formula, it was concluded that the narrative texts were concentrated in the "Educational Level".

Findings for the fourth sub problem

Findings obtained for the fourth sub-problem of the research are shown in table 6.

Table 6. Readability Scores and Levels of Informative Texts in Sixth Grade Turkish Textbooks

Texts	Ateşman Formula		Çetinkaya-Uzun Formula	
	R.S	Level	R.S	Level
Milli Mücadele'de Türk Çocukları ve Bir Destan	44,572	Difficult	30,762	Disabled
Anadolu İmecesı	71,202	Easy	43,198	Education
Mardin Müzesi Uçurtma Festivali	48,359	Difficult	32,111	Disabled
Kolombiya'da 42. Rüzgâr ve Uçurtma Festivali	34,515	Difficult	26,901	Disabled
Dünyanın En İlginç Uçurtmaları İstanbul'a Geliyor	26,112	Very Diff.	23,016	Disabled
Kumluca'da Uçurtma Festivali	29,939	Very Diff.	16,036	Disabled
Tek Parmakla "Azmin Zaferi"	19,661	Very Diff.	20,509	Disabled
İyilik Üzerine	51,118	Medium Diff.	33,843	Disabled
Çocuk Kalbi	50,351	Medium Diff.	34,459	Disabled
Büyük Keşifler	70,968	Easy	44,938	Education

Eski Bir Antivirüs Programı: Ya Kebikeç	35,392	Difficult	22,945	Disabled
İnsansı Robotlarla Tanışalım	46,872	Difficult	28,185	Disabled
Müziğin İnsan Sağlığı Üzerine Faydaları	56,155	Medium Diff.	32,874	Disabled
Karagöz ve Plastik Tekniği	56,791	Medium Diff.	35,222	Disabled
Nazilli Destanı	66,241	Medium Diff.	41,387	Education

In the table 6, The readability scores and levels of the informative texts in the sixth grade Turkish textbooks are seen according to Ateşman and Çetinkaya-Uzun formulas. The readability scores of informative texts according to the Ateşman formula ranged from 19,661 (Very Difficult) to 71,202 (Easy). When the readability scores obtained from Ateşman's formula are analyzed, it is seen that 33% (f: 5) of 15 informative texts in the book are "Difficult", 33% (f: 5) are "Medium Difficult", 20% (f: 3) are "Very Difficult" and %13,4 (f: 2) "Easy". No informative text classified as "Very Easy" has been identified. As a result of the data obtained from the Ateşman formula, it is seen that the informative texts are concentrated on the "Very Difficult, Difficult and Medium Difficult" level. According to the numerical data obtained from the Çetinkaya-Uzun formula are analyzed, it is seen that the readability scores of the informative texts vary between 16,016 (Disabled Level) and 44,938 (Educational Level). When the readability scores of Çetinkaya and Uzun informative texts are examined, it is seen that 80% (f: 12) of the informative texts are classified as "Disabled Level" and 20% as "Educational Level". Based on the readability scores obtained from the Çetinkaya-Uzun formula, it was concluded that the narrative texts were concentrated in the "Disabled Level".

Findings for the fifth sub problem

Findings obtained for the fifth sub-problem of the research are shown in table 7.

Table 7. Expert Assessments on Informative Texts in Sixth Grade Turkish Textbooks

Texts	Expert Reviews		
	Expert 1	Expert 2	Expert 3
Milli Mücadele'de Türk Çocukları ve Bir Destan	Easy	Easy	Easy
Anadolu İmecesini	Medium Diff.	Medium Diff.	Medium Diff.
Mardin Müzesi Uçurtma Festivali	Easy	Easy	Easy
Kolombiya'da 42. Rüzgâr ve Uçurtma Festivali	Easy	Easy	Easy
Dünyanın En İlginç Uçurtmaları İstanbul'a Geliyor	Easy	Easy	Easy
Kumluca'da Uçurtma Festivali	Easy	Easy	Easy
Tek Parmakla "Azmin Zaferi"	Easy	Easy	Easy
İyilik Üzerine	Medium Diff.	Easy	Medium Diff.
Çocuk Kalbi	Medium Diff.	Medium Diff.	Medium Diff.
Büyük Keşifler	Medium Diff.	Medium Diff.	Medium Diff.
Eski Bir Antivirüs Programı: Ya Kebikeç	Easy	Medium Diff.	Easy

İnsansı Robotlarla Tanışalım	Medium Diff.	Medium Diff.	Medium Diff.
Müziğin İnsan Sağlığı Üzerine Faydaları	Medium Diff.	Medium Diff.	Easy
Karagöz ve Plastik Tekniği	Medium Diff.	Medium Diff.	Medium Diff.
Nazilli Destanı	Medium Diff.	Medium Diff.	Easy

In table 7, It is seen that 15 informative reading texts are evaluated by experts. According to the evaluation of Expert 1, it is seen that 7 out of 15 texts are "Easy" and 8 are "Medium Difficulty". In the evaluation of Expert 2, 7 of 15 texts were stated as "Easy" and 8 of them as "Medium Difficulty". Expert 3 evaluated 9 of the 15 texts as "Easy" and 6 as "Medium Difficulty". In the expert evaluations, it is seen that expert 3 found the informative texts easier than the other two experts. Experts, "Milli Mücadele'de Türk Çocukları ve Bir Destan", "Mardin Müzesi Uçurtma Festivali", "Kolombiya'da 42. Rüzgâr ve Uçurtma Festivali", "Dünyanın En İlginç Uçurtmaları İstanbul'a Geliyor", "Kumluca'da Uçurtma Festivali", "Tek Parmakla "Azmin Zaferi" evaluated as "Easy" level. On the other hand, "Anadolu İmecesesi", "Çocuk Kalbi", "Büyük Keşifler", "İnsansı Robotlarla Tanışalım", "Karagöz ve Plastik Tekniği" texts were evaluated as "Medium Diffuculty" level.

Findings for the sixth sub problem

Findings obtained for the sixth sub-problem of the research are shown in table 8.

Table 8. Expert Assessments on Narrative Reading Texts in Sixth Grade Turkish Textbooks

Texts	Expert Reviews		
	Expert 1	Expert 2	Expert 3
Meşeler	Easy	Easy	Easy
Tartışarak Gerçeğe Doğru	Medium Diff.	Medium Diff.	Medium Diff.
Elveda Ağustos Böceği	Easy	Easy	Easy
Kediyle Kaplan	Easy	Easy	Easy
Yeni Bir Sabah	Easy	Easy	Easy
Sakarya'nın Değeri	Easy	Easy	Orta Güçlükte
Oyun	Easy	Easy	Easy
Sel Sularında	Easy	Easy	Orta Güçlükte
Bebek	Medium Diff.	Medium Diff.	Medium Diff.
Sevgi Dersi	Medium Diff.	Medium Diff.	Medium Diff.
Azim	Easy	Medium Diff.	Medium Diff.
Su Sesi	Medium Diff.	Medium Diff.	Medium Diff.
Yıldız Yağmuru	Medium Diff.	Medium Diff.	Medium Diff.
Gazlı Göl	Medium Diff.	Medium Diff.	Medium Diff.
Forsa	Easy	Easy	Easy
Buldum... Buldum...	Easy	Easy	Easy
Yaz Sinemaları	Medium Diff.	Medium Diff.	Medium Diff.
Zaman Makinesi	Easy	Easy	Easy
Kurtla Köpek	Easy	Easy	Medium Diff.
Kent Faresi İle Tarla Faresi	Easy	Easy	Easy

In table 8, 20 narrative readings were evaluated by experts. In the evaluation of Expert 1, it is seen that 12 of the 20 texts are "Easy" and 8 are "Medium Difficulty". In the evaluation of Expert 2, 11 of the 20 texts were stated to be "Easy" and 9 were "Moderate Difficulty". Expert 3 evaluated 9 of the 20 texts as "Easy" and 11 as "Medium Difficulty". When the evaluations made by three experts were analyzed, expert 1 evaluated the narrative texts easier than the other two experts. Experts, "Meşeler", "Elveda Ağustos Böceği", "Kediyle Kaplan", "Yeni Bir Sabah", "Oyun", "Forsa", "Buldum...Buldum...", "Kurtla Köpek", "Kent Faresi ile Tarla Faresi" evaluated as "Easy" level. On the other hand, "Tartışarak Gerçeğe Doğru", "Bebek", "Sevgi Dersi", "Su Sesi", "Yıldız Yağmuru", "Gazlı Göl", "Yaz Sinemaları" texts were evaluated as "Medium Difficulty" level.

Discussion and Conclusion

The main source for the transfer of knowledge to students at all levels of education is the textbooks. At this point, it is vital that the physical structure and contents of the textbooks are appropriate for the students' levels. Especially considering the role of reading texts in Turkish textbooks in improving students' reading skills, the readability of texts and their suitability to students' interest and age levels are extremely important. In this context, this study aims to determine the readability scores of narrative and informative texts in sixth grade Turkish textbooks. Many researchers have stated in the related literature that it is not possible to obtain a definitive result when just data obtained from the formulas that determine readability. For this reason, in this study, expert opinions were taken from three Turkish teachers who teach sixth grade.

According to the results obtained for the first sub-problem of the research, it is seen that the average word length in the sixth grade Turkish textbooks is 2,5 syllables and the average sentence length is 8,17 words. In their research, Baş and Yıldız (2015) determined the readability of the texts in the second grade Turkish textbooks and they reached a similar result. The researchers determined the average word length of the narrative texts in the 2nd grade Turkish textbooks as 2,5 syllables and the average sentence length as 6,6 words.

In his research, Zorbay (2007) obtained a similar result in terms of sentence and word length and readability levels of the tales in Turkish textbooks and found the sentence length in the tales as 8,93 words. Çakıroğlu (2015) found the average word length of the texts in the first grade Turkish textbooks as 2.54 syllables, the word length of the texts in the second grade Turkish textbooks as 2.56 syllables, the word length of the texts in the third grade Turkish textbooks as 2.65 syllables, the average word length of the texts in the fourth grade Turkish text books as 2,6 syllables.

In their research, Çiftçi et al. (2007) determined the readability of a total of 46 narrative and informative texts in sixth grade Turkish textbooks belonging to one state and two private publishers. They determined that the average word length of the narrative texts was 2.62 syllables in book 1, 2.49 syllables in book 2, and 2.60 syllables in book 3, while the average sentence length was 8.74 words in book 1, 8,36 words in book 2 and 8,41 words in book 3.

According to the results obtained for the second sub-problem of the research, it is seen that the informative texts in the sixth grade Turkish textbooks are 2.8 syllables and the average sentence length is 13.62 words. In their research, Baş and Yıldız (2015), found that the average word length of informative texts was 2.74 syllables and the average sentence length was 9.21. Çiftçi et al. (2007) found the average word length of informative texts as 2.81 syllables in book 1, 2.65 syllables in book 2, 2.57 syllables in book 3 in their research. They also determined the average sentence lengths of informative texts as 12.86 words in book 1, 14.54 words in book 2 and 11.96 words in book 3.

The third sub-problem of the research is “What is the readability score and level of the narrative texts in the sixth grade Turkish textbooks?” In the examination for the question, the readability scores of the texts were calculated by using two formulas. According to the results obtained from Ateşman's formula, the readability score of the narrative texts ranged from 58.941 (Medium Difficulty) to 90.843 (Very Easy). 75% of the narrative texts (f: 15) are classified as "Easy". It is seen that the difficulty level of the narrative texts is concentrated as "Easy". A similar conclusion has reached by Çiftçi et al. (2007). In their study, researchers found that 62% of narrative texts were classified as "Easy or Very Easy".

Bağcı and Ünal (2013) classified 29% (f: 10) of 29 narrative texts as "Easy" in their research on the readability of the texts in primary school 8th grade Turkish textbooks, one of which is a state and a private publishing house. In this study, it is seen that the narrative texts are concentrated in “Medium Difficulty”.

According to the results obtained from Çetinkaya-Uzun formula, the readability score of the narrative texts ranges between 38,135 (Educational Level) and 51,444 (Independent Level). 95% of the narrative texts (f: 19) are classified as "Educational Level". The difficulty level of the narrative texts intensified as “Educational Level” (8th and 9th grades). In their research, Çiftçi et al. (2007) found that 35% (f: 10) of the narrative texts were “Medium Difficulty”. Also, in their research, Bağcı and Ünal (2013) found that 74% (f: 20) of the 27 narrative texts are at the "Educational Level".

The fourth sub problem of the research is “What is the readability score and level of the informative texts in the sixth grade Turkish textbooks?” In the examination for the question, the readability scores of the texts were calculated by using two formulas. According to the results obtained from Ateşman's formula, the readability score of informative texts ranged from 19,661 (Very Difficult) to 71,202 (Easy). 66.6% (f: 10) of the informative texts are classified as “Difficult and Medium Difficulty”. The difficulty level of the informative texts is concentrated on “Difficult and Medium Difficulty”. In their researches, Çiftçi et al. (2007) found that 35% of the informative texts were “Difficult” or “Very Difficult”. Also, Bağcı and Ünal (2013) reached the conclusion that 65,5% (f: 19) of 29 informative texts were “Moderate Difficulty”.

According to the results obtained from Çetinkaya-Uzun formula, the readability score of informative texts ranges from 16,036 (Disabled Level) to 44,938 (Educational Level). 80% of the informative texts (f: 12) are classified as “Disabled Level”. The difficulty level of informative texts is concentrated as “Disabled Level” (10th, 11th and 12th grades). In their study, Bağcı and Ünal (2013) found that 65,5% of the 29 informative texts were at the "Educational Level".

The fifth sub problem of the research is “What are the expert evaluations for the informative texts in the sixth grade Turkish textbooks?” In the examination for the question, it is seen that the experts evaluate the informative texts as "Easy" or "Medium Difficulty".

The sixth sub problem of the research is “What are the expert evaluations for the narrative texts in the sixth grade Turkish textbooks?” In the examination for the question, it is seen that the experts evaluate the informative texts as "Easy" or "Medium Difficulty". Experts stated that the texts evaluated as "Medium Difficulty" contain words and phrases above the students' levels, and that the texts deal with subjects that are too long and far from their daily lives. It is seen that the experts do not evaluate any text as "Very Easy", "Difficult" and "Very Difficult". Based on all these data obtained, it has been determined that the average word and sentence lengths of the narrative texts in the sixth grade Turkish textbook reviewed are close to the average word and sentence lengths of the Turkish texts. However, it is seen that the average word and sentence lengths of the informative texts are above the acceptable average for Turkish texts. Considering the readability scores obtained from Ateşman and Çetinkaya-Uzun

formulas of the narrative and informative texts in the Turkish textbook, according to the Ateşman formula, it was observed that the narrative texts are more readability than informative texts. According to the Çetinkaya-Uzun formula, it was concluded that the narrative texts are easier to read than informative texts.

References

1. Al-Ajlan A. A., Hend S. A and AbdulMalik S. A. (2008): “Towards the Development of an Automatic Readability Measurements for Arabic Language”, 3rd Int. Conf. Digi. Inf. Mng. (ICDIM), p. 506–511.
2. Ateş, S., Çetinkaya, Ç and Yıldırım, K. (2012). How to Choose a Readable Book?. *İlköğretim Online Dergisi 11*, p. 319-331.
3. Ateşman, E. (1997). Measuring Readability in Turkish. *Dil Dergisi*, 58, p. 71-74.
4. Bağcı, H. and Ünal, Y. (2013). The readability Level of the Texts in 8th Grade Turkish Course Books in Primary Education. *Ana Dili Eğitimi Dergisi*, 1(3), P. 12-28.
5. Baş, B and Yıldız, İ.F. (2015). Examining the Texts in the 2nd Grade Turkish Course Book in Terms of Readability. *Mersin Üniversitesi Eğitim Fakültesi Dergisi*, 11(1), P. 52-61.
6. Bezirci, B and Yılmaz, A.E. (2010). A Software Library on Measuring Readability of Texts and New Readability Criteria for Turkish. *DEÜ Mühendislik Fakültesi Fen Bilimleri Dergisi*, 12(3), p. 50-62.
7. Cohen, L., Manion, L., and Morrison, K. (2007). Research methods in education (6th ed.). New York, NY: Routledge.
8. Crossley, S.A., Allen D.B and McNamara D.S. (2011). Text Readability and Intuitive Simplification: A Comparison of Readability Formulas. *Reading in a Foreign Language*, 23 (1), p. 84-101.
9. Çakıroğlu, O. (2015). Evaluation of Readability Levels of Texts in Primary School Turkish Textbooks for Students with Learning Difficulties. *İlköğretim Online*, 14(2), p. 671-681.
10. Çeçen, M. A and Çiftçi, Ö. (2007). Analysis of the Texts in Primary School 6th Grade Turkish Textbooks in Terms of Type and Theme. *Millî Eğitim*, 173, p. 39-49.
11. Çetinkaya, G and Uzun, L. (2010). Readability Features of Texts in Turkish Textbooks. Hakan Ülper (Ed.), *Turkish Textbook Analysis*, p. 141-155. Ankara: Pegem Akademi Publishing.
12. Çiftçi, Ö. , Çeçen, M.A and Melenlioğlu, D. (2007). Evaluation of Texts in Sixth Grade Textbooks in Terms of Readability. *Elektronik Sosyal Bilimler Dergisi*, 22(6), p. 206- 219.
13. Dubay W. H. (2004): “*The Principles of Readability, Impact Information*”, Costa Mesa, CA.
14. Kaçalin, M. S and Benzer, A. (2006). Reading Education in Curriculum Programs. *Edebiyat, Edebiyat Öğretimi ve Değişim Yazıları*, 2. Ankara: PegemA Publishing.
15. Özbay, M. (2003). Teaching Turkish in Primary Schools According to Teachers' Opinions, Ankara: Gölge Ofset Publishing.
16. Sever, S. (2004). Teaching Turkish and Complete Learning. Ankara: Anı Publishing.
17. Tekşan, K. and Güneş, M. (2006). Examination of the Words in the Texts in the Stage Turkish Teaching Books in terms of Quality and Quantity. *Dilbilim, Dil Öğretimi ve Çeviribilim Yazıları*, 1. Ankara: PegemA Publishing.
18. Temur, T. (2003). Readability. *TÜBAR-XIII*, p. 169-180.
19. Yıldırım, A. and Şimşek H. (2011). Qualitative Research Methods in the Social Sciences. Ankara: Seçkin Publishing.
20. Zorbaz, K. Z. (2007). An Evaluation on the Word-Sentence Lengths and Readability Levels of Tales in Turkish Textbooks. *Eğitimde Kuram ve Uygulama*, 3(1), p. 87-101.