

The Journal of Language Teaching and LearningTM

2025

Volume 15/Issue 2

Article 5

A Comparison of the Readability of Texts in B1 Level Textbooks Used for Teaching English, German, and Turkish as Foreign Languages

Funda Örge Yaşar, Çanakkale Onsekiz Mart University, Çanakkale, Türkiye, fundaorge@comu.edu.tr

Mehtap Özden, Çanakkale Onsekiz Mart University, Çanakkale, Türkiye, mehtapgunes@comu.edu.tr

Recommended Citations:

APA

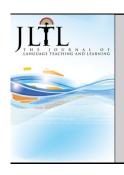
Örge Yaşar, F., & Özden, M. (2025). A Comparison of the Readability of Texts in B1 Level Textbooks Used for Teaching English, German, and Turkish as Foreign Languages. *The Journal of Language Teaching and Learning*, 15(2), 81-96.

MLA

Örge Yaşar, Funda, and Mehtap Özden. "A Comparison of the Readability of Texts in B1 Level Textbooks Used for Teaching English, German, and Turkish as Foreign Languages." *The Journal of Language Teaching and Learning*, vol. 15, no. 2, 2025, 81-96.

The JLTL is freely available online at www.jltl.com.tr, with neither subscription nor membership required. Contributors are invited to review the Submission page and manuscript templates at www.jltl.org/Submitonline





Contents lists available at www.jltl.com.tr

The Journal of Language Teaching and Learning



Published by the Association of Applied Linguistics

www.jltl.com.tr

The Journal of Language Teaching and Learning, 2025(2), pp. 81-96

A Comparison of the Readability of Texts in B1 Level Textbooks Used for Teaching English, German, and Turkish as Foreign Languages

Funda Örge Yaşar¹, Mehtap Özden²

ARTICLE INFO

Article History:

Received 27 Mar 2025 Revisions completed 28 Jun 2025 Online First 30 Jun 2025 Published 30 Jun 2025

Key Words:

Readability B1 Level Textbooks English as a Foreign Language German as a Foreign Language Turkish as a Foreign Language

ABSTRACT

In this study, the texts in textbooks prepared for B1 level students in the foreign language teaching of English, German, and Turkish were examined according to readability formulas; the obtained results were analyzed by comparing them. The Flesch, Amstad, and Ateşman readability formulas were used for English, German, and Turkish texts, respectively. In the study, which utilized the document analysis method, a total of 63 texts were analyzed from a selected textbook for each of the three languages. According to the results, the English textbook had a readability score of 74.99 (fairly easy), the German textbook scored 67.32 (standard), and the Turkish textbook scored 70.25 (easy). The study emphasizes the importance of readability analysis in the selection process of language teaching materials. It also suggests that, considering the impact of each language's structural features on readability formulas, tools should be developed for each language in this field.

© Association of Applied Linguistics. All rights reserved

¹ Department of Turkish and Social Science Education, Division of Turkish Language Education, Çanakkale Onsekiz Mart University, Çanakkale, Türkiye, fundaorge@comu.edu.tr

² Department of Turkish and Social Science Education, Division of Turkish Language Education, Çanakkale Onsekiz Mart University, Çanakkale, Türkiye, mehtapgunes@comu.edu.tr Corresponding author: mehtapgunes@comu.edu.tr

Örge Yaşar, F., & Özden, M. (2025). A Comparison of the Readability of Texts in B1 Level Textbooks Used for Teaching English, German, and Turkish as Foreign Languages. *The Journal of Language Teaching and Learning*, 15(2), 81-96.

In today's rapidly developing and globalizing world, the interest in learning different languages is increasing day by day. Language learning is a complex process that involves both cognitive and emotional dimensions. Learning a language is not limited to developing grammar rules and vocabulary; it also broadens individuals' perspectives on the world and different cultures. Learning a language offers an experience that helps individuals explore various thought systems, values, and lifestyles. It is clear that having knowledge of a foreign language has become a necessity for interacting with other countries in scientific, cultural, political, and economic fields, as well as for exchanging information on a global scale (Demircan, 1988). Among the most widely learned foreign languages globally are English, German, French, Japanese, and Spanish (Ateş & Aytekin, 2020). Of these languages, English holds the position of being the most spoken and most learned foreign language worldwide as a global language. English, dominant in many fields such as education, science, business, culture, technology, and media, stands out as a key communication tool in the globalized world. Knowing English facilitates people's access to global knowledge and enables them to play an active role in international trade and diplomatic relations. Since English is the official language of many international organizations such as the United European Union, World Health Organization, and International Monetary Fund, individuals who speak English have many professional and academic opportunities.

German is one of the most widely spoken languages in Europe and is prevalent in countries such as Germany, Austria, and Switzerland. In these countries, German holds significant importance both in education and in professional life. Therefore, learning German as a foreign language not only enables linguistic proficiency but also allows individuals to understand the deep historical legacy of fields such as economy, science, politics, philosophy, and art in regions where the language is spoken (Karaman, 2017). Germany's strong global economy, its high-quality education system, and other factors provide individuals learning German with

international career opportunities. Since German is one of the official languages of the European Union, knowing or learning German also provides significant advantages in fields such as European policies, law, and international relations.

Turkish, as one of the most widely spoken languages in the world, holds a significant position in regions such as Central Asia, the Balkans, and the Middle East in terms of trade and cultural relations. Learning Turkish not only helps the language's individuals grasp grammatical structures but also enables them to gain a deeper understanding of Turkish culture, history, and traditions (Sever, 2001). In this context, teaching Turkish as a foreign language not only helps students acquire language skills but also provides them with in-depth knowledge about the cultural heritage and social structure of Turkish society. Furthermore, knowing Turkish is of great importance for foreigners who wish to study and work in Türkiye.

Books prepared for foreign language teaching are essential tools used for teaching and learning the language accurately and effectively. These tools must be designed meticulously to contribute to the language learning process. Many elements, from word choice to sentence structure, influence the language learning process. The selected text should reflect the richness and aesthetics of the language, adhere to text creation criteria, and appeal the cognitive and characteristics of the students. The texts included in textbooks should be evaluated based on various measurements, calculations, and analyses to determine their suitability both qualitatively and quantitatively (Özçetin & Karakuş, 2020). For foreign language learners to understand texts and express themselves correctly in the language, the texts should not only be understandable, coherent, and engaging, but also appropriate in terms of readability level.

Readability is a measure used to determine whether a text is understandable by its target audience, and it is defined in various ways in literature. Gunning (1968) defines readability as a practical tool that helps identify the elements that make a text difficult to read. McLaughlin (1969) considers readability as a factor that identifies the

reading difficulties of a specific group of readers. Dreyer (1984) views readability as a combination of ease of understanding and the appeal of a text. While readability is not the only criterion for determining the comprehensibility of a text, it is an important factor that contributes to making the text more easily grasped. Factors such as the percentage of difficult or unfamiliar words in a text, types of words, the distribution of concrete or abstract words, print styles, and physical features are among the elements that affect readability (Rye, 1982). A text that is difficult to read is expected to be different from one that is easy to read, as difficult texts complicate the reading process, while texts with high readability directly assist the reader in understanding the text more easily, thereby influencing the reading experience (Akbaş & Aksoy, 2024). Short and simple sentences in texts are better perceived and make the learning process more efficient compared to long and complex sentences (Acarlar et al., 2002). However, in some cases, simple texts may be boring for strong readers, while texts with low fluency may cause weaker readers to lose interest. Therefore, readability is closely related to the compatibility between the audience and the text (Stenner & Stone, 2023).

Readability is calculated through various formulas and is based on linguistic variables such as the ASL and AWL in a text (Ateşman, 1997). Wilkens et al. (2022) note that hundreds of different formulas related to readability have been developed throughout history. A review of the literature indicates that while the first studies on readability date back to the early 1920s, they became more systematic starting in the 1940s (Chall, 1988). In this context, the first experimental studies on readability were conducted by Thorndike (1921), Lively and Pressey (1923), Vogel and Washburne (1928), Patty and Painter (1931), Dale and Tyler (1934), and Gray and Leary (1935) (Witty, 1951; Liu, 2023). These studies contributed to the evolution of readability formulas, leading to more applicable and accurate results. The FRES Reading Ease Formula, developed by Rudolf Flesch in 1948, has become one of the most well-known formulas in this field. This formula determines the readability level of texts by focusing on the number of words per sentence and the number of syllables per word (Flesch, 1948). At the same time, Edgar Dale and Jeanne Chall also developed a readability formula to determine the difficulty level of texts. In their formula, they define difficult words using a specific word list, and base the formula on variables such as sentence length and difficult (unknown) words (Dale & Chall, 1948). Another formula is the Gunning Fog Index. Developed by Robert P. Gunning in 1952, this formula aims to determine the readability of texts by using variables such as the number of three- or more syllable words, total word count, and total sentence count (Gunning, 1968). These formulas were later followed by the Powers-Sumner-Kearl Readability Formula (1958), Coleman Readability Formulas (1965), Automated Readability Index (1967), Cloze Test Readability (1969), Simple Measure of Gobbledygook (1969), FORCAST Reading Grade Levels (1973), Flesch-Kincaid Grade Level Index (1975), Raygor Readability Estimate (1977), and Fry Readability Graph (2002), among others (Benzer, 2020; Altuntaş Gürsoy & Çevik, 2023).

Initially, these formulas were developed and applied based on English texts, but over time, formulas have been developed for other languages such as German, French, Russian, Chinese, Finnish, Spanish, and Dutch. Additionally, some of the existing formulas have been adapted for other languages (Altuntaş Gürsoy & Çevik, 2023). Each language has its own unique grammatical structures, word lengths, and sentence formation rules, which may cause a readability formula developed for a particular language to produce inaccurate results when applied to another language (Anderson & Davison, 1986). For example, a formula developed to determine the readability level of English texts might yield incorrect results when applied to a German text. This is primarily because German has a more complex sentence structure than English, and word lengths in German tend to be longer than in English (Günther et al., 2019). Similarly, the agglutinative structure of Turkish or the character-based structure of Chinese (Jie, 2020) also influences reading difficulty. Therefore, applying a readability formula developed for a particular language to texts written in another

language would lead to incorrect calculations of readability scores and levels. To avoid this error, the most accurate approach would be to develop or adapt readability formulas according to the structural and characteristic features of each language.

Among readability formulas, Flesch's Reading Ease Formula is one of the most well-known and widely used (Graesser et al., 2004; Faller, 2018). This formula has been adapted by researchers to various languages including French (Kandel & Moles, 1958), Spanish (Fernández Huerta, 1959), Dutch (Douma, 1960), Swedish (Björnsson, 1968), Polish (Pisarek, 1969), German (Amstad, 1978), Italian (Franchina & Vacca, 1986), Turkish (Ateşman, 1997), among others. In this context, the aim of the study is to determine and compare the readability scores and levels of the texts in the B1level textbooks prepared for foreign language learners; for English using the Flesch Reading Ease Formula, for German using the Amstad Readability Formula, and for Turkish using the Ateşman Readability Formula. The following questions are addressed in the study.

- 1. What are the readability scores and levels of the texts in the;
 - a. New Headway English Course B1-level textbook, used for teaching English as a foreign language, according to the Flesch Reading Ease Formula?
 - b. Schritte International Neu B1.1 and B1.2-level textbooks, used for teaching German as a foreign language, according to the Amstad Readability Formula?
 - c. Yeni İstanbul Uluslararası Öğrenciler İçin Türkçe [New Istanbul Turkish for International Students] B1-level textbook, used for teaching Turkish as a foreign language, according to the Ateşman Readability Formula?
- 2. Is there a difference in readability among the B1-level textbooks used for teaching English, German, and Turkish as foreign languages?

2. Methodology

2.1. Research Design

In this study, document analysis, one of the qualitative research techniques, has been utilized. Additionally, the data in the study were analyzed through content analysis and quantified by considering elements such as sentence length, word count, and syllable count. Documents are effectively used as a significant source of information in qualitative research (Merriam & Tisdell, 2016). These sources can include field notes, interview recordings, and other materials collected from the field, as well as academic works such as books, articles, and theses, as well as official or personal correspondence such as letters and emails (Creswell & Guetterman, 2019). While various documents are examined through the document analysis technique (Taylor et al., 2016), the case method is used to describe a situation as it existed in the past or exists in the present (Given, 2008).

2.2. Study Material

The study's research materials consist of textbooks designed for B1-level foreign language learners: New Headway English Course (Soars & Soars, 2019) for English instruction, Schritte International Neu: Deutsch als Fremdsprache (Hilpert et al., 2022) for German instruction, and Yeni İstanbul: Uluslararası Öğrenciler İçin Türkçe [New Istanbul Turkish for International Students] (Bölükbaş et al., 2020) for Turkish instruction.

2.3. Data Collection Tools

In the data collection process for the research, three different readability formulas were used: the Flesch Reading Ease Formula, the Amstad Readability Formula, and the Atesman Readability Formula. Below is a detailed description of the readability formulas used in the study.

2.3.1. Flesch Reading Ease Formula

Flesch Reading Ease Formula (Figure 1) was developed in 1948 by Rudolph Flesch to

determine the readability of English texts. The readability levels and their corresponding scores are presented in Table 1.

Reading Ease =
$$206.835 - 84.6wl - 1.015sl$$

wl: word lenght

sl: sentence lenght

Figure 1

Flesch reading ease formula (Flesch, 1948, p. 229).

Table 1 Readability Levels of English Texts According to the Flesch Reading Ease Formula

Score	Level
90-100 points	Very Easy
80-90 points	Easy
70-80 points	Fairly Easy
60-70 points	Standard
50-60 points	Fairly Difficult
30-50 points	Difficult
0-30 points	Very Difficult

Source: Flesch, 1948, p. 230.

2.3.2. Amstad Readability Formula

The Amstad Readability Formula (Figure 2) is a German adaptation of the Flesch Reading Ease Formula, made by Toni Amstad in 1978. The readability levels and their corresponding scores are presented in Table 2.

Readability Index = 180 - SL - (58.5 x WL)

SL: Sentence Length

WL: Word Length

Figure 2

Amstad readability formula (Amstad, 1978, p. 80).

Table 2 Readability Levels of German Texts According to the Amstad Readability Formula

Score	Level
90-100 points	Very Easy (suitable for students aged 11)
80-90 points	Easy
70-80 points	Fairly Easy
60-70 points	Standard (suitable for students aged 13-15)
50-60 points	Fairly Difficult
30-50 points	Difficult
0-30 points	Very Difficult (suitable for academics)

Source: Li, 2022, p. 190.

2.3.3. Ateşman Readability Formula

Ateşman Readability Formula (Figure 3) is the Turkish adaptation of the readability formula

developed by Flesch, made by Ender Ateşman in 1997. The readability levels and their corresponding scores are presented in Table 3.

Readability Score = $198.825 - (40.175x_1 - 2.610x_2)$

 $x_{l:}$ Average word length in syllables

 x_2 : Average sentence length in words

Figure 3 Ateşman readability formula (Ateşman, 1997, p. 74).

Table 3
Readability Levels of Turkish Texts According to the Ateşman Readability Formula

Score	Level
90-100 points	Very Easy
70-89 points	Easy
50-69 points	Standard
30-49 points	Difficult
1-29 points	Very Difficult

Source: Ateşman, 1997, p. 7

2.4. Data Collection

The data collection process consists of several stages. In the first phase, the criteria for counting sentences in the texts included in the study, as well as how words would be counted, were determined. In this context, structures ending with a period (.), ellipsis (...), question mark (?), or exclamation mark (!) were considered as sentences. Additionally, sequential sentences connected by a comma (,) or semicolon (;) were treated as a single sentence. After counting the sentences, the focus shifted to counting words. Any expression with spaces between parts, regardless of whether they form meaningful words, was counted as a word. Expressions written with numerals (for example, "1923" instead of "one thousand nine hundred twentythree") and abbreviations in their full form (for example, "TDK" as "Türk Dil Kurumu" [Turkish Language Association] or "USA" as "United States of America") were considered, and the number of words and syllables for these expressions were determined. When determining syllable counts, the syllable structure of the respective language was taken into account: English for English texts, German for German texts, and Turkish for Turkish texts. The accuracy of the data used in the calculations was verified through observations made at two different times.

2.5. Data Analysis

Based on the syllable, word, and sentence counts obtained from the text analysis, the average word length (AWL) and average sentence length (ASL) were calculated for each of the English, German, and Turkish texts. The data were then applied to the readability formulas, and the readability level of the texts was determined based on the obtained readability scores.

3. Findings

The findings obtained from the New Headway English Course, Schritte International Neu: Deutsch als Fremdsprache, and Yeni İstanbul: Uluslararası Öğrenciler İçin Türkçe [New Istanbul: Turkish for International Students] textbooks are presented below in the given order.

Table 4
The Flesch Readability Scores and Levels of Texts in New Headway English Course B1 Level

Theme	Texts	AWL	ASL	Flesch Readability Score	Flesch Readability Level
Getting to know you	People the great communicators	1.56	10.54	64.3	Standard
The way we live	Living in the USA	1.41	9.6	77.8	Fairly Easy
It all went wrong	The perfect crime	1.35	7.94	84.17	Easy
Let's go shopping!	The best shopping street in the world	1.45	10.53	73.44	Fairly Easy
What do you want to do?	Hollywood kids	1.42	10.53	76.43	Fairly Easy
Tell me! What's it like?	A tale of two millionaires	1.68	12.15	52.46	Fairly Difficult
Famous couples	The pop star and the footballer	1.28	10.49	87.93	Easy
Do's and don'ts	Dilemmas	1.32	13.78	81.18	Easy
Going places	Megalopolis	1.47	12.58	69.92	Standard

Table 4 (cont'd)					
Theme	Texts	AWL	ASL	Flesch Readability	Flesch Readability
				Score	Level
Scared to	Into the wild	1.37	10.23	80.33	Easy
death					
Things that	Three plants that changed the	1.61	15.32	55.03	Fairly Difficult
change the	world				
world					
Dreams and	I'm a ghostbuster, says vicar	1.26	12.43	87.43	Easy
reality					
Earning a	A funny way to earn a living	1.4	10.14	78.18	Fairly Easy
living					
Love you and	The tale of two silent brothers	1.37	9.2	81.3	Easy
leave you					
	Average	1.43	11.1	74.99	Fairly Easy

In Table 4, the AWL and ASL, readability scores, and readability levels of the texts in the New Headway English Course B1-level textbook are presented. The analysis shows that the word lengths in the texts range from 1.26 to 1.68 syllables, while sentence lengths range from 7.94 to 15.32 words. The texts consist of words with an average of 1.43 syllables and sentences with an

average of 11.1 words. According to the Flesch formula, out of the 14 texts in the textbook, 6 are classified as "easy," 4 as "fairly easy," 2 as "standard," and 2 as "fairly difficult." Additionally, the texts in the New Headway English Course B1-level textbook have an average readability score of 74.99, which classifies them as "fairly easy."

Table 5
The Amstad Readability Scores and Levels of Texts in Schritte International Neu Deutsch als Fremdsprache B1
Level

Theme	Texts	AWL	ASL	Amstad	Amstad
				Readability	Readability Level
				Score	
Glück im	Sechs Richtige	1.54	5.46	84.45	Easy
Alltag	Glücksmomente	1.64	10.6	82.46	Easy
Unterhaltung	Die Serie, die ich machen würde	1.7	10.11	70.44	Fairly Easy
	Deutschsprachige Musiker	1.26	12.72	93.57	Very Easy
Gesund	Komm, entspann dich!	1.73	9.7	69.1	Standard
Bleiben	Lachen ist gesund!	1.64	13.85	70.21	Fairly Easy
	Der Verlust der Mitte	1.8	13.33	61.37	Standard
Sprachen	Sag's durch die Blume!	1.59	11.15	75.84	Fairly Easy
	Mama, das ist kaputto!	1.73	12.85	65.95	Standard
Eine Arbeit	Tobias L., 17, keine Idee	1.7	10.33	70.22	Fairly Easy
Finden	Ich wäre gern kreativer	1.95	9.32	56.61	Fairly Difficult
Dienstleistung	Etwas tun, statt nur zu träumen	1.6	9.5	76.9	Fairly Easy
	Der eigene Chef sein	1.77	11.58	64.88	Standard
Rund ums	Die zwei "R"- Ein Rezept für gute	1.48	9.11	84.31	Easy
Wohnen	Nachbarschaft				
	Fernbeziehungen	1.97	14.32	50.44	Fairly Difficult
	Wo und wie werden wir leben?	1.86	11.77	59.42	Fairly Difficult
Unter	Freundschaften im Job	1.93	9.35	57.75	Fairly Difficult
Kollegen	Die Sterne lügen nicht	2.01	11.1	51.32	Fairly Difficult
Virtuelle Welt	Sind Maschinen besser als wir?	1.75	10.21	67.42	Standard
	Was soll ich bloß tun?	1.58	12.95	74.62	Fairly Easy

Table 5 (cont'd)					
Themes	Texts	AWL	ASL	Amstad	Amstad
				Readability	Readability
				Score	Level
Werbung und	Der strahlende Sieger	1.77	12.33	64.13	Standard
Konsum	Die sprechende Zahnbürste	1.67	8.41	73.9	Fairly Easy
	Revolution und Geschäft	1.95	11.58	54.35	Fairly Difficult
Miteinander	Alles hat seinen Preis	1.59	7.81	79.18	Fairly Easy
	Arbeitsalltag anders	1.73	13.18	65.62	Standard
Soziales	Nachbarschaftshilfe- Jeder hilft	1.86	11.9	59.29	Fairly Difficult
Engagement	jedem				
	Engagement macht stark!	2.1	12.7	44.45	Difficult
Aus Politik	Tun, was man tun kann	1.8	11.91	62.79	Standard
und	Der anatolische Schwabe	1.93	11.72	55.38	Fairly Difficult
Geschichte					
Alte und neue	Ein Fest der Vielfalt	1.71	10.08	69.89	Standard
Heimat	Eine Reportage zum Thema	1.65	12.68	70.8	Fairly Easy
	Heimat				
	Average	1.74	11.08	67.32	Standard

In Table 5, the AWL and ASL, as well as the readability scores and levels according to the Amstad Readability Formula, are presented for the B1-level textbook Schritte International Neu Deutsch als Fremdsprache. The word lengths range from 1.26 to 2.1 syllables, while sentence lengths range from 5.46 to 14.32 words. Additionally, the texts in this book consist of words with an average of 1.74 syllables and

sentences with an average of 11.08 words. When evaluating the readability scores and levels of the texts, it is found that out of the 31 texts examined, 1 is classified as "very easy," 3 as "easy," 9 as "fairly easy," 9 as "standard," 8 as "fairly difficult," and 1 as "difficult." Furthermore, the B1-level textbook for teaching German as a foreign language has an average readability score of 67.32, classifying it as "standard."

Table 6 The Ateşman Readability Scores and Levels of Texts in Yeni İstanbul Uluslararası Öğrenciler İçin Türkçe [New Istanbul Turkish for International Students] B1 Level

Theme	Texts	AWL	ASL	Ateşman	Ateşman
				Readability	Readability
				Score	Level
Yeni Bir Hayat	Nasıl Bir Ev Arıyorsunuz?	2.34	8.07	83.75	Easy
	Nereye Gideceğiz?	2.55	4.91	83.56	Easy
	İkinci Vatanım Türkiye	2.46	7	81.72	Easy
İş Dünyası	İş Hayatındaki Roller	2.75	7.74	68.14	Standard
	Yoğurdun Steve Jobs'u	2.6	7.7	74.27	Easy
	Meslek Seçimi	2.85	11.27	54.91	Standard
Her Şeyin Başı	Sağlıklı Yaşam Tavsiyeleri	2.63	7.67	73.15	Easy
Sağlık	Bulaşıcı Hastalıklar ve Korunma	2.95	10.47	52.98	Standard
	Yolları				
	Obsesif Kompulsif Bozukluk	2.75	9.89	62.53	Standard
	Nedir?				

Table 6 (cont'd)					
Theme	Texts	AWL	ASL	Ateşman	Ateşman
				Readability	Readability
				Score	Level
Eğitim Hayatı	Okumanın Yaşı Yoktur	2.74	7.72	68.6	Standard
	Herkes Aynı Şekilde mi Öğrenir?	2.84	6.27	68.36	Standard
	Dünyadan Eğitim Haberleri	3.03	8.73	54.34	Standard
Hayallerimiz	Dilekler	2.65	6.52	75.34	Easy
	Pişmanlıklarınızdan Kurtulun	2.6	6.33	77.85	Easy
	Şikâyetim Var	2.48	7.32	80.09	Easy
Bir Dünya	Farklı Kültürlerde Beden Dilleri	2.65	10.97	63.73	Standard
Kültür	Göçebe Yaşam: Yörükler	2.56	7.54	76.3	Easy
	Bir Dünya Festival	2.71	9.59	64.92	Standard
	Average	2.67	8.1	70.25	Easy

When examining Table 6, it becomes evident that the Yeni İstanbul Uluslararası Öğrenciler İçin Türkçe [New Istanbul Turkish for International Students] B1-level textbook contains texts with varying word lengths, sentence lengths, and readability scores. The word lengths range from 2.34 to 3.03 syllables, while sentence lengths vary between 4.91 and 11.27 words. On average, the analyzed 18 texts consist of words with 2.67

syllables and sentences with 8.1 words. According to the Ateşman Readability Formula, the readability scores classify eight of these texts as "easy" and the remaining eight as "standard." Additionally, the B1-level textbook used for teaching Turkish as a foreign language has an average readability score of 70.25, classifying it as "easy.

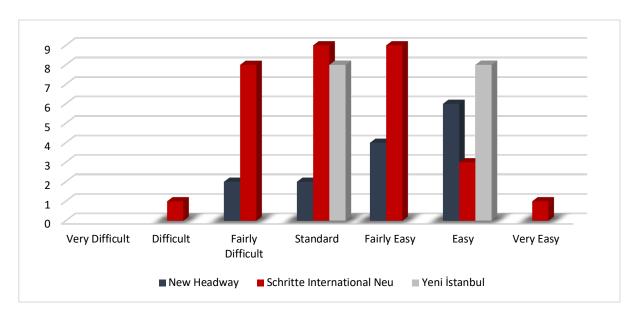


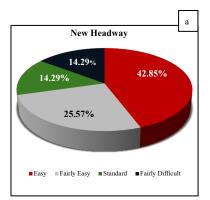
Figure 4
Distribution of texts in the reviewed B1 level textbooks in terms of readability

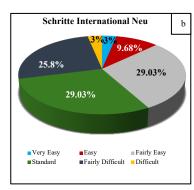
Figure 4 presents the readability distribution of texts from three different B1-level textbooks: *New Headway, Schritte International Neu,* and *Yeni İstanbul [New Istanbul].* The analysis reveals that in

the English language textbook, six texts are categorized as "easy," four as "fairly easy," two as "standard," and two as "fairly difficult." In the German language textbook, one text is classified

as "very easy," three as "easy," nine as "fairly easy," nine as "standard," eight as "fairly difficult," and one as "difficult." Meanwhile, in the Turkish language textbook, eight texts are in

the "easy" category, while the other eight fall into the "standard" category.





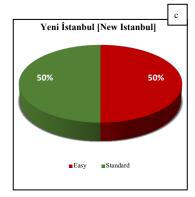


Figure 5a, 5b, 5c

Distribution of readability levels in the New Headway textbook, Schritte International Neu textbook, Yeni İstanbul [New Istanbul] textbook

Figure 5a illustrates the distribution of readability levels in the New Headway English Course textbook designed for B1-level learners. The analysis indicates that the majority of texts (42.85%) fall into the "easy" category, followed by "fairly easy" texts (25.57%). Additionally, "standard" and "fairly difficult" texts each account for 14.29% of the total. Notably, the textbook does not contain any texts classified as "very easy," "difficult," or "very difficult."

Figure 5b presents the distribution of readability levels in the Schritte International Neu textbook designed for B1-level learners. The analysis shows that the majority of texts fall into the "fairly easy" and "standard" categories, each accounting for 29.03% of the total. These are followed by "fairly difficult" texts (25.8%), "easy" texts (9.68%), and "very easy" and "difficult" texts, both at 3%. Notably, the textbook does not contain any texts classified as "very difficult."

Figure 5c illustrates the distribution of readability levels in the Yeni İstanbul Uluslararası Öğrenciler İçin Türkçe [New Istanbul Turkish for International Students] textbook designed for B1-level learners. According to the analysis, 50% of the examined texts fall into the "easy" category, while the remaining 50% are classified as "standard."

4. Discussion and Conclusion

In this study, the readability levels of the texts in B1 level textbooks used for teaching English, German, and Turkish as foreign languages were compared and analyzed. The B1 level represents a stage where language learners are capable of sufficient communication in daily life but still face certain limitations in understanding academic or complex texts (Council of Europe, 2020). Therefore, the readability of textbooks used at the B1 level is crucial and effective for students' language learning progress. The findings reveal that the readability levels of textbooks prepared in different languages show significant differences. These noticeable differences may be related to the structure, syntax, and the design processes of the texts in terms of teaching and learning.

The readability level of the New Headway English Course B1 level textbook is 74.99 points, with an average rating of "fairly easy." The textbook is designed with texts that are relatively easy to read and comprehend for foreign language learners, meaning it features a straightforward language structure. According to the Flesch Reading Ease Formula, 6 of the 14 English texts examined in the study are classified as "easy," 4 as "fairly easy," 2 as "standard," and 2 as "fairly

difficult." This suggests that the texts in the English textbook have a relatively high readability level. These results align with previous studies (Crossley et al., 2008), indicating that the textbooks used in English language teaching are appropriate in terms of readability for learners' levels, which is consistent with the data obtained in this study.

The German textbook Schritte International Neu Deutsch als Fremdsprache is considered "standard" readable in terms of the texts it contains. The average readability score of the texts in this textbook is 67.32 points. Compared to English, German tends to have longer words, which leads to more complex sentence structures (Wolf et al., 2008). This can help explain the findings observed in this study. The readability values obtained using the Amstad formula indicate that the German texts are more difficult than the English texts. Upon examining the German texts, it was found that out of the 31 texts, 1 was rated "very easy," 3 were "easy," 9 were "fairly easy," 9 were "standard," 8 were "fairly difficult," and 1 was "difficult." The textbook's inclusion of complex grammar structures contributes to advanced learning of German grammar for students. In a study conducted by Başaran (2023), it was found that the readability of textbooks used in German language teaching is at a "standard" level, and they contain complex grammatical structures. The German textbook examined in this study aligns with these findings. In other words, the textbook designed for teaching German provides opportunities for students to enhance their language skills.

The results obtained show that the Yeni İstanbul Uluslararası Öğrenciler İçin Türkçe [New Istanbul Turkish for International Students] B1 level textbook, designed for teaching Turkish as a foreign language, falls into the "easy" category in terms of readability. The average readability score for the 18 texts analyzed in the book is 70.25. The agglutinative structure of Turkish and the relatively shorter sentence lengths (Ateşman, 1997) have contributed to this outcome. The findings indicate that some texts used in the teaching of Turkish as a foreign language are of "fairly difficulty," and this is attributed to the type of the text itself. In previous studies (Sever, 2001;

Demir & Çeçen, 2013), it has been found that textbooks prepared for teaching Turkish may vary in terms of readability. According to the Ateşman formula, out of the 18 texts in the book, 8 are rated as "easy" and 8 as "standard."

The findings reveal that the three textbooks primarily focus on the "fairly easy," "standard," and "fairly difficult" levels. This distribution suggests that the texts at the B1 level require a certain amount of cognitive effort while still being relatively easy to understand. New Headway displays a more balanced distribution between the easy and standard levels compared to the other This book offers two sources. systematic progression in vocabulary and grammar, encouraging students to engage in critical thinking. However, the density of some texts may be challenging for students. Additionally, the fact that the examined textbook is based on British English may present some limitations for learners seeking to study in the context of American

Schritte International Neu holds the highest value in the "fairly difficult" and "fairly easy" categories. This indicates that the book generally presents a moderate level of difficulty, providing learners with reading experiences at varying levels. However, it should be noted that the more challenging texts in the book may create a cognitive load for some learners.

Yeni İstanbul [New Istanbul], shows high values in the "easy" and "standard" categories, with a significant increase in the "easy" category. This suggests that the book contains relatively more easily understandable texts, making it more accessible, particularly for individuals learning Turkish as a foreign language. However, it should be questioned whether the difficulty level of the book's texts gradually increases to support the transition to higher levels.

It is observed that none of the three textbooks contain texts at a very difficult level, and only a few texts are classified as difficult. This suggests that the textbooks generally adhere to the boundaries of the B1 level. The *Schritte International Neu Deutsch als Fremdsprache* B1 textbook, with its readability levels categorized as "fairly difficult" and "standard," may contribute to the development of more complex language

skills among learners. In contrast, the Yeni İstanbul Uluslararası Öğrenciler İçin Türkçe [New Istanbul Turkish for International Students] B1 textbook is classified as "easy" in terms of readability, indicating that it offers clear and accessible content. The New Headway English Course B1 textbook appears to maintain a balanced structure, striking a middle ground between easy and difficult texts.

The findings of this study indicate that the readability levels of B1-level foreign language textbooks are shaped by different strategies during their development. *Schritte International Neu* contains cognitively demanding texts, while *Yeni İstanbul [New Istanbul]* offers more accessible and comprehensible content. *New Headway*, on the other hand, maintains a relatively balanced structure, providing suitable options for learners at different proficiency levels.

As is well known, the selection of instructional materials considers students' interests and needs, reading habits, language development processes, and the supportive nature of the texts for learning. In the context of foreign language teaching, Yeni İstanbul [New Istanbul] provides more accessible content for learners of Turkish. Schritte International Neu, designed for learners of German, contains relatively more complex texts and caters to more advanced learners. Meanwhile, New Headway, intended for English learners, offers more balanced learning process intermediate-level students. The most suitable textbook should be selected based on the student's learning needs and goals.

In foreign language teaching, the more readable the texts are, the more effective the students' comprehension process becomes. Previous studies (Chall & Dale, 1995) have shown that easily readable texts accelerate students' language learning processes and improve their comprehension skills. However, since readability formulas rely solely on quantitative data, they are not sufficient to determine the pedagogical value of textbooks (McNamara et al., 2014). Factors such as students' individual differences, cultural backgrounds, and motivation also play a crucial role in text comprehensibility (Nation, 2022)

This study, which compares and analyzes the readability levels of B1-level textbooks used for teaching English, German, and Turkish as foreign languages, highlights important considerations for selecting texts to be used in foreign language instruction. Future readability studies textbooks designed for different language levels may support making textbooks more effective and accessible. Additionally, more comprehensive results can be obtained regarding development of instructional materials through holistic studies that take student feedback and data on their comprehension levels into account.

5. Limitations of the Study

This study is limited to 63 texts: 14 from the "New Headway English Course" used in English instruction, 31 from the "Schritte International Neu Deutsch als Fremdsprache" used in German instruction, and 18 from the "Yeni İstanbul Uluslararası Öğrenciler İçin Türkçe" [New Istanbul Turkish for International Students] used in Turkish instruction. The research is restricted to the results obtained through the application of the readability formulas Flesch (1948) for English texts, Amstad (1978) for German texts, and Ateşman (1997) for Turkish texts.

Declarations

Acknowledgments: The authors declare that they have no conflicts of interest regarding the research, authorship, and/or publication of this article.

Funding: This research received no specific grant from any funding agency in the public, commercial, or not-for-profit sectors.

Conflict of Interest: The authors declare no potential conflicts of interest with respect to the research, authorship, or publication of this article.

Statement on the Use of AI: No artificial intelligence tools were used in the conception, design, or writing of this study.

References

- Acarlar, F., Ege, P., & Turan, F. (2002). Türk çocuklarında üstdil becerilerinin gelişimi ve okuma ile ilişkisi [Development of metalinguistic abilities and its relationship with reading in Turkish children]. *Türk Psikoloji Dergisi*, 17(50), 63-73.
- Akbaş, B., & Aksoy, E. (2024). Sevim Ak hikâyelerinin okunabilirlik açısından değerlendirilmesi [An evaluation of Sevim Ak's stories in terms of readability]. *Nizip Eğitim Fakültesi Dergisi*, 1(1), 62-73.
- Altuntaş Gürsoy, İ., & Çevik, M. (2023). Türkçenin yabancı dil olarak öğretimi için hazırlanmış yardımcı okuma kitaplarının okunabilirliklerinin incelenmesi [Investigation of readability of supplementary reading books prepared for teaching Turkish as a foreign language]. *Korkut Ata Türkiyat Araştırmaları Dergisi* (13), 1227-1245. https://doi.org/10.51531/korkutataturkiyat.1391687
- Amstad, T. (1978). Wie verständlich sind unsere Zeitungen? Unveröffentlichte Doktorarbeit. Universität Zürich, Zürich.
- Anderson, R. C., & Davison, A. (1986). Conceptual and empirical bases of readability formulas. (Technical Report No. 392).
- Ateş, E., & Aytekin, H. (2020). Küreselleşen dünyada çokkültürlülük ve yabancı dil eğitimi [Multiculturalism and foreign language education in a globalized world]. *OPUS Uluslararası Toplum Araştırmaları Dergisi*, 15(26), 4563-4579. https://doi.org/10.26466/opus.651385
- Ateşman, E. (1997). Türkçede okunabilirliğin ölçülmesi [Measuring readability in Turkish]. *Dil Dergisi*, (58), 71-74. Başaran, B. (2023). Die Lesbarkeit; noch ein weiterer Indikator für DaF-Lehrwerke? *Diyalog*, (Sonderausgabe: Germanistik im Wandel der Zeit), 590-609.
- Benzer, A. (2020). Yapay zekâya dayalı okunabilirlik formülüne doğru bir adım [A step toward the formula of readability based on artificial intelligence]. *Araştırma ve Deneyim Dergisi*, 5(1), 47-82.
- Björnsson, C. H. (1968). Läsbarhet. Stockholm: Liber.
- Bölükbaş, F., Yalçın Yılmaz, M., & Keskin, F. (2020). *Yeni İstanbul Uluslararası Öğrenciler İçin Türkçe (B1)* [New Istanbul Turkish for international students (B1)]. Kültür Sanat Basımevi.
- Chall, J. S. (1988). Readability: Its past- The beginning years. In B. L. Zakaluk & S. J. Samuels (Eds.), *Readability: Its Past, Present, and Future* (pp. 2-13). Newark: International Reading Association.
- Chall, J. S., & Dale, E. (1995). Readability Revisited: The New Dale-Chall Readability Formula. Brookline Books.
- Council of Europe (2020). Common European Framework of Reference for Languages: Learning, teaching, assessment Companion volume, Council of Europe Publishing, Strasbourg. available at www.coe.int/lang-cefr.
- Creswell, J. W., & Guetterman, T. C. (2019). *Educational research: Planning, conducting and evaluating quantitative and qualitative research* (6th Edition). Pearson.
- Crossley, S. A., Greenfield, J., & McNamara, D. S. (2008). Assessing text readability using cognitively based indices. *TESOL Quarterly*, 42(3), 475-493.
- Dale, E., & Chall, J. S. (1948). A formula for predicting readability: Instructions. *Educational Research Bulletin*, 27(2), 37-54.
- Demir, M., & Çeçen, M. A. (2013). İlköğretim I-V. sınıflar Türkçe ders kitaplarındaki metinlerin okunabilirlik açısından değerlendirilmesi [An evaluation on texts of 1st-5th classes Turkish course books in term of readability]. *Millî Eğitim*, 197, 80-94.
- Demircan, Ö. (1988). *Dünden bugüne Türkiye'de yabancı dil* [Foreign language education in Türkiye: From past to present]. İstanbul: Remzi Kitabevi.
- Douma, W. H. (1960). De leesbaarheid van landbouwbladen: Een onderzoek naar en een toepassing van leesbaarheidsformules. Bulletin No. 17. Afdeling Sociologie En Sociografie Van De Landbouwhogeschool. Wageningen.
- Dreyer, L. G. (1984). Readability and responsibility. *Journal of Reading*, 27(4), 334-338.
- Faller, J. M. V. (2018). Extant readability tools online for classroom utilization. *International Journal of English and Education*, 7(4), 102-113.
- Fernández Huerta J. (1959). Medidas sencillas de lecturabilidad. Consigna, 214, 29-32.
- Flesch, R. F. (1948). A new readability yardstick. Journal of Applied Psychology, 32(3), 221-233.
- Franchina, V., & Vacca, R. (1986). Adaptation of Flesh readability index on a bilingual text written by the same author both in Italian and English languages. *Linguaggi*, 3, 47-49.
- Given, L. M. (Ed.), (2008). The SAGE encyclopedia of qualitative research methods (Volumes 1 & 2). SAGE.

- Graesser, A. C., McNamara, D. S., Louwerse, M. M., & Cai, Z. (2004). Coh-Metrix: Analysis of text on cohesion and language. *Behavior Research Methods, Instruments, & Computers,* 36(2), 193-202. https://doi.org/10.3758/BF03195564
- Gunning, R. (1968). The technique of clear writing. Revised Edition. McGraw-Hill Book Company: New York.
- Günther, F., Smolka, E., & Marelli, M. (2019). Understanding differs between English and German: Capturing systematic language differences of complex words. *Cortex*, 116, 168-175. https://doi.org/10.1016/j.cortex.2018.09.007
- Hilpert, S., Kerner, M., Orth-Chambah, J., Pude, A., Schümann, A. Specht, F., Weers, D., Gottstein-Schramm, B., Kalender, S., Krämer-Kienle, I., Niebisch, D., & Reimann, M. (2022). *Schritte International Neu Deutsch als Fremdsprache Kurs- und Arbeitsbuch (B1.1)*. Hueber Verlag.
- Hilpert, S., Kerner, M., Pude, A., Robert, A., Schümann, A., Specht, F., Weers, D., Gottstein-Schramm, B., Hagner, V., Kalender, S., & Krämer-Kienle, I. (2022). *Schritte International Neu Deutsch als Fremdsprache Kurs- und Arbeitsbuch (B1.2)*. Hueber Verlag.
- Jie, S. (2020). The nature of Chinese characters. Advances in Social Science, Education and Humanities Research, volume 497, Proceedings of the 2nd International Conference on Literature, Art and Human Development (ICLAHD 2020). 267-270.
- Kandel, L., & Moles, A. (1958). Application de l'indice de Flesch á la langue française. *Cahiers d'Études de Radio-Télévision*, pages 253274.
- Karaman, F. (2017). Temel eğitimde ikinci yabancı dil olarak Almanca öğretimi [German teaching as a second foreign language in basic education]. *Batman Üniversitesi Yaşam Bilimleri Dergisi*, 7(2/1), 104-110.
- Li, J. (2022). Kognitionstranslatologie: Das verbale Arbeitsgedächtnis im Übersetzungsprozess. Berlin: Frank & Timme.
- Liu, Y. (2023). Readability and adaptation of children's literature: An interpersonal metaphor perspective. *Journal of World Languages*, 2023, 1-22. https://doi.org/10.1515/jwl-2022-0039
- McLaughlin, G. H. (1969). SMOG grading: A new readability formula. Journal of Reading, 12(8), 639-646.
- McNamara, D. S., Graesser, A. C., McCarthy, P. M., & Cai, Z. (2014). Automated Evaluation of Text and Discourse with Coh-Metrix. Cambridge University Press.
- Merriam, S. B., & Tisdell, E. J. (2016). Qualitative research: A guide to design and implementation (4th Edition). Wiley.
- Nation, I. S. P. (2022). Learning Vocabulary in Another Language (3rd Edition). Cambridge University Press.
- Özçetin, K., & Karakuş, N. (2020). 5. sınıf Türkçe ders kitaplarındaki metinlerin okunabilirlik yönünden incelenmesi [Readability of the 8th grade Turkish textbooks]. *Türkiye Eğitim Dergisi*, 5(1), 175-190.
- Pisarek, W. (1969). Jak mierzyć zrozumiałość tekstu? Zeszyty Prasoznawcze, 4(42), 35-48.
- Rye, J. (1982). *Cloze procedure and the teaching of reading*. London: Heineman.
- Sever, S. (2001). Öğretim dili olarak Türkçenin sorunları ve öğretme-öğrenme sürecinde etkili yaklaşımlar [Problems of Turkish as a medium of instruction and effective approaches in the teaching-learning process]. Ankara Üniversitesi Eğitim Bilimleri Fakültesi Dergisi, 34(1), 11-22. https://doi.org/10.1501/Egifak_00000000047
- Soars, J., & Soars, L. (2019). New Headway English Course. Oxford University Press.
- Stenner, A. J., & Stone, M. H. (2023). Does the Reader Comprehend the Text Because the Reader is Able or Because the Text is Easy? In: Fisher Jr., W. P., Massengill, P. J. (eds.) *Explanatory Models, Unit Standards, and Personalized Learning in Educational Measurement.* (p. 133-152). Springer, Singapore. https://doi.org/10.1007/978-981-19-3747-7 11
- Taylor, S. J., Bogdan, R., & DeVault, M. L. (2016). *Introduction to qualitative research methods: A guidebook and resource* (4th Edition). Wiley.
- Wilkens, R., Alfter, D., Wang, X., Pintard, A., Tack, A., Yancey, K., & François, T. (2022). FABRA: French aggreator-based readability assessment toolkit. Proceedings of the 13th Conference on Language Resources and Evaluation (LREC 2022), (p. 1217-1233), 20-25 June, Marseille.
- Witty, P. (1951). Improving readability of printed materials. *Elementary English*, 28(7), 392-401, 409.
- Wolf, M., Horn, A. B., Mehl, M. R., Haug, S., Pennebaker, J. W., & Kordy, H. (2008). Computergestützte quantitative textanalyse: Äquivalenz und robustheit der deutschen version des linguistic inquiry and word count. *Diagnostica*, 54(2), 85-98. https://doi.org/10.1026/0012-1924.54.2.85