

**EĞİTİM**  
yayınevi

CONTEMPORARY RESEARCH IN  
**LANGUAGE  
EDUCATION**



**EDITOR: ASST. PROF. DR. AYSEL DEREGÖZÜ**

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## TABLE OF CONTENTS

<b>FOREWORD .....</b>	<b>5</b>
<b>EXPLORING CHALLENGES IN ENGLISH CONSONANT SOUNDS FOR ARAB AND TURKISH EFL LEARNERS .....</b>	<b>7</b>
Namık ÜLKERSOY, Fatch SHAMMAA	
<b>EVALUATING THE E-LEARNING READINESS OF TURKISH EFL LEARNERS.....</b>	<b>31</b>
Cennet YILDIZ	
<b>EMBRACING DIVERSITY: MULTILINGUAL TEACHERS' PERSPECTIVES ON MULTILINGUALISM .....</b>	<b>49</b>
Aysel DEREGÖZÜ, Ismail ELHAYDAR	
<b>YAPAY ZEKÂNIN YABANCI DİL ÖĞRETİMİNDE KULLANIMI: ALMANCA ÖRNEĞİ.....</b>	<b>77</b>
Aygül ŞAHİN TOPTAŞ	



## FOREWORD

Dear Readers,

It is with great pleasure and enthusiasm that I introduce you to the book “Contemporary Research in Language Education”. This volume represents the collective efforts of dedicated scholars and researchers who are passionate about the field of language education. Their work exemplifies the richness and diversity of this dynamic discipline.

Language education, in today’s interconnected world, plays a pivotal role in fostering communication, understanding, and cultural exchange. As languages and cultures evolve and intersect, so too does the study of language education. This book offers a comprehensive exploration of the current research landscape in this ever-evolving field.

The authors featured in this book take you on a journey through the various facets of language education, providing insights into phonetics, multilingualism, and innovative pedagogical practices.

I extend my sincere gratitude to all the authors who have contributed their expertise and dedication to make this book a reality. The diverse perspectives and rigorous research have enriched our understanding of language education. I would also like to thank the peer reviewers who meticulously assessed the quality and scholarly merit of the contributions.

My appreciation extends to the publisher, whose support and commitment have made the publication of this book possible, as well as to the diligent individuals involved in its production.

I hope that “Contemporary Research in Language Education” will serve as a valuable resource for educators, researchers, policymakers, and anyone interested in the dynamic world of language education. May it inspire continued exploration and innovation in the field, ultimately contributing to the advancement of language education and intercultural understanding.

With warm regards,

Asst. Prof. Dr. Aysel DEREGÖZÜ



# EXPLORING CHALLENGES IN ENGLISH CONSONANT SOUNDS FOR ARAB AND TURKISH EFL LEARNERS

Namık ÜLKERSOY<sup>1</sup>, Fateh SHAMMAA<sup>2</sup>

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## INTRODUCTION

Pronunciation is considered a crucial sub-skill in language learning, yet it is often a challenging aspect for EFL learners. Several factors can contribute to the difficulties encountered during conversations, with the main factor being the differences between the phonological systems of the learner's first language and the target language. These differences can significantly impact the accuracy of pronunciation. Additionally, the limited exposure or interaction with native speakers of the target language is also an important factor contributing to mispronunciation.

Pronunciation is a challenging sub-skill for many EFL learners, as they may struggle with producing certain English sounds correctly. According to Fraser (2011), mispronunciation can be linked to physical ability, as learners may have difficulty distinguishing between sounds that do not exist in their native language. This indicates that the phonological system of a learner's first language can impact their ability to accurately pronounce sounds in the target language, as noted by Avery & Ehrlich (2013). Additionally, due to the influence of Latin and Greek on English, speakers who are proficient in these languages can often predict the correct pronunciation of English words influenced by the same languages (Henry, 1987). For instance, the Greek pronunciation of 'ch' as /k/ can enable speakers of Greek to correctly pronounce the word 'chemistry' as /'kemɪstri/ or /'kɛməstri/. However, there is a lack of research on whether

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Turkish ELT and EFL learners experience difficulties with this aspect of pronunciation.

To address the challenge of pronunciation in English, this study aims to compare two different languages, Turkish and Arabic, which are not influenced by Latin or Greek. The focus will be on specific consonant sounds such as /p/, /b/, /v/, /f/, /t/, /d/, /k/, /g/, /ð/, and /θ/ as well as initial-consonant clusters. The study will involve both EFL and ELT learners to identify problematic sounds and determine the reasons behind the difficulty. Additionally, the study will consider the position of these sounds (initial, middle, and final) since some EFL learners may pronounce these sounds correctly in one position but not in others. By identifying the reasons behind the difficulty, solutions can be developed to address these problematic sounds.

This research aims to investigate the impact of the native consonant inventory on English consonant pronunciation errors. Specifically, the study will focus on some consonant phonemes in Arabic and Turkish languages. The definition of a phoneme, which is the smallest unit in a language's sound system that can alter the meaning of words, will be explored (Demirezen, 1986, 1987; Ladefoged, 1975; Roach, 1991). Additionally, the study will examine allophones, which are different variants of the same phoneme that occur in distinct contexts. The concept of minimal pairs, which consist of phonemes occurring in the same environment and producing meaning differences, will also be explored (Demirezen, 1986, 1987; Ladefoged, 1975; Roach, 1991). By understanding these concepts, we can better understand the causes of pronunciation difficulties and develop solutions to address them.

## **PHONOLOGICAL STUDIES AND THEORIES ON CONSONANTS**

A discussion of the sound inventories of the three languages is a must, to start with, to clarify some consonant sounds related to this study in each language. For many years, there has been a significant focus on analyzing the mistakes that non-native speakers of English, both those learning it as a second language (ESL) and those learning it as a foreign language (EFL), make with regards to phonology. To explain the errors that these individuals make, Lado has suggested that the key lies in comparing the native language of the learner with the foreign language they are attempting to learn. Lado believes that when a student encounters a foreign language, they will find some aspects of it easy to learn, while others will prove to be extremely difficult. Specifically, elements

of the foreign language that are similar to their native language will be easy for them to learn, while those that differ significantly from their native language will present a greater challenge (Lado, 1957, pp. 1-2).

### CONSONANT SOUNDS OF ARABIC, TURKISH AND ENGLISH

English, Arabic, and Turkish differ in their consonant inventories. English has 24 consonant sounds, while Arabic has 28, and Turkish has 21. Arabic, being a Semitic language, has a rich consonantal system and a limited vocalic system. However, despite these differences, English and Arabic share only 14 consonant sounds. In contrast, Turkish shares most of its consonant sounds with English, as they have 20 consonants in common. To provide a better understanding of the phonetic nature of consonants in these languages, Tables 2.1.1, 2.1.2, and 2.1.3 have been included in this study.

Table 2.1.1 shows the English consonants.

	Bilabial	Labio-dental	Dental	Alveolar	Palate-alveolar	Palatal	Velar	Glottal
<b>Stops</b>	p			t			k	
	b			d			g	
<b>Fricatives</b>		f	θ	s	ʃ			h
		v	ð	z	ʒ			
<b>Affricative</b>					tʃ dʒ			
<b>Nasals</b>	m			n			ŋ	
<b>Laterals</b>				l				
<b>Approximants</b>	w				r	j		

Table 2.1.2 shows the Turkish consonants.

	Bilabial	Labio-dental	Dental	Alveolar	Palate-alveolar	Palatal	Velar	Glottal
<b>Stops</b>	p			t			k	
	b			d			g	
<b>Fricatives</b>		f		s	ʃ			h
		v		z	ʒ			
<b>Affricative</b>					tʃ dʒ			
<b>Nasals</b>	m			n			ŋ	
<b>Laterals</b>				l				
<b>Approximants</b>					r	j		

**Table 2.1.3** shows the Arabic consonants.

	Labial	Labio-dental	Inter-dental	Dental-alveolar	Palatal	Velar	Uvular	Pharyngeal	Laryngeal
Plosive emphatic	b			t, d ʔ	ʃ/ǧʃ	k	q		ʔ
Fricative emphatic		f	t, d ð	s, z ʃ	ç		ħ, ʁ	ħ, ʕ	h
Nasal	m			n					
Lateral emphatic				l ɗ					
Tap				r					
Glide					j	w			

**THE CONTRASTIVE ANALYSIS HYPOTHESIS (CAH)**

The concept that involves examining the similarities and differences between a learner’s first language (L1) and the second language, they are attempting to learn (L2) in order to understand and explain the difficulties they may encounter in the process is called The Contrastive Analysis Hypothesis (CAH).

In the light of CAH, vowel sounds are somehow challenging because Turkish has eight vowel sounds, which are “a,” “ı,” “o,” “u,” “e,” “i,” “ö,” and “ü.” Arabic, on the other hand, has only three vowel sounds, which are “a,” “i,” and “u.” As a result, Turkish EFL learners may find it challenging to distinguish between the various vowel sounds in English, especially those that are not present in their native language. For example, they may have difficulty differentiating between the English “i” and “ee” sounds. In contrast, Arabic EFL learners may struggle with the English short “i” sound, which is not present in their language. This sound is often found in English words such as “it,” “sit,” and “ship.” Therefore, Arabic EFL learners may have difficulty producing and recognizing this sound in English, as it is not present in their native language.

Moreover, consonant sounds vary and can be challenging too because Arabic has some consonant sounds that do not exist in English, such as the “ghayn” and “qaf” sounds. These sounds can be particularly challenging for Arabic EFL learners when they try to produce and recognize them in English. For instance, the “ghayn” sound is a voiced velar fricative sound that is pronounced in the back of the throat, and it is often written as “gh” in English transliteration. English words such as “ghost” and “guitar” contain this sound. However, Arabic EFL learners may substitute this sound with other sounds that exist in their language, such as the “kh” sound, which can lead to pronunciation errors.

On the other hand, according to Özcan and (2018), Turkish has a few consonant sounds that are absent in English, such as the “ğ” sound. This sound

is a voiced palatal fricative sound that is pronounced in the middle of the mouth, and it is not found in English. As a result, Turkish EFL learners may struggle with pronouncing certain English consonant sounds, such as the “v” and “w” sounds, which do not exist in Turkish. They may substitute these sounds with other similar sounds in Turkish, which can lead to pronunciation errors.

Understanding these differences in vowel and consonant sounds between the learners’ L1 and L2 can help educators develop targeted strategies to help learners overcome these difficulties. For example, educators may use minimal pairs exercises, where learners listen to and repeat words that differ by only one sound, to help learners differentiate between similar vowel sounds in English.

### **THE MARKEDNESS DIFFERENTIAL HYPOTHESIS (MDH)**

Another important hypothesis that suggests some difficulty that second language learners might face is called The Markedness Differential Hypothesis (MDH). According to Brown (2007), It is a linguistic theory that proposes that second language (L2) learners encounter difficulties in acquiring certain features of a language because these features are marked in the L2 but unmarked in the learner’s first language (L1). According to the MDH, markedness refers to the degree of complexity or deviation from a language’s norms or standards.

English, for instance, has two consonant sounds, “v” and “w,” that are produced by placing the lips together in different ways. These sounds are marked in English because they are not present in Arabic or Turkish. According to the MDH, Arab and Turkish EFL learners may struggle with distinguishing between the “v” and “w” sounds because they are marked and different from their L1.

Overall, the MDH provides a framework for understanding the difficulties that L2 learners may encounter in acquiring certain features of the L2. By identifying which features of the L2 are marked or unmarked, educators can develop targeted strategies to help learners overcome these difficulties and improve their overall proficiency in the language.

The dissimilarities between the sound systems of Arabic and English, as well as Turkish and English, can lead to mispronunciation. Nunan (2001) highlighted that greater differences in the sound systems of both languages can result in more mispronunciations. Previous studies have also identified some specific challenges that EFL Arab learners face when pronouncing English sounds. Avery and Ehrlich (1992) noted that Arab EFL learners may encounter

difficulties pronouncing certain sounds such as /p/ because it does not exist in the Arabic language. As a result, they might substitute /b/ for /p/. The /v/ sound is another complex sound for Arab EFL learners, and they may replace it with /f/. Pathan (2004) found that learners tend to use the nearest equivalent sound in their first language. Differences in the phonological systems among languages can thus result in mispronunciation.

As Kharma and Hajjaj (1989) suggest, Arabic includes the sounds /n/ and /ŋ/, but they are considered allophones of the same phoneme /n/, unlike in English where they are distinct phonemes. Consequently, Arab EFL learners may struggle to differentiate between these two sounds or may substitute /g/ or /k/ for /ŋ/.

El-Zarka (2013) points out that the primary difference between Arabic and English lies in their consonant sounds. Arabic possesses a larger inventory of consonants with 28 in contrast to English's 25. While many of these consonants are shared between the two languages, there are some that are unique to English, such as p, v, g, and ch. This difference also holds true for Turkish, which has 21 consonant sounds, but only 20 consonant sounds in common with English. Consequently, learners often struggle to correctly articulate these sounds. Tables 1.0, 1.1, and 1.2 present an overview of the phonetic characteristics of consonant sounds in these three languages.

In a similar vein, Chang (2000) suggests that Mandarin Chinese EFL learners face challenges in pronouncing the dental fricatives /θ/ and /ð/ because these sounds do not exist in their native language. Menyuk (1968) and Schmidt (1977) further note that EFL learners tend to substitute these sounds with other sounds if they are not present in their first language. Even if they exist in the native language, speakers may have difficulty comprehending them because of their complexity. However, Alkhuli (1983) contradicts this notion by stating that /θ/ and /ð/ sounds do exist in Arabic, but some Arab EFL learners still struggle with pronouncing them because these sounds are not commonly used in the spoken Arabic language. Similarly, Hassan (2014) reports that Arab EFL Sudanese learners find it challenging to produce these two sounds despite their existence in Arabic. Consequently, the ability of EFL Arab learners to accurately articulate /θ/ and /ð/ sounds remains uncertain.

Othata (2004) noted that Japanese EFL learners have a tendency to add a vowel sound at the end of words that end with a consonant, resulting in mispronunciations such as the word "bath" being pronounced as /basu/. This

is due to the influence of their first language, as Japanese speakers typically add a vowel at the end of words that end with a consonant sound. Parker and Riley (2009) support this observation and suggest that Japanese EFL learners are greatly influenced by their first language. Similarly, Nguyen (2007) found that Vietnamese learners tend to add a schwa sound to word-final consonants, or replace them with sounds that are closer to their mother tongue. Varol (2012) also noted that Turkish EFL learners tend to substitute the English sounds /ð/ and /θ/ with /t/ and /d/, respectively, due to the absence of these sounds in their native language. However, there has been no research conducted on the pronunciation of these sounds by Turkish ELT learners. Centerman and Krausz (2011) observed that Swedish EFL learners struggle with pronouncing certain initial consonant sounds, such as /θ/, /ð/, /tʃ/, /ʃ/, and /dʒ/, which do not occur initially in the Swedish language.

Furthermore, the differences in English pronunciation between Turkish and Arabic are particularly evident in consonant clusters, which are groups of two or more consonant sounds occurring in a single syllable without a vowel, and can occur at the beginning or end of words. In English, initial consonant clusters of two or three consonant sounds are permitted. However, Amer (2010) noted that initial consonant clusters are not allowed in Arabic, but final two-consonant clusters are allowed. This is supported by Watson (2002), who stated that the highest number of clusters in Arabic is two-consonant clusters. Due to these differences, Arab EFL learners may add a vowel while pronouncing a two- or three-consonant cluster in English, according to Ammar and Alhumaid (2009), Al-Shuaibi (2009), and Na'ama (2011).

Similarly, in Turkish, Kornfilt (1997) found that word-initial consonant clusters are not allowed and are broken up by epenthesis, as seen in *tren* “train” pronounced as /tiren/. However, word-final consonant clusters are permitted in Turkish, but with restrictions on voicing. Additionally, word-medial consonant clusters are not allowed within the same syllable.

Besides, Yule (1987) asserted that the English writing system presents a challenge to English language learners as it differs from English sound production, making it difficult to produce correct sounds. English sounds and symbols do not correspond, which makes it hard to predict English sounds. Conversely, Turkish sounds and symbols match, according to Lewis (1983). Turkish orthography is a regular language, and the pronunciation matches the writing system. However, Turkish EFL learners may face difficulties in transferring this language rule to L2.

In addition, El Zarka (2013) stated that Arabic orthography is shallow, where one letter represents one phoneme. On the other hand, English orthography is deep and extends beyond sound-to-letter correspondence.

Moreover, exposure to a language plays a vital role in accurate pronunciation. Conversely, insufficient exposure is a critical factor leading to mispronunciation. Moyer (2007) and Shively (2008) suggested that exposure to the target language enhances accurate pronunciation, not only for Arab EFL learners but for EFL learners in general. Therefore, learners should be encouraged to expose themselves to the TL more frequently by speaking and listening to the target language not only in the classroom but also outside of it. In this regard, Asassfeh (2011) stated that Arab EFL learners might encounter difficulties in pronunciation due to a lack of exposure to the TL.

Considering the aforementioned distinctions in the phonological structures of Arabic, Turkish, and English, coupled with insufficient exposure to the target language, it is anticipated that Arab and Turkish English language learners will encounter challenges in acquiring English consonant sounds. However, the specific nature and prevalence of these challenges have not been adequately documented.

The present study focuses on the obstacles faced by Arab EFL and Turkish ELT learners in correctly articulating certain English consonant sounds. Our objective, therefore, is to furnish a comprehensive account of the particular consonant sounds that pose difficulties for these learners.

## CONSONANT SOUNDS IN THE THREE LANGUAGES

### Stops

Collins and Mees (2003) assert that stop consonants are formed by a complete closure of the vocal tract, which obstructs the flow of air. The soft palate is elevated to prevent the air from escaping through the nose, after which the articulators rapidly separate, resulting in the forceful release of air.

a) /p/ and /b/

- /b/ does occur in Turkish, Arabic and English

Turkish	Arabic	English
baba /baba/ 'father'	Kitab 'book	brother

- However, /p/ does occur only in Turkish and English. Arabic does not have this phoneme.

Turkish	Arabic	English
para /para/ ‘money’	DOES NOT EXIST	people

b) /t/and /d/

- /t/and /d/ occur in Turkish, Arabic and English

Turkish	Arabic	English
tel /tel/ ‘wire’	tis? /nine	take
dal /dal/ ‘branch’	dar home	dim

c) /k/ and /g/

- /k/ and /g/ occur in Turkish, Arabic and English

Turkish	Arabic	English
kan [kan] ‘blood’	Kabir big	cook
gaga [gaga] ‘beak’	garb west	good

**Fricatives**

Demirezen (1987) defines a fricative as a sound during the production of which the lung air leaves the mouth and creates an audible friction.

a) [f] and [v]

- [f] does occur in Turkish, Arabic and English

Turkish	Arabic	English
fil ‘elephant’	fil ‘elephant’	father

- However, / v / does occur only in Turkish and English. Arabic does not have this phoneme.

Turkish	Arabic	English
vakit ‘time’	DOES NOT EXIST	vase

In other words, English contains two labio-dental sounds that are /f/ and /v/, whereas Arabic has /f/ but /v/ sound does not exist.

b) Dental [ð] and [θ] occur only Arabic and English. Turkish does not have these two phonemes.

Turkish	Arabic	English
DOES NOT EXIST	Thalath ‘three’	three
DOES NOT EXIST	Dakar ‘male	mother

## THE UNIVERSAL SYLLABLE STRUCTURE

### Syllable Structure of Turkish, Arabic and English

In view of the differences among the three languages, it is imperative to highlight the dissimilarities in syllable structure, which may pose challenges and obstacles for EFL learners.

#### Syllable structure

The syllable is a fundamental unit of sound that typically consists of an onset and a rhyme, comprising a nucleus and a coda. The nucleus is considered the most significant part of the syllable and usually contains a vowel. This configuration is widely accepted by most phonologists. Roach proposed that syllables are typically characterized by a center that has minimal or no obstruction to airflow, resulting in a relatively loud sound. A single sound standing alone, V, is referred to as a minimal syllable, examples of which include /ɑ:/ and /ɔ:/. Other syllables might have an onset but no coda, represented as CV, such as the word “key” (/ki:/). Conversely, some syllables may have a coda but no onset, represented as VC, such as the word “ease” (/i:z/). Additionally, some syllables might contain both an onset and a coda, known as CVC, such as the word “run” (/rʌn/). Furthermore, some syllables may begin with two consonants in a two-consonant cluster, like “pray” (/preɪ/), while others may start with three consonants in a three-consonant cluster, like “spray” (/spreɪ/). (Roach, 2009, pp. 67-68)

#### Turkish syllable structure

As per Kornfilt’s (1997) analysis, the fundamental type of syllable in Turkish is CV, although other configurations like CVC, V, and VC are also allowed.

Turkish syllable structure	Syllable Type	Turkish example	Gloss
	V CV	acı	“pain”
	CV CV	kapı	“door”
	VC CV CVC	ihimal	“possibility”

In Turkish, syllables are formed based on the vowel harmony principle. The syllable structure typically consists of an optional initial consonant cluster, a single vowel, and a final consonant or consonant cluster. Turkish has a relatively simple syllable structure compared to many other languages, with the vast majority of syllables conforming to the pattern of (C) V (C). However, there are some loanwords in Turkish that contain more complex syllables, such as those with initial consonant clusters or final consonant clusters. Additionally, there are some words in Turkish that contain diphthongs, which are combinations of two vowels that are pronounced as a single sound.

### Arabic syllable structure

According to Watson (2002) and McCarthy (1994) Arabic syllable structure is typically CVC. However, some Arabic dialects allow for the syllable structure to be CV or VC. Additionally, Arabic has some unique phonetic features, such as pharyngealized consonants and long vowels, that can affect the syllable structure in certain contexts.

Watson (2002) states that Arabic syllable structure is characterized by five types of syllables. Al-Ani (1970) suggests that the minimum syllable in Arabic consists of a consonant and a vowel (CV), while the highest component can be a four-consonant cluster syllable (CVCC). Unlike English, Arabic only permits consonant clusters in the coda, and onset consonant clusters are absent. Furthermore, the maximum number of consonant clusters in Arabic is two, and three-consonant clusters do not exist. Alkhouli (1990) highlights that all Arabic utterances must commence with a consonant, unlike English and Turkish where syllables can start with a vowel. Additionally, every Arabic syllable must include at least one vowel. However, while Arabic vowels cannot be found in initial position, they can occur between two consonants or in word-final position.

Arabic syllable structure	Syllable Type	Arabic example	Gloss
	CV	La	“no”
	CVV	Fei	“in”
	CVC	Qam	“stand up”
	CVVC	Saam	“fasted”
	CVCC	Sabt	“Saturday”

## English syllable structure

English syllable structure is more complex than Turkish and Arabic. According to Roach (2009) and Crystal and Yavas (2011), English syllables can have any of the five possible structures: V, CV, VC, CVC, or CCV. English allows consonant clusters in both the onset and coda, and these can include up to three consonants, as in “strength” or “twelfth”. In addition, English allows for syllabic consonants, such as the /l/ in “bottle” or the /n/ in “button”, which function as the nucleus of the syllable. English also has several diphthongs and triphthongs, which can complicate syllable structure for EFL learners.

To summarize, the syllable structure of English is more diverse than that of Arabic and Turkish. While Arabic and English share some common syllable types such as CV, CVC, and CVCC, English has a total of fourteen syllable types compared to Arabic’s five. Turkish and English share similar syllable types, including CV, CVC, VC, and V. Unlike Arabic, English allows for both onset and coda consonant clusters, which can contain two, three, or four consonants, according to Treiman (1989). Conversely, Arabic permits only two-consonant clusters.

English syllable structure	Syllable Type	English example
	V	eye
	VC	am
	VCC	ask
	VCCC	amps
	CV	knee
	CVC	sick
	CVCC	best
	CCV	blue
	CCVC	sleep
	CCVCC	stink
	CCVCCC	prints
	CCVCCCC	bursts
	CCCV	scree
	CCVCV	straight
	CCCVCC	sprint
	CCCVCCC	sprints
	CCCVCCCC	splints

## THE CURRENT STUDY

### The participants

In this research, the participants comprise a total of 60 individuals who were categorized into two groups, each group consisting of 30 participants. The first group is comprised of university-level Arab EFL learners hailing from various countries including Syria, Iraq, Saudi Arabia, Palestine, Yemen, and Egypt, with an equal gender distribution of 15 males and 15 females. The second group consists of Turkish first-year students studying English language teaching at Inonu University, and they volunteered to participate in the study, providing informed consent prior to data collection.

### Data collection tool

The research employed a read-aloud task as its data collection tool. Participants were requested to read a list of fourteen sentences created by the researcher and evaluated by the researcher's linguistic supervisor. The purpose of the task was to identify problematic sounds for Turkish and Arab English learners, specifically /p/, /b/, /v/, /f/, /t/, /d/, /k/, /g/, /ð/, and /θ/, as well as initial-three-consonant clusters in English.

### Data Collection Procedure

In order to collect data, the participants were first informed about the purpose of the study and the recording procedures, and their consent was obtained. For the Arab participants, the researcher sent a voice recording explaining the study and the procedure, along with a PDF file of the test list. The participants were asked to send their recordings back using social media platforms. For the Turkish ELT participants, the pronunciation test was recorded in a quiet room at Inonu University. The participants were shown the test list on a screen and asked to read the sentences silently for three minutes to familiarize themselves with the sentences. They then recorded their voice using Voice Recorder on the researcher's phone.

After collecting data from all the participants, the recorded voices were saved as digital sound files and categorized into separate folders based on participants' nationalities, i.e. Arab and Turkish. Further categorization was done based on the gender of the participants, i.e., male and female. To ensure anonymity and confidentiality, each sound file was individually labeled with a number from "S1" to "S60," corresponding to each participant's unique

identification number. This was done to facilitate easy access to the files and to ensure that the participants' identities were protected.

### **Research Questions**

1. Which English consonant sounds do Arab EFL and Turkish ELT learners have difficulty in pronouncing?
2. Can Arab EFL and Turkish ELT learners correctly pronounce words which have initial-consonant clusters?
3. Does the position of the sounds affect the difficulty or the ease of pronunciation for Arab EFL and Turkish ELT learners?

Thus, It is deemed significant to incorporate in this study the consonant sounds discussed in the three languages, and to furnish instances prior to commencing the Methodology section.

### **Data Analysis Procedure**

After recording and organizing the data into separate Arab and Turkish folders by gender, the researcher and linguist supervisor analyzed the recordings of the read-aloud task. The International Phonetic Alphabet (IPA) was used to phonetically transcribe each target sound, and pronunciation errors were given a score of zero while correct answers were given a score of one. The number of errors made by each participant was tallied and converted into percentages, which were used to calculate the average frequency of errors for each problematic sound and consonant cluster in each group. To determine the test performance of the thirty participants in each group for the relevant problematic sounds, the number of correct productions was divided by the number of participants, resulting in an average rate of correct productions.

### **The Results and Discussion**

This study includes a comprehensive examination of the consonant production errors made by the participants. The purpose of this analysis is to determine whether there is a significant distinction in the pronunciation of the intended and unintended forms of these consonants.

**Table 4.1.** Turkish and Arab learners’ pronunciation of the /f/ sound

	Initial /f/		Middle /f/		Final /f/	
	Desired	Undesired	Desired	Undesired	Desired	Undesired
<b>Turkish Males</b>	15	0	15	0	15	0
<b>Turkish Females</b>	15	0	15	0	15	0
<b>Arab males</b>	15	0	15	0	15	0
<b>Arab females</b>	15	0	15	0	15	0

Table 4.1. indicates that there is no notable difficulty encountered by male and female Turkish ELT and Arab EFL learners in producing the /f/ phoneme in various word positions. This finding is consistent with earlier research that has demonstrated that the similarities between the two languages’ phonetic systems lead to an absence of difficulties in producing shared phonemes.

**Table 4.2.** Turkish and Arab learners’ pronunciation of the /v/ sound

	Initial /v/		Middle /v/		Final /v/	
	Desired	Undesired	Desired	Undesired	Desired	Undesired
<b>Turkish Males</b>	13	2	15	0	14	1
<b>Turkish Females</b>	7	8	15	0	11	4
<b>Arab males</b>	10	5	11	4	1	14
<b>Arab females</b>	12	3	14	1	5	10

Table 4.2. presents findings indicating that Turkish learners of English as a second language encounter challenges in pronouncing the /v/ phoneme in all three positions, with the initial position being the most problematic. Specifically, female Turkish learners experience greater difficulty than male learners in producing the /v/ sound, particularly in the initial position. Despite the fact that the /v/ phoneme is present in both languages, some Turkish learners substitute it with /w/ when it appears initially. The table also demonstrates that Arab learners of English as a foreign language encounter similar difficulties in producing the /v/ sound, consistent with prior research that suggests Arab learners often substitute the /v/ sound with /f/ due to its absence in the Arabic language. Additionally, the results indicate that Arab learners encounter more difficulty pronouncing the /v/ sound in final position.

**Table 4.3.** Turkish and Arab learners' pronunciation of the /t/ sound

	Initial /t/		Middle /t/		Final /t/	
	Desired	Undesired	Desired	Undesired	Desired	Undesired
<b>Turkish Males</b>	15	0	15	0	15	0
<b>Turkish Females</b>	15	0	15	0	15	0
<b>Arab males</b>	15	0	15	0	15	0
<b>Arab females</b>	15	0	15	0	15	0

Table 4.3 displays results that suggest both male and female Turkish learners of English as a second language and Arab learners of English as a foreign language do not encounter any difficulties in pronouncing the /t/ phoneme in all three positions. This finding is consistent with previous research indicating that similarities between the two language systems lead to an absence of difficulties in pronouncing common sounds.

**Table 4.4.** Turkish and Arab learners' pronunciation of the /d/ sound

	Initial /d/		Middle /d/		Final /d/	
	Desired	Undesired	Desired	Undesired	Desired	Undesired
<b>Turkish Males</b>	15	0	15	0	15	0
<b>Turkish Females</b>	15	0	15	0	15	0
<b>Arab males</b>	15	0	15	0	15	0
<b>Arab females</b>	15	0	15	0	15	0

Table 4.4 illustrates that male and female Turkish learners of English as a second language and Arab learners of English as a foreign language experience no difficulty in pronouncing the /d/ phoneme in all three positions. This finding aligns with prior research that suggests that shared features between the two language systems facilitate the accurate pronunciation of common sounds. Nevertheless, it was observed that Turkish learners have a tendency to substitute the /t/ sound for the /d/ sound only when pronouncing the name "Ahmed" in the final position.

**Table 4.5.** Turkish and Arab learners' pronunciation of the /p/ sound

	Initial /p/		Middle /p/		Final /p/	
	Desired	Undesired	Desired	Undesired	Desired	Undesired
<b>Turkish Males</b>	15	0	15	0	15	0
<b>Turkish Females</b>	15	0	15	0	15	0
<b>Arab males</b>	4	11	3	12	4	11
<b>Arab females</b>	9	6	8	7	10	5

Table 4.5 presents findings indicating that Turkish learners of English as a second language do not experience any difficulties in accurately pronouncing the /p/ phoneme in all three positions, regardless of gender. Notably, the /p/ sound is present in the Turkish language. On the other hand, the table demonstrates that both male and female Arab learners of English as a foreign language face challenges in pronouncing the /p/ phoneme in all three positions. However, it is noteworthy that male Arab learners encounter more difficulty than their female counterparts. Consequently, further research is warranted to investigate the underlying reasons for this disparity, such as gender differences, English proficiency levels, or duration of exposure to the second language. Overall, these findings align with prior research suggesting that Arab learners of English as a foreign language struggle with producing the /p/ sound, and it is observed that the /b/ sound is used as a substitute for the /p/ sound by Arab learners.

**Table 4.6.** Turkish and Arab learners’ pronunciation of the /b/ sound

	Initial /b/		Middle /b/		Final /b/	
	Desired	Undesired	Desired	Undesired	Desired	Undesired
<b>Turkish Males</b>	15	0	15	0	15	0
<b>Turkish Females</b>	15	0	15	0	15	0
<b>Arab males</b>	14	1	15	0	15	0
<b>Arab females</b>	15	0	15	0	15	0

Table 4.6 displays results indicating that both Turkish learners of English as a second language and Arab learners of English as a foreign language do not encounter any challenges in accurately pronouncing the /b/ phoneme in all three positions. This finding aligns with previous research demonstrating that the existence of shared sounds between the two language systems facilitates the accurate pronunciation of common sounds.

**Table 4.7.** Turkish and Arab learners’ pronunciation of the /ð/ sound

	Initial /ð/		Middle /ð/		Final /ð/	
	Desired	Undesired	Desired	Undesired	Desired	Undesired
<b>Turkish Males</b>	15	0	14	1	14	1
<b>Turkish Females</b>	14	1	13	2	10	5
<b>Arab males</b>	14	1	15	0	14	1
<b>Arab females</b>	15	0	15	0	15	0

Table 4.7 presents surprising findings that Turkish learners of English as a second language face minimal difficulty in correctly pronouncing the /ð/ phoneme in all three positions, regardless of gender. However, some Turkish

learners tend to substitute the /ð/ sound with the /d/ sound, as previous studies have found. Moreover, the table reveals that Turkish learners can accurately pronounce the /ð/ sound in the initial position of the word “the,” but face difficulty in pronouncing it correctly in other words such as “there.” Although these findings appear to contradict previous research on Turkish learners’ ability to accurately pronounce the /ð/ sound, it is observed that English language teaching (ELT) learners face fewer difficulties than Turkish learners of English as a foreign language (EFL) with this sound. On the other hand, Arab learners of English as a foreign language have no difficulty producing the /ð/ sound since it exists in the Arabic language. Nevertheless, it was observed that one of the Arab participants mispronounced this sound, which supports previous studies indicating that this sound is not commonly used in spoken Arabic.

**Table 4.8.** Turkish and Arab learners’ pronunciation of the /θ/ sound

	Initial /θ/		Middle /θ/		Final /θ/	
	Desired	Undesired	Desired	Undesired	Desired	Undesired
<b>Turkish Males</b>	7	8	14	1	13	2
<b>Turkish Females</b>	9	6	13	2	12	3
<b>Arab males</b>	15	0	15	0	15	0
<b>Arab females</b>	15	0	15	0	15	0

Table 4.8 presents that Turkish ELT learners encounter challenges in producing the /θ/ phoneme in all three positions, and they often replace it with the /t/ sound. This observation aligns with earlier research, indicating that learners tend to utilize substituted sounds when encountering unfamiliar ones. On the other hand, the table indicates that Arab EFL learners of both genders can pronounce the /θ/ sound in all three positions without difficulty.

**Table 4.9.** Turkish and Arab learners’ pronunciation of the /k/ sound

	Initial /k/		Middle /k/		Final /k/	
	Desired	Undesired	Desired	Undesired	Desired	Undesired
<b>Turkish Males</b>	15	0	15	0	15	0
<b>Turkish Females</b>	15	0	15	0	15	0
<b>Arab males</b>	15	0	15	0	15	0
<b>Arab females</b>	15	0	15	0	15	0

Table 4.9 presents data indicating that both Turkish ELT and Arab EFL learners, regardless of gender, can pronounce the /k/ phoneme accurately in all three positions without any difficulty. This finding is consistent with previous research demonstrating that the shared features of these two languages make it

easy for learners to pronounce the common sounds. However, previous studies suggested that Arab EFL learners tend to substitute the /k/ sound with /g/. Nevertheless, the current study contradicts this notion and provides evidence that both Turkish and Arab learners can pronounce the /k/ sound correctly.

**Table 4.10.** Turkish and Arab learners’ pronunciation of the /g/ sound

	Initial /g/		Middle /g/		Final /g/	
	Desired	Undesired	Desired	Undesired	Desired	Undesired
<b>Turkish Males</b>	15	0	15	0	15	0
<b>Turkish Females</b>	15	0	15	0	15	0
<b>Arab males</b>	15	0	15	0	15	0
<b>Arab females</b>	15	0	15	0	15	0

The results in Table 4.10 indicate that both Turkish ELT and Arab EFL learners, including both genders, can correctly pronounce the /g/ sound in all three positions without any difficulty. However, previous studies suggested that Arab EFL learners may substitute the /g/ sound with /k/. Nevertheless, the findings from this table demonstrate that the learners in the study were able to accurately produce the /g/ sound.

**Table 4.11.** Turkish and Arab learners’ pronunciation of the initial-three-consonant clusters

	Initial-three-consonant clusters	
	Desired	Undesired
<b>Turkish Males</b>	12	3
<b>Turkish Females</b>	13	2
<b>Arab males</b>	9	6
<b>Arab females</b>	10	5

The results presented in Table 4.11 indicate that Turkish ELT learners face some difficulty in producing initial three-consonant clusters, although the majority of participants were able to produce them correctly. Conversely, Arab ELT learners encountered more difficulty in producing initial three-consonant clusters. It is worth noting that initial clusters are not permitted in Turkish and Arabic languages, and thus it is expected that learners of these languages would struggle with producing initial three-consonant clusters in English.

Thus, In Tables 4.0-4.10 provide important insights into the challenges that Turkish learners of English as a second language and Arab learners of English as a foreign language encounter when pronouncing English phonemes. Overall, the findings suggest that learners who share phonemes between their native language and English encounter fewer difficulties in accurately pronouncing

the shared sounds. However, when encountering unfamiliar phonemes, learners may substitute them with familiar sounds from their native language, leading to pronunciation errors.

Table 4.1 shows that Turkish learners of English as a second language face challenges in pronouncing the /v/ phoneme, particularly in the initial position, with female learners experiencing greater difficulty than male learners. This finding is consistent with prior research indicating that Turkish learners may substitute the /v/ sound with /w/ when it appears initially. Similarly, Arab learners of English as a foreign language may substitute the /v/ sound with /f/ due to its absence in the Arabic language. Additionally, the results indicate that Arab learners encounter more difficulty pronouncing the /v/ sound in the final position.

Table 4.5 reveals that male and female Arab learners of English as a foreign language face challenges in pronouncing the /p/ phoneme in all three positions, with male learners encountering more difficulty than female learners. This finding is consistent with prior research suggesting that Arab learners of English as a foreign language struggle with producing the /p/ sound and may substitute it with the /b/ sound.

Table 4.7 presents surprising findings that Turkish learners of English as a second language face minimal difficulty in correctly pronouncing the /ð/ phoneme in all three positions, regardless of gender. However, some Turkish learners tend to substitute the /ð/ sound with the /d/ sound. On the other hand, Arab learners of English as a foreign language have no difficulty producing the /ð/ sound since it exists in the Arabic language.

Table 4.8 indicates that Turkish learners of English as a second language encounter challenges in producing the /θ/ phoneme in all three positions, and they often replace it with the /t/ sound. This observation aligns with earlier research, indicating that learners tend to utilize substituted sounds when encountering unfamiliar ones. On the other hand, Arab learners of English as a foreign language can pronounce the /θ/ sound in all three positions without difficulty.

Finally, Tables 4.9 and 4.10 demonstrate that both Turkish learners of English as a second language and Arab learners of English as a foreign language can correctly pronounce the /k/ and /g/ sounds in all three positions without any difficulty, regardless of gender. This finding is consistent with previous research demonstrating that the shared features of these two languages make it easy for

learners to pronounce the common sounds.

In conclusion, the results of this study provide valuable information for English language teachers working with Turkish and Arab learners of English as a second or foreign language. By understanding the specific phonemes that learners struggle with, teachers can tailor their instruction to address these areas of difficulty and help learners achieve more accurate pronunciation. Additionally, further research is warranted to investigate the underlying reasons for gender differences and other factors that may contribute to phoneme pronunciation difficulties in language learners.

## CONCLUSION

The analysis of the test found that Turkish ELT learners struggle with producing the inter-dental fricatives [θ, ð], and /v/ sounds, which was expected as these sounds do not exist in the Turkish language system. However, some participants were able to pronounce /ð/ correctly, and the difficulty with /v/ was mainly in the initial position. Arab EFL learners, on the other hand, struggle with producing the /p/ and /v/ sounds, which is not surprising as these phonemes do not exist in the Arabic language system. The study also found that the environment in which a sound is used plays an important role in learners' difficulties, and the term "environmentally marked" was used to describe this phenomenon. The initial [v] sound was also found to be affected by environmental markedness. Finally, both Arab and Turkish learners struggled with pronouncing initial three-consonant clusters due to the influence of their L1.

This study highlights the influence of L1 on L2 pronunciation acquisition. It suggests that identifying problematic sounds and understanding the reasons behind the difficulties are crucial steps in helping learners overcome them. Teachers and learners alike should be aware of these problematic sounds and focus on them in English pronunciation teaching. Such teaching should involve a comparison of L1 and L2 phonological structures, and special attention should be given to sounds that are particularly difficult for learners. It is also important to teach English sounds in various contexts that include all possible environments. Learners should also be made aware of the phonological differences between their L1 and L2, as these differences play a significant role in the acquisition of L2 pronunciation.

To further investigate the difficulties that ELT learners face in pronouncing problematic sounds, intonations, and stress syllables, future research should focus on different levels of ELT learners, including freshman, sophomore, junior,

and senior. This will enable researchers to examine whether the difficulties persist as the learners progress through their language learning journey. By conducting such research, it will be possible to gain a deeper understanding of the specific challenges that ELT learners encounter when learning English pronunciation, and to develop more effective teaching strategies to help learners overcome these challenges.

### **The list of sentences**

1. Their view was too fantastic.
2. The dentist ended my suffering with pills.
3. Ibrahim is a safe driver.
4. Old people save some money.
5. The baby is asleep.
6. Children eat an apple a day.
7. I found my bag in the cab.
8. My mother is healthy.
9. I can hardly breathe.
10. Ahmed is in good health.
11. There is a thunderstorm this week.
12. She is the biggest and the most attractive.
13. The straws are useful.
14. It is a spring morning.

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## EVALUATING THE E-LEARNING READINESS OF TURKISH EFL LEARNERS

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### ABSTRACT

The value of distance education as a dependable and flexible mode of instruction delivery has been established following the COVID-19 pandemic which has necessitated a shift from face-to-face classrooms to online education. The primary goal of this study is to determine how prepared Turkish English as a Foreign Language (EFL) students are for online instruction. This has been accomplished by using the Online Learning Readiness Scale (OLRS). It assesses students' readiness in five domains: motivation for learning, online/computer self-efficacy, learner control, self-directed learning, and online communication self-efficacy. The results show that Turkish EFL students are very self-assured when it comes to computers and the internet, and they are also very motivated, which makes them excellent candidates for online learning. Based on gender, there weren't significant differences in the readiness levels of male and female students for online learning. Similarly, the readiness levels of students in the sophomore, junior, and senior grades are all similar. These findings not only demonstrate the readiness of Turkish EFL students for online education, but also shed light on the students' sense of technological self-efficacy and motivation to learn English as a foreign language. The findings have the potential to improve English language education in Turkey by supplying helpful insights that can be used in the development of efficient virtual courses that are adapted to meet the requirements of this particular student population.

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## INTRODUCTION

The emergence of the COVID-19 pandemic has emphasized the significance of distance education, especially in comparison to earlier eras. The need to stop the spread of the disease necessitated the immediate suspension of traditional face-to-face instruction and the rapid adoption of remote education solutions. Even in the wake of a pandemic, distance education continues to be a significant force in the field of education. The COVID-19 pandemic has served as a stark reminder of the vital role that distance education plays in ensuring the continuity of education delivery during national or international events. It has proven its worth as a stable and adaptable mode of delivering education.

Educators, instructional designers, program developers, and policymakers must therefore develop a comprehensive understanding of distance education and its complex dynamics. It is equally important to be prepared to quickly transition from traditional in-person education to remote learning when unforeseen circumstances arise (Yastibas et al., 2023). This readiness factor is not merely a fallback; it is a crucial element of educational readiness.

In the field of higher education, e-learning integration is crucial for institutions to meet their educational objectives. Existing scholarly literature and research on e-learning addresses technology, faculty engagement, support systems, pedagogical approaches, preparedness, management strategies, ethical considerations, evaluation methodologies, planning processes, and institutional factors (Al-Fraihat et al., 2017). Among this diverse landscape, readiness for online learning emerges as a critically important and extensively researched facet.

The assessment of students' readiness for active participation in e-learning is a critical component in ensuring the efficacy of e-learning methodologies. Understanding students' readiness levels, as well as the direct and indirect effects they have, is critical for decision-makers, e-learning developers, and researchers. This understanding not only guides effective planning but also results in enhanced learning experiences and academic performance. It is critical to recognize that the importance of educational institutions' e-learning initiatives extends beyond their mere success. Students' willingness to engage with e-learning platforms has a significant impact on their individual learning journeys and ultimate academic achievements and thus contributes significantly to the achievement of the fundamental goals of education and online learning (Torun, 2020).

## LITERATURE REVIEW

### Turkish EFL Learners' E-Learning Readiness

Warner, Christie, and Choy (1998) coined the phrase “readiness for online learning” for the first time in the Australian education setting. Their groundbreaking work uncovered three crucial elements that serve as the cornerstone of successful online learning. The first component emphasizes students' preference for online instructional methods over traditional in-person classrooms, recognizing the diversity of learner preferences in how they receive instruction. The second component focuses on students' self-confidence in using electronic communication tools for educational purposes. The third element, on the other hand, emphasizes a learner's capacity for self-directed learning in recognition of the increased autonomy students frequently have in online settings.

The significance of having good time management skills and adjusting to the independent nature of online learning are being emphasized as key components in determining readiness for online learning. Fostering intrinsic motivation and gaining an understanding of one's unique learning preferences and experiences are two aspects of this adaptation (Smith, 2005). Technical skills are also important, according to Watkins et al. (2004), though the precise requirements will depend on the layout of the particular online learning experience.

Some personal qualities that are essential for success and satisfaction in such environments have been identified by empirical studies into student readiness (Lee et al., 2002) in online learning environments. Individual differences in academic performance, graduation rates, and general satisfaction with online education can frequently be attributed to elements like technical competence, computer self-confidence, individual learning preferences, and attitudes toward technology (Shi et al., 2006).

Failures in e-learning environments can be brought on by low levels of student readiness. Thus, recent research has examined to what extent e-learning readiness could influence learners' academic success (Kruger-Ross & Waters, 2013). Without adequate preparation, forcing learners into e-learning experiences can result in negative e-learning encounters and even foster biases against future online learning opportunities (Guglielmino & Guglielmino, 2003). According to Muse (2003), dropout rates are also related to e-learning readiness.

When examining the various elements that contribute to e-learning failures, student unpreparedness stands out as a common factor. It is crucial to implement specific classroom strategies that promote self-directed learning which will ensure successful engagement with e-learning content (Piskurich, 2003). Before beginning any e-learning initiative, it is crucial to have a thorough understanding of the learners' levels of readiness for the particular learning activities offered (Yurdugül & Alsancak-Sırakaya, 2013). E-learning professionals must provide advice and support to online learners as it continues to be widely used in higher education, keeping in mind their readiness levels and their needs. As e-learning continues to take center stage in higher education, e-learning professionals must support and mentor online students while also keeping an eye on their readiness to actively engage in the corresponding online education programs (Torun, 2020).

Online education covering other academic disciplines is not the same as online language learning (Zou et al., 2021). Remarkably, there has been a noticeable lack of focus on evaluating learners' preparedness for the particular domain of online language learning (Yang & Xu, 2023). Language functions as the main subject of online learning as well as the medium of instruction in an online English as a Foreign Language (EFL) course. Moonyoung and Son (2022) examined how a group of aspiring EFL teachers used information and communication technology, as well as how they felt about and perceived barriers to integrating technology. According to their findings, the use of digital tools in the classroom has created a dynamic learning environment that has the potential to improve teaching and learning outcomes.

Learners of English as a Foreign Language (EFL) are the focus of this research, and the primary objective of this investigation is to determine the extent to which EFL students are prepared to participate in online instruction. In the Turkish EFL context, the number of studies related to EFL students' readiness for online learning is very limited. Only very recently, a few studies tried to shed light on this issue. As one of them, Yastibas, Kayali, and Altuntaş (2023) surveyed 405 Turkish EFL students in order to determine their level of readiness for online language learning. The study examined the impact of distant education on students' language proficiency using the Online Learning Readiness Scale and open-ended questions. According to the results, students were well-prepared for online learning, which appeared to have a beneficial impact on all four language skills. In a separate study conducted within the Turkish context of English as a Foreign Language (EFL), the degree of

preparedness exhibited by preparatory EFL students was assessed, revealing a significant level of readiness for engaging in online language learning activities (Korkmaz, 2021). These students demonstrated an exceptional level of readiness for online education, according to this study. They demonstrated exceptional proficiency in critical domains like learning motivation, online communication self-efficacy, and computer and Internet self-efficacy. However, it is interesting that they fared far worse in the learner control and self-directed learning categories. (Korkmaz, 2021). Similarly, Serttaş and Kasabal's (2020) research revealed that pre-college EFL learners in this region were well-prepared for online education. These students exhibited an exceptional propensity for self-directed learning, learning motivation, and online communication autonomy. However, their scores were significantly lower when it came to learner control as well as their self-efficacy with computers and the internet (Serttaş & Kasabal, 2020).

According to the scant literature cited above, there is a compelling need for additional in-depth research on the online learning readiness of Turkish EFL (English as a Foreign Language) students. Due to the multifaceted nature of online learning's challenges and opportunities, this is necessary, especially in the context of English language education in Türkiye.

These variables include the students' technological aptitude, their ability to adjust to virtual learning settings, their drive and capacity for self-directed learning, and the overall effect of virtual learning on their English language proficiency. As a result of the complexity of these components, a detailed analysis is necessary to comprehend the unique nuances and intricacies of Turkish EFL students' preparation for distance education.

Evaluation of Turkish EFL students' readiness in this situation is crucial from both an academic and practical perspective. It can inform the creation of more effective online English language learning programs and instructional strategies tailored to the particular circumstances and needs of this student population. Moreover, it can shed light on how to maximize the benefits of online education while mitigating potential obstacles, thereby contributing to the enhancement of English language education in Türkiye.

This study is based on the theoretical foundations of the Online Learning Readiness Scale's (OLRS) subdimensions, which were initially proposed by Hung et al. (2010). The OLRS was divided into five subdivisions by Hung et al. (2010), each of which investigates important elements of readiness for online

learning. According to Hung et al. (2010), the Online/computer self-efficacy subdimension measures a student's comfort level with computer systems, the software required for online learning, and efficient internet navigation. Self-directed learning emphasizes the student's ability to direct their own learning, including tasks like creating a study schedule and using their time wisely (Hung et al., 2010). Learner control, on the other hand, evaluates how much a student can take charge of their own educational journeys. Learners' drive for participating in online learning activities is assessed by learning motivation as the fourth dimension. According to Hung et al. (2010), the last subdimension focuses on students' confidence in their ability to use both offline and online communication tools to effectively communicate their ideas. This theoretical framework offers insights into students' readiness for online learning, making it an invaluable tool for online instructors and instructional designers. Equipped with this understanding, instructors can customize their virtual classes and initiatives to more effectively meet the readiness levels of their pupils, thereby augmenting the caliber of virtual learning (Hung et al., 2010). Based on this model, this research will address the following three research questions.

How prepared are Turkish EFL learners for online instruction?

Does the gender of Turkish EFL learners have an impact on their readiness for online instruction?

Is there a correlation between the grade level of Turkish EFL students and their preparedness for online learning?

## **METHODOLOGY**

### **Participants**

Participants in online learning at a Turkish university were the focus of the current study. These students, whose majors were banking and finance, were given a 5-point Likert-type scale to use for self-evaluation. The anchors on the scale ranged from 1 (strongly disagree) to 5 (strongly agree).

This study took into account the following demographic variables: gender and student grade level (including sophomores, juniors, and seniors). The breakdown of participants showed that female respondents made up 67.9% (89 individuals), while male respondents made up 32.1% (42 individuals). The distribution of participants by grade level was as follows: 33.6% (44 participants) were seniors, 34.4% (45 participants) were juniors, and 32.1% (42

participants) were sophomores. The study examined online English courses that were exclusively conducted through distance learning, utilizing a synchronous format.

### **Instruments**

The Online Learning Readiness Scale, which was first developed by Hung et al. (2010) and modified by İlhan and Çetin (2013) for the unique educational setting in Türkiye, was used to gather the data. There are eighteen items in the scale used in this study, and a five-point Likert scale is used to rate each item. The construct consists of five discrete subscales: self-efficacy related to computers and the internet, learner control, self-directed learning, motivation for learning, and self-efficacy related to online communication. The Cronbach's Alpha coefficient for the current scale was calculated as 0.91.

### **Setting**

An online platform was used to conduct fall 2020/21 school year English as a Foreign Language (EFL) classes. The length of this course was 15 weeks, spread out over the course of the fall semester. The university's distance education center developed a specialized Learning Management System (LMS) to serve as the primary instructional platform for the online, distance EFL courses. Lockdowns were implemented as a preventative measure in response to the COVID-19 pandemic at the end of the fall semester of the 2020/2021 school year. So, data was collected using the Google Docs platform.

### **Data Analysis**

In the initial stage, descriptive statistics were computed for the five subscales. The summation of responses to individual questions within a given factor (dimension) was performed, followed by division of the total by the number of items pertaining to that factor. This calculation allowed for the determination of the average score for each student within the respective factor (dimension). Then, a Multivariate Analysis of Variance (MANOVA) was conducted to examine potential variations in the components of the Online Learning Readiness Scale (OLRS) based on gender and grade level.

## RESULTS

### Findings about the First Research Question

The level of readiness of students studying EFL in Türkiye was evaluated using the Online Learning Readiness Scale, which consists of five subscales. The following table presents the mean scores of Turkish students studying English as a foreign language on the five subscales as well as the total scale.

**Table1:** The E-Learning Readiness Level of Turkish EFL Students

Subscales and total scale	<i>x</i>	<i>Sd.</i>
Online/computer self-efficacy	3.6489	0.81787
Self-motivated education learning	3.5420	0.81806
Learner control	3.2366	0.86478
Motivation for e-learning	3.8817	0.81649
Online communication self-efficacy	3.3995	0.97614
Online learning readiness scale	3.5417	0.70189

The participants in the current study demonstrated readiness levels that exceeded the average level on all five subdivisions of the OLRs, as evidenced by their mean scores (Table 1). Furthermore, the participants exhibited the highest average score on the subscale assessing motivation for e-learning ( $M = 3.88$ ), while displaying the lowest average score on the subscale measuring learner control ( $M = 3.23$ ). Subdimensions of online/computer self-efficacy (Mean=3.64), self-motivated education

(Mean = 3.54), and online communication self-efficacy (Mean = 3.39) were found to have above-average and relatively high readiness scores after these.

### Findings about the Second Research Question

A Multivariate Analysis of Variance (MANOVA) was performed to evaluate any possible gender variations in the OLRs constructs. According to Table 2's results, there were no statistically significant differences between male and female students.

**Table 2:** The results of the MANOVA according to the gender variable

	Gender				F	P	$\eta^2$
	Male		Female				
	M	SD	M	SD			
Online/computer self-efficacy	3.66	0.990	3.64	0.728	0.029	0.865	0.000
Self-motivated education	3.42	0.869	3.59	0.791	1.293	0.258	0.010
Learner control	3.29	0.943	3.20	0.829	0.267	0.606	0.002
Motivation for learning	3.83	0.793	3.90	0.830	0.215	0.643	0.002
Online communication self-efficacy	3.23	0.966	3.47	0.976	1.699	0.195	0.013

### Findings about the Third Research Question

In addition, this study investigated the relationships that exist between the OLRs dimensions and the students’ grade levels, which are representative of the total number of academic credits they have accumulated. The research divided the students who participated in the study into three distinct groups, each corresponding to a different grade level: (1) sophomores, (2) juniors, and (3) seniors. Based on the MANOVA test results, there was no significant difference observed among students of various grade levels in terms of their readiness across all dimensions, as shown in Table 3.

**Table 3:** The results of the MANOVA according to the grade variable

	Grade						F	P	$\eta^2$
	Sophomore		Junior		Senior				
	M	SD	M	SD	M	SD			
Online/computer self-efficacy	3.46	0.948	3.65	0.771	3.82	0.698	2.185	0.117	0.033
Self-motivated education	3.49	0.929	3.58	0.729	3.54	0.806	0.134	0.875	0.002
Learner control	3.15	0.940	3.24	0.902	3.30	0.756	0.299	0.742	0.005
Motivation for learning	3.80	0.880	3.83	0.783	4.00	0.789	0.776	0.462	0.012
Online communication self-efficacy	3.34	1.01	3.39	0.919	3.46	1.01	0.164	0.849	0.003

## DISCUSSION

The primary objective of this study was to evaluate the e-learning readiness level of the Turkish EFL learners. In the context of this study, the average scores achieved by students across all five dimensions surpassed the mean value.

The findings of this study suggest that the EFL learners who were sampled demonstrated a significant level of preparedness in terms of their motivation for e-learning. Subsequently, their Online/computer self-efficacy and self-directed learning exhibited strong readiness levels. It is noteworthy to acknowledge that their level of preparedness was notably lower when compared to other aspects, specifically those related to learner control and online communication self-efficacy. The existing body of literature, particularly concerning EFL students, as explored by Yastibas, Kayali, and Altuntaş (2023), Serttaş and Kasabalı (2020), and Korkmaz (2022), suggests that Turkish learners of English as a foreign language exhibit readiness for engaging in online learning. The results of the current study support these conclusions by showing that the EFL students who took part were adequately prepared for online learning.

The findings presented here provide significant insights into the current state of online learning readiness among Turkish ELF students. The available evidence indicates that these EFL students have a relatively high level of e-learning motivation. Our EFL students' significantly higher scores on the motivation for learning subscale were consistent with patterns found in earlier studies (Yastibas, Kayali & Altuntaş, 2023; Korkmaz, 2022; Serttaş & Kasabalı, 2020). One potential explanation for the observed trend could be attributed to the students' notable levels of self-assurance in their aptitude for utilizing computers and the internet proficiently. Gaining these abilities, which are considered essential in this digital age, will probably increase their propensity to participate actively in online learning. Students' motivation is further reinforced by the unique features of distance education, which allow them the freedom to use digital resources to improve their learning process. The freedom to move around and use these resources effectively in the virtual classroom serves as a strong incentive for their continued participation and commitment to the process of learning online.

In addition to a motivation for e-learning, Turkish EFL learners' readiness level was also found to be high in the Online/computer self-efficacy domain. Technology and the ways in which it has altered human interaction could account for this. Because of the widespread availability of computers and smartphones and the ease with which people can connect to the Internet from almost anywhere (Yastibas et al., 2023), the current study's EFL participants likely have high levels of self-efficacy with computers and web-based education.

The prioritization of self-directed learning has merit within the realm of online education due to its capacity to provide students with greater control over

the trajectory and pace of their educational pursuits. These Turkish students studying English as a foreign language (EFL) demonstrated a high degree of preparedness for self-directed learning, which suggests that they are skilled at handling the flexible and customized format of online courses. However, the studies in the Turkish EFL context did not find consistent results with regard to self-directed learning. The EFL students who were the focus of Korkmaz's (2022) research had the lowest scores in the self-motivated education aspect, whereas Yastibas, Kayali & Altuntaş (2023) found that the EFL students who participated in their research displayed the highest scores in the self-motivated education dimension. Variations in this study's results are likely attributable to online learning's distinctive characteristics. Online learning tends to reduce the traditional teacher-centered approach, thereby creating an environment that is naturally more student-centered than traditional classroom settings. It is possible that in this environment, participants became more aware of their own agency and its significance in the learning process. The shift toward greater learner autonomy and responsibility may have affected the outcomes (Yastibas, Kayali & Altuntaş, 2023).

The EFL students in this research showed the lowest scores in the learner control subscale, supporting the findings of Yastibas, Kayali & Altuntaş (2023), Serttaş and Kasabali's (2020) and Korkmaz's (2022) who also found the lowest readiness score in the learner control domain. The reason for this situation could be the fact that online courses present a distinct educational setting in contrast to conventional face-to-face teaching. The presence and immediate guidance of an instructor in a traditional classroom setting provide students with valuable benefits. On the other hand, individuals engaged in online learning often undertake their educational endeavors autonomously. The introduction of this fundamental shift in the learning paradigm may present distinct challenges.

The heightened vulnerability to external distractions that individuals engaged in online learning may experience poses a substantial barrier. In comparison to the structured setting of a conventional classroom, students who are enrolled in online courses may encounter heightened susceptibility to diversionary influences such as instant messaging, social media platforms, and online gaming. The presence of these distractions has the potential to hinder individuals' focus and capacity to actively participate in educational materials and tasks.

According to Garrison (1997), the acquisition of self-directed learning skills emerges as an essential competency for students who are enrolled in online

courses. Academic success encompasses not solely the capacity to establish and oversee personal educational goals, but also the commitment to stay focused and undeterred in the face of potential diversions. The acquisition of this skill empowers students to optimize the adaptability and convenience offered by online education, while simultaneously maintaining an active and efficient involvement in their educational endeavors.

The findings of this study indicate that there is no statistically significant evidence of gender disparities. The results of this study suggest that there were no statistically significant disparities observed between male and female students with regards to their levels of preparedness across multiple domains. Both male and female participants exhibited comparable attitudes and behaviors in relation to self-directed learning, motivation for learning, Online/computer self-efficacy, online communication self-efficacy, and learner control. The results presented in this study align with the conclusions drawn by Bunz, Curry, and Voon (2007), who found no statistically significant difference in computer proficiency between genders. Furthermore, the findings presented here are consistent with the study conducted by Hung et al. (2010), which demonstrated that there was not a statistically significant disparity in the propensity for readiness in online learning between male and female students. There exists a possibility of alignment in attitudes and beliefs among male and female students regarding their participation in online academic studies. Hence, the results suggest that there is no statistically significant discrepancy between genders regarding the level of readiness exhibited by college students for engaging in online learning.

The third finding is that, in terms readiness for online learning, all students demonstrated an equal degree of readiness regardless of their grade levels. However, this finding is not consistent with the findings of Wojciechowski and Palmer (2005) and Hung et al. (2010), who suggest that relatively mature college students tend to demonstrate higher levels of readiness for enrolling in online courses and more mature students may also exhibit superior learning performance in comparison to their less mature peers in a digital learning environment. The finding that all students, irrespective of grade level, showed an equal degree of preparedness for online learning could have been influenced by a number of factors. Students of all grade levels have grown up in a world where technology is an essential part of daily life in the current digital age. They usually have early proficiency with digital communication tools, computers, and the Internet. This technological competency may help them be more

ready for online learning, regardless of their grade or academic standing. The increasing integration of technology, flexibility, institutional support, and the allure of student-centered learning in online education can be credited for the preparedness of students at all grade levels for learning online. These elements influence students' preparedness to engage in productively in online learning environments, regardless of their grade levels.

### **STUDY IMPLICATIONS AND CONCLUSION**

Several pedagogical implications arise from this study, most notably for English language education in Turkey but also elsewhere. According to the study's findings, online learning motivation among Turkish EFL students is exceptionally high. By creating online courses that effectively deliver content and foster students' enthusiasm for the academic pursuits, educators can capitalize on this type of intrinsic motivation. Incorporating interesting content, interactive exercises, and room for creative expression are all ways to keep students interested and engaged in their online courses.

Research shows that there is room for improvement, particularly in the area of learner control, despite the fact that students have demonstrated readiness for self-directed learning. Teachers can help students learn to self-regulate their behaviors by providing them with guidance and tools to do so. Through the use of techniques like goal-setting, time management, and regular self-evaluation, students can take responsibility for their own learning.

Turkish students studying English as a foreign language are very confident in their computer and internet skills. By utilizing a range of digital tools and platforms in their virtual classrooms, educators can profit from this trend. These kinds of tools have the potential to boost involvement, promote teamwork, and open up new ways to customize instruction to meet the needs of specific students.

The study found that students, both male and female, were equally prepared for college. Thus, educators shouldn't make any assumptions about the gender of their students when creating online courses. Teachers should instead concentrate on developing inclusive, equitable classroom environments that accommodate the diverse needs and preferences.

The results show that students of different grades are not significantly different in terms of their preparedness for online learning. To meet the needs of students from different ages and backgrounds, teachers at all levels should

give their students plenty of practice and feedback on their skills in addition to clear instructions, technical support, and other resources.

The study examined how easily distance learners could become sidetracked from their assignments. Teachers should recognize the challenge of keeping students' attention while taking part in online classes. Discipline training, creating a workable study schedule, and using technological tools to eliminate interruptions are all helpful strategies for students who have trouble staying on track.

Conducting regular assessments of students' readiness for online learning can be useful. Educational institutions can evaluate their students' readiness for online learning with the help of the Online Learning Readiness Scale (OLRS) and provide individualized support where it is needed. Teachers are able to adapt their methods and interventions to meet the ever-evolving needs of their students when they engage in ongoing assessment of their students' progress. Educators and schools should put resources toward developing their online teaching and curriculum design skills through professional development opportunities. Instructors can benefit from training programs that help them keep up with the latest trends in online teaching and learn how to make the most of available technological tools.

In conclusion, this study has important pedagogical implications for online English language instruction, particularly with regards to the importance of students' motivation, self-directed learning, and the integration of technology. Educators who take into account the implications discussed here can create more engaging, effective, and inclusive online learning experiences for students studying Turkish as a foreign language around the world.

## **LIMITATIONS**

A potential constraint of this study pertains to the possibility of limited generalizability of its findings. The study centered on Turkish students who are learning English as a foreign language (EFL) at a particular university in Turkey. Hence, it is important to note that the findings may not have immediate relevance to English as a Foreign Language (EFL) learners in diverse cultural environments or educational contexts. The readiness levels of students in different regions or institutions may be influenced by variations in cultural attitudes towards online learning, access to technology, and teaching methodologies.

The data obtained in this study was dependent on the self-reported responses provided by the participants. Response bias can impact self-report measures, such as the Online Learning Readiness Scale (OLRS). There is a possibility that participants may exhibit a tendency to provide socially desirable responses, which could potentially result in an overestimation of their readiness levels. Furthermore, it is important to note that self-assessment may not consistently provide an accurate representation of students' true preparedness for engaging in online learning, as individuals' perceptions may deviate from their demonstrated competencies. In this research, a cross-sectional design was used to gather data from English as a Foreign Language (EFL) students. A longitudinal methodology, which involves the continuous monitoring of students' readiness levels over an extended duration, has the potential to yield deeper insights into the progression of online learning readiness and its temporal evolution. This constraint hinders the investigation of possible fluctuations in preparedness over the course of a student's educational trajectory.

The study emphasized the significance of motivation, self-directed learning, and technology integration, but it did not extensively explore particular instructional strategies or interventions aimed at improving these dimensions of readiness for online learning. Additional research is required to examine pedagogical approaches and interventions that have the potential to effectively address the identified gaps in readiness. The study did not comprehensively investigate matters pertaining to technology access and infrastructure. The preparedness of students for online learning can be significantly impacted by their access to dependable internet connectivity and appropriate technological devices. The study did not extensively investigate socioeconomic factors, which could potentially have a significant impact on students' preparedness for online education.

The study was carried out within the confines of a solitary academic institution. The levels of preparedness among students can vary across different institutions, primarily as a result of disparities in curriculum, teaching methodologies, and institutional resources. Hence, it is important to acknowledge that the results may not comprehensively reflect the range of preparedness for online learning within the wider educational context.

The primary emphasis of the study was on the demographic variables of gender and grade level. Although an analysis was conducted on these factors to identify potential variations in preparedness, there was a lack of comprehensive investigation into other demographic attributes such as age, prior experience

with online learning, and socioeconomic status, which have the potential to impact students' readiness. Subsequent investigations in the field would greatly benefit from a more thorough and all-encompassing examination of these aforementioned factors.

In conclusion, it is crucial to recognize the limitations of this study despite the valuable pedagogical implications that can be derived from it. Additional investigation and an in-depth examination of readiness factors are required in order to gain a more nuanced comprehension of the readiness for online learning and to develop effective strategies for enhancing it among English as a Foreign Language (EFL) students globally.

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# **EMBRACING DIVERSITY: MULTILINGUAL TEACHERS' PERSPECTIVES ON MULTILINGUALISM**

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## **INTRODUCTION**

From historical point of view, the world was divided into clear lingual regions where each region or nationality has its own language. This case can't be stable and fixed due to human beings' interactive history - from migrations to wars and their causes. All these reasons lead to multilingual societies and individuals who can proficiently speak more than one language. Multilingualism as a phenomenon is an evolving lingual movement which can be defined as given by the European Commission (2007): "the ability of societies, institutions, groups and individuals to engage, on a regular basis, with more than one language in their day-to-day lives" (p. 6). Furthermore, according to this definition multilingualism has more than one level from whole societies to individuals.

## **MULTILINGUALISM**

Multilingualism is a widespread phenomenon, with more than half of the world's population being bilingual or multilingual. Different countries and regions often exhibit varying degrees of multilingualism due to historical, social, and cultural factors. In the literature multilingualism has been widely studied and defined by researchers. Multilingualism is identified as the ability of an individual or a community to communicate using more than one language (Baker 2011, Grosjean 2010, Cenoz & Gorter 2015), the ability of individuals

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to use different languages for specific functions and the dynamic interaction between these languages in various communicative contexts.” (Hoffmann 1991) or as socio-cultural phenomenon resulting from contact between linguistic communities, leading to the use of multiple languages within a social setting (Ricento, 2006). Thus, multilingualism goes beyond being bilingual, where a person is proficient in two languages. Instead, it encompasses individuals who are skilled in three or more languages. The level of proficiency can vary widely, from being able to hold simple conversations to having native-like fluency in multiple languages

According to Wei (2000) multilingualism can manifest in various contexts, such as:

1. Individual Multilingualism: When a person possesses proficiency in multiple languages due to factors like growing up in a multilingual family, attending schools that teach different languages, or learning languages for personal or professional reasons.
2. Societal Multilingualism: Refers to the coexistence of multiple languages within a specific geographical area or country. In some regions, various languages might be recognized as official or national languages, and people within the society use them in their daily lives.

The phenomenon of multilingualism is widespread and has far-reaching implications. It plays a crucial role in shaping cultural identity, promoting intercultural understanding, fostering economic opportunities, and facilitating global communication (European Commission 2020). Multilingual individuals often enjoy cognitive advantages, such as enhanced problem-solving abilities and greater cognitive flexibility. Green & Abutaleb (2013) found that multilingual individuals are adept at switching between languages, a skill known as code-switching. This linguistic flexibility extends to other cognitive domains, enabling them to adapt to new situations and think creatively. Multilinguals often display greater mental flexibility and adaptability, allowing them to approach problems from multiple angles. Bialystok, Craik, & Luk (2008) state that multilingual individuals often exhibit enhanced executive functions, including better attention control, improved working memory, and advanced problem-solving abilities. The constant mental juggling of languages sharpens these cognitive skills, resulting in improved performance in various tasks. Hence, the mastery of multiple languages challenges and nurtures the brain, resulting in cognitive advantages that extend far beyond the realm of

linguistics. Embracing multilingualism not only enriches communication but also nurtures the mind's cognitive prowess, leading to a more vibrant and agile intellect. However, multilingualism also comes with challenges, such as language barriers that can hinder effective communication, especially in diverse societies where multiple languages are spoken. Overall, multilingualism is a dynamic and evolving aspect of human communication and plays a significant role in shaping the diversity and richness of the world's languages and cultures.

In his qualitative study Haukås explored the beliefs of L3 (third language) teachers in a Norwegian school regarding multilingualism and multilingual pedagogy. The teachers recognized the benefits of their own multilingualism but were unsure if their students experienced the same advantages due to differences in awareness. They used awareness-raising activities to help students utilize their knowledge of common languages (Norwegian and English) but paid less attention to their knowledge of other languages. The study emphasized the importance of incorporating explicit language learning approaches for L3 instruction, as learning an L3 differs significantly from learning L2 English (Haukås, 2016).

In a study conducted in Norway and Russia unlike the findings from studies conducted in other countries, where teachers of English tended to exhibit strong preferences for monolingualism (e.g., Kim, 2020), the teachers of English from Norway and Russia in this study demonstrated a strong belief in the advantages of being multilingual or becoming one. Interestingly, there were no statistically significant differences between these teachers and those who reported teaching other languages. (Calafato, R. 2020).

Notably, in the Norwegian context, where the previous English curriculum (Norway UDIR, 2013) did not explicitly mention multilingualism as a resource, the absence of significant differences in beliefs about multilingualism is noteworthy. Furthermore, the participants generally did not believe that their governments were actively promoting the learning of multiple languages through investments in teacher education, materials, or campaigns. This contrasts with the explicit emphasis by Norway's UDIR and the Russian MoE on the importance of citizens being proficient in multiple languages to navigate a multilingual, multicultural world (Norway UDIR, 2006; Russia MoE, 2018). It is also in contrast to the participants' positive beliefs about the benefits of multilingualism for both students and teachers. (Calafato, R. 2020).

Developing teacher education programs to equip educators with the necessary skills to support children who do not speak the language of instruction in the classroom has shown promising results based on preliminary research evidence. In-service training has been found to enhance teachers' capabilities and resources, leading to improved academic outcomes for these language-minority students. Practitioners strongly advocate for such training, and they also believe that initial teacher training should be adapted to prepare teachers for the growing number who will work in multilingual classrooms. In various countries and cities within the EU, schools and teachers benefit from the resources, networking opportunities, and training offered by specialized centers. Practitioners have observed that networking both between and within schools fosters non-formal learning among teachers, thereby supporting the educational needs of migrant children. Such collaborative efforts contribute to enhancing the learning environment and support provided to language-minority students. (European Commission,2015)

As multilingualism has a great impact on individual, cultural, economical and social life multilingual teachers' views on topics like language support, language practices, multilingualism, migrant children learning L2 and literacy needs to be examined in detail. The findings will shed light on language teaching practices and implications for further studies.

According to the literature mentioned above this study aims at answering the following questions:

1. What are multilingual teachers' views on language support?
2. What are multilingual teachers' views about multilingualism?
3. What are multilingual teachers' Language Practices?
4. What are multilingual teachers' views on the first language/s of migrant children?
5. What are multilingual teachers' views on children learning L2?
6. What are multilingual teachers' views on literacy?

## **METHODOLOGY**

### **Research Design**

In this study the quantitative research method is used. With the aim to find answers for the research questions the questionnaire "The Multilingual

Classrooms Questionnaire” (MCQ) (Mifsud & Petrova, 2017) was used to investigate teachers’ language awareness in multilingual classes. The questionnaire was developed by The Centre for Literacy in the European Literacy Network COST Action IS1401 of The Multilingual Classrooms Questionnaire (MCQ) for the Multilingual Classrooms Project of WG1 of the COST Action (Mifsud & Petrova, 2017). Through this questionnaire for teachers, the Multilingual Group of the European Literacy Network (COST Action IS1401) is seeking to obtain and analyse information about teachers’ knowledge, attitudes and behaviours with regard to multilingualism. As in this study multilingual language teachers’ language awareness will be examined, this questionnaire was found to suit the aim of this study.

### **Participants**

The research was conducted with 62 participants of ELT teachers from different countries. Mainly Syria (n=29), and Turkey (n=27), beside other countries like Pakistan (n=1), Iran (n=1), Ghana (n=1), Nigeria (n=1), USA(n=1), and Rwanda (n=1), which reflexes a great variety of lingual backgrounds. There are 28 female (45.2%) and 34 male (54.8%) participants. The ages of the participants ranged from 18 to 54. The ages of the participants were between 18 to 24 (27.4%), 25 to 34 (29%), 35 to 44 (37.1%), and 45 to 54 (6.5%).

### **Research tools**

This study aimed to explore the experiences and challenges faced by multilingual teachers in a diverse educational setting. The participants were 62 teachers who had proficiency in multiple languages and taught in a multicultural school environment. The study utilized and method, including a questionnaire using scales to gain insights into the multilingual teachers’ views on multilingualism, language support, children’s second language and literacy. The MLQ consists of 39 items in 10 sections: demographic section, spoken languages, Professional background, Language Learning Opportunities, Language Support, views about multilingualism, Language Practices, The first language/s of migrant children, Children’s learning of L2 and Literacy. The Multilingual Classrooms Questionnaire (MCQ) was created for the Multilingual Classrooms Project of WG1 of the COST Action. (Mifsud, C.L. & Petrova, R. (2017). One question was added to the questionnaire in order to get more information from the participants on challenges they face during teaching.

## Data Collection Procedures

The questionnaire was turned on Google form into an online version and forwarded to participants. All of the participants have taken part in The Multilingual Classrooms Questionnaire (MCQ).

## Data Analysis

The quantitative data was analysed by using SPSS 22.00 frequencies and percentages were examined and as the data showed a non –normal distribution the non- parametric tests Kruskal –Wallis and Mann -Whitney U test was applied to find out statistically significant differences among some variables. There were four scales used in the research which are views on multilingualism, The first language/s of migrant children, children’s learning of L2, and literacy. These scales were examined regarding the following factors of participants: age, gender, teaching experience, number of students currently in class, percentage of multilingual students in class.

The reliability statistics for Scale views on multilingualism (N of Items: 15) show high Cronbach’s alpha values, indicating internal consistency and high reliability. Scale of the first language of children (N of Items: 16) has a high Cronbach’s alpha value of 0.895, indicating 16 items are internally consistent and measuring the same construct reliably. Scale of learning a second language (N of Items: 8) has a high Cronbach’s alpha value of 0.909, indicating 8 items are internally consistent and measuring the same construct reliably. Scale of literacy (N of Items: 6) also has a high Cronbach’s alpha value of 0.928, indicating 6 items consistently measure the intended construct. Overall, all four scales have good to excellent reliability, with Cronbach’s alpha values ranging from approximately 0.895 to 0.932. These high values provide researchers with confidence in using these scales for data analysis and interpretation in their research studies.

The Cronbach’s alpha indicates a high level of internal consistency for the research scale. This means that the items in the scales are measuring the same construct consistently. The scales demonstrate strong reliability, producing consistent and stable results, which enhances the trustworthiness of the measurements. With a Cronbach’s alpha exceeding the recommended threshold, the scales are considered dependable for assessing the intended variable. The minimized measurement error indicates that the scale accurately captures respondents’ attitudes or perceptions. Overall, the reliable research scale shows promise for providing robust and meaningful results in the study.

## **FINDINGS**

### **Findings on Demographics**

The participants' gender was 34 (54.8%) males and 28 (45.2%) females. The ages of the participants were between 18 to 24 (27.4%), 25 to 34 (29%), 35 to 44 (37.1%), and 45 to 54 (6.5%) years old. 61 (98.4%) participants live in Turkey, 1 (1.6%) participant lives in Qatar. 27 (43.4%) participants were born in Turkey, 29 (46.8%) in Syria, 1 (1.6%) in Iran, 1 (1.6%) in Ghana, 1 (1.6%) in Nigeria, 1 (1.6%) in Pakistan (1.6%), 1 (1.6%) in United States of America (1.6%), and 1 (1.6%) participant in Rwanda. In total, teachers reported 6 different languages as L1. The most frequent reported language was Arabic (46.8 %) followed by Turkish (35.5 %), English (9.7 %), Kurdish (4.8 %), Persian and Kinyarwanda (language of Rwanda) (1 %). Regarding L2, 62 (100%) participants reported that they speak a second language, 48 (77.41%) participants reported that they speak a third language, 17 (27.41%) participants reported that they speak a fourth language beside their mother tongues.

The participants have different years of experience in both origin and visiting countries, their total teaching experiences is as following: From 0-5 years (n=26) (41.9%), from 6-10 years (n=13) (21%), from 11-15 years (n=16) (25.8%) and more than 15 years (n=7) (11.3%). 48.4 % of participants reported that they had received specialist training in educating children with different language backgrounds.

### **Findings on Multilingual Students in Class**

21 participants students were 0 to 10% (33.9%) multilingual. 10 participants 11 to 30% (16.1%), 6 participants 31 to 50% (9.7%), 9 participants 51 to 70% (14.5%), and 8 participants 71 to 100% (12.9%) of their students were multilingual. When asked about languages spoken in their classes a variety of languages were reported like Arabic, Turkish, Kurdish, German, Dutch, Russian, Czech, French, Slovak, and Persian..

### **Findings related to specific resources used for teaching language/s in school/class for students who do not speak the language of the classroom (target language)**

43 participants (69.4) reported that they have specific resources for students who do not speak the language of the classroom while 19 participants (30.6) reported that they do not have specific resources. The participants' answers

about the question “During classes, should the teacher use only the languages all the student know very well?” were with 42 (67.7%) “No” and 32.29% “Yes”.

**The 60 responses on the question “If “Yes” or “No” why?” is as following:**

- He should use other languages to get all students involved in the class
- Students should be exposed to new languages including the target language they’re supposed to learn
- I believe no, because the focus should better be on the target language and how students use and apply it. It is not a translation course after all.
- Students should listen to the language they are learning
- It will facilitate the teaching process
- If the teacher can communicate with the minority of children who don’t know the official language then it is needed to be done often so that the children can feel less isolated, but of course it must be sidewalk so that the majority of students who do speak the official language don’t end up confused.
- The teacher should integrate other languages including body language as well
- L1 must be used
- Because we should expose our students to the language.
- Because English should be dominant.
- No, the teacher should use primarily the L2 during the classes with the help of L1 when the need arises
- They should not use only one group’s language. It is not fair.
- Some Turkish some English because we can understand
- Teacher uses both target and mother language
- They should learn the other language as well
- They need exposure to language
- No, because at the beginning, we didn’t use to know our mother tongue, neither.
- Because while using it those who don’t know well will improve themselves

- Don't have to do that because the teacher can explain the words in different ways without the translation to improve their skills and to stick in their mind
- Sometimes no because speaking English is also needed to be used so as to teach it.
- In a multilingual class we need to use other languages time to time
- For a better understanding
- Only the target language should be used
- To motivate student
- Because using other languages that they don't know very well might be interesting in order to learn effectively.
- They need to feel comfortable with the language
- The first language is preferable.
- To get better results.
- Because it will help the other students to learn the common language too
- Teachers have to speak English only.
- The language which you teach doesn't need any interference from L1 (just some rare parts)
- They should learn and listen the other languages
- Students will do better using a language they know. To understand what teachers say
- I believe it is unfair
- To make education easier
- That would be ineffective way if teachers speak their native language, and it will be translating class Not Teaching, as a teach I must speak full English in the class and encourage students to speak out even if they make some mistakes
- To gain the skills of the new language
- To convey his/her ideas clearly
- Both languages should be used

- Because the other students that don't know the spoken language well can have hardship in lesson
- The teacher should use the foreign languages to familiarize non-native students with the foreign language.
- The teacher should use the both languages according to the need
- They cannot learn other language if you continue to speak the language they know
- There need to be a main language for the majority of the pupils

The 60 responses to the question about whether to use other languages in the classroom can be categorized into several general ideas. Some respondents are supportive of using other languages, stating that it can lead to better understanding, expose students to new languages (including the target language), and facilitate the teaching process. They argue that teachers should use foreign languages to familiarize non-native students with the language and culture. On the other hand, there are respondents who are neutral, conditional, or in favour of using both languages. They suggest that the focus should primarily be on the target language, but there could be occasional use of other languages if necessary. Some argue that both the target and mother language should be used, while others believe English should dominate. Another group of respondents expresses motivation and encouragement for using other languages, emphasizing that it can help students feel comfortable, improve their language skills, and better understand what the teachers are saying. They believe that exposing students to a new language can lead to better results and make the learning process easier. However, there are those who oppose using other languages in the classroom. They argue that the teacher should primarily use the target language, without relying on translation, as using other languages might distract from the main learning objectives. They stress the importance of immersive teaching in the target language, even if students make mistakes, as it fosters language development. There are also a few respondents who express uncertainty or no opinion on the matter. They don't offer a clear stance on whether other languages should be used in the classroom. Finally, some respondents mention other considerations, such as the need for a main language for the majority of students or fairness in language usage. In conclusion, the responses vary widely, with arguments both for and against using other languages in the classroom, highlighting the complexity of this issue in language education.

### Findings related to the challenges faced by multilingual teachers

Participants have chosen more than one answer and some of added their own answers about the challenges they face as the following: Limited reading habits on the part of the students: 33 respondents (53.2%). The need for greater cooperation and coordination among teaching personnel: 35 respondents (56.45%). Cultural differences, the different syntax, and the different pronunciation of the same letters: 1 respondent (1.6%)

### Findings on multilingual teachers' views on multilingualism

Table 1 shows the result of mean scores of multilingual teachers' views on multilingualism.

**Table 1:** Results of Mean Values of Multilingual Teachers' Views on Multilingualism

	N	$\bar{x}$	Std. Error of Mean
Schools should teach in only one language	62	2.61	.204
Schools should teach in two or more languages	62	4.40	.223
Children should be encouraged to learn different languages	62	5.02	.185
Every European citizen should master at least two other languages in addition to their first language	62	4.39	.183
Proficiency in mastering foreign languages is important to face global challenges	62	4.81	.179
Multilingual media can support mutual understanding	62	4.84	.166
Teachers should emphasise the positive relationship between languages	62	4.89	.171
Teachers should have an understanding of the social circumstances of the children in their class	62	5.02	.179
It is often said that the more languages one knows, the easier it is to learn new languages	62	4.76	.170
Children who know several languages will achieve better results across disciplines	62	4.47	.189
The migrant children's previous language knowledge is important when learning a language	62	4.58	.189
Teaching children in both the target language and their first language will result in language confusion	62	3.08	.197
Being multilingual is an advantage for learning at school	62	4.60	.180
Being multilingual is a disadvantage for relationships with peers	62	2.69	.180
The teaching of multilingual children is more challenging than teaching children who are monolingual.	62	3.45	.204

According the findings on the mean scores of multilingual teachers' views on multilingualism the highest value had the items “Children should be encouraged to learn different languages” and “Teachers should have an understanding of

the social circumstances of the children in their class”, whereas the lowest value was found to be with the items “Being multilingual is a disadvantage for relationships with peers” and “Schools should teach in only one language”.

**Findings on multilingual teachers’ views on multilingualism according to age**

Table 2 shows the Mann Whitney-U Test result on multilingual teachers’ views according to age .

**Table 2:** Mann Whitney-U test result on multilingual teachers’ views according to age

Literacy	Groups	N	$\bar{x}$	$X^2$	sd	P
	18 - 24	17	29.59	4.692	3	.196
	25 - 34	18	39.06			
	35 - 44	23	27.22			
	45 - 54	4	30.25			
	Total	62				

Table 2 shows the result of the Kruskal Wallis Test applied to determine whether the literacy scores differ depending on the age variable. When the mean ranks in the table are examined, it is seen that the literacy scores of teachers aged between 25 to 34 are higher than other groups. It is seen that teachers aged between 45 to 54 take the second place. It is seen that teachers aged between 18 to 24 and 35 to 44 are lower than the others. However, since  $p = .196$ , it is concluded that this difference obtained from scale scores is not statistically significant ( $p > .05$ ).

**Findings on multilingual teachers’ views on multilingualism according to gender**

Table 3 shows the Mann Whitney-U Test results on multilingual teachers’ views on multilingualism according to gender.

**Table 3:** Mann Whitney-U Test results on multilingual teachers’ views on multilingualism according to gender

Views on language	Groups	N	$\bar{x}$	$\Sigma$	U	z	P
	Males	34	30.56	1039.00	444.000	-.453	.650
	Females	28	32.64	914.00			
	Total	62					

Table 3 shows the results of the Mann Whitney-U Test applied to determine whether the scores of the application dimension Views on language Scale, differ depending on gender. When the mean ranks in the table are examined, it is seen that female students are in the first place with 32.64 points in the application of Views on language, and male students are in the second place with 30.56 points. Since  $p = (.650)$ , it is seen that this difference obtained from scale scores is not statistically significant ( $p > .05$ ).

**Findings on multilingual teachers’ views on multilingualism according to years of teaching experience**

Table 4 shows Kruskal Wallis Test results on multilingual teachers’ views on multilingualism according to years of teaching experience.

**Table 4:** Kruskal Wallis Test Results on multilingual teachers’ views on multilingualism according to years of teaching experience

Views on language	Groups	<i>N</i>	$\bar{x}$	$X^2$	<i>sd</i>	<i>P</i>
	0-5	26	34.00	7.679	3	.053
	6-10	13	38.88			
	11-15	16	27.56			
	More than 15	7	17.50			
	Total	62				

Table 4 shows the result of the Kruskal Wallis Test applied to determine whether the Views on language scores differ depending on years of teaching experience variable. When the mean ranks in the table are examined, it is seen that Views on language scores of teachers with experience from 6-10 are higher than other groups. It is seen that teachers whose experience between 0-5 years take the second place. It is also seen that teachers whose experience between 11-15 and more than 15 years are lower than the others. However, since  $p = .053$ , it is concluded that this difference obtained from scale scores is not statistically significant ( $p > .05$ ).

**Findings on multilingual teachers’ views on the first language/s of migrant children**

Table 5 shows mean values of multilingual teachers’ views on the first language/s of migrant children.

**Table 5:** Mean Values of multilingual teachers' views on the first language/s of migrant children

First Language (L1)	N	Mean	Std. Error of Mean
Migrant parents do not want their children to maintain their L1.	62	2.95	.186
It is the teachers' responsibility to help migrant children to maintain their L1.	62	3.16	.186
Teachers should be informed about children's L1 and culture.	62	4.31	.182
In my teaching, I do not usually make reference to the L1 or culture of the children I have in class.	62	3.39	.187
Migrant children do not want to speak their L1 in front of school peers.	62	3.31	.186
Migrant children must learn one language at a time.	62	3.26	.206
Migrant children can maintain their home culture even without maintaining their first language.	62	3.53	.188
The frequent use of the first language delays the learning of the language being taught.	62	3.65	.199
The school should offer activities aimed at raising awareness about the migrant children's first language and culture.	62	4.24	.178
Maintaining the first language helps migrant children to maintain their home culture as well.	62	4.13	.174
Teachers should allow the children to speak in their L1 in class.	62	3.37	.193
To help migrant children maintain their first language, the teacher must have some basic knowledge of their language.	62	3.71	.185
Learning subject matter in their first language helps children to learn subject matter better.	62	4.10	.179
The use of the L1 in the classroom should be minimised as soon as children learn the target language.	62	4.15	.173
Curriculum instruction in the first language will result in a poor level of target language proficiency.	62	3.73	.184
The use of the first language in the classroom allows children to base their learning of the target language on the conceptual knowledge they already possess in their first language.	62	3.55	.173

When the results on mean values of multilingual teachers' views on the first language/s of migrant children are examined, it is evident that "Teachers should be informed about children's L1 and culture" and "The school should offer activities aimed at raising awareness about the migrant children's first language and culture" had the highest scores. "Migrant parents do not want their children to maintain their L1" had the lowest mean value.

### Findings on multilingual teachers' views on the first language/s of migrant children according to age

Table 6 shows Kruskal Wallis Test results on multilingual teachers' views teachers' views on the first language/s of migrant children according to age.

**Table 6:** Kruskal Wallis Test Results on multilingual teachers' views teachers' views on the first language/s of migrant children according to age

First language of migrant students	Groups	<i>N</i>	$\bar{x}$	$X^2$	<i>sd</i>	<i>P</i>
	18 - 24	17	29.18	5.630	3	.131
	25 - 34	18	39.61			
	35 - 44	23	28.48			
	45 - 54	4	22.25			
	Total	62				

Table 6 shows the result of the Kruskal Wallis Test applied to determine whether the First language of migrant students' scores differ depending on the age variable. When the mean ranks in the table are examined, it is seen that the First language of migrant students' scores of teachers aged between 25 to 34 are higher than other groups. It is seen that teachers aged between 18 to 24 take the second place. It is also seen that teachers aged between 35 to 44 and 45 to 54 are lower than the others. However, since  $p = .131$ , it is concluded that this difference obtained from scale scores is not statistically significant ( $p > .05$ )

### Findings on multilingual teachers' views on the first language/s of migrant children according to gender

Table 7 shows Mann Whitney-U test results on multilingual teachers' views teachers' views on the first language/s of migrant children according to gender.

**Table 7:** Mann Whitney-U Test Results on multilingual teachers' views teachers' views on the first language/s of migrant children according to gender

First language of migrant students	Groups	<i>N</i>	$\bar{x}$	$\Sigma$	<i>U</i>	<i>z</i>	<i>P</i>
	Males	34	31.88	1084.00	463.000	-.184	.854
	Females	28	31.04	869.00			
	Total	62					

Table 7 shows the results of the Mann Whitney-U Test applied to determine whether the scores of the application dimension First language of migrant students Scale, differ depending on gender. When the mean ranks in the table

are examined, it is seen that male students are in the first place with 31.88 points in the application of First language of migrant students, and female students are in the second place with 31.04 points. Since  $p = (.854)$ , it is seen that this difference obtained from scale scores is not statistically significant ( $p > .05$ ).

### **Findings on multilingual teachers' views on the first language/s of migrant children according to years of teaching experience**

Table 8 shows Mann Whitney-U test results on multilingual teachers' views teachers' views on the first language/s of migrant children according to years of teaching experience.

**Table 8:** Mann Whitney-U Test Results on multilingual teachers' views teachers' views on the first language/s of migrant children according to years of teaching experience

First language of migrant students	Groups	<i>N</i>	$\bar{x}$	$\chi^2$	<i>sd</i>	<i>P</i>
	0-5	26	32.73	2.124	3	.547
	6-10	13	34.69			
	11-15	16	30.63			
	More than 15	7	23.00			
	Total	62				

Table 8 shows the result of the Kruskal Wallis Test applied to determine whether the First language of migrant students' scores differ depending on years of teaching experience variable. When the mean ranks in the table are examined, it is seen that First language of migrant students' scores of teachers with experience from 6-10 are higher than other groups. It is seen that teachers whose experience between 0-5 years take the second place. It is also seen that teachers whose experience between 11-15 and more than 15 years are lower than the others. However, since  $p = .547$ , it is concluded that this difference obtained from scale scores is not statistically significant ( $p > .05$ ).

### **Findings on multilingual teachers' views on children learning L2**

Table 9 shows results of mean values on multilingual teachers' views on children learning L2.

**Table 9:** Results of mean values on multilingual teachers’ views on children learning L2

Learning a second language	N	Mean	Std. Error of Mean
The target language/s and first language/s are mutually enhancing.	62	3.74	.180
Teachers should restrict the use of first languages in the classroom if these are not the languages of schooling.	62	4.02	.196
Proficiency in L1 is important in learning other languages.	62	4.05	.190
Developing children’s understanding of how language works is important.	62	4.55	.200
Teachers should focus on language forms and structures common to a range of languages.	62	4.03	.178
Children can successfully participate in regular target language classes if they receive instruction in their L1.	62	3.71	.194
When teaching a language, the teacher should refer to other languages if their grammatical constructions are similar to those in other languages.	62	4.18	.179
Language learners should be encouraged to find learning procedures (explanations of words, grammar, etc.) by themselves.	62	4.73	.168

When the results of mean values of multilingual teachers’ views on children learning L2 are examined, it is evident that the items “Language learners should be encouraged to find learning procedures (explanations of words, grammar, etc.) by themselves” and “Developing children’s understanding of how language works is important” had the highest scores and “Children can successfully participate in regular target language classes if they receive instruction in their L1” had the lowest mean value.

**Findings on multilingual teachers’ views on children learning L2 according to age**

Table 10 shows Kruskal - Wallis test results on multilingual teachers’ views on on children learning L2 according to age.

**Table 10:** Kruskal - Wallis Test Results on multilingual teachers’ views on on children learning L2 according to age

Children’s learning of L2	Groups	N	$\bar{x}$	$X^2$	sd	P
	18 - 24	17	34.65	1.069	3	.784
	25 - 34	18	31.94			
	35 - 44	23	29.70			
	45 - 54	4	26.50			
	Total	62				

Table 10 shows the result of the Kruskal - Wallis Test applied to determine whether the Children's learning of L2 scores differ depending on the age variable. When the mean ranks in the table are examined, it is seen that the Children's learning of L2 scores of teachers aged between 18 - 24 are higher than other groups. It is seen that teachers aged between 25 to 34 take the second place. It is also seen that teachers aged between 35 to 44 and 45 to 54 are lower than the others. However, since  $p = .784$ , it is concluded that this difference obtained from scale scores is not statistically significant ( $p > .05$ ).

### **Findings on multilingual teachers' views on children learning L2 according to gender**

Table 11 shows Mann Whitney-U test results on multilingual teachers' views on children learning L2 according to gender.

**Table 11:** Mann Whitney-U Test Results on multilingual teachers' views on children learning L2 according to gender

Children's learning of L2	Groups	<i>N</i>	$\bar{x}$	$\Sigma$	<i>U</i>	<i>z</i>	<i>P</i>
	Males	34	28.25	960.50	365.500	-1.566	.117
	Females	28	35.45	992.50			
	Total	62					

Table 11 shows the results of the Mann Whitney-U Test applied to determine whether the scores of the application dimension Children's learning of L2 Scale, differ depending on gender. When the mean ranks in the table are examined, it is seen that female students are in the first place with 35.45 points in the application of Children's learning of L2, and male students are in the second place with 28.25 points. Since  $p = (.117)$ , it is seen that this difference obtained from scale scores is not statistically significant ( $p > .05$ ).

### **Findings on multilingual teachers' views on on children learning L2 according to years of experience**

Table 12 shows Mann Whitney-U test results on multilingual teachers' views on children learning L2 according to years of experience.

**Table 12:** Mann Whitney-U Test Results on multilingual teachers’ views on children learning L2 according to years of experience

Children’s learning of L2	Groups	<i>N</i>	$\bar{x}$	$\chi^2$	<i>sd</i>	<i>P</i>
	0-5	26	33.67	.824	3	.844
	6-10	13	31.27			
	11-15	16	29.78			
	More than 15	7	27.79			
	Total	62				

Table 12 shows the result of the Kruskal Wallis Test applied to determine whether Children’s learning of L2 scores differ depending on years of teaching experience variable. When the mean ranks in the table are examined, it is seen that Children’s learning of L2 scores of teachers with experience from 0-5 are higher than other groups. It is seen that teachers whose experience between 5-10 years take the second place. It is also seen that teachers whose experience between 11-15 and more than 15 years are lower than the others. However, since  $p = .844$ , it is concluded that this difference obtained from scale scores is not statistically significant ( $p > .05$ ).

**Findings on multilingual teachers’ views on literacy**

Table 13 shows results of mean values of multilingual teachers’ views on literacy

**Table 13:** Results on Mean Values of multilingual teachers’ views on literacy

Literacy	<i>N</i>	Mean	Std. Error of Mean
High levels of literacy in more than two languages results in higher development of school subject knowledge	62	4.10	.188
High levels of literacy in more than two languages results in higher development of cognitive skills	62	4.39	.187
Literacy development in a child’s L1 can facilitate the development of reading in the target language	62	4.40	.177
Literacy development in a child’s L1 can facilitate the development of writing in the target language	62	4.13	.186
Children who can read and write in their first language will learn other languages faster than those who cannot read and write in their first language	62	4.05	.198
Children who are not proficient in the language/s of schooling would do better in school if they learn to read and write first in their first language	62	3.76	.197

The results on the mean values of multilingual teachers' views on literacy shows that the highest mean value belonged to the items "Literacy development in a child's L1 can facilitate the development of reading in the target language" and "High levels of literacy in more than two languages results in higher development of cognitive skills". The lowest mean value had the item "Children who are not proficient in the language/s of schooling would do better in school if they learn to read and write first in their first language".

### Findings on multilingual teachers' views on literacy according to gender

Table 14 shows Mann Whitney-U test results on multilingual teachers' views on literacy according to gender.

**Table 14:** Mann Whitney-U Test Results on multilingual teachers' views on literacy according to gender

Literacy	Groups	<i>N</i>	$\bar{x}$	$\Sigma$	<i>U</i>	<i>z</i>	<i>P</i>
	Males	34	29.53	1004.00	409.000	-.951	.342
	Females	28	33.89	949.00			
	Total	62					

Table 14 shows the results of the Mann Whitney-U Test applied to determine whether the scores of the application dimension Literacy Scale, differ depending on gender. When the mean ranks in the table are examined, it is seen that female students are in the first place with 33.89 points in the application of literacy, and male students are in the second place with 29.53 points. Since  $p = (.342)$ , it is seen that this difference obtained from scale scores is not significant ( $p > .05$ ).

### Findings on multilingual teachers' views on literacy according to years of teaching experience

Table 15 shows Kruskal Wallis Test results on multilingual teachers' views on literacy according to years of teaching experience.

**Table 15:** Kruskal Wallis test results on multilingual teachers' views on literacy according to years of teaching experience

Literacy	Groups	<i>N</i>	$\bar{x}$	$X^2$	<i>sd</i>	<i>P</i>
	0-5	26	35.77	4.594	3	.204
	6-10	13	34.15			
	11-15	16	25.22			
	More than 15	7	25.07			
	Total	62				

Table 15 shows the result of the Kruskal Wallis Test applied to determine whether the Literacy scores differ depending on years of teaching experience variable. When the mean ranks in the table are examined, it is seen that Literacy scores of teachers with experience from 0-5 are higher than other groups. It is seen that teachers whose experience between 6-10 years take the second place. It is also seen that teachers whose experience between 11-15 and more than 15 years are lower than the others. However, since  $p = .204$ , it is concluded that this difference obtained from scale scores is not statistically significant ( $p > .05$ ).

## DISCUSSION

The aim of this study is to investigate multilingual teachers' language awareness and their views in their multilingual classes, The discussion section of the research will interpret and analyse the findings obtained from the statistical analyses conducted on the various scales. It will provide a deeper understanding of the results and address the research questions or objectives.

Findings on multilingual teachers' views on multilingualism demonstrated no statistically significant differences according to gender, age, and teaching experience. These results suggest that multilingual teachers' beliefs and attitudes towards language learning and language education are relatively uniform across diverse demographic and classroom settings. The consistent views on language education are essential for fostering a positive and inclusive learning environment for multilingual students. When teachers hold shared beliefs about the significance of language learning, they are more likely to implement effective language instruction strategies and support the linguistic and cultural diversity of their students.

The findings from the study show that among the participants, there is a diverse range of languages spoken in their classrooms, including Arabic, Turkish, Kurdish, German, Dutch, Russian, Czech, French, Slovak, and Persian. The percentage of multilingual students in the classes varies, with the majority (33.9%) having 0 to 10% multilingual students. Interestingly, a significant proportion of participants (69.4%) reported having specific resources for students who do not speak the language of the classroom (target language), indicating that educators are actively considering the needs of non-native speakers and providing additional support. When asked about the question "During classes, should the teacher use only the languages all the student know very well?" the majority of participants (67.7%) answered "No," indicating

that they believe teachers should not restrict themselves to only languages fully known by all students. Instead, they expressed diverse views on language use in the classroom. Some participants advocated for multilingual approaches to involve all students and emphasized the importance of exposing students to new languages, including the target language they are supposed to learn. On the other hand, some respondents emphasized the need to focus primarily on the target language with minimal reliance on other languages. Other participants expressed concerns about fairness and understanding, arguing that using only one group's language could be unfair and that both languages should be used to ensure all students can follow the lessons. Some educators highlighted the importance of using other languages to motivate students, facilitate learning, and create a comfortable learning environment.

The participants in the study were asked to identify the challenges they face in their multilingual classrooms. They were allowed to choose more than one answer or provide their own responses. The most commonly reported challenge, mentioned by 33 respondents (53.2%), is the limited reading habits of students. This suggests that many educators struggle to motivate students to engage in reading activities, which can have implications for language learning and comprehension. The second most prevalent challenge, cited by 35 respondents (56.45%), is the need for greater cooperation and coordination among teaching personnel. This indicates that effective collaboration between teachers and staff members is deemed crucial to address the complexities of language education in a multilingual classroom. Additionally, one respondent (1.6%) identified cultural differences, different syntax (sentence structure), and varying pronunciation of the same letters as challenges. This highlights the linguistic and cultural diversity present in the classroom, which can pose unique difficulties for both educators and students.

Findings on multilingual teachers' views on the first language/s of migrant children indicate no statistically significant differences according to gender, age, and teaching experience. This suggests that multilingual teachers recognize the importance of valuing and integrating students' first languages, regardless of their own background or the specific characteristics of their classrooms. These findings highlight the positive attitudes of multilingual teachers towards students with migrant backgrounds and their appreciation for the linguistic resources that students bring to the classroom. Acknowledging and validating students' first languages can foster a sense of identity and belonging, promoting better engagement and academic outcomes.

Findings on multilingual teachers' views on children learning L2 indicate no statistically significant differences according to gender, age, and teaching experience. This suggests that multilingual teachers' perceptions of second language acquisition in children are relatively consistent across diverse contexts. The uniform views on children's second language learning are critical for designing effective language instruction approaches that cater to the unique needs and backgrounds of multilingual learners. Teachers who possess a shared understanding of effective language learning strategies are better equipped to support the language development of their students.

Findings of multilingual teachers' views on literacy revealed that there is no statistically significant difference gender, age, and years of teaching experience. These findings suggest that the participants' views on literacy development in multilingual students remain consistent regardless of their individual characteristics and the diverse classroom contexts they teach in.

The lack of significant differences in teachers' perceptions of literacy is an encouraging finding, as it indicates that the importance of fostering high levels of literacy in multiple languages is a shared perspective among multilingual teachers. This aligns with the existing literature, which emphasizes the role of literacy as a crucial foundation for academic success and cognitive development in students who are learning multiple languages.

The findings from this study shed light on the views of multilingual teachers regarding literacy, language learning, and the importance of first languages in the context of a diverse classroom. The results demonstrate a remarkable level of consistency and shared perspectives among teachers across various demographic and classroom factors. The study's outcomes emphasize the importance of promoting inclusive language education practices that value multilingualism and respect students' linguistic diversity. Multilingual teachers' collective awareness of the significance of literacy, language learning, and first language support contributes to creating a positive and supportive learning environment for multilingual students. However, it is crucial to acknowledge the limitations of the study, including the specific sample and context used for data collection. Future research should aim to replicate these findings in different settings and include a more diverse and extensive sample of multilingual teachers to further validate and expand on the results. Overall, the results of this study provide valuable insights for educators, policymakers, and curriculum developers to create inclusive and effective language education programs that cater to the needs of multilingual students and promote their academic and social success.

## **SUGGESTIONS AND IMPLICATIONS**

The study is restricted to the views of teacher residing in Turkey, for that reason its findings might not be generalized to other teacher groups or other countries. Just 62 participants joined the questionnaire, which may reduce the study's ability to identify meaningful results or variations in the data even they are from different countries and different lingual backgrounds.

### **Professional Development for Teachers:**

Since the study showed a high level of consistency in multilingual teachers' views on literacy and language education, it highlights the importance of providing targeted professional development opportunities for educators. These workshops and training sessions should focus on evidence-based practices for supporting multilingual students, integrating first languages into instruction, and employing effective strategies for second language acquisition. Continuous professional development can help teachers stay informed about the latest research and best practices in multilingual education, ultimately leading to improved classroom practices and better outcomes for students.

### **Curriculum and Instructional Materials:**

Educational institutions should develop and implement culturally responsive and linguistically diverse curricula and instructional materials. Such materials should reflect the diverse backgrounds of students and include a variety of resources that cater to the language and literacy needs of multilingual learners. Integrating students' cultural and linguistic backgrounds into the curriculum can enhance engagement, motivation, and academic achievement.

### **Support for Migrant Students:**

The study's findings emphasize the importance of recognizing and valuing the first languages of migrant students. Policymakers and school administrators should create policies and practices that support the inclusion of first languages in the learning process. This could involve offering language support programs for students with limited proficiency in the language of instruction, promoting bilingual education models, and providing resources for teachers to work effectively with diverse linguistic backgrounds.

### **Collaboration and Professional Learning Communities:**

Promote collaboration and the establishment of professional learning communities among multilingual teachers. Encouraging teachers to share experiences, resources, and effective strategies can foster a supportive network of educators dedicated to enhancing multilingual education. Collaboration can lead to more comprehensive approaches to language instruction and literacy development, benefiting both teachers and students.

### **Inclusive Language Policies:**

Educational institutions and policymakers should develop and implement inclusive language policies that embrace multilingualism and promote language diversity. These policies should be designed to foster a positive and supportive learning environment for all students, regardless of their linguistic backgrounds.

### **Community Engagement and Parent Involvement:**

Schools should actively engage with multilingual students' families and communities. Encouraging parent involvement and creating opportunities for parents to participate in their children's language education can lead to better communication and understanding between schools and families. This collaboration can support students' language development and overall academic success.

### **Advocacy for Multilingual Education:**

Educators and policymakers should advocate for the value of multilingual education and the importance of supporting linguistic diversity in educational settings. Raising awareness of the benefits of multilingualism and promoting evidence-based practices can lead to more substantial support and resources for multilingual students and teachers.

### **Research and Data Collection:**

To build a more comprehensive understanding of multilingual education, further research is needed in different educational settings and regions. Policymakers and researchers should invest in longitudinal studies and large-scale data collection to assess the long-term impact of language education practices on multilingual students' academic performance and overall development.

In conclusion, the study's findings offer valuable insights into the perspectives of multilingual teachers on literacy, language learning, and the importance of first languages in the classroom. Implementing the suggestions and implications mentioned above can contribute to the creation of more inclusive and effective language education practices that support the diverse needs of multilingual students and foster their academic and personal growth.

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# YAPAY ZEKÂNIN YABANCI DİL ÖĞRETİMİNDE KULLANIMI: ALMANCA ÖRNEĞİ

Aygül ŞAHİN TOPTAŞ<sup>1</sup>

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## GİRİŞ

Eğitim insanoğlunun dünya üzerinde varoluşunun ilk anından itibaren süregelen bir olgudur. Elbette insanın ilk dönemlerine ait eğitim genellikle hayatta kalma becerilerini geliştirme ve klan yapısı içerisindeki kuralların öğretilmesine yönelik informal bir eğitimi içeriyordu. İnsanlığın bu dönemlerinde en önemli eğitim öğretim aracı olarak belki de mağara duvarlarına çizilen resimleri söyleyebiliriz. Bu süreç uzun bir süre devam ettikten sonra Sümerlerin yazıyı keşfi eğitimde ve eğitim materyallerinde köklü bir değişikliği de beraberinde getirmiştir. Bundan sonra eğitim genellikle okul diyebileceğimiz ortamlarda daha formal şekilde sürdürülmeye başlanmıştır. Bu eğitimin en önemli materyali kil tabletler olmuştur. Temelde ezbere dayalı bu eğitim için hazırlanan kopyaların ve materyallerin öğrenciler tarafından ezberlenmesi ve işaretlerin tekrar tekrar yazılması eğitimin en önemli kuralıydı. Yazı temelli eğitim uzun bir süre varlığını sürdürmüştür (Wilson, 2008: 3-14). Geçmişte, eğitim, okuma, ezberleme ve tartışma temelinde yazılı malzemelere dayanıyordu. Ancak 1900'lerde bilgi toplumu çağına geçişle birlikte, eğitim materyalleri çeşitlenmeye başladı. Kitapların yanı sıra resimler, fotoğraflar, grafikler, filmler, stereo gramfonlar, modeller ve gerçek materyaller eğitimde kullanılmaya başlandı. 1960'ların ardından video, teyp, müzik çalar, slayt projektörü, tepegöz ve bilgisayarlar eğitim materyalleri haline geldi. 1990'lar ve 2000'ler arasında bilgisayarlara erişim daha yaygın hale geldi ve kişisel

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bilgisayarlar popüler hale geldi. Görsel materyallerdeki çeşitlilik arttı, video ve animasyonlar eğitimde daha fazla kullanılmaya başlandı. Ancak, en büyük değişiklik 2000'lerden sonra geldi ve internetin hayatımıza girmesiyle dijital bir çağ başladı. Mobil cihazların yaygınlaşmasıyla birlikte, özellikle bu cihazlara yönelik yazılımların üretilmesi eğitim materyallerini büyük ölçüde değiştirdi. Web 2.0 dönemi, arama motorları, internet siteleri, bloglar, sosyal medya platformları gibi araçların bilgiye erişimi kolaylaştırarak eğitim materyallerinin evrimini hızlandırdı (Çoklar ve Çoklar, 2021).

2010'lu yıllardan itibaren, Web 3.0 olarak adlandırılan yeni bir İnternet teknolojisi gelişmiştir. Web 3.0, büyük ölçüde makine öğrenmesi ve yapay zekâ temelli bir teknolojiye dayanmaktadır. Bu teknoloji, verilerin makine tabanlı olarak değerlendirilmesine odaklanır ve daha açık, bağlantılı ve akıllı web siteleri ve uygulamaları oluşturmayı amaçlamaktadır (Polat ve Öz, 2021). Web 3.0, sanal gerçeklik ve yapay zekâ odaklı yeni bir internet çağının habercisi olarak kabul edilir. Bu yeniliklerin özellikle eğitim alanında çığır açıcı değişikliklere yol açabileceği düşünülmektedir. Yapay Zekâ (AI) ve Makine Öğrenimi (ML), bilgisayarların verileri insanlarla aynı şekilde değerlendirmesine olanak tanıyarak, kullanıcının bireysel gereksinimlerine göre yararlı bilgilerin akıllı bir şekilde geliştirilmesine ve dağıtılmasına olanak tanır (Ejeke, 2022). Görüldüğü üzere Web 3.0 sanal gerçeklik ve yapay zekâ merkezli yeni bir internet çağının habercisi olmuştur. Bu yenilik hayatımızı birçok yönüyle etkilerken özellikle eğitim alanında da çığır açıcı yenilikleri beraberinde getireceği düşünülmektedir. Bu çalışmada Web 3.0 araçları içerisinde yer alan yapay zekânın yabancı dil eğitimi ve öğretimi alanında ne tür yenilikleri doğuracağı ve avantajlarını incelenecektir.

Yapay zekâ tarihçesi oldukça köklü bir geçmişe sahiptir. Yapay zekâ ile ilgili ilk çalışma McCulloch ve Pitts tarafından yapılmıştır (McCulloch ve Pitts, 1943). 1950 ile 1980 yılları arasında yapay sinir ağları ve makine öğrenmesi gibi teknikler, yapay zekâ araştırmalarında önem kazanmıştır. Yapay zekâ kavramı, ilk olarak 1950'lerin ortalarında ortaya çıkmıştır. Alanı şekillendiren önemli isimler arasında Alan Turing, John McCarthy ve Marvin Minsky bulunmaktadır. Yapay zekâ terimi, ilk kez 1956 yılında John McCarthy tarafından Dartmouth Konferansı'nda tanıtılmıştır. Ancak, yapay zekâ alanındaki büyük ilerlemeler ve yaygın popülerlik, 1980-1987 yılları arasında gerçekleşmiştir. Amerikan Yapay Zekâ Derneği'nin ilk Ulusal Konferansı olan "First National Conference of the American Association of AI," 1980 yılında Stanford Üniversitesi'nde düzenlenmiştir. Ancak 1980'li yıllardaki büyük yatırımların istenen sonucu

vermemesi arařtırmaların “Yapay Zekâ Krizi” olarak adlandırılan bir döneme girmesine yol açmıřtır. Bu dönemde yapay zekâ finansmanı azalmıř ve yapay zekaya ilgi azalmıřtır. 2000’li yıllarla birlikte yapay zekâ arařtırmaları, daha fazla veri, güçlü bilgisayarlar ve yeni öğrenme yöntemleriyle yeniden canlanmıřtır. Büyük veri, derin öğrenme ve karmařıklık analizi gibi alanlar önem kazanmıřtır. Yapay zekâ, bugünlerde birçok alanda büyük bir etkiye sahiptir. Otomasyon, tıp, otonom araçlar, doğal dil işleme ve daha pek çok alanda kullanılmaktadır. Gelecekte, yapay zekâ teknolojilerinin daha da gelişmesi ve hayatımızın daha fazla alanında kullanılması beklenmektedir (Haenlein ve Kaplan, 2019; Nabiyeve ve Erümit, 2022; Nalbant, 2021; Turing, 1950).

Yapay zekânın birçok tanımını yapmak mümkündür. En genel anlamıyla yapay zekâ, bilgisayar programları ve makinelerin insan gibi düşünme, anlama ve karmařık görevleri gerçekleştirme yeteneğini geliřtirmek için yapılan çalıřmaları içeren bir bilim ve mühendislik alanıdır (Pirim 2006). Bilgisayar bilimcisi Nils John Nilsson (2009: 13) yapay zekâyı çevresinde uygun şekilde ve öngörüyle çalıřan bir teknoloji tanımlamaktadır. Avrupa Komisyonu’nun (EC) Yapay Zekâ Yüksek Düzey Uzman Grubu (AI HLEG) ise yapay zekâyı “*Belirli hedeflere ulaşmak için çevrelerini analiz ederek ve belirli bir dereceye kadar özerklikle eylemler gerçekleřtirerek akıllı davranıřlar sergileyen sistemler*” olarak tanımlamaktadır (Sheikh, Prins ve Schrijvers, 2023: 16). Buna ek olarak yapay zekâ öğrenme, problem çözme ve örüntü tanıma gibi genellikle insan zekâsıyla ilişkilendirilen biliřsel sorunları çözmeye adanmıř bilgisayar bilimi alanı olarak da tanımlanabilir (Chassignola, Khoroshavin, Klimova ve Bilyatdinova, 2018).

## **YABANCI DİL ÖĞRETİMİNDE YAPAY ZEKÂ’NIN KULLANIMI**

Her yıl yüz milyonlarca insan gönüllü olarak dil öğrenmeye çalıřıyor. Bunlar, akademik, profesyonel, mesleki, mesleki eğitim veya dini amaçlarla veya evlilik yoluyla ana dilleri dışında başka dilleri konuřan kiřilerle akraba oldukları için yeni bir dilde yeterlilik arayan yetiřkinleri içermektedir. Ayrıca, eğitimlerini ikinci bir dil aracılıęıyla deneyimleyen veya bir veya daha fazla yabancı dilin normal müfredatlarında zorunlu ders olduęu okul çağındaki çocuklar da dil öğrenmeye çalıřan grubun içerisinde yer almaktadır (Long, 2009). İnternet çağı dediğimiz dijital çağ özellikle dil öğretimi alanında birçok yenilięi ve avantajı insanoęlunun kullanımına sunmaktadır. Bu noktada özellikle yapay zekâ dediğimiz düşünen makinalar ya da bilgisayarların eğitim alanında çığır açmaları beklenmektedir. Elbette bu kazanımlar uzun bir

zaman diliminde gerçekleşmiştir. Eğitimde yapay zekânın tarihsel kökenleri Ohio Üniversitesi'nde çalışan Sidney L. Pressey tarafından ilk uygulama örneklerinin ortaya 1920'lere kadar dayanmaktadır. Pressey, çoktan seçmeli testleri sadece öğrenci başarılarını değerlendirmekle kalmayıp, aynı zamanda öğrenmeyi desteklemek için kullanabileceğini önermiştir. Bu yaklaşım, Edward Thorndike'nın "derhal geribildirimle öğrenmeyi değerlendirmek" ilkesine dayanır ve öğrencilere doğru cevapları gösteren ve öğretmenlere daha fazla etkileşim olanağı sunan "makinelere" bahseder. Ancak, o dönemin teknolojiyle bu fikirleri hayata geçirmek mümkün olmamıştır. B. F. Skinner, davranışçı kuramın öncülerinden biri olarak, bu yaklaşımı insanlar için de kullanabileceğini düşünmüş ve 1958'de "öğretme makineleri" olarak bilinen programlı öğretimin örneklerinden birini geliştirmiştir. Bu basit makineler, öğrencilere soruları görüp cevapları yazma fırsatı sunmuş ve doğru cevaplar verildiğinde bir sonraki soruya geçilmesini sağlamıştır. Skinner'a göre, bu "öğretme makinesi" kişisel bir öğretmen gibi davranmaktadır. Bugün, bu çalışmaların eğitim teknolojisine etkilerini "kişiselleştirilmiş öğrenme" veya "akıllı öğretim sistemleri" gibi terimlerle karşımıza çıkmaktadır (Arslan, 2017). Yapay zekânın eğitim alanında yönetsel, öğretme ve öğrenmeye yönelik faydaları ana hatlarıyla aşağıdaki tabloda verilmiştir.

**Tablo 1:** Yapay Zekânın Eğitimde Yapabileceği İşler

<b>Yönetim-İdare</b>	<ul style="list-style-type: none"> <li>• Sınavlara not verme ve geri bildirim sağlama gibi öğretmenlerin zamanının çoğunu tüketen idari görevleri daha hızlı gerçekleştirin.</li> <li>• Her bir öğrencinin öğrenme stillerini ve tercihlerini belirleyerek kişiselleştirilmiş öğrenme planı oluşturmalarına yardımcı olun.</li> <li>• Öğretmenlere karar desteği ve veriye dayalı çalışmalarda yardımcı olun.</li> <li>• Geri bildirimde bulunun ve öğrenciyle zamanında ve doğrudan çalışın.</li> </ul>
<b>Öğretim</b>	<ul style="list-style-type: none"> <li>• Bir öğrencinin proje ve alıştırmalarda beklentileri ne kadar aştığını ve okulu bırakma olasılığını tahmin edin.</li> <li>• Özelleştirilmiş içerik önermek için müfredatı ve ders materyalini analiz edin.</li> <li>• İşbirliğini destekleyerek öğretimin sınıfın ötesine ve daha üst düzeydeki eğitime geçmesine izin verin.</li> <li>• Her öğrencinin kişisel verilerine göre öğretim yöntemini uyarlayın.</li> <li>• Öğretmenlerin her öğrenci için kişiselleştirilmiş öğrenme planları oluşturmalarına yardımcı olun.</li> </ul>
<b>Öğrenme</b>	<ul style="list-style-type: none"> <li>• Öğrencilerin eksiklerini ortaya çıkarın ve bunları eğitimin başında giderin.</li> <li>• Öğrenciler için üniversite ders seçimini özelleştirin.</li> <li>• Çalışma verilerini toplayarak her öğrencinin kariyer yolunu tahmin edin</li> <li>• Geliş durumunu tespit edin ve öğrencilere akıllı uyarlanabilir müdahale uygulayın.</li> </ul>

Yapay zekâ teknolojileri, eğitimde büyük potansiyele sahip olmasına rağmen, mevcut uygulamaların çoğu sadece veri saklama amacı taşımakta ve eğitimde etkili bir şekilde kullanılmamaktadır. Eğitimdeki büyük bir zorluk, öğrencilerin farklı öğrenme hızları, yetenekleri ve ilgi alanlarına sahip olmalarıdır, ancak genellikle standart bir eğitim modeli izlenmektedir. Yapay zekâ, her öğrencinin özgün öğrenme ihtiyaçlarına ve tercihlerine daha iyi uyacak şekilde özelleştirilmiş eğitim materyalleri sunma potansiyeline sahiptir. Dünya genelinde, eğitim sistemleri yapay zekâ uygulamalarını benimsemeye yönelik bir dönüşüm içindedir. Türkiye’de Millî Eğitim Bakanlığı, yapay zekâ uygulamalarını eğitimde kullanarak geliştirmeyi hedeflemektedir (İşler ve Kılıç, 2021). Yapay zekâ teknolojisi artık öğretme ve öğrenmeyi yeniden şekillendirmektedir. 21. yüzyılda eğitimi şekillendiren iki önemli etken şunlardır: bilginin yaygınlaşması ve teknolojik devrim. Yapay zekâ teknolojisindeki yeniliklerin, yapay zekâ teknolojisinin eğitimde de uygulanmasına olanak sağladığı açıktır; sürekli gelişme hızlı ve kesintisiz olacaktır. Yapay zekâ, not verme, sanal dersle öğrencilerin öğrenmesine yardımcı olma, öğretimin diğer yönlerine uyum sağlama, uzmanlık sağlayacak şekilde programlanma, öğrencilerin sorularını yanıtlama, bilgi bulma ve temel ders materyalleri için öğretmenlerin yerini alma gibi görevleri üstlenebilir (Shen, Chen, Grey ve Su, 2021). Yapay zekâ uygulamaları, öğretmenlerin zamanlarını daha etkili bir şekilde yönetmelerine yardımcı olabilir. Örneğin, yapay zekâ uygulamaları gereken materyalleri otomatik olarak hazırlayabilir ve kitapları dijitalleştirebilir, böylece öğretmenler zaman kazanır. Bu bulgular, yapay zekâ teknolojilerinin eğitimdeki potansiyelini göstermektedir. Yapay zekâ, öğretme ve öğrenme süreçlerini iyileştirmek ve öğrencilere daha etkili öğrenme deneyimleri sunmak için önemli bir araç olabilir (İşler ve Kılıç, 2021; Karsenti, 2019). Yapay zekâ sadece öğretmenlere değil öğrencileri de destekleyici olabilmektedir. Yapay zekâ, öğrenci profillerini çıkararak bağımsız öğrenme yeteneklerinin geliştirilmesinde kritik bir rol oynar. Bu profiller, öğrencilerin öğrenme süreçlerine dair davranış verileri temel alınarak oluşturulur. Öğrencilerin düşünme kapasiteleri ve yetenekleri, öğrenme yeteneklerinin değerlendirilmesi için detaylı bir analize tabi tutulur. Ardından, bu bilgi analizi sonucunda öğrencilerin bilgi uzmanlığı alanları haritalandırılarak belirlenir. Öğrenci modelleme, öğrenme sonuçları ile öğrenme materyalleri, kaynaklar ve öğretme davranışları gibi çeşitli faktörler arasındaki ilişkileri inşa eder. Yapay zekâ, genellikle öğrenci modelini, uzman bilgisini, öğrencilerin sıkça yaptığı hataları tanımlayan kuralları ve yanlış anlamaları içeren detaylı öğrenme içerikleriyle birleştirerek etkili bir öğretim modeli oluşturur (Chen, Chen ve Lin, 2020).

Özellikle öğrenci açısından değerlendirecek olursak Yapay zekâ temelli akıllı ders verme sistemleri her öğrenci için bireyselleştirilmiş adım adım eğitimler sağlayabilirler. Konu ve pedagoji hakkındaki uzman bilgisinden yararlanılarak ve bireysel öğrencilerin yanlıgılarına ve başarılarına yanıt olarak, sistem, öğrenme materyalleri ve aktiviteleri aracılıgıyla en uygun adım adım yolu belirler. Öğrenci ilerledikçe sistem otomatik olarak zorluk seviyesini ayarlar ve ipuçları veya rehberlik sağlar (Holmes, Bialik ve Fadel, 2019: 102). Bu uygulamayı bir kişiselleştirilmiş öğrenme adımıdır. Kişiselleştirilmiş öğretim, Yapay zekâ, öğrencilere özelleştirilmiş öğrenme deneyimleri sunma yeteneđi sunar. Eğitime yönelik daha geleneksel yaklaşımlardan farklı olarak kişiselleştirilmiş öğretim, öğrenmenin insan unsuruna, yani öğrencilerin kendi meraklarının derinliklerini keşfederken benzersiz ihtiyaçlarına ve farklılıklarına odaklanır. Günümüzün gençlerini giderek daha akıllı makinelerden ayıran yetenekleri geliştirmeye çalışırken, kişiselleştirilmiş öğrenme, yaratıcılık ve eleştirel düşünme gibi hayati becerilerin gelişmesine olanak tanıyan bir yol sunmaktadır. Yapay zekâ destekli öğrenme sistemleri, öğrencilerin öğrenme stilleri, yetenekleri ve ilerlemeleri hakkında değerli bilgiler sağlayarak öğretmenlere öğrencilerin öğrenme ihtiyaçlarına uygun öneriler sunabilir ve öğretim yöntemlerini kişiselleştirebilir. Yapay zekâ destekli öğrenme sistemleri, öğrencilerin öğrenme stilleri, yetenekleri ve ilerlemeleri hakkında değerli bilgiler sağlayarak öğretmenlere öğrencilerin öğrenme ihtiyaçlarına uygun öneriler sunabilir ve öğretim yöntemlerini kişiselleştirebilir (Zimmerman, 2018: 94-96; Mahendra, 2023)

Yapar Zekânın eğitim öğretim sürecinde etkili bir şekilde de kullanılabileređi diđer bir alan ise ölçme değerlendirme sürecidir. Ölçme ve değerlendirme yapay zekâ, sosyal etkileşimlerimizin her yönünü deđiştirebilecek, hızla gelişen bir teknolojik alandır. Günümüzde yapay zekâ temelli birçok çevrimiçi çeviri programı bulunmaktadır. Yapay zekâ temelli bu programlar çeviri yaparken dilbilimsel doğruluđun yanında kelimenin cümle içindeki bağlamını da anlarlar. Bu noktada yazılı bir metni ya da sesi bir dosyayı dilbilimsel ve anlamsal olarak değerlendirip puanlayabilirler. Özellikle LightSIDE ve BETSY gibi otomatik yazı puanlama sistemleri ölçme değerlendirme süreçlerinde maliyet ve zaman tasarrufu sağlayarak, sınıf için yabancı dil öğretiminde hızlı geri dönütler ile yabancı dil öğretimine katkı sağlayabilir (Bayraktarođlu ve Adıgüzel, 2022). Yapay zekâdan etkilenmesi muhtemel olarak tanımlanan eğitimdeki kilit alanlardan biri, öğrencilerin ödevleri ve ödevlerinin incelenmesi, not verilmesi ve öğrencilere geri bildirim sağlanması gibi eğitim sürecindeki farklı idari

görevleri yerine getirerek öğretmenleri önemli bir yükten de kurtarabilir (Chen, Chen ve Lin, 2020). Yapay zekâ ayrıca ölçme ve değerlendirme sürecinde topladığı verileri istatistiksel açıdan analiz ederek ve yorumlayarak, eğitimciler ve yöneticiler öğrenci performansına ilişkin değerli bilgiler edinebilir, eğilimleri belirleyebilir ve öğretim ve öğrenmede iyileştirmeleri teşvik etmek için verilere dayalı kararlar alabilir. Bu özellikle eğitimin kişiselleştirilme sürecine pozitif bir etki sağlar (Holmes, Bialik ve Fadel, 2019: 82-83). Bu yönleriyle özellikle dil eğitiminde yapay zekânın büyük bir katkı sağlaması beklenmektedir. Yapay zekânın eğitimsel değerlendirmedeki rolü şu anda yüksek öğrenimle veya dil yeterliliği değerlendirmesi gibi uzmanlaşmış eğitim alanlarıyla sınırlıdır. Ancak araştırmacıların eğitim ortamında yapay zekâ destekli değerlendirmelerin kapsamını genişletmek için çaba sarf ettiklerini ifade etmek gerekir (Patel, 2023).

Yapay zekânın eğitim alanında sağlayacağı önemli bir katkı da materyal geliştirme alanındadır. Uygulamalı dilbilimciler uzun yıllardır uygulamalı dilbilim teorisi ile dil öğretimi uygulaması arasındaki uçurumdan yakınmakta ve aynı zamanda bu uçurumun kapanmak üzere olduğunu da öngörmektedirler (Tomlinson, 2013). Bu uçurumun kapanmasında yapay zekâ gibi yenilikçi uygulamaların büyük bir katkı sağlayacağını söylemek yanlış olmayacaktır. Yapay zekâ, öğrenme materyallerinin öğrencilerin ihtiyaçlarına ve yeteneklerine göre özelleştirilmesini ve kişiselleştirilmesini mümkün kılmaktadır (Chen, Chen ve Lin, 2020). Eğitim alanında yapay zekâ özellikle dijital çağa uygun materyallerin hazırlanması ve erişimi noktasında büyük bir avantaj sağlamaktadır. Yapay zekâ ile öğretmenler farklı türlerdeki eğitim yazılımları, web materyalleri, dijital kitaplar, müze uygulamalarına erişimin ötesinde kendilerini destekleyecek öğretici robotlar, robot öğretmenler, avatarlar, dijital asistanlar gibi yardımcıları da sahip olmuşlardır (Öngöz, 2022).

Bu materyallerden özellikle robotlar, dijital asistanlar ve avatarlar öğrencilere dil eğitimi konusunda önemli birer yardımcıya hatta öğretmene dönüşebilirler. Robotlar çocuklara programlamayı, robot bilimini, matematiği, mantığı, problem çözmeyi ve hatta biyolojiyi öğretebilir. Bazen bazı modern yaklaşımlar kullanılarak uygulamalı deneyim yoluyla elde edilir (Chassignola, Khoroshavin, Klimova ve Bilyatdinova, 2018). Örneğin, Yapay zekâ tabanlı bir öğretim asistanı olan Jill Watson, 2015'ten bu yana öğrencilerin sorularını çevrimiçi olarak yanıtlarken, yapay zekâ sohbet robotu da 2016'dan bu yana üniversitelerde işe alım ve işte kalma konusunda yardımcı olmaktadır. Eğitsel robotik, öğrenciler için bir araç olarak geliştirilmiş ve son yıllarda bilim, teknoloji,

matematik, bilişim ve diğer okul konularında öğrenmeyi desteklemektedir (Shen, Chen, Grey ve Su. 2021) Başka bir örnek Kaliforniya Üniversitesi'nde geliştirilen robot Rubi'dir. Bu robot okul öncesi öğrencilere Fince öğretmek için kullanılmaktadır. Deneme aşamasındaki bu robot, baş, gövde, kollar ve bacaklara sahiptir. Burnundaki bir video kamera, yazılım yardımıyla yüzleri tanıyabilmekte ve izleyebilmektedir. Bu sayede her görüntüyü hızla analiz ederek öğrencilere sözlü veya jestlerle geri bildirimler sağlayabilir ve eğitim etkinliklerini yönlendirebilir. Rubi'nin deneyleri başarılı bir şekilde devam etmektedir. Robot öğretmenler, eğitimde kullanımı hala tam olarak oturmamış olsa da yakın gelecekte sınıflarda yaygın bir şekilde yer alabilirler. Genel olarak, eğitimciler robot öğretmenleri yardımcı öğretmenler olarak kullanabileceklerini düşünmektedirler. Robot öğretmenlerin tasarımı, öğretmenlerin yerini almak değil, öğrencilerin gelişimine katkıda bulunmak amacıyla yapılmaktadır. Eğitim bilimlerinin birçok alanında robot öğretmenlerden faydalanmak mümkün olsa da şu ana kadar yapılan çalışmalar özellikle yabancı dil öğretiminde robotların büyük bir potansiyele sahip olduğunu göstermektedir. Özellikle doğru telaffuz, tonlama, jest ve mimikler gibi iletişim becerileri robotlar aracılığıyla daha doğru bir şekilde öğretilmektedir (Aslan, 2014).

Yabancı dil öğretimi temelinde bakacak olursak yapay zekânın bizlere sağlayacağı bir diğer materyal dil öğrenim uygulamaları olabilir. Günümüzde, yapay zekâ, dil öğrenimi sürecini geliştirmek için mobil uygulamalar ve çevrimiçi platformlarda yaygın bir şekilde kullanılmaktadır. Bu uygulamalar, kelime dağarcığınızı artırmak, dilbilgisi becerilerinizi güçlendirmek ve telaffuzunuzu iyileştirmeniz konularında size rehberlik etmektedir. Kişiselleştirilmiş öğrenme deneyimleri sunarak, seviyenize ve ihtiyaçlarınıza uygun içerik sunarlar. Ayrıca, bu yapay zekâ araçlarının entegre edildiği uygulamalar daha etkileşimli ve kullanıcı odaklı hale gelir. Otomatik çeviri araçları, dil engellerini aşmak için yapay zekâ teknolojisini kullanır. Farklı dillerdeki metinleri veya konuşmaları anlayabilir ve çevirebilirler. Bu araçlar, kelime anlamını kavrama, cümle yapısını anlama ve kelime dağarcığınızı genişletme konularında size yardımcı olabilirler. Ses tanıma sistemleri, doğru telaffuzunuzu geliştirmenize yardımcı olabilir. Konuşmalarınızı analiz ederek hataları belirleyebilir ve size geri bildirim sağlayabilirler. Bu şekilde, telaffuzunuzu düzeltmeniz ve doğru bir şekilde konuşmanız için size destek olurlar. Yapay zekâ tabanlı dil analiz araçları, yazılı ve sözlü metinlerinizi analiz ederek dilbilgisi hatalarınızı ve yazım yanlışlarınızı tespit edebilirler. Hatalarınızı anında görmek ve dil becerilerinizi geliştirmek için geri bildirim sağlarlar. Ayrıca, yapay zekâ

teknolojileri etkileşimli konuşma ve diyalog sistemleri oluşturmak için kullanılabilir. Bu sistemlerle yapay zekâ tabanlı karakterlerle konuşabilir ve gerçek hayatta kullanabileceğiniz dil becerilerinizi pratiğe dökebilirsiniz. Bu, konuşma yeteneklerinizi geliştirmenize ve daha rahat hissetmenize yardımcı olabilir (Esen. 2023).

Materyal kullanımı açısından yapay zekânın en büyük etkiyi yaratacağı alanın ise sanal gerçeklik prensibine göre oluşturulan uygulamalar olacağını söylemek yanlış olmayacaktır. Sanal gerçeklik (VR), görsel, dokunsal ve gerçek dünyayı andıran deneyimler sunan teknolojileri ve uzaysal bilgi işleme teknolojisiyle birleştiren bir kavramdır. Bu teknoloji, gerçek ve hayali dünyaları bir araya getirerek kullanıcılara etkileyici deneyimler sunar. Sanal gerçeklik, öğrenmeyi sanal platformlarda gerçekleştirerek deneyim odaklı öğrenmeyi teşvik eder. Kullanıcılara etkileşimli bir bilgisayar tarafından üretilmiş üç boyutlu bir görselleştirme sunar. Yapay zekâ ve sanal gerçeklik eğitim alanında büyük bir etki yaratmaktadır. Eğitimciler, yapay zekâ teknolojilerini sanal gerçeklik ile birleştirerek öğrencilere etkileyici ve etkileşimli öğrenme deneyimleri sunmaktadır. Bu sayede öğrenciler, sanal dünyalarda tarih, bilim ve diğer konuları keşfedebilir ve bu konularla etkileşimde bulunabilirler. Yapay zekâ ve sanal gerçekliğin önemli bir avantajı, öğrencilere pratik deneyimler sunabilme yeteneğidir. Yapay zekâ destekli algoritmalar, sanal ortamları öğrencilerin eylemlerine ve cevaplarına göre uyarlar, bu da kişiselleştirilmiş rehberlik ve zorluklar sunar. Bu uyarlamalı öğrenme yaklaşımı, öğrencilere simülasyonlara aktif katılım sağlayarak bilgiyi daha derinlemesine anlamalarını teşvik eder. Ayrıca, yapay zekâ ve sanal gerçeklik teknolojileri iş birliği ve uzaktan öğrenmeyi kolaylaştırır. Öğrenciler farklı bölgelerden gelip sanal sınıflarda bir araya gelebilir, ortak sanal alanlarda bulunabilir ve projeler üzerinde iş birliği yapabilirler. Yapay zekâ algoritmaları, bireysel öğrencilere veya gruplara geri bildirim sağlayarak gerçek zamanlı etkileşimi destekler. Sonuç olarak, yapay zekâ ve sanal gerçeklik, işbirlikçi yaklaşımları teşvik eder, eğitime erişimi artırır ve daha kapsayıcı bir öğrenme ortamı oluşturur (Ersöz ve Bülbül, 2022; Arıcı ve Arıcı. 2022: 1-4).

Eğitimdeki yapay zekâ teknolojisi öğretmen, idareci ve öğrencilere ek olarak ebeveynlerin çocuklarının öğrenme yolculuğunda desteklenmesinde de önemli bir rolü üstlenebilir. Ancak bu aynı zamanda sorumluluk sorunlarını ve ele alınması gereken gizlilik kaygılarını da beraberinde getiriyor. Yapay zekâ destekli teknolojilerin yardımıyla ebeveynler, çocuklarının öğrenme süreci, performansı ve gelişim alanları hakkında değerli bilgiler edinebilir. Bu araçların

sağladığı analitik bilgiler, çocuklarının öğrenmesini etkileyen faktörlere ilişkin kapsamlı bir anlayış sunarak ebeveynlerin eğitimsel gelişimlerini desteklemede proaktif bir yaklaşım benimsemelerine olanak tanır. Yapay zekâ destekli teknolojiler faydalar sunarken gizlilik endişelerini ve gözetim sorunlarını ele almak çok önemlidir. Ebeveynler, çocuklarının verilerinin korunacağına güvenmeli ve verilerin toplanması ve analizinin katı gizlilik düzenlemelerine uygun olmasını sağlamalıdır. Yapay zekâ destekli eğitim teknolojilerinin kullanımında çocukların mahremiyetinin korunması, verilerin güvenliğini ve etik kullanımını sürdürmek açısından son derece önemlidir (Mahendra, 2023). Ayrıca yapay zekâ ile elde edilen veriler dijital çağda hepimiz bireysel bilgi ayak izlerini geride bırakmaktadır, bu da veri bolluğuna yol açmakta, insan ve toplumsal davranışların nesnel olarak ölçülmesine ve dolayısıyla kolayca takip edilmesine, modellenmesine ve bir dereceye kadar tahmin edilmesine olanak tanımaktadır. Bilgi ayak izlerini çevreleyen bu olguya “verileştirme” adı verilmektedir ve aynı zamanda eğitim sektörünü de etkilemektedir. Verileştirme kesinlikle bazı etik kaygıları gündeme getirirse de bu aynı zamanda uyumlu bir politika tepkisi gerektirir (Pedró, Subosa, Rivas ve Valverde, 2019: 5-7).

### **YAPAY ZEKÂ’NIN YABANCI DİL ÖĞRETİMİNDE KULLANIMINA YÖNELİK ÖNERİLER VE ÖRNEKLER: ALMANCA ÖRNEĞİ**

Araştırmada yapay zekâ destekli dil öğrenimine yönelik olarak 5 farklı örnek verilmiştir. Örnekler ChatGPT -3.5 ile oluşturulmuştur. Öncelikle yapay zekâ destekli kelime öğrenimine yönelik olarak iki farklı örnek sunulmuştur.

**Tablo 2.** Yapay Zekâ Destekli Kelime Öğrenimi

<p>Über Studium möchte ich Vokabeln lernen. Kannst du 10 wichtige Wörter und Bedeutungen schreiben?</p>
<p>Natürlich! Hier sind 10 wichtige Vokabeln und ihre Bedeutungen, die dir beim Studium hilfreich sein könnten:</p> <p><b>Recherche</b> (Substantiv): Die systematische Suche nach Informationen, Daten oder Fakten für eine bestimmte Aufgabe oder ein Projekt.</p> <p><b>Hypothese</b> (Substantiv): Eine vorläufige Annahme oder Vermutung, die aufgrund begrenzter Beweise oder Erfahrungen gemacht wird und als Grundlage für weitere Untersuchungen dient.</p> <p><b>Literaturverzeichnis</b> (Substantiv): Eine Liste von Quellen oder Referenzen, die in einem wissenschaftlichen Text oder einer wissenschaftlichen Arbeit verwendet wurden, um die Herkunft von Informationen nachvollziehbar zu machen.</p> <p><b>Methode</b> (Substantiv): Ein systematischer Ansatz oder ein Verfahren, das in einer wissenschaftlichen Untersuchung, einem Experiment oder einer Studie verwendet wird, um Daten zu sammeln, zu analysieren oder zu interpretieren.</p> <p><b>Analyse</b> (Substantiv): Der Prozess der Untersuchung von Daten, Informationen oder Materialien, um Muster, Trends oder Erkenntnisse zu identifizieren.</p> <p><b>These</b> (Substantiv): Eine Behauptung oder Aussage, die in einer wissenschaftlichen Arbeit oder einem Argument vertreten wird und durch Beweise oder Argumente gestützt werden muss.</p> <p><b>Plagiiere</b> (Verb): Das unerlaubte Kopieren oder Übernehmen von Texten, Ideen oder Arbeiten anderer Personen und sie als eigene auszugeben, ohne angemessene Quellenangaben zu machen.</p> <p><b>Zitation</b> (Substantiv): Eine schriftliche oder mündliche Angabe der Quelle, aus der Informationen oder Zitate entnommen wurden, um die Glaubwürdigkeit und Nachvollziehbarkeit einer Arbeit sicherzustellen.</p> <p><b>Forschung</b> (Substantiv): Die systematische Untersuchung und Analyse eines Themas oder einer Fragestellung, um neue Erkenntnisse oder Informationen zu gewinnen.</p> <p><b>Dissertation</b> (Substantiv): Eine ausführliche schriftliche Arbeit, die in der Regel als Abschlussarbeit für einen höheren akademischen Grad, wie zum Beispiel einen Dokortitel, verfasst wird.</p> <p>Diese Vokabeln sollten dir beim Studium und bei wissenschaftlichen Arbeiten nützlich sein. Viel Erfolg beim Lernen!</p>
<p>Kannst du für jedes Wort ein Beispiel in einem Satz schreiben?</p>
<p>Natürlich, hier sind Beispielsätze für jede der genannten Vokabeln:</p> <p><b>Recherche:</b> Ich muss umfangreiche Recherchen durchführen, um genügend Informationen für meine Abschlussarbeit zu sammeln.</p> <p><b>Hypothese:</b> Unsere Hypothese besagt, dass höhere Temperaturen zu einer Zunahme der Waldbrände führen.</p> <p><b>Literaturverzeichnis:</b> Stellen Sie sicher, dass Sie alle Quellen korrekt in Ihr Literaturverzeichnis aufnehmen, um Plagiatsvorwürfe zu vermeiden.</p> <p><b>Methode:</b> Die wissenschaftliche Methode erfordert klare Schritte, um Daten zu sammeln, zu analysieren und Schlussfolgerungen zu ziehen.</p> <p><b>Analyse:</b> Die Analyse der Umfrageergebnisse zeigte, dass die Mehrheit der Befragten mit dem Produkt zufrieden war.</p> <p><b>These:</b> Die Hauptthese meiner Arbeit ist, dass soziale Medien das menschliche Verhalten beeinflussen können.</p> <p><b>Plagiiere:</b> Sie wurde des Plagiats beschuldigt, da sie Passagen aus einem Buch ohne Quellenangabe in ihre Arbeit übernommen hatte.</p> <p><b>Zitation:</b> Bitte fügen Sie am Ende Ihres Essays die richtigen Zitationen hinzu, um die Quellen Ihrer Informationen anzuzeigen.</p> <p><b>Forschung:</b> Die Forschung in diesem Bereich hat zu wichtigen Durchbrüchen in der Medizin geführt.</p> <p><b>Dissertation:</b> Die Verteidigung meiner Dissertation wird nächsten Monat stattfinden, und ich bin nervös, aber auch aufgeregt.</p> <p>Ich hoffe, diese Beispielsätze helfen dir dabei, die Bedeutung der Vokabeln besser zu verstehen.</p>

Yapay zekâ destekli Almanca kelime öğrenimine yönelik olarak üniversite eğitimi ile ilgili 10 önemli kelimeyi anlamlarıyla yazılması istenmiştir. Yapay zekâ 10 kelimeyi anlamları ile sunmuştur. Sonrasında bu kelimeleri cümle içerisinde örneklendirmesi istenmiştir. Yapay zekâ her kelimeyi birer cümle içerisinde anlamlı bir şekilde kullanmıştır. Yapay zekânın kelime öğrenimi konusunda kullanılabilirlik etkili bir araç olduğu görülmektedir.

**Tablo 3.** Yapay Zekâ Destekli Kelime Öğrenimine Yönelik Uygulamalar

Kannst du mir eine App zum Vokabellernen empfehlen?
Natürlich, es gibt viele Apps zum Vokabellernen, die je nach deinen Bedürfnissen und Vorlieben nützlich sein können. Hier sind einige beliebte Optionen: <ul style="list-style-type: none"> <li>• Duolingo: Duolingo ist eine beliebte App, die Sprachen auf spielerische Weise vermittelt. Sie bietet Kurse in vielen Sprachen und enthält Übungen zum Vokabellernen.</li> <li>• Memrise: Memrise konzentriert sich stark auf das Vokabellernen und bietet eine Vielzahl von Kursen für verschiedene Sprachen und Themen.</li> <li>• Anki: Anki ist eine mächtige App für das Karteikartenlernen. Du kannst eigene Karteikarten erstellen und anpassen, um Vokabeln und andere Informationen zu lernen.</li> <li>• Quizlet: Quizlet ermöglicht es dir, Karteikarten zu erstellen und mit anderen Nutzern zu teilen. Es enthält auch Spiele und Übungen, um das Vokabellernen interessanter zu gestalten.</li> <li>• Mango Languages: Diese App ist bekannt für ihre kulturell reichen Sprachkurse. Sie kann dir dabei helfen, nicht nur Vokabeln, sondern auch die Aussprache und Grammatik einer Sprache zu erlernen.</li> <li>• Tandem: Tandem ist großartig, wenn du mit Muttersprachlern in Kontakt treten und deine Sprachkenntnisse praktizieren möchtest.</li> <li>• Babbel: Babbel bietet strukturierte Sprachkurse mit einem Schwerpunkt auf Vokabellernen und Kommunikation.</li> <li>• Rosetta Stone: Rosetta Stone ist bekannt für seine immersiven Sprachlernmethoden und enthält auch Vokabelübungen.</li> </ul> <p>Die beste App hängt von deinen persönlichen Präferenzen und Zielen ab. Einige Apps sind besser für den Erwerb neuer Sprachen geeignet, während andere sich auf das Auffrischen von Vokabeln in einer bereits erlernten Sprache konzentrieren. Probier einige dieser Apps aus und wähle diejenige, die am besten zu deinen Bedürfnissen passt.</p>

İkinci örnekte ise (Tablo 3) yapay zekâ aracından kelime öğrenimine yönelik olarak kullanılabilirlik uygulamalar sorulmuş, yapay zekâ 8 farklı uygulama ve bu uygulamaların içeriklerini ve kelime öğreniminde nasıl kullanılabilirliğini açıklamıştır. Yapay zekâ dil öğreniminde bireysel olarak kelime öğrenimi dışında bireysel öneriler sunan bir destek aracıdır.

**Tablo 4.** Yapay Zekâ ile Almanca Sohbet

Hallo, wie geht's dir?
Hallo! Mir geht es gut, danke. Ich bin nur ein Computerprogramm, also habe ich keine Gefühle, aber ich bin hier, um Ihnen zu helfen. Wie kann ich Ihnen heute helfen?
Ich möchte Deutsch lernen. Können wir uns unterhalten?
Natürlich! Ich helfe Ihnen gerne dabei, Deutsch zu lernen. Worüber möchten Sie sprechen oder welche Fragen haben Sie? Sie können gerne ein Thema wählen, das Sie interessiert, oder ich kann Ihnen grundlegende Sätze und Vokabeln beibringen, wenn Sie das bevorzugen.
Reise in Deutschland. Was sind die wichtigen Sehenswürdigkeiten in Deutschland?
<p>Deutschland ist ein Land mit einer reichen Geschichte und vielen interessanten Sehenswürdigkeiten. Hier sind einige der wichtigsten Sehenswürdigkeiten in Deutschland:</p> <ol style="list-style-type: none"> <li>1. Brandenburger Tor (Brandenburg Gate) - Berlin: Dieses historische Tor ist ein Symbol der deutschen Wiedervereinigung und ein beliebter Ort für Besucher in Berlin.</li> <li>2. Schloss Neuschwanstein - Bayern: Dieses märchenhafte Schloss, das oft als das "Schloss des Märchenkönigs" bezeichnet wird, ist eines der berühmtesten Schlösser der Welt.</li> <li>3. Kölner Dom (Cologne Cathedral) - Köln: Der Kölner Dom ist eine beeindruckende gotische Kathedrale und eines der Wahrzeichen von Köln.</li> <li>4. ....</li> </ol> <p>Dies sind nur einige der vielen Sehenswürdigkeiten, die Deutschland zu bieten hat. Das Land hat auch eine reiche Kultur, köstliches Essen und eine Fülle von Museen und Kunstgalerien, die es zu entdecken gilt.</p>

Tablo 4'te Almanca öğrenimine yönelik olarak yapay zekâ ile Almanca sohbet edilmiştir. Yapay zekâ bir konu seçilmesini ve o konu hakkında sohbet edebileceğini söylemiştir. Sohbet yazılı olarak gerçekleşmiştir. Sohbet esnasında yapay zekâ aracının ücretsiz sürümü kullanılmıştır. Ücretli sürümde sesli sohbet seçeneği de bulunmaktadır. Konuşma becerisinin gelişmesine yönelik olarak yapay zekâ kullanılabilir, ücretli sürüm kullanılarak sesli sürüm kullanılabilir ve dinleme becerisi de bu şekilde desteklenebilir.

**Tablo 5.** Yapay Zekâ ile Yazılan Metinin Düzeltilmesi

Wochenende habe ich viele interessante Ding gemacht. Am Samstag morgen bin ich früh aufgestanden, um meine Deutschhausaufgaben zu tun. Ich lerne Deutsch als Fremdsprache und versuche, meine Sprachkenntnisse gut machen. Nach die Hausaufgaben habe ich mich mit einigen meiner Kommiliton getroffen, um zusammen zu üben. Wir haben viel Spaß gehabt und sogar ein bisschen Deutsch gesprochen. Samstagnachmittag ich bin in Stadtzentrum gegangen, ein bisschen zu bummeln. Ich habe einige schöne Geschäfte entdeckt und ein paar Souvenirs gekauft. Danach bin ich in einen Park ging, um die frische Luft zu genießen und ein Buch zu lesen. Das Wetter ist wunderbar, also habe ich die Zeit im Freien wirklich genissen. Am Sonntag habe ich mit meiner Tandempartnerin getroffen. Sie ist Deutsche und möchte Englisch lernen, also haben wir uns entschieden, uns gegeneitig zu helfen. Wir haben den Tag damit verbracht, in beiden Sprachen zu sprechen und uns auszutauschen. Es war eine großartige Möglichkeit, meine Deutschkenntnisse zu verbessern und gleichzeitig neue Freundschaften zu. Insgesamt war mein Wochenende sehr produktiv und unterhaltsam. Ich freue schon über das nächste Wochenende, um noch mehr über die deutsche Sprache und Kultur zu lernen.

Kannst du diesen Text grammatisch und inhaltlich korrigieren?

Am Wochenende habe ich viele interessante Dinge gemacht. Am Samstagmorgen bin ich früh aufgestanden, um meine Deutschhausaufgaben zu erledigen. Ich lerne Deutsch als Fremdsprache und versuche, meine Sprachkenntnisse zu verbessern. Nach den Hausaufgaben habe ich mich mit einigen meiner Kommilitonen getroffen, um zusammen zu üben. Wir hatten viel Spaß gehabt und haben sogar ein bisschen Deutsch gesprochen.

Am Samstagnachmittag bin ich ins Stadtzentrum gegangen, um ein bisschen zu bummeln. Ich habe einige schöne Geschäfte entdeckt und ein paar Souvenirs gekauft. Danach bin ich in einen Park gegangen, um die frische Luft zu genießen und ein Buch zu lesen. Das Wetter war wunderbar, also habe ich die Zeit im Freien wirklich genossen.

Am Sonntag habe ich mich mit meiner Tandempartnerin getroffen. Sie ist Deutsche und möchte Englisch lernen, also haben wir uns entschieden, uns gegenseitig zu helfen. Wir haben den Tag damit verbracht, in beiden Sprachen zu sprechen und uns auszutauschen. Es war eine großartige Möglichkeit, meine Deutschkenntnisse zu verbessern und gleichzeitig neue Freundschaften zu schließen.

Insgesamt war mein Wochenende sehr produktiv und unterhaltsam. Ich freue mich schon auf das nächste Wochenende, um noch mehr über die deutsche Sprache und Kultur zu lernen.

Kannst du meine Fehler schreiben?

Natürlich, hier sind die Fehler in deinem ursprünglichen Text:

1. "Ding" sollte "Dinge" sein.
2. "Samstag morgen" sollte "Samstagmorgen" sein.
3. "gut machen" sollte "zu verbessern" sein.
4. "Nach die Hausaufgaben" sollte "Nach den Hausaufgaben" sein.
5. "mit einigen meiner Kommiliton" sollte "mit einigen meiner Kommilitonen" sein.
6. "die Zeit im Freien wirklich genissen" sollte "die Zeit im Freien wirklich genossen" sein.
7. "meine Deutschkenntnisse zu" sollte "meine Deutschkenntnisse zu verbessern" sein.
8. "gleichzeitig neue Freundschaften zu" sollte "gleichzeitig neue Freundschaften zu schließen" sein.
9. "freue schon über das nächste Wochenende" sollte "freue mich schon auf das nächste Wochenende" sein.

Tablo 5’te içerisinde Almanca dilbilgisi hatası ve eksikleri bulunan bir metin yazılmıştır. Yapay zekâdan önce bu metni içerik ve dilbilgisel olarak düzeltmesi istenmiştir. Sonrasına ise metinde yapılan hataları yazması istenmiştir. Yapay zekâ aracı yapılan hataları madde madde sıralamış ve doğrularını yazmıştır. Verilen örnekte de görüleceği üzere yapay zekâ aracı ile yazma becerisini geliştirilmesinde verimli bir şekilde kullanılabilmesi gibi dilbilgisi öğreniminde de kullanılabilir.

**Tablo 6.** Yapay Zekâ Destekli Dil Öğretimi

Ich habe Schüler, die das Niveau A1 in Deutsch haben. Ich möchte heute Präsenzunterricht geben. Wie kann ich das lehren?
Das Lehren von Deutsch auf dem A1-Niveau erfordert eine klare Struktur und eine praxisnahe Herangehensweise. Hier sind einige Schritte und Ideen, die Ihnen beim Präsenzunterricht für Schüler mit A1-Deutschkenntnissen helfen können:
<ol style="list-style-type: none"> <li>1. Begrüßung und Vorstellung: Beginnen Sie den Unterricht mit einer freundlichen Begrüßung und lassen Sie die Schüler sich vorstellen. Dies fördert die Kommunikation auf Deutsch von Anfang an.</li> <li>2. Wiederholung des Vorherigen: Falls dies nicht die erste Unterrichtsstunde ist, starten Sie mit einer kurzen Wiederholung des vorherigen Materials, um sicherzustellen, dass die Schüler das Gelernte behalten haben.</li> <li>3. Thematische Einführung: Wählen Sie ein konkretes Thema für die Stunde aus, z.B. "Familie", "Essen" oder "Reisen". Stellen Sie das Thema den Schülern vor und erzählen Sie kurz darüber.</li> <li>4. Vokabeln und Ausdrücke einführen: Präsentieren Sie neue Vokabeln und Ausdrücke, die zum gewählten Thema passen. Verwenden Sie Bilder, Karten und andere visuelle Hilfsmittel, um das Verständnis zu erleichtern.</li> <li>5. Übungen zur Aussprache: Üben Sie die richtige Aussprache der neuen Vokabeln und Sätze. Lassen Sie die Schüler diese mehrmals wiederholen.</li> <li>6. Satzstruktur und Grammatik: Erklären Sie die grundlegende Satzstruktur auf Deutsch und führen Sie einfache grammatikalische Konzepte ein, die zu Ihrem Thema passen. Dies könnte beispielsweise die Verwendung von Artikel, Pronomen oder Verben sein.</li> <li>7. Übungen zur Anwendung: Lassen Sie die Schüler Übungen machen, um das Gelernte anzuwenden. Das könnten einfache Sätze oder Dialoge sein, die sie in Paaren oder in der Gruppe üben.</li> <li>8. Rollenspiele: Fördern Sie die Kommunikation, indem Sie Rollenspiele durchführen, bei denen die Schüler alltägliche Situationen auf Deutsch simulieren, wie z.B. das Bestellen von Essen in einem Restaurant oder das Fragen nach dem Weg.</li> <li>9. Hausaufgaben: Weisen Sie den Schülern eine angemessene Menge an Hausaufgaben zu, um das Gelernte zu festigen. Dies könnte das Üben von Vokabeln, das Schreiben von Sätzen oder das Ansehen von kurzen Videos auf Deutsch beinhalten.</li> <li>10. Abschluss: Schließen Sie die Stunde mit einer Zusammenfassung des Gelernten ab und geben Sie den Schülern die Gelegenheit, Fragen zu stellen.</li> <li>11. Hören und Sprechen: Integrieren Sie auch Hörverständnisübungen und Gelegenheiten zum freien Sprechen in Ihren Unterricht. Das Hören von authentischen Sprachbeispielen und das aktive Sprechen sind entscheidend für den Spracherwerb.</li> <li>12. Kultur: Erzählen Sie den Schülern auch ein wenig über die Kultur der deutschsprachigen Länder, um ihr Interesse an der Sprache und Kultur zu wecken.</li> </ol> <p>Denken Sie daran, den Unterricht interaktiv und abwechslungsreich zu gestalten, um das Interesse der Schüler zu erhalten. Es ist auch wichtig, Geduld zu haben und den Schülern genügend Zeit zu geben, um die Sprache zu erlernen und zu üben.</p>

Tablo 6’da yapay zekâya dil öğretmeni olarak A1 seviyesindeki öğrencilere Präsenz konusunu nasıl öğretilebileceğine yönelik olarak destek istenmiştir. Yapay zekâ adım adım ders planı ve dersin işlenişine yönelik olarak tavsiyelerde bulunmuştur. Yapay zekâ bireysel dil öğrenmenin yanında öğretmenlerin de dil öğretiminde yardımcı olarak kullanılabileceği etkili bir araçtır.

Yapay zekâ ile dil öğrenimi konusu farklı şekilde örneklendirilebilir. Verilen örnekler dışında pek çok farklı şekilde yapay zekâ dil öğreniminde kullanılabilir. Konuşma, yazma, dinleme, dilbilgisi gibi birçok noktada yapay zekâ ile dil öğrenimi etkili bir araçtır. Yapay zekâ bireysel ve kişiselleştirilmiş öğrenmeyi desteklemektedir. Birey bir eğitime ihtiyaç duymadan bireysel olarak kendini geliştirebilir, hatalarına yönelik olarak geri dönütler alabilir. Ayrıca kaynak kullanmadan sadece yapay zekâ desteği ile dil öğrenebilir. Yapay zekâ dil öğreniminde bireysel öğrenme için kullanılabilir gibi dil öğretmenleri tarafında da destek aracı olarak kullanılabilir. Yapay zekânın birçok avantajı dışında dezavantajları da bulunmaktadır. Birey karşısında hızlı cevap veren bir araç bulunduğu için kendini düşünmeye zorlamayabilir ve yapay zekâdan cevap isteyebilir. Bu durum bireyleri düşünmeden uzaklaştırarak tembelliğe itebilir. Buna ek olarak öğrencilerden Almanca metin yazmaları istendiğinde yapay zekâya yazdırabilirler, bu öğrencilerin hazır ve hızlı bilgiye erişmesine neden olarak öğrenmesini zorlaştırabilir. Ayrıca bunun denetleme mekanizması olmadığı için kontrolü çok zordur.

## SONUÇ

Eğitim, toplumun temel taşlarından biridir ve her öğrencinin adil ve eşit bir öğrenme fırsatına sahip olma hakkı vardır. Bu nedenle yapay zekânın eğitimde kullanımı, öğrencilere kişiselleştirilmiş öğrenme deneyimleri sunma, öğretmenlere yardımcı olma ve eğitim kurumlarının daha verimli çalışmasını sağlama potansiyeline sahiptir. Yapay zekâ, özellikle dil eğitimi alanında da büyük bir potansiyele sahiptir. Bu potansiyel, özellikle Almanca gibi yabancı dillerin öğrenilmesinde önemli bir rol oynamaktadır. Almanca, dünya genelinde yaygın olarak konuşulan bir dildir ve dil öğrenimi, kişisel ve profesyonel gelişim için büyük bir öneme sahiptir. Yapay zekâ, dil öğrenme sürecini kişiselleştirilmiş hale getirerek öğrencilere özelleştirilmiş deneyimler sunabilir. Öğrencilere kendi hızlarında öğrenme imkânı tanırken, aynı zamanda esnek çalışma saatleri sunarak öğrencilerin motivasyonunu artırabilir. Ancak dil öğrenim süreci, her öğrenci için farklı zorluklar ve gereksinimler içerebilir.

Bu araştırma yapay zekânın dil öğrenimi konusundaki farklı uygulama alanlarını incelemiş ve çeşitli örnekler sunmuştur. İlk olarak, yapay zekâ destekli kelime öğrenimi üzerinde durulmuş ve bu alanda iki örnek sunulmuştur. Bu örnekler, yapay zekâ kullanarak kelime öğrenimini kişiselleştirme ve öğrencilere özelleştirilmiş deneyimler sunma potansiyelini göstermektedir. Ayrıca, yapay zekâ destekli Almanca kelime öğrenimi için üniversite öğrenimi hakkında 10 önemli kelime sunulmuş ve bu kelimelerin anlamları verilmiştir. Ardından, yapay zekâ bu kelimeleri cümle içerisinde kullanarak örnekler sunmuştur. Bu örnekler, yapay zekânın kelime öğrenimi konusunda etkili bir araç olabileceğini göstermektedir. İkinci örnekte, yapay zekâ aracının kelime öğrenimi için kullanılabilir uygulamaları ve bu uygulamaların içeriklerini açıklamıştır. Bu, yapay zekânın dil öğrenimi süreçlerini destekleme ve özelleştirme kapasitesini vurgulamaktadır. Ayrıca, yapay zekâ ile Almanca dilinde sohbet etme örneği verilmiştir. Bu, yapay zekânın öğrencilerle dil becerilerini geliştirmek için etkileşimde bulunabileceği bir başka alanı temsil etmektedir. Son olarak, yapay zekâ tarafından bir metindeki dilbilgisi hatalarının düzeltilmesi örneği sunulmuştur. Bu, yapay zekânın yazma becerilerini geliştirmek ve dilbilgisi öğrenimini desteklemek için nasıl kullanılabilirliğini göstermektedir.

Tüm bu örnekler, yapay zekânın dil öğrenimi konusundaki potansiyelini ve çeşitli uygulama alanlarını vurgulamaktadır. Ancak aynı zamanda yapay zekânın bazı dezavantajlarını da göz önünde bulundurmalıyız, bu nedenle yapay zekâ kullanımının dikkatli bir şekilde yönetilmesi gerekmektedir. İnsan ve yapay zekâ arasındaki dengeyi korumak, adil ve şeffaf değerlendirme uygulamaları sağlamak, veri gizliliğini korumak ve öğrenci-öğrenci ile öğrenci-öğretmen etkileşimlerini desteklemek önemlidir. Yapay zekâ, eğitim sektöründe büyük bir değişim ve dönüşüm potansiyeline sahiptir. Yapay zekâ öğretici, deneysel, açıklayıcı veya keşfedici olabilir; öğrencileri dil hakkında bilgilendirebilir, kullanılan dilin deneyimini sağlayabilir, dil kullanımını teşvik edebilir veya öğrencilerin dil hakkında kendileri için keşifler yapmalarına yardımcı olabilir.

Ayrıca, yapay zekâ teknolojileri eğitimde daha kapsayıcı, eşitlikçi ve kaliteli öğrenme fırsatları sağlamayı hedefler. Bu, öğrencilerin çeşitli ihtiyaçlarına daha iyi cevap verilmesini mümkün kılar. Yapay zekâ, öğretmenler için de önemli bir araç olabilir. İdari görevleri yerine getirirken veya veri toplarken verimli ve kullanışlı bir seçenek sunar. Hem öğrencilerin hem de öğretmenlerin ihtiyaçlarına odaklanarak, yapay zekâ eğitimde önemli bir yatırım olarak değerlendirilmelidir.

Sonuç olarak, yapay zekâ dil öğrenimi ve eğitim alanlarında büyük bir potansiyele sahiptir. Öğrencilere bireysel destek sağlama, değerlendirme süreçlerini iyileştirme, özelleştirilmiş öğrenmeyi destekleme ve otomatik geri bildirim sağlama gibi önemli katkılar sunar. Ancak yapay zekâ, dikkatli bir şekilde ele alınmalı ve insan öğretmenlerin rolü ile dengelenmelidir. Eğitim sektörü, yapay zekâ teknolojisinin avantajlarını en üst düzeye çıkarmak ve potansiyel riskleri azaltmak için dikkatli bir şekilde yönlendirilmelidir. Bu nedenle, yapay zekâ destekli eğitimin etkili bir şekilde entegre edilmesi için sürekli çaba ve dikkat gerekmektedir.

Yapay zekânın eğitimdeki potansiyeli büyük olsa da bu teknolojinin kullanımıyla ilgili etik sorumluluklar ve endişeler de göz ardı edilmemelidir. Eğitimciler, öğrencilerin güvenliği, gizliliği ve adaleti için gerekli önlemleri almalı ve yapay zekâ uygulamalarının eğitimdeki etkilerini dikkatle izlemelidir. Ayrıca, eğitimciler ve öğrenciler arasındaki etkileşimi artırmak için yapay zekâ araçlarının tasarımında insan odaklı yaklaşımlar benimsemelidirler. Bu şekilde, yapay zekâ eğitimdeki potansiyelini en iyi şekilde kullanabilir ve öğrencilere daha iyi bir öğrenme deneyimi sunabilir.

Son olarak şunu da ifade etmek gerekir ki eğitimciler, yapay zekâ destekli teknolojilerin öğrencilere kişiselleştirilmiş destek sağlama potansiyelini değerlendirirken, aynı zamanda veri gizliliği, içerik kalitesi ve önyargı gibi yeni risklere dikkat etmek zorundadırlar (U.S. Department of Education, Office of Educational Technology, 2023).

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