CONCEPTUAL CHANGE THEORIES AND PRACTICE EXAMPLES IN EDUCATION

Editors Prof. Dr. Abdülkadir KABADAYI Assoc. Prof. Dr. Meriç ERASLAN



2023

Conceptual Change Theories and Practice Examples in

Education

Editors Abdülkadir KABADAYI & Meriç ERASLAN



Conceptual Change Theories and Practice Examples in

Education

Editors Abdülkadir KABADAYI & Meriç ERASLAN



Conceptual Change Theories and Practice Examples in Education

Editor • Prof. Dr. Abdülkadir KABADAYI • Orcid: 0000-0003-4114-5890
• Assoc. Prof. Dr. Meriç ERASLAN • Orcid: 000-0001-7541-7554
Cover Design • Motion Graphics
Book Layout • Mirajul Kayal

First Published • October 2023, Lyon

ISBN: 978-2-38236-596-0

copyright © 2023 by Livre de Lyon

All rights reserved. No part of this publication may be reproduced, stored in a retrieval system, or transmitted in any form or by an means, electronic, mechanical, photocopying, recording, or otherwise, without prior written permission from the Publisher.

Publisher • Livre de Lyon
Address • 37 rue marietton, 69009, Lyon France
website • http://www.livredelyon.com
e-mail • livredelyon@gmail.com



LIVRE DE LYON

FOREWORD

The theme of this term's book is *Conceptual Change Theories and Practice Examples in Education* with many researches now taking on global dimensions, it is imperative to discuss innovative approaches towards educational sciences including the best research integrity practices. I believe that this book could serve as a catalyst for strengthening international cooperation on the transfer of innovative approaches towards education.

The challenges in educational sciences are both difficult and interesting. Academicians are working on them with enthusiasm, tenacity, and dedication to develop new methods of analysis and provide new solutions to keep up with the ever-changing world. In this new age of global interconnectivity and interdependence, it is necessary to provide security practitioners, both professionals and students, with state-of-the art knowledge on the frontiers in educational sciences. This book is a good step in that direction.

This book provides a valuable window on educational sciences and covers the necessary components from educational sciences. *Conceptual Change Theories and Practice Examples in Education* addresses especially educators, researchers, academics, postgraduate students, pre-service teachers, teachers and school leaders own development. It makes recommendations to educators, researchers, academics, postgraduate students, pre-service teachers, teachers, school leaders and policy makers and so on

The editor would like to thank all of the authors who made this book so interesting and enjoyable. Special thanks should also be extended to the reviewers who gave of their time to evaluate the record number of submissions. Especially to the LVRE DE LYON Publishing House, we owe a great debt as this book would not have been possible without their consent efforts.

At this juncture, I would like to thank the authors for all of their cooperation. We hope that all of those reading enjoy these chapters of the book as much as possible.

> Editors Prof. Dr. Abdülkadir KABADAYI Assoc. Prof. Dr. Meriç ERASLAN

CONTENTS

	FOREWORD	Ι
CHAPTER I.	REVOLUTIONIZING ENGLISH LANGUAGE TEACHING: THE ROLE OF ARTIFICIAL INTELLIGENCE	1
	Nilüfer AYBİRDİ	
CHAPTER II.	AN EXAMINATION OF THE COPING WAYS WITH PRESCHOOL CHILDREN'S PROBLEM BEHAVIORS ACCORDING TO THE VARIABLES RELATED TO THE CHILD AND THE MOTHER	27
	Aylin MENTİŞ & Belgin LİMAN	
CHAPTER III.	THE ART OF VISUAL THINKING: PRACTICAL EXAMPLES OF GRAPHIC ORGANIZER INTEGRATION IN LANGUAGE CLASSROOMS	45
	Dilşah KALAY	
CHAPTER IV.	A CURRENT APPROACH IN CONCEPTUAL CHANGE: COMMON KNOWLEDGE CONSTRUCTION MODEL	61
	Ahmet TAŞDERE	
CHAPTER V.	A GENERAL OVERVIEW OF THE HISTORY OF TEACHING TURKISH TO FOREIGNERS	75
	Tuğrul Gökmen ŞAHİN	
CHAPTER VI.	INVESTIGATING PROSPECTIVE MATHEMATICS TEACHERS' NOTICING SKILLS IN TASK ANALYSIS	97
	Dilek GİRİT YILDIZ	
CHAPTER VII.	THE USE OF AUTHENTIC MATERIALS IN ENGLISH AS A FOREIGN LANGUAGE INSTRUCTION	4 115
	Fatma KİMSESİZ	
CHAPTER VIII.	A NEW TREND IN CITIZENSHIP EDUCATION FOR (IM)MIGRANT CHILDREN: ART AND ART TERAPHY	133
	Selda ŞAN & Katarzyna MIŁEK	
CHAPTER IX.	LANGUAGE ANXIETY AS A BARRIER TO EFFECTIVE COMMUNICATION IN THE GCC REGION: A REVIEW OF CHALLENGES AND SOLUTIONS	151
	Fatima AL-MUKHAINI & Osman Erdem YAPAR	

- CHAPTER X. THE EFFECT OF ORFF SCHULWERK EDUCATION ON SOCIAL INTERACTION AND COMMUNICATION SKILLS OF CHILDREN WITH AUTISTIC SPECTRUM DISORDER 161 *Aylin MENTİŞ & Özgü KÜÇÜK* CHAPTER XI. AN OVERVIEW OF THE WALDORF APPROACH IN
 - PRESCHOOL EDUCATION

173

Feyza UÇAR ÇABUK

CHAPTER I

REVOLUTIONIZING ENGLISH LANGUAGE TEACHING: THE ROLE OF ARTIFICIAL INTELLIGENCE

Nilüfer AYBİRDİ

(Asst. Prof. Dr.), Ordu University E-mail: niluferaybirdi@hotmail.com ORCID: 0000-0002-1223-3050

1. Introduction

Recent advances in technology have led to rapid changes in the field of education. With these advances, the integration of artificial intelligence (AI) into different educational contexts has gained remarkable popularity. As one of these domains, English Language Teaching (ELT) stands out as a field where AI has a significant role in revolutionizing traditional language teaching methods. With the latest developments, artificial intelligence technology has become more proficient at understanding, analyzing, generating, and responding to human language. Thanks to these features, both language teachers and students can find innovative solutions to the problems they come across. The integration of AI-powered tools in ELT provides great opportunities for teachers to move away from traditional teaching methods and improve their students' basic language skills. By taking advantage of these opportunities offered by artificial intelligence, language teachers can create interesting and dynamic language learning environments that give priority to the individual needs of students and contribute to their individual development of them.

In this chapter, we will explore the transformative impact of AI use on ELT highlighting its practices in improving language skills (e.g., reading, writing, listening, and speaking). We will examine various applications of AI such as

automated language assessment tools, chatbots, AI-powered language learning platforms, and intelligent virtual assistants. Moreover, this chapter is assumed to contribute to a deeper understanding of the potential impact of AI in language teaching by providing a comprehensive analysis of the benefits and drawbacks of using AI applications in language teaching. It also informs educators and policymakers in making informed decisions about the integration of AI tools in language teaching practices.

2. Overview of Artificial Intelligence

AI, known as computer systems used to perform tasks that require cognitive abilities, is typically referred to as machine intelligence (Russell & Norvig, 2016). These machines can also be defined as human intelligence simulations which are designed to perceive their environments,



think, learn, solve problems, make decisions, and adapt their behaviors based on available information and experiences (Nilsson, 2014). Gordon (2011) describes artificial intelligence as an analytical life cluster that aims to imitate life. The term artificial intelligence was first used by McCarthy et al in their 1955 summer school research project. This project was in principle based on the assumption that a machine can be built to imitate any kind of learning or other characteristics of intelligence. Another pioneer of the applicability of artificial intelligence in a machine was Alan Turing, who not only laid the foundations of computer science fields but also examined the philosophical aspects of artificial intelligence developments (Muggleton, 2014).

The concept of artificial intelligence has been divided into various subbranches, depending on the situation of the problem to be solved, since 1955, when it was first used. Artificial neural networks, fuzzy logic, simulated annealing, expert systems, computer vision, speech recognition, genetic algorithms, chaotic molding, and robotics are some of them. All of these subbranches form the infrastructure of many technological tools that we use in our daily lives (Civelek, 2003; Nilsson, 2014).

There are numerous applications of AI in various contexts such as finance, healthcare, transportation, and education. In these fields, AI systems are utilized

for different objectives like risk assessment, drug discovery, and self-driving cars. In the field of education, AI is used for designing tutoring systems, adapting learning platforms, providing automated feedback creating personalized learning programs, etc. (Owoc et al., 2019). The AI system uses intelligence as a key technology by integrating it with Big Data, cloud computing, and other applications to shape the future development of education (Yanhua, 2020). Major industrialized countries are at present promoting innovation in education and the field has faced significant developments and opportunities.

Similarly, the integration of AI in foreign language teaching holds great potential to transform language learning experiences (Meurers, 2012). By leveraging machine learning, natural language processing, and speech recognition technologies, AI can provide personalized and adaptive learning environments, enhance language assessment, and facilitate natural language interaction. The conventional methods used in foreign language teaching have been replaced by technological devices such as computers and mobile phones. Likewise, the foreign language learning mode has become more innovative by moving away from traditional human-computer interactions and AI applications (Yanhua, 2020). Various learning modes such as personalized learning, collaboration, problem-solving, functional language use, and in-depth comprehension have changed accordingly (Yanhua, 2020).

2.1. AI-Powered Natural Language Processing in ELT

As a subfield of linguistics, natural language processing (NLP) is concerned with how human language and computers interact and mainly how computers can be programmed to understand, interpret, analyze, and generate natural language input (Jurafsky & Martin, 2009; Schmidt & Strasser, 2022). The technology includes various techniques and algorithms which enable computers to process, analyze, manipulate, extract, categorize, and organize human language data. Employing a combination of linguistic, statistical, and machine-learning techniques to extract meaning from the text, NLP algorithms enable machines to perform language-related tasks (Bird et al., 2009; Luo & Cheng, 2020). A range of tasks such as sentimental analysis, machine translation, text summarization, and language parsing can be performed by these AI-powered NLP technologies.

Offering advanced language analysis tools and techniques, AI-powered NLP is transforming ELT. With AI-powered NLP, language instructors can obtain deeper insights into learners' language skills and provide more targeted instruction (Meurers, 2012). This human-computer interaction technology provides images or videos that replicate natural conversation scenarios. Through

the text chat function, the system reads the text that the user enters and offers the best conversation information based on prior machine learning, giving the user the impression that they are learning a foreign language in a friendly and casual chat environment (Luo & Cheng, 2020).

Facilitating instructors to identify and address specific areas of improvement, NLP algorithms can automatically parse sentence structure, syntax, and semantics. Allowing for sentiment analysis, which assesses learners' language expression for emotional tone, this technology enables instructors to provide valuable feedback on communication and expression. By utilizing AI-powered NLP in ELT, language teachers can enhance their teaching methodologies and provide more personalized and effective language instruction (Alhawiti, 2014; Meurers, 2015; Nadkarni, Ohno-Machado, & Chapman, 2011; Van den Branden, 2006).

The ability to automate language assessment processes is one of the key benefits of AI-powered NLP in language teaching (Alhawiti, 2014). AI-powered algorithms can automatically assess written essays and provide consistent and immediate feedback on grammar, vocabulary, and coherence (Litman, 2016). This automated essay scoring saves time for both teachers and students, allowing for more efficient assessment and feedback provision. Moreover, AI-powered NLP can assess students' communicative skills accurately by evaluating their pronunciation, fluency, and intonation. This objective evaluation gives students in-depth feedback on their speaking skills, allowing them to concentrate on areas that need improvement (Mitchell, Evanini, & Zechner, 2014). Thus, AI-powered NLP simplifies the evaluation process by automating language assessment, allowing teachers to devote more time to targeted instruction and assistance. The system can also be utilized by teachers to automate processes that have previously needed manual effort, such as developing curriculum or preparing evaluation materials.

NLP systems may be used to facilitate finegrained adaptation of materials curricular by automatically searching for content from online sources such as the web that are specifically customized to a learner's reading level or areas



of interest (Petersen & Ostendorf, 2009). Allowing more individualized learning experiences, AI-powered adaptive learning systems examine learners' language skills, interests, and learning habits to provide them with individualized content, activities, strategies, and suggestions. These systems can actively change task complexity, give customized learning materials, and provide personalized feedback to adapt to the needs of individual learners (Litman, 2016). AI-powered NLP methods help learners proceed at their speed and focus on areas that need improvement by customizing the learning process This personalized approach to language learning increases student engagement and motivation, resulting in better language competency and learner outcomes (Litman, 2016).

2.2. Machine Learning Techniques in ELT

In ELT, machine learning refers to the use of computational techniques that allow computer systems to learn from data and improve their performance in language teaching and learning environments. It entails analyzing and interpreting language data using algorithms and statistical models, allowing the creation of intelligent language learning systems (Murphy, 2019). Large datasets, such as learner performance data, language corpora, and linguistic resources, can be processed and analyzed using machine learning algorithms. These algorithms can detect patterns, correlations, and trends in data, facilitating the development of individualized learning experiences and targeted feedback for learners (Luo & Cheng, 2020).

Extracting and analyzing data are the primary applications of machine learning. With this system, teachers can upload their own instructional materials or network resources as data to the platform and build up a massive database. The system judges students' right and wrong answers in the exercises and with the information gradually accumulating in the database and prior experiences, it improves this judgment ability over time (Schmidt & Strasser, 2022). The platform also does intelligent data analysis based on results from student tests and course settings, and a corresponding analysis report is provided to provide teachers and students with educational suggestions (Luo & Cheng, 2020). For instance, the system may extract useful information by looking at the whole data of a student's learning circumstances across several disciplines over the course of a year, and it can assess the underlying causes of the students' learning difficulties and provide solutions (Ma, 2021).

There are various unpredictable factors impacting language instruction such as the settings' software and hardware, the level of teacher's expertise, students' interests, cognitive styles, and methods of teaching and learning (Ma, 2021). Due to these complexities of the English teaching process, teachers can facilitate AI systems' unique problem-solving skills to obtain adaptive instructional techniques that are appropriate for each learner (Kushik, Yevtushenko, & Evtushenko, 2020; Ma, 2021). By employing machine learning approaches, ELT systems may be adjusted to individual student requirements, giving customized exercises, information, and suggestions based on learners' skills, limitations, and preferences. Machine learning models may also be trained to comprehend and analyze natural language, which fosters the design of automated tutoring systems capable of engaging students in interactive language exercises and providing immediate feedback (Luo & Cheng, 2020).

In essence, machine learning in ELT is the use of computer techniques and algorithms to evaluate language data and construct intelligent systems capable of personalizing language learning experiences, providing targeted feedback, and assisting learners in their own language acquisition journey. These methods have the potential to improve the efficacy as well as the applicability of language learning and teaching practices.

2.3. Deep Learning and Its Applications in ELT

Deep learning, a subfield of machine learning, has sparked considerable interest in the field of ELT because of its capability to transform language learning practices. It focuses on the development and implementation of artificial neural networks with multiple layers to process and analyze complex data. Deep learning entails training deep neural networks on big datasets, so it enables them to generate hierarchical representations and uncover complicated patterns and correlations within the data set. The weights and biases of the network's linked nodes, known as artificial neurons, are adjusted iteratively to maximize the network's efficacy in particular tasks (Ahmad, Farman, & Jan, 2019). Deep learning has demonstrated exceptional performance in a variety of disciplines, such as computer vision, natural language processing, speech recognition, agriculture, manufacturing, malware detection, entertainment, education, plagiarism detection, and pattern identification (Ahmad et al., 2019; Krizhevsky et al., 2012). Its capacity to learn and derive nuanced characteristics from raw data automatically has made it a strong tool for tackling complicated problems while ensuring state-of-the-art functionality for a variety of different applications. In the field of education, deep learning is the application of multistep analysis and processing procedures by students to comprehend ideas more deeply. These strategies include conceptual transformation, mental model

creation, source interaction, and introspective thinking. Deep learning, in its simplest form, is a dynamic, inquiry-based, and understanding-oriented learning approach that calls on students to carefully apply advanced thinking skills to ensure successful knowledge transmission and implementation (Guo, 2021).

Automated language assessment is one of deep learning's main applications in ELT. Accurate assessments and focused feedback on a range of language abilities, including grammar, vocabulary, and pronunciation, may be given by training deep learning models on vast amounts of learner performance datasets. Such models can detect patterns and correlations in data, allowing for the implementation of intelligent assessment systems that provide students with individualized and exact feedback. For example, the automated correction technology on the deep learning platform has the ability to thoroughly examine students' English writings, offer immediate corrections for grammar and spelling errors, and arrive at basic judgments about the general structure of the paper (Guo, 2021).

NLP is another key use of deep learning in ELT. Deep learning models can be programmed to recognize and process natural language, allowing smart language learning systems to be created (Schmidt & Strasser, 2022). These programs can involve students in collaborative tasks with chatbots or computerized conversation partners while giving them immediate feedback dependent on their replies. These systems can analyze language input with greater precision and efficacy by applying deep learning algorithms, which results in more genuine and natural interactions between students and the system (Guo, 2021; Litman, 2016).



Figure 1. The intersection of NLP, machine learning and deep learning

Deep learning techniques may also be used to create intelligent tutoring systems in ELT in addition to automated language assessment and NLP. These programs offer individualized instruction and may adjust to the specific needs of each learner. Deep learning models are able to examine performance data from students, determine their relative strengths and weaknesses, and actively adapt to the subject matter and degree of learning materials' difficulty. Intelligent teaching systems that use deep learning algorithms can provide individualized exercises, material recommendations, and adaptive learning routes, which promote more efficient and successful language acquisition. Since the learning dynamics of each student are recorded simultaneously on the deep learning platforms, teachers can determine their students' learning styles and levels based on their previous learning records (Guo, 2021). Figure 1 below shows the intersection of NLP, machine learning and deep learning.

Furthermore, deep learning can also be used in ELT to improve virtual reality (VR) and augmented reality (AR) engagements. VR can be defined as seeing something as reality which entails seeing virtual reality, creating general assembly drawings and patterns, translating them into component entities, and automatically processing parts using machine tools. Utilizing computing gear to simulate and generate visual and auditory environments, VR technology stimulates users' aural and visual senses while giving them the most accurate representation of their sensory organs for an outstanding experience. (Zhao & Liu, 2022). AR, on the other hand, is an enhanced version of VR. This system offers genuine or believable experiences to the users. AR has three basic features differentiating it from VR: integration of digital and physical worlds, real-time interactions, and precise 3D visual recognition of virtual and genuine objects (Alizadeh, 2019; Wolfe & Cedillos, 2015). Immersive language learning contexts can be generated by merging deep learning with VR/AR technology. AI-powered systems can put students into engaging situations, simulations, and virtual language exercises by encouraging active engagement and improving language abilities in a realistic and stimulating way (Alizadeh, 2019). Deep learning is extremely useful for teaching English as a foreign language, as educational robots make English-speaking activities livelier, and real-world interactions encourage students to use the language. In addition to creating a natural atmosphere for students, these educational robots help students reduce their anxiety and improve their English-speaking skills while communicating with real people (Guo, 2021). The use of deep learning techniques in ELT offers enormous potential for the future of language instruction as technology advances

3. Use of AI Applications to Improve Students' Basic Language Skills

The four basic language skills of speaking, listening, reading, and writing may all be developed with the use of AI in language learning settings. AI-powered products may provide learners with engaging and realistic language learning situations including voice recognition platforms, chatbots, digital tutors, and language learning programs (Rusmiyanto et al., 2023).

3.1. How to Improve Students' Writing Skills via AI Applications

AI applications offer valuable opportunities for language teachers to enhance students' writing skills (Zhao, 2022). Applications of AI provide language instructors with valuable opportunities to improve their students' writing abilities (Nobles & Paganucci, 2015). Firstly, assessing students' writing prompts and giving feedback can be automated by using AI-powered technologies. These tools examine student writing by applying natural language processing algorithms and provide insights on grammar, word use, and overall coherence. Real-time feedback provided by computer programs, in particular, benefits not only language learners but also instructors, as learners may edit their own writing and teachers can save time from reviewing and evaluating papers (Schmidt & Strasser, 2022). Thus, by using AI techniques in writing evaluation, teachers may help their students discover and concentrate on specific areas for improvement in their writing.

Secondly, AI could offer assistance with focused writing practice and instruction. AI-powered systems can provide personalized writing tasks and prompts depending on students' particular requirements and proficiency levels (Pokrivcakova, 2019). These tasks can be developed to help students improve their writing abilities in areas such as argumentation, narrative organization, and persuasive writing. With AI-generated writing tasks, language teachers can present students with a variety of practice opportunities, tailored to their unique learning goals and preferences. Furthermore, AI can help students with their writing by providing virtual writing assistance. These AI-powered tools provide students with real-time recommendations and corrections while they write, assisting them in improving their grammar, style, and coherence (Jian, 2022). Virtual writing assistants serve as writing coaches, supporting students with revision and editing (Winans, 2021). Thus, integrating AI applications in language instruction can improve students' writing skills considerably. Figure 2 below shows an example of an AI-powered spell and style check.



Figure 2. AI-powered spell and style check (Grammarly example)

AI applications can be employed by English teachers in writing classes for different purposes such as:

Automated Writing Assessment: AI-powered tools, such as Grammarly, Jasper.ai, Hemingway Editor, ProWritingAid and Quillbot can analyze students' writing and provide automated assessment and feedback on grammar, spelling, and style. These tools can help English teachers save time on manual grading and assist students with immediate feedback on their writing prompts (Schmidt & Strasser, 2022).

Virtual Writing Assistants: Virtual writing assistants such as Microsoft Word's Editor or Google Docs' Smart Compose, may provide real-time recommendations and edits while students write. These tools act as writing coaches for students, helping them improve their grammar, sentence organization, and general coherence (Nazari, Shabbir, & Setiawan, 2021).

AI-generated Writing Prompts: Based on students' language skills and learning objectives, AI apps may produce customized writing prompts (Yang, 2007). For instance, programs like QuillBot, ChatGPT, Lucy or AI Storyteller, may offer original and interesting writing prompts that encourage students to practice certain writing abilities or explore new styles of writing.

Plagiarism Detection: Instances of plagiarism in students' work can be found using AI-powered plagiarism detection programs like Turnitin, iThenticate, or Copyscape, which can be used by English teachers. These technologies compare students' work to a large database of sources to verify academic integrity and teach them appropriate citation and referencing. **Peer Collaboration:** With AI-based programs like Lucy, Sudowrite, and Jasper, learners can brainstorm some specific subjects to write about in a dialog style, either independently or cooperatively. After finishing their writing, students can practice their oral skills with other students by reading aloud their work. Meanwhile, students may edit or comment on each other's writing. Learners can also experience teamwork and evaluation through this approach (Yang, 2007).

Language Translation: English language learners and teachers can benefit from the quick translations and grammatical checks offered by AI-powered language translation programs (Schmidt & Strasser, 2022) like Google Translate, DeepL, Reverso Translation, Smartling, Amazon Translate, Crowdin, Bing Microsoft Translater, and Memsource. Figure 3 shows an example of AI-powered translated text.



Figure 3. AI-powered translated text (DeepL example)

3.2. How to Improve Students' Speaking Skills via AI Applications

Oral language competency is essential for language learners since it is basically the ability they will use the most (Warschauer, 1997). That's why, improving oral language proficiency is crucial for English language learners (Yang, 2007). Teachers can improve their students' speaking skills and provide engaging and productive language learning environments by integrating AI technologies into language instruction. Students may practice and advance their speaking skills by using AI-powered voice recognition technology, which can give real-time feedback on both pronunciation and fluency.

When students talk to an AI, the Automatic Human Speech Recognition system identifies their verbal expressions and voice in a manner comparable to the way humans perceive speech. In classroom settings where a native speaker of the target language is not present, AI may be utilized to practice oral skills and enhance speaking a foreign language (Junaidi et al., 2020). AI applications such as Pronunciation Power, Alexa, and ELSA Speak can evaluate students' speech patterns and provide individualized feedback by identifying and correcting pronunciation mistakes.

Additionally, AI chatbots can provide students with engaging and immersive language practice opportunities (Rusmiyanto et al., 2023).



Applications like Falou, Duolingo and Mitsuku simulate conversations that enable students to practice speaking in a low-pressure setting. These chatbots are able to respond quickly, supply various prompts, and adjust to students' proficiency level in the language, offering individualized practice, increasing confidence, and promoting learner autonomy (Rusmiyanto et al., 2023). Prior research has shown that learners report more enthusiasm and involvement when interacting with chatbots which provide natural language discussions and tailored feedback (Dizon, 2020; Kim, 2016). In addition, in previous studies, it was determined that the students' chatting with a chatbot, or a real person had an equal effect on the development of their speaking skills (Kim, 2016). In language classes using an artificial intelligence-based speech robot, students were also found to have more positive views on language learning and advanced interactive behaviors (Lin & Mubarok, 2021). These results highlight the pedagogical potential of AI technology in fostering student autonomy and producing customized learning experiences (Kang, 2022).

Futhermore, language instructors can benefit from AI technologies that help them conduct personalized speaking tasks and evaluations. Students can facilitate from AI-powered platforms like Flipgrid, SpeakApp, Busuu, Cambly, Talkative, and Voscreen to record and upload their speaking assignments, which can then be evaluated by the teacher. These AI algorithms can assess the fluency, correctness, and coherence of student recordings, giving teachers useful information about their speaking skills and areas for improvement. Since conversational activities are conducted with anonymous chatbots, using these platforms also helps anxious or introverted students to overcome their fear of negative evaluation and express themselves freely (Schmidt & Strasser, 2022). An example lesson plan for the employment of Flipgrid application in an English-speaking lesson is provided below. **Example Lesson Plan:** Using Flipgrid Application for a Speaking Lesson on Seasons (5th grade)

Objective: To improve students' speaking skills by discussing and describing the seasons in English.

Materials:

- Computers or mobile devices with internet access

- Flipgrid account for both the teacher and students
- Speaking prompts or questions related to seasons

Procedure:

Warm-up Activity

Introduction (10) minutes

- Engage learners in a quick conversation about the seasons, such as "What are the four seasons?" as well as "What do you like/dislike about each season?"
- Introduce the lesson's goal, which is to improve speaking skills by describing and talking about the seasons in English.

While-Activity:

Flipgrid Setup (5 minutes)

• Ensure all students have access to computers or mobile devices with the Flipgrid app installed or access to the Flipgrid website.

• Provide login information and guide students through creating their Flipgrid accounts if necessary.

• Create a "grid" for the class and share the join code.

Speaking Prompt Introduction (5 minutes)

- Introduce speaking prompts or questions related to seasons, such as "Which season is your favorite and why?" or "Describe the activities you enjoy during a specific season."
- Explain the task and any specific guidelines or requirements.

Recording and Submission (20 minutes)

- Tell students to use Flipgrid to record their answers to the speaking questions.
- Encourage detailed descriptions, use of season-related vocabulary, and expression of opinions and preferences.
- Remind students to review their recordings before submitting them.

Post-Activity:

Peer Interaction (10 minutes)

- Assign students a few videos from their classmates to view and comment on.
- Encourage questions and emphasize constructive feedback and respectful communication.

Reflection (10 minutes)

• Engage the whole class in a discussion about the seasons based on the recordings and feedback received.

• Highlight interesting points, common themes, and areas for improvement in speaking skills.

• Provide additional feedback and guidance based on observations during the peer interaction phase.

Figure 4. Example lesson plan for employment of Flipgrid application in a speaking lesson

3.3. How to Improve Students' Reading Skills via AI Applications

Reading and comprehension are among the most fundamental skills that a language learner should have. Efficient employment of new technologies has a significant impact on improving learners' reading skills (Ahmadi, 2018). With the application of AI technologies, instructors are able to save time from tedious and repetitive



tasks such as reading aloud, dictating, and evaluating and can focus on students' individual development (Srinivasan & Murthy, 2021). Furthermore, intelligent tutoring systems provided by several AI applications offer a wide range of services such as content instruction, determination of proficiency level, expertise in curriculum, generating and adjusting instructional environments, practice, and assessment (Burns & Capps, 2013). By integrating these systems into their reading classes, English language teachers can also assist their students with reading difficulties.

Several tools can be used to improve language learners' reading and comprehension skills. Some of them are as follows:

Text to speech systems: Text-to-speech technology can be defined as a system that translates written input into spoken input (Widyana, Jerusalem, & Yumechas, 2022). While the text is being read, students can listen to it and improve their comprehension skills. Tools such as Voice Dream Reader and NaturalReader are able to convert written texts into oral ones.

Readability technologies: The method by which linguists and educators analyze the ease or difficulty of texts in order to provide learners with materials appropriate to their proficiency is known as readability evaluation (Imperial & Ong, 2021). AI applications like Readable and Hemingway Editor are able to analyze the difficulty level of a written text, showing readability degree, sentence structure complexity and vocabulary use. Students can facilitate from these technologies to determine areas that they need improvement for better comprehension.

Adaptive Learning Platforms: Tools like Duolingo, Amira Learning, The Edvocate, and Rosetta Stone apply algorithms that allow for individualized tutoring experiences. When compared to traditional methods, these automated toolshave more advantages such as identifying students' strengths and weaknesses, offering accurate and quick assessment, providing immediate feedback, finding common patterns in learners' mistakes, tracking learner progress, and supplying instructional materials. Teachers can facilitate individualized materials that meet their students' learning requirements by incorporating AI-assisted reading comprehension assessments and adaptive learning software into their lessons (Ahmadi, 2018).

Online Dictionaries: Students can benefit from online dictionaries such as Cambridge Dictionary, Merriam-Webster, Collins Dictionary, Wiktionary, Collins Dictionary, Google Dictionary, Urban Dictionary, and Thesaurus. com in understanding the meaning of unknown words and finding synonyms. These resources are useful for expanding vocabulary and promoting reading comprehension skills.

Interactive Reading Applications: Tools such as Read Theory and Newsela provide a large amount of authentic and real-world content including articles, passages, and stories tailored to different reading difficulties. These instructional content platforms offer interactive functions like annotations, brief quizzes, writing prompts, highlighting, and flexible reading experiences. Through the integration of these tools into lessons, language teachers can have access to weekly lesson plans, student checklists, and reading assignments and they can monitor student progress (Giroir et al., 2015).



3.4. How to Improve Students' Listening Skills via AI Applications

AI listening tools provide a range of opportunities for both language teachers and learners. Adapting to learners' individual needs, these technologies offer personalized listening experiences. By integrating these tools into their lessons, language teachers can facilitate from accurate and real-time analysis and assessment of learners' listening abilities. With this personalized approach language learners can identify their weaknesses and focus on progressing at their own pace. One of the key features of AI-powered listening tools is speech recognition technology which can easily analyze students' pronunciation, intonation, and comprehension (Zhao & Yang, 2021). Moreover, access to a variety of authentic audio content, including native speakers with different accents, is made possible via these technologies. Thus, by receiving realtime and accurate feedback, students can correct their mistakes easily and develop more advanced listening skills. Additionally, AI-powered listening tools encourage more involvement in the language learning process. Quizzes, challenges, and progress monitoring are just a few examples of the interactive features and gamification components that these programs frequently include. These elements stimulate active engagement and motivate learners, fostering a pleasant learning experience and keeping learners interested and self-driven to develop their listening abilities (Ruan et al., 2021). Through digital devices, students can access these resources at any time and wherever they are.

There are various AI-powered tools available to help students promote their English listening abilities. Students can enter their age, grade, language level, interests, and other basic information into these AI-based systems and take advantage of personalized listening materials made available to them (Zhao & Yang, 2021). For instance, Duolingo platform involves audio clips, listening exercises, and comprehension questions to help learners practice their listening skills in a gamified and interactive way. FluentU is another application that uses authentic videos to teach listening skills. FluentU offers interactive subtitles, vocabulary lists, and comprehension tests to assist learners in practicing their listening skills while viewing stimulating videos. Rosetta Stone, on the other hand, is a language learning program that provides interactive listening exercises using voice recognition technology. Listening to audio clips and completing accompanying tasks such as matching, dictation, and multiplechoice questions can help learners develop their listening skills. Similarly, LingQ is a language learning software that focuses on intensive reading and listening practice. It contains a large archive of real-life content, such as articles, stories, and podcasts, along with audio recordings. Learners can enhance their listening skills by listening to the audio while reading the text. Lastly, BBC Learning English is an online resource that offers a broad range of listening resources, such as news stories, podcasts, listening activities, exercises, comprehension questions, and audio lessons. All of these AI-powered platforms cater to learners' individual needs and preferences.

4. Benefits of Integrating AI-powered Tools in ELT

The application of AI-powered methods can bring added value to the practices of English teaching and learning. Here is a short list of numerous benefits of utilizing AI-powered tools in language teaching classrooms:

Automated grading and feedback: AI-powered tools can be employed for grading essays written by students. These systems are quite accurate and faster than human instructors who may show a tendency to be tired while reading through masses of submitted student essays at once. Automated grading tools evaluate students' knowledge by processing and analyzing their responses, providing feedback, and offering individualized learning plans (Owoc et al., 2019). This assists instructors in streamlining their workload so that they may focus on more critical issues without sacrificing grading quality. Additionally, Feedback loops for instructors supported by machine learning and NLP tools increase the quality of student evaluations. Students can receive immediate feedback from AI-powered tools, which can help them discover areas for development and growth in their language learning process (Porter & Grippa, 2020). A chatbot, for instance, can gather responses using a dialog interface, much like a human interviewer, but with far less labor required from the user. Furthermore, each dialogue may be tailored to the learners' personality and responses. A chatbot can even explain why students hold certain beliefs (Owoc et al., 2019).

Personalized learning: The term "personalized learning" refers to a range of educational programs where the teaching strategy and the learning pace are adjusted to best meet the requirements of each individual student (Mohd & Shahbodin, 2015). Each student's individual learning preferences and areas of interest are taken into consideration while creating the content. Algorithms are frequently used in AI language learning programs to monitor users' progress and customize the learning content to fit their individual requirements and skill levels (Chen et al., 2021). By exposing students to content that is adapted to their learning preferences and pace, learning efficiency and engagement can be

enhanced (Kessler, 2018). Due to the adapting feature they have, AI systems are also beneficial for students with special needs. The AI system engages with each student separately to ensure that they are learning at their optimum rate while also giving them a greater amount of personal time with teachers who might otherwise miss important details when instructing a large group because of the lack of participation from some students in the lesson.

Organized and authentic content: To help learners better grasp dialogues and situations in the real world, AI apps provide access to a broad variety of authentic video and audio data, including native speakers, various accents, and genuine speech patterns (Brown & Lee, 2018). AI-based technology may offer a variety of entertaining games and social interactions, reduce learning barriers, and repeat courses as frequently as required. These features will foster learners' enthusiasm for language learning (Lai & Kritsonis, 2006).

Accessibility and flexibility: Tools for AI language learning are frequently made available online or as mobile applications, making them simple to use with any internet-connected device. This enables students to study whenever they want and from any place (De la Vall & Araya, 2023) allowing for flexibility and convenience in practicing listening, speaking, and other language skills. Additionally, by connecting to the Internet, students may access a variety of authentic reading resources at school or from home. Further, such resources are accessible at any time of the day (Lai & Kritsonis, 2006).

Increased engagement and motivation: AI technologies frequently include interactive features, gamification contents, and progress monitoring, which motivate learners and encourage active engagement in language learning exercises (Rusmiyanto et al., 2023).

Cost-effectiveness: Compared to more conventional language learning techniques like in-person classes or tutors, many AI language learning platforms are free or have low-cost choices (De la Vall & Araya, 2023). When applied in combination with traditional foreign language classroom study, computer technology will be far less costly to utilize than face-to-face classroom instruction. Students can also study more independently when using this method, giving the teacher more time to focus on aspects of second language teaching that are still difficult or impossible to teach using a computer, such as pronunciation, spoken dialogue practice, and essay writing (Lai & Kritsonis, 2006).

Culture exposure: AI language learning technologies may introduce users to many cultural aspects such as norms, traditions, and social standards through interactive courses and scenarios from everyday life. This can assist students in developing a greater knowledge and appreciation for various cultures (De la Vall & Araya, 2023).

Intelligent tutoring systems: Intelligent tutoring systems have been found to be more successful than conventional teaching practices in providing students with immediate feedback about their tasks while guiding them toward finding the correct response (Lai & Kritsonis, 2006). AI tutors can be used as virtual facilitators by language teachers. These digital teacher assistants can operate on online discussion platforms, interact with students by asking questions and responding to them and inform them about the weekly lesson schedule (Owoc et al., 2019). These systems also take into account additional variables, such as student performance information from prior evaluations, in order to modify their strategy in accordance with students' individual needs.

5. Drawbacks of Integrating AI-powered Tools in ELT

Lack of human interaction: The main drawback of AI-based language teaching technologies is the lack of interaction. Since students do not interact with human instructors during class time, they might lose the ability to practice and gain social skills. While some AI-based technologies allow users to practice speaking in real-time with native speakers or human language instructors, the majority of learning activities are self-directed and devoid of face-to-face contact. For students who favor a more individualized and active learning environment, this might pose an issue (De la Vall & Araya, 2023).

Data Problems: Since it is impossible to predict every method a student will learn it is challenging for teachers to come up with a single algorithm that will work for everyone. Also, programs for computer-assisted language learning still have flaws in their software (Lai & Kritsonis, 2006). AI requires an extensive amount of data for a software program to acquire appropriately, yet many problems arise during this process. Gathering all the essential information might be challenging as some people identify things incorrectly or provide inaccurate responses. Although several speech programs have lately been created, their capabilities are still constrained. Besides, AI-driven language learning technologies require a lot of training, which might be difficult for dialects or minority languages. As a result, learning materials for these languages may be biased or insufficient (De la Vall & Araya, 2023). AI language learning systems could also require assistance in order to comprehend or produce original or creative language, such as poems or literature. AI-based language learning techniques may fail to understand cultural and contextual subtleties of language

such as idioms and daily conversations. This can lead to misunderstandings or communication problems (De la Vall & Araya, 2023). An additional problem is the governance of data, which is concerned with the infrastructure of data organization, storage, management, usage, saving, and destruction. Regulations should include all the procedures necessary to maintain the core standards such as accessibility, availability, integrity, accuracy, reliability, consistency, transparency, and confidentiality (Owoc et al., 2019).

Educational costs: Another drawback of AI-powered language learning is that it will increase educational expenses and damage the equality of chances in education (Gips, DiMattia, & Gips 2004). Schools with limited budgets and economically disadvantaged students may struggle to afford a computer or tablet when it becomes one of the basic requirements to meet. It will result in unequal educational circumstances for such students and institutions. However, costly devices and software programs can become a major burden for both families and educational institutions (Lai & Kritsonis, 2006).

Lack of emotional intelligence: AI has just recently been employed as a tool beyond interaction with other humans; nonetheless, this technology should not completely replace instructors given that they provide more than mere data. AI applications may be unable to analyze and react properly to learners' emotions and particular learning styles, both of which are critical elements of good language instruction. Human instructors, on the other hand, may help their students develop critical social skills like empathy and communication abilities by analyzing their emotions and personal attitudes. Additionally, computers are incapable of dealing with unforeseen scenarios. The learning settings of foreign language learners are diverse and dynamic. Because of the limits of artificial intelligence, computer technology is unable to cope with unplanned learning challenges and respond to learners' questions as quickly as human teachers do (Lai & Kritsonis, 2006).

Insufficient technology knowledge: For the efficient and appropriate use of AI applications in and out of the classroom, both teachers and students must have basic knowledge of computer technology. If a student or a teacher is untrained in how to utilize computer technology, then s/he cannot use it (Lai & Kritsonis, 2006). Today, there are still teachers who do not have enough technological training to guide their students to learn computer and AI-supported language learning systems.

Ethical concerns: When using AI in language teaching and learning, language teachers should pay attention to particular considerations regarding

data privacy, security, transparency, and the ethical implications of collecting and analyzing learners' personal information and performance data. In particular, the issue of data protection is of great importance. Language learning is a highly individual act that should not be shared with chatbots whose server location is unknown, untrusted, or not compliant with the EU General Data Protection Regulation (Schmidt & Strasser, 2022).

6. Conclusion

The rising need for English language proficiency in the globalized world of today has underlined the importance of effective language learning and communication skills. As technology improves, AI is gaining popularity as potential assistance in the field of education, particularly language acquisition (Rusmiyanto et al., 2023). The areas and methods for integrating AI-powered tools in language teaching and learning have also evolved along with the development of technology. Recent advancements and innovations in technology have brought new requirements such as organization and management in the field of language teaching and learning. AI is increasingly being explored in the field of education as a potential tool to aid language acquisition and support the development of students' communication skills. AI promises customized, interactive and adaptive learning experiences tailored to the needs and preferences of each student. Thus, it plays an important role in improving the quality of language teaching and providing more efficient and personalized language learning.

In conclusion, the objective of this chapter was to discuss some AI-powered language learning tools and analyze the benefits and drawbacks of using these programs and computer technology in the field of current English language teaching. AI-based language learning tools offer a range of facilities such as saving time, genuine content, easily accessible materials, immediate feedback, individualized learning plans, and engaging activities. However, there are also drawbacks to employing AI-based language learning technologies, such as the necessity for additional human interaction, the difficulty of understanding the complexities of language depending on culture and context, and the requirement for a large amount of data to train AI programs. It is critical to address these issues and constraints while developing AI-based language learning systems so that users may access information more reliably and efficiently. AI-based language learning systems have the potential to evolve into

even more efficient and productive tools for language learning and teaching if these concerns are addressed properly.

References

Ahmad, J., Farman, H., & Jan, Z. (2019). Deep learning methods and applications. In A. C. Kaushik, A. Kumar, S. Bharadwaj, R. Chaudhary & S. Sahi (Eds.), *Bioinformatics techniques for drug discovery* (pp.31-42). Berlin, Germany: Springer Science and Business Media LLC.

Ahmadi, D. M. R. (2018). The use of technology in English language learning: A literature review. *International Journal of Research in English Education*, 3(2), 115-125.

Alhawiti, K. M. (2014). Natural language processing and its use in education. *International Journal of Advanced Computer Science and Applications*, 5(12), 72-90.

Alizadeh, M. (2019). Virtual reality in the language classroom: Theory and practice. *Call-Ej*, 20(3), 21-30.

Bird, S., Klein, E., & Loper, E. (2009). *Natural language processing with Python: Analyzing text with the natural language toolkit.* Sebastapol: O'Reilly Media.

Brown, J. D., & Lee, Y. (2018). Intelligent tutoring systems for language learning. In N. Arnold & L. Ducate (Eds.), *Present and future promises of CALL: From theory and research to new directions in language teaching* (pp. 116-134). Amsterdam: John Benjamins Publishing Company.

Burns, H. L. & Capps, C. G. (2013). Foundations of intelligent tutoring systems: An introduction. In: Polson, M. C. & Richardson, J. J. (Eds.), *Foundations of intelligent tutoring systems* (pp. 1-19). Hillsdale, NJ: Lawrence Erlbaum.

Chen, X., Zou, D., Xie, H., & Cheng, G. (2021). Twenty years of personalized language learning. *Educational Technology & Society*, 24(1), 205-222.

Civelek, Ö. (2003). Yapay Zekâ-Ömer Civelek'le Söyleşi. *TMH-Türkiye Mühendislik Haberleri*, *423*(1), 40-50.

De la Vall, R. R. F., & Araya, F. G. (2023). Exploring the benefits and challenges of AI-language learning tools. *Int. J. Soc. Sci. Humanit. Invent, 10*, 7569-7576.

Dizon, G. (2020). Evaluating intelligent personal assistants for L2 listening and speaking development. *Language Learning & Technology, 24*(1), 16-26.

Gips, A., DiMattia, P., & Gips, J. (2004) The effect of assistive technology on educational costs: Two case studies. In K. Miesenberger, J. Klaus, W. Zagler, & D. Burger (Eds.), *Computers helping people with special needs* (pp. 206-213). Berlin: Springer.

Giroir, S., Grimaldo, L. R., Vaughn, S., & Roberts, G. (2015). Interactive read-alouds for English learners in the elementary grades. *The Reading Teacher*, *68*(8), 639-648.

Gordon, B. M. (2011). *Artificial intelligence: Approaches, tools and applications*. New York: Nova Science Publishers, Inc.

Guo, Y. (2021). A study of english informative teaching strategies based on deep learning. *Journal of Mathematics*, 2021, 1-8.

Imperial, J. M., & Ong, E. (2021). A simple post-processing technique for improving readability assessment of texts using word mover's distance. arXiv preprint arXiv:2103.07277.

Jian, L. (2022). Construction and application of iWrite Artificial Intelligence Evaluation System for College English Writing. *Security and Communication Networks*, 2022, 1-8.

Junaidi, J., Hamuddin, B., Julita, K., Rahman, F., & Derin, T. (2020). Artificial intelligence in EFL context: rising students' speaking performance with Lyra virtual assistance. *International Journal of Advanced Science and Technology Rehabilitation*, 29(5), 6735-6741.

Jurafsky, D., & Martin, J. H. (2009). *Speech and language processing: An introduction to natural language processing, computational linguistics, and speech recognition* (2nd ed.). Upper Saddle River, NJ: Prentice Hall.

Kang, H. (2022). Effects of artificial intelligence (AI) and native speaker interlocutors on ESL learners' speaking ability and affective aspects. *Multimedia-Assisted Language Learning*, 25(2), 9-43.

Kim, N. Y. (2016). Effects of voice chat on EFL learners' speaking ability according to proficiency levels. *Multimedia-Assisted Language Learning*, 19(4), 63-88.

Krizhevsky, A., Sutskever, I., & Hinton, G. E. (2017). ImageNet classification with deep convolutional neural networks. *Communications of the ACM*, *60*(6), 84-90.

Kessler, G. (2018). Technology and the future of language teaching. *Foreign Language Annals*, *51*(1), 205-218.

Kushik, N., Yevtushenko, N., & Evtushenko, T. (2020). Novel machine learning technique for predicting teaching strategy effectiveness. *International*

Journal of Information Management, 53, 101488. https://doi.org/10.1016/j. ijinfomgt.2016.02.006

Lai, C. C., & Kritsonis, W. A. (2006). The advantages and disadvantages of computer technology in second language acquisition. *National Journal For Publishing And Mentoring Doctoral Student Research*, *3*(1), 1-6.

Lin, C. J., & Mubarok, H. (2021). Learning analytics for investigating the mind map-guided AI chatbot approach in an EFL flipped speaking classroom. *Educational Technology & Society*, 24(4), 16-35.

Litman, D. (2016). Natural language processing for enhancing teaching and learning. *Proceedings of the AAAI Conference on Artificial Intelligence*, 30(1). https://ojs.aaai.org/index.php/AAAI/article/view/9879

Luo, M., & Cheng, L. (2020, July). Exploration of interactive foreign language teaching mode based on artificial intelligence. *2020 International Conference on Computer Vision, Image and Deep Learning (CVIDL)* (pp. 285-290). IEEE. https://doi.org/10.1109/CVIDL51233.2020.00-84

Ma, L. (2021). An immersive context teaching method for college English based on artificial intelligence and machine learning in virtual reality technology. *Mobile Information Systems, 2021,* 1-7.

Meurers, D. (2012). Natural language processing and language learning. In C. A. Chapelle (Ed.), *Encyclopedia of applied linguistics*, (pp. 4193–4205). Oxford: Wiley.

Meurers, D. (2015). Learner corpora and natural language processing. In Granger, S., Gilquin, G., & F. Meunier (Eds), *The Cambridge handbook of learner corpus research*, (pp. 537–566). England: Cambridge University Press.

Mitchell, C. M., Evanini, K., & Zechner, K. (2014). A trialogue-based spoken dialogue system for assessment of English language learners. In *Proceedings of the International Workshop on Spoken Dialogue Systems*. Napa: CA.

Mohd, C. K. N. C. K., & Shahbodin, F. (2015). Personalized learning environment (PLE) experience in the twenty-first century: Review of the literature. In A. Abraham, A. K. Muda, & Y. H. Choo (Eds.), *Pattern analysis, intelligent security and the internet of things* (pp. 179-192). Cham: Springer.

Muggleton, S. (2014). Alan Turing and the development of artificial intelligence. *AI Communications*, 27(1), 3-10.

Murphy, R. F. (2019). Artificial intelligence applications to support K-12 teachers and teaching. *Perspective*, *10*, 1-20.

Nadkarni, P. M., Ohno-Machado, L., & Chapman, W. W. (2011). Natural language processing: an introduction. *Journal of the American Medical Informatics Association*, 18(5), 544-551.

Nazari, N., Shabbir, M. S., & Setiawan, R. (2021). Application of artificial intelligence powered digital writing assistant in higher education: randomized controlled trial. *Heliyon*, *7*(5), 1-9.

Nilsson, N. J. (2014). *Artificial intelligence: A new synthesis*. United States: Morgan Kaufmann.

Nobles, S., & Paganucci, L. (2015). Do digital writing tools deliver? Student perceptions of writing quality using digital tools and online writing environments. *Computers and Composition*, *38*(*1*), 16-31.

Owoc, M. L., Sawicka, A., & Weichbroth, P. (2019, August). Artificial intelligence technologies in education: benefits, challenges and strategies of implementation. In *IFIP International Workshop on Artificial Intelligence for Knowledge Management* (pp. 37-58). Cham: Springer International Publishing.

Petersen, S. E., & Ostendorf, M. (2009). A machine learning approach to reading level assessment. *Computer Speech and Language*, 23(1), 89–106.

Pokrivcakova, S. (2019). Preparing teachers for the application of AI-powered technologies in foreign language education. *Journal of Language and Cultural Education*, 7(3), 135-153.

Porter, B., & Grippa, F. (2020). A platform for AI-enabled real-time feedback to promote digital collaboration. *Sustainability*, *12*(24), 4-13.

Ruan, S., Jiang, L., Xu, Q., Liu, Z., Davis, G. M., Brunskill, E., & Landay, J. A. (2021). EnglishBot: An AI-powered conversational system for second language learning. In *26th International Conference on Intelligent User Interfaces* (pp. 434–444). https://doi.org/10.1145/3397481.3450648

Rusmiyanto, R., Huriati, N., Fitriani, N., Tyas, N. K., Rofi'i, A., & Sari, M. N. (2023). The role of artificial intelligence (AI) in Developing English language learner's communication skills. *Journal on Education*, *6*(1), 750-757.

Russell, S., & Norvig, P. (2016). *Artificial intelligence: A modern approach*. N.J: Prentice Hall.

Schmidt, T., & Strasser, T. (2022). Artificial intelligence in foreign language learning and teaching: a CALL for intelligent practice. *Anglistik: International Journal of English Studies*, *33*(1), 165-184.

Srinivasan, V., & Murthy, H. (2021). Improving reading and comprehension in K-12: Evidence from a large-scale AI technology intervention in India. *Computers and Education: Artificial Intelligence*, 2, 1-22.

Van den Branden, K. (2006). *Task-based language education*. UK: Cambridge University Press.

Warschauer, M. (1997). Comparing face-to-face and electronic discussion in the second language classroom. *CALICO Journal*, *13*(2&3), 7-25.

Widyana, A., Jerusalem, M. I., & Yumechas, B. (2022, December). The application of text-to-speech technology in language learning. In *Sixth International Conference on Language, Literature, Culture, and Education (ICOLLITE 2022)* (pp. 85-92). Indonesia: Atlantis Press.

Winans, M. D. (2021). Grammarly's tone detector: Helping students write pragmatically appropriate texts. *Relc Journal*, *52*(2), 348-352.

Wolfe, C. R., & Cedillos, E. M. (2015). E- communications, platforms and e-learning. *International Encyclopedia of the Social & Behavioral Sciences: Second Edition*, 6, 895–902.

Yang, S. H. (2007). Artificial intelligence for integrating English oral practice and writing skills. *Sino-US English Teaching*, 4(4), 1-6.

Yanhua, Z. (2020, June). The application of artificial intelligence in foreign language teaching. In 2020 International Conference on Artificial Intelligence and Education (ICAIE) (pp. 40-42). IEEE.

Zhao, X., & Yang, Y. (2021, March). A study on the application of blended teaching to English reading course under the background of artificial intelligence. In *IOP Conference Series: Earth and Environmental Science*, *693*(1), 012019. IOP Publishing.

Zhao, X. (2022). Leveraging artificial intelligence (AI) technology for English writing: Introducing Wordtune as a digital writing assistant for EFL writers. *RELC Journal*, 0(0),1-5. https://doi.org/10.1177/00336882221094089

Zhao, Y., & Liu, S. (2022). A deep learning model with virtual reality technology for second language acquisition. *Mobile Information Systems*, 2022, 1-7.

CHAPTER II

AN EXAMINATION OF THE COPING WAYS WITH PRESCHOOL CHILDREN'S PROBLEM BEHAVIORS ACCORDING TO THE VARIABLES RELATED TO THE CHILD AND THE MOTHER

Aylin MENTİŞ¹ & Belgin LİMAN²

¹(Assoc. Prof. Dr.), Ege University, Education Faculty, İzmir, TURKEY. E-mail: aylinmentiskoksoy@gmail.com ORCID: 0000-0003-4549-0579

²(Asst. Prof.), Niğde Omer Halisdemir University, Niğde Zübeyde Hanım School of Health, Niğde, TURKEY E-mail: belgin.liman@gmail.com ORCID: 0000-0003-4965-2379

1. Introduction

In their first years of life, children gain the ability to observe and imitate, and their behavior is shaped accordingly. In this process, it is important for children to be in healthy adjustment with their environment. A healthy process is associated with a safe, positive, understanding, and loving environment and approaches (Yavuzer, 2008). Maladjustment with the environment can cause permanent behavioral problems in children. Problem behavior refers to the activities that significantly affect the development and learning of children, parents' and educators' teaching effectively and their socializing of children and that harm both others and the children (Kaner, 2007). Behavioral problems are situations that can lead to problems for children and others. Problem behavior refers to the repetitive behavior of the child that he or she should not exhibit even though he or she reached the competence not to do that behavior (Birkan,
2002). A behavior is considered a problem behavior based on the developmental period of the child, the severity of the symptoms, and how often they occur (Aydın, 2006; Weikart, 2009). 1998). The observed behavior problems differ from child to child, and behavioral and emotional problems can be seen at different rates by the age of the child (Dinnebeil et al., 2013; Le Compte, Okman&Sükan, 1979; Luczynski& Hanley, 2013). Ar1 et al. (1995) put forth that 59.5% of children aged 4-11 years had emotional and behavioral problems. Mild or severe problems were observed in 7% of the 3-year-old children, whereas the behavior of not obeying the rules was observed in 15% of them. However, these rates increase in older children (Ekşi, 1999). In their study on 5-6-year-old preschool children,Derman and Başal (2013) determined at least one or more behavioral problems in 60.6% of them. Another study conducted with children aged 3-6 revealed that teachers observed speech difficulties and disorders, stealing, learning difficulties, hyperactivity, and lack of appetite in childrenthe most (Sezer, 2006).

Children's behavioral problems are classified as externalizing and internalizing behaviors(Gardner & Shaw, 2008; Aunola& Nurmi, 2005; Gimpel& Holland, 2003; Özbey&Alisinanoğlu, 2009). Externalizing behavioral problems are described as disturbing anti-socialbehaviors such as excessive activity stemming from affective and behavioral controlweakness, disrupting ongoing activities, aggression, not obeying rules, and resistance, whereas internalizing behavioral problems are behaviors such as anxiety (worry, fear, uneasiness, depression, etc.), introversion and somatic complaints (Gardner & Shaw, 2008;Merrell, 2001; Özbey, 2009; Özbey&Alisinanoğlu, 2009). Externalizing and internalizingbehavioral problems are associated with biological and environmental factors and the childcharacter traits (Gardner & Shaw, 2008; Kwon, 2007). The family, which is the first social environment, has a significant influence on the formation of behavioral problems in children (Alisinanoğlu&Ulutaş, 2000; Ekinci, 2014). According to the studies, the social class of the family, economic situation, incompatible environmental conditions, family being a positive or negative model, the attitude of the family, family type, psychological disorder in any individual of the family, family conflicts, and divorce are among the familial factors causing behavioral problems in children. (Alisinanoğlu&Ulutaş, 2000; Ekinci, 2014; Doctroff& Arnold, 2004; Mcgee, Partridge, Williams, & Silva, 1991; Nelsen, Lott, &Glenn, 2002).In their studies on problem behaviors, Reid andCrisafulli (1990) and Stadelman, Perren, Wyl, and Klitzing (2007) put forth that factors such as disruptions, disagreements, violencein family life, and lack of healthy communication with the child may be the source of problem behaviors in children.It is emphasized that children of families with high family stress have more problem behaviors and that factors like depression, rigid attitude, and limited social support n the family assume a crucial role in the formation of problem behaviors (Abidin, 1990; Özdal, 2003; Hemmeter et al., 2006; Kwon, 2007; Yaşar-Ekici, 2014). Many stated that parenting attitudes may have very different impacts on children's behaviors (Anuola&Nurmi, 2005; Arı, 2005; Bronstein&Zlotnik, 2008; Dursun, 2010; Özbey&Alisinanoğlu, 2009; Yurdeşen, 2004). In families where parents are concerned about the child and corporal punishment is less, children exhibit fewer behavioral problems (Kerr, Lopez, Olson&Sameroff, 2004). Also, Coleman, and Karraker (2000) determined that mothers who consider themselves competent in their mothering skills use more effective coping methods when they encounter children's unwanted behaviors. The literaturestated that maternal education level is a crucial determinant of children's behavioral outcomes (Nagin& Tremblay, 2001), and as the education level of mothers increases, the psychosocial development and adjustment of children are positively affected. Studies showed that as the education level increases, the oppressive attitudes of parents toward children decrease and the level of democratic attitudes increases (Alpoğuz, 2014; Bornstein &Zlotnik, 2008; Özyürek, 2004).

Many of the problems seen in children at an early age continue in later years, and in the majority of children, the probability of these problems being permanent increases. Some behavioral disorders seen in childhood can continue as antisocial behaviors in adulthood (Tomblin, Zhang, Buckwalter,& Carts, 2000; Steiner &Karnik, 2005). These behavioral problems are more likely to integrate with the personality of the children and increase the probability of interpersonal failure, academic lag, and delinquency in the later years of life (Steiner &Karnik, 2005). Works done in the early years would affect children's later years positively and their adaptation to the environment they will be in (Kanlıkılıçer, 2005). While parenting is a worthwhile and rewarding endeavor, it is often stressful and difficult (Williamson & Johnston, 2019). In this process, positive parental behaviors on children's behavioral problems are very important (Mingebach, Kamp-Becker, Christiansen, & Weber, 2018). In this context, it is believed that a mother-centered examination of coping ways with undesirable behaviors is crucial in terms of revealing the findings regarding the person closest to children. In compliance with such understanding, the present study aimed toexamine mothers' coping ways with the problem behaviors of their child attending preschool according to thevariablesrelated to the child and the mother. The study sought responses to the questions below:

1. Do mothers' ways of coping with problem behaviors differ significantly by the gender of their children?

2. Do mothers' ways of coping with problem behaviors differ significantly by the number of their children?

3. Do mothers' ways of coping with problem behaviors differ significantly by their age?

4. Do mothers' ways of coping with problem behaviors differ significantly by their education level?

2. Method

Relational screening model, which aims to determine the presence and degree of change between two or more variables, was used in the study (Karasar, 2005).

2.1. Population and Sample

The study'spopulation consisted of mothers of children who were attending public preschools in Niğde province in the 2022-2023 academic year. The study's sample was made up of 193 mothers whose children were attendingseven preschools that were selected employing the random sampling method among the preschools in the city center of Niğde. In the evaluation phase, 55 mothers who had filled out the Problem Behavior Scale incorrectly or incompletely were excluded from the sample.

56% of the children included in the research were girls and 43% were boys. 17% of the participating mothers had one child, 56% had two children, 26% had three or more children. In addition, 03% of the mothers were within the age range of 25-30, 29% within the age range of 31-35, 31% within the age range of 36-40, and 26% in the age range of 41 and older.

Furthermore, 26% of the mothers were elementary and secondary school graduates, 22% had high school diploma, 13% had undergraduate degree, and 38% had Master's degree.

N	Ge	ender Mumber of Children Parents Maternal age Had		Number of Children Parents Had		Mot	her's	Educa	ation				
Participants	Girl	Boy	1 child	2 children	3 childrenand above	25-30 year-old	31-35 year-old	36-40 year-old	41 age and above	Elementary secondary school	High school	Associate degree	Undergraduate and above
193	109	84	33	109	51	9	56	60	51	51	43	25	74

Table1. Descriptive Statistics of the Participants

2.2. Data Collection Tools

The "General Information Form" and the "Problem Behavior Scale – Coping – Parents Form", developed by Kaner (2007), were used for data collection.

2.3. General Information Form

The General Information Form included information onthegender of the children participating in the study, the age of the mothers, the number of their children, and the mothers' education level.

2.3.1. Problem Behavior Scale-Coping-Parent Form: The 25-item Problem Behavior Scale-Coping-Parent Form (PBS-C-PF) developed by Kaner (2007) with three subscales determines the ways parents use to cope with their children's problem behaviors and the extent to which they use these ways.

2.3.1.1. Effective Coping: The Effective Coping (EC) subscale includes items pertaining the parents' ability to eliminate undesirable behaviors before they escalate and spread to other children. The highest score that can be achieved in this subscale is 33, and the lowest score is 0.

2.3.1.2. Negative Coping: The Negative Coping (NC) subscale includes items that aim to measure the degree to which parents use punitive and negative ways in coping with their child's problem behaviors. The highest score that can be achieved in this subscale is 30, and the lowest score is 0.

2.3.1.3. *Preventive Coping:* The Preventive Coping (PC)subscale includes four items pertaining parents' coping ways involving verbal and non-verbal signs that prevent the start of their child's unwanted behavior. The highest score that may be achieved in this subscale is 12, and the lowest score is 0. The response format of the four-point LikertPBS-C-PF is every day (3 points), several times a week (2 points), several times a month (1 point), and never (0). A high score on the EC and PC subscales of the PBS-C-PF indicates parents exhibiting positive behaviors, whereas a high score on the NC subscale indicates parents exhibiting negative behaviors upon coping with their children's problem behaviors. The internal consistency coefficients for the EC subscale are 0.71, 0.89 for the NC subscale, and 0.66 for the PC subscale. The internal consistency coefficients for the study Cronbach Alpha coefficients for subscales were .85, .95, .68 respectively.

2.4. Data Analysis

The collected data were analyzed via the SPSS 20.0 software. Upon analyzing the differences in variables, Shapiro-Wilk and Kolmogorov-Smirnov tests were performed to determine the homogeneity of distribution.

 Table 2. Normality Test Results Regarding
 PBS-C-PFSub-Dimensions of

 Children in the Study

	Kolmogo	orov-Smi	rnova		
Sub-Dimensions	Statistic	df	Sig.	Skewness	Kurtosis
Effective Coping	.083	.193	.002	466	469
Negative Coping	.255	.193	.000	-1.878	2.347
Preventive Coping	.118	.193	.000	542	358

The distribution of the scores of the subscales of the PBS-C-PF was determined not normal (p<.05). In the EC subscale, skewness was calculated as -466 and kurtosis as -469. In the NC subscale, skewness was calculated as -1.878 and kurtosis as 2.347. Furthermore, in the PC subscale, skewness was calculated as -542 and kurtosis as -358. These findings revealed that the scale subscale scores did not have a normal distribution. After this, the Mann-Whitney U test was performed to detect whether mothers' coping ways with problem behaviors differed by their child's sex, the Kruskal-Wallis H test was performed to detect whether mothers' coping ways with problem behaviors differed by the number of children they had and to their age, and, finally, the Bonferroni-Correction

Kruskal Wallis H test was performed to detect whether mothers' coping ways with problem behaviors differed by their education level.

3. Findings

In this section, the obtained data were analyzed and general findings are presented in line with the study questions.

Dimension	Gender	Ν	Mean Ranks	U	р
Effective Coping	Girl	109	93.90	4240.500	.37
	Boy	84	101.02		
Negative Coping	Girl	109	105.33	3669.500	. 01*
	Boy	84	86.18		
Preventive Coping	Girl	109	100.78	4166.000	. 28
	Boy	84	92.10		

Table 3. Mann-Whitney U TestResults of the PBS-C-PFby the gender of the participating mothers' child

*p<.05

There was no significant difference between children's gender and the mean scores of the EC subscale (U=4240.500, p>.05) and PC subscale (U=4166.000, p>.05). Nonetheless, there was a significant difference between children's gender and the mean scores of NC subscale (U=3669.500, p<.05). Accordingly, the study findings revealed that while coping with problem behaviors, mothers used negative coping methods more with the girls compared to the boys.

Table 4. Kruskal-Wallis H Test results of the PBS-C-PFby the number of children

Dimension	Number of Children	N	Mean Ranks	X ² (sd=3)	р
Effective Coping	1	33	91.64	1.593	.45
	2	109	94.77		
	3 and more	51	105.24		
Negative Coping	1	33	97.53	1.354	.50
	2	109	100.38		
	3and more	51	89.43		
Preventive Coping	1	33	82.15	2.865	.23
	2	109	99.73		
	3 and more	51	100.76		

There was no significant difference between the number of children and the mean ranks of the EC subscale ($X^2=1.593$, p=.45>.05), the mean ranks of the NC subscale ($X^2=1.354$, p=.50>.05), and the mean ranks of PC subscale ($X^2=2.865$, p=.23>.05).

Dimension	Age	N	Mean Ranks	X ² (sd=3)	р	Different Groups
Effective Coping	25-30	6	115.58	9.028	.06	
	31-35	56	87.69			
	36-40	60	91.03			
	41 and above	51	115.50			
Negative Coping	25-30	6	114.17	1.259	.86	
	31-35	56	98.80			
	36-40	60	93.08			
	41 and above	51	95.10			
Preventive Coping	25-30	6	86.83	10.390	.03*	3<4
	31-35	56	90.33			
	36-40	60	96.56			
	41 and above	51	115.44			

Table 5. Kruskal-Wallis H Test results of the PBS-C-PFby the mother's age

*p<.05

No significant difference existed between the mothers' age and the mean ranks of the EC subscale ($X^2=9.028$, p=.06 >.05) and the mean ranks of the NC subscale ($X^2=1.259$, p=.86>.05). Nonetheless, a significant difference existed between the mothers' age and the mean ranks of PC subscale ($X^2=10.390$, p=.03<.05). This significant difference is due to the fact that the PC mean ranks of mothers aged 41 and over years (115.44) is higher than the PC mean ranks of mothers aged 36-40 years (96.56). This finding indicates that the mothers' age is an important variable in the PC level.

Dimension	Mother's Education	Ν	Mean	X ²	р
			Ranks	(sd=3)	
Effective Coping	Elementary middle school	51	98.36	7.578	.05*
	High school	43	79.24		
	Associate Degree	25	91.74		
	Undergraduate and above	74	108.16		
Negative Coping	Elementary middle school	51	99.69	6.148	.10
	High school	43	111.66		
	Associate Degree	25	99.34		
	Undergraduate and above	74	85.84		
Preventive Coping	Elementary middle school	51	87.43	2.285	.51
	High school	43	97.48		
	Associate Degree	25	103.78		
	Undergraduate and above	74	101.03		

Table 6. Kruskal-Wallis H Test results of the PBS-C-PFby the mother's education level

*p<.05

No significant difference existed between children's education level and the mean scores of the NC subscale ($X^2=6.148$, p=.10>.05) and PC subscale PC subscale ($X^2=2.285$, p=.51>.05). However, a significant difference existed between children's gender and the mean scores of EF subscale ($X^2=7.578$, p=.05).

4. Discussion and Conclusion

It was concluded that no significant difference by children's gender at the effective and preventive coping levels of the PBS-C-PF existed and a significant difference by children's gender at negative coping level of the PBS-C-PF existed.

In the literature, it is likely to encounter studies that do not overlap with this result. Contrary to this finding, a socio-economic study of different mothers conducted by Vivar, Redhead and Wake-up (2013) concluded that the gender variable did not create a significant differentiation between the effective, negative and preventive coping scores averages. The literature indicates that men are more problematic than girls (Miller, Koplewicz, & Klein, 1997; Kanlıkılıçer, 2005; Uyanik Balat, Shimşek & Akman, 2008; Özbey and Alisinanoğlu, 2009). Leadbeater and Bishop (1994) indicated that boys show more problematic behavior than girls; Kwon (2007) found that mothers with boys are more stressed and more problem-behavior in stressed families; Bennett-Murphy et al. (2007) observed that girls were more conservative and sensitive than boys; anger was a feeling specific to boys; and fear and sadness were a feeling specific to girls. In contrast, Bao et al. (2016) concluded that gender did not affect children's behavioral problems, and Alisinanoğlu and Özbey (2009) found that their inclination and selfish behavior did not vary by gender. According to Lansford (2022), this difference can be influenced by the demographic characteristics of the parent and the child, as it may be due to inter-cultural characteristics such as ethnic origin and religion. However, the gender and judgment of the parents can influence the situation. Hasting and McGrill (2008) pointed out that families respond differently to the problem behavior of boys and girls. Traditionally, parents can ignore unwanted behavior in boys, while girls can show more clearly that they do not approve of such behavior.

The study found that the child number variable did not significantly differentiate the average of effective, negative, and preventive response scores on the Problem Behavior Scale. Thesefindings coincide with the findings of Kaner's (2007) research. In his study, Kaner (2007) determined that the number of children that parents have has no statistical significance in dealing with children's problem behavior. Looking at the literature, it has been found that the number of children that parents have can influence their attitudes (Yavuzer, 1990). The researchers, Güneysu and Bilir (1988) and Listak (2007), found that the rise in the number of siblings caused a decrease in the democratic attitudes of parents and fathers; Urban (2007) found that behavioral problems differed from brotherhood in preschool years; that single children were more compatible than children with two siblings; that children with three or more siblings were more socially anxious than single children; and that two brothers showed more problematic behavior than single kids. In addition, Mangaret al. (1995) noted that there was a significant relationship between parents' educational level and socio-economic level and the child's status of abuse.

The number of children in the home can be a factor affecting child behavior. The majority of the mothers participating in the present study had two children. This suggests that having only two children reduces the likelihood of problem behaviors in children. Indeed, ErGazeloğlu (2000) found that the only child of families or children with two siblings is more successful in the psycho-social development scale.

The study found that no significant difference existed in the level of negative and preventive coping with the age of mothers; there was a significant differentiation in the levels of effective coping. Mothers aged 41 and over were found to be more inclined to use preventive treatment than mothers aged 36 to 40 to deal with problematic behavior. It is believed that as the mothers' age increases, their experience in raising children increases, and this has an effect on raising their children and solving their children's problems. The fact that young mothers have less knowledge and skills about raising children can cause them to be more impatient and have conflicts with their children (Özyürek & Tezel Şahin, 2010). In fact, Kaya (2010) determined in her study that mothers become more tolerant towards their children as they get older. Again, Tahiroğlu vd. (2009) found that the frequency of shouting, insulting, and pushing decreases with age.

The study concluded that there was no significant difference in the level of negative and preventive coping of mothers with the educational level variable, while there was a significant differentiation in the degree of effective coping. Bilir, Arı, Baykoç-Dönmez, and Güneysu (1991) determined that mothers who had elementary school diploma and who were housewivesused more physical punishment with their children and these children had more behavioral problems. Similarly, Bornstein &Zlotnik (2008) concluded that mothers with low education levels were more likely to use physical punishment to discipline their children, whereas mothers with high education levels adapted a more child-centered and supportive parenting style. Tazeoğlu (2011) that parents with higher education tend to use appropriate disciplinary methods, while parents with low educational levels tend to resort to physical violence as a discipline method. Another study (Badahdah and Le, 2016) examined the impact of parents' educational level on the Alabama Parental Behavior Scale. Parents were divided into two groups: parents with an undergraduate degree (42.5%) and parents with a lower university degree (57.5%). The result of the study was that parents with a bachelor's degree or higher were less inclined to use sub-dimensions of punishment and inconsistent discipline than parents with lower educational levels than the bachelor. In a similar study on the subject, he found that punitive behavior decreases as the level of education increases (Kaya and Buğa, 2021). Mothers' educational levels are an important determinant of the behavioral outcomes of the children (Nagin& Tremblay, 2001), and children's psychosocial development and adjustment are positively affected as mothers' education levels increase. Studies showed that as the education level of mothers increases, their oppressive attitudes toward children decrease and their democratic attitudes levels increase (Alpoğuz, 2014; Bornstein & Zlotnik, 2008; Özyürek, 2004). A study conducted by Köyceğiz and Özbey (2018) determined that mothers with high education levels had high conflict resolution skills. Coleman & Karraker

(2000) found that education level is a variable that predicts mothers' selfefficacy beliefs. Kaner (2007) stated that as education levels increase, parents can cope with unwanted behaviors more effectively and mothers who consider themselves competent in their mothering skills use more effective ways of coping when they encounter their children's problem behaviors (Alpoğuz, 2014; Coleman & Karraker, 2000). With the increase in the importance given to family education in recent years, it is believed that there are positive developments in informing and supporting the family. It is also believed that this has an effect on mothers exhibiting more positive behaviors while coping with their children's undesirable behaviors. As a matter of fact, a study carried out in Turkey in 2008 reported that physical punishment is less common if mothers have undergraduate degree, that parents from disadvantaged pasts and attending family education courses do not beat their children frequently and learn how to communicate with them (UNICEF, 2008).

5. Recommendations

In compliance with these results, the following recommendations are presented:

1. Since the fact that this study was conducted with 193 mothers who had children attending seven different public preschools in Niğde is a limitation of the study, it is believed that it would be more beneficial to work with a larger sample group in the future studies for generalization purposes.

2. Trainings and programs can be planned for families to help them understand the prominence of supporting their children's socio-emotional development.

3. In order for mothers to learn coping ways for their children's problem behaviors, it can be ensured that they receive support from centers that can direct the family, such as parent schools, psychological guidance and counseling centers, and family counseling centers.

4. The personality of the mother, her competence in raising children, and her communication with her child are also important in shaping the child's behavior. For this reason, parent education programs based on relationshipfocused and behavioral approaches can be developed for the intervention of children's behavioral problems.

5. It is also believed that it would be appropriate to conduct the study with different participants (fathers, other family members, caregivers, etc.) and to plan similar studies using different research methods.

References

Abidin, K. (1990). Assessment of child physical and sexual abuse offenders. Milner, J.S., Murphy, W.D. *Family Relations*, 40, 478-488.

Alisinanoğlu, F. and Özbey, S. (2009). Anaokuluveanasınıfidavranışölçeği'ningeçerlilikvegüvenirlikçalışması. *MeslekiEğitimFakültesiDergisi*, 4(1), 173-198.

Alisinanoğlu, F. &Ulutaş İ. (2000). Çocuklardakaygıvebunuetkileyenetmenler. *MilliEğitimDergisi*, 145, s. 5-9.

Alpoğuz, D. U. (2014). *Algılananana-baba tutumlarınınilköğretimöğrencilerininokumayayöneliktutumlarınaveTürkçedersiakademikbaşarılarınaetkisi*. (Yayınlanmamışyükseklisanstezi). AhiEvranÜniversitesi, Kırşehir.

Arı, R. (2005). Gelişimveöğrenme. 2. Baskı, Ankara: Nobel YayınDağıtım

Arı, M., Bayhan, P. & Artan, İ. (1995). *Farklıana-baba tutumlarının 4-11 yaşgrubuçocuklarındagörülen problem durumlarınaetkisininaraştırılması*, 10. YA-PA OkulöncesiEğitimiveYaygınlaştırılmasıSemineri, ss.23-38.

Aunola, K., &Nurmi, J. E. (2005). The role of parenting styles in children's problem behavior. *Child Development*, 76(6), 1144-1159.

Aydın, A. (2006). SınıfYönetimi. Ankara: TekAğaç.

Bao, P., Jing, J., Jin, Y., Hu, X., Liu, B., & Hu, M. (2016). Trajectories and the influencing factors of behavior problems in preschool children: A longitudinal study in Guangzhou, China. *BMC Psychiatry*, 16(1), 1-10.

Bennett Murphy, L. M., Laurie-Rose, C., Brinkman, T. M., & McNamara, K. A., (2007). Sustained Attention and Social Competence in Typical Developing Preschool-Aged Children. *Early Child Development and Care*, 177 (2), 133-149.

Bilir, Ş., Arı, M., Baykoç-Dönmez, N. &Güneysu, S., (1991). 4- 12 yaşlarıarasında 16.100 çocuktaörselenmedurumlarıileilgilibirinceleme. *Çocukİstismarıveİhmali.* (45-55). Ankara: Gözde Repro Ofset.

Bronstein, M. H., &Zlotnik, D. (2008). Parenting styles and their effects. M. M. HaithveJ.B.Benson (Ed.), *Infant and Early Childhood Development*, 496-509.

Büyüköztürk, Ş. (2003). *SosyalBilimlerIçin Veri Analizi El Kitabı*. (3. Baskı). (142-148). Ankara: PegemYayıncılık.

Coleman, P.K., &Karraker, K.H. (2000) Parenting self-efficacy among mothers of school-age children: conceptualization, measurement and correlates. *Family Relations*, 49, 5-11.

Derman, M. &Başal, H. A. (2013). Okulöncesiçocuklarındagözlen endavranışproblemleriileailelerininanne-baba tutumlarıarasındakiilişki. *AmasyaÜniversitesiEğitimFakültesiDergisi*, 2(1), 115-144. Dinnebel, L. A., Sawyer, B. E., Logan, J., Dynia, J. M., Cancio, E., & Justice, L. M. (2013). Influences on the congruence between parents' and teachers' ratings of young children's social skills and problem behaviors. *Early Childhood Research Quarterly*, 28(1), 144-152.

Doctoroff, G. L., & Arnold, D. H. (2004). Brief report parent-rated externalizing behavior in preschoolers: the predictive utility of structured interviews, teacher reports, and classroom observations. *Journal of Clinical Child and Adolescent Psychology*. 33(4), 813-818.

Dursun, A. (2010). *Okulöncesidönemdekiçocuklarındavranışproblemleri*yleanne-baba tutumlarıarasındakiilişkininincelenmesi. (Yayınlanmamışyükseklisanstezi). DokuzEylülÜniversitesiEğitimBilimleriEnstitüsü, İzmir.

Ekşi, A. (1999). ÇocuğunRuhsalVeBilişselGelişimDönemleriveDönemlereÖzgüsorunları, Ben Hasta Değilim. Ed. AyselEkşi, İstanbul: Nobel Tıp-Kitabevi.

ErGazeloğlu, C. (2000). İlkokuldördüncüsiniförencilerininpsikososyalgelişimine*ana baba tutumununetkisininincelenmesi*. (Yayımlanmamışyükseklisanstezi). HacettepeÜniversitesi, Ankara.

Ertürk Kara, G. H. & Gürgen, F. (2016). 48-72 aylıkçocuklarındavranışsorunlarınınçeşitlideğişkenleraçısındanincelenmesi. *International Journal of Social Sciences and Education Research*, 2(4), 1207-1216.

Gardner, F., & Shaw, D.S. (2008). *Behavioral Problems of Infancy* and Preschool Children (0–5). InRutter, M., Bishop, D., Pine, D., Scott, S., Stevenson, Taylor, E. & Thapar, A. (Eds), Rutter's Child and Adolescent Psychiatry, 5th Edition (pp. 882-893). Oxford: Blackwell Publishing.

Gimpel, G. A., & Holland M. L. (2003). *Emotional and behavioral problems of young children: Effective interventions*. New York: Guilford Press

Güneysu, S. &Bilir, Ş. (1991). Üniversitegençlerininkendilerinikabuldüzeyinealgılanananne baba tutumlarınınetkisi. Aileyazıları. Ankara: T.C. Başbakanlık Aile Araştırma Kurumu Yayınları.

Hastings, P.D., &McGrill, I.D., (2008). Special section: emotion socialization in preschoolers. Parasympathetic regulation and parental socialization of emotion: biopsychosocial processes of adjustment in preschoolers. *Social Development*, 17(2), 211-238.

Hemmeter, M. L., Ostrosky, M., & Fox, L., (2006). Social and Emotional Foundations for Early Learning: A Conceptual Model for Intervention. *School Psychology Review*, 35(4),583-601.

Işık, E. (2021). Erkençocukluktagörülendavranışproblemlerininçeşitlideğişkenleraçısındanincelenmesi. *UludağÜniversitesi Fen-Edebiyat-FakültesiSosyalBilimlerDergisi*, 22(40), 183-226. Kaner, S. (2007). Öğretmenlerin ve anne-babaların öz-yetkinlikinançları, tükenmişlikalgılarıveçocukların problem davranışları.Ankara ÜniversitesiBilimselAraştırmaProjesiRaporları.

Web:http://acikarsiv.ankara.edu.tr/browse/5356/6003.pdf?show. ErişiTar-ihi: 28-12-2021.

Kanlıkılıçer, P. (2005). *Okulöncesidavranışsorunlarıtaramaölçeği: geçerlikvegüvenirlikçalışması*. (Yükseklisanstezi). MarmaraÜniversitesiEğitimBilimleriEnstitüsüOkulÖncesiAnabilimDalı, İstanbul.

Karasar, N. (2005). *BilimselAraştırmaYöntemi*, Nobel YayınDağıtım, Ankara.

Kaya,A.(2010). İlköğretimöğrencilerininanne-babalarınınçocukyetiştirmetutumlarınınkişiliközelliklerine gore değişkenliğininincelenmesi. (Yayınlanmamışyükseklisanstezi). MaltepeÜniversitesiSosyalBilimlerEnstitüsü, İstanbul.

Kaya, A G., Buğa, A. (2021). Anne BabalarınEbeveynDavranışlarınınveEvlilikDoyumlarınınİncelenmesi. SosyalPolitikaÇalışmalarıDergisi, 21(51), 371-410.

Kerr, D.C.R., Lopez, N. L., Olson, S. L., &Sameroff, A. J. (2004). Parental disipline and externalizing behavior problems in early childhood: Theroles of moral regulation and childgender. *J Abnorm Child Psychol.* 32(4), 369-83.

Köyceğiz, M. &Özbey, S. (2018). Okulöncesidönemçocuğuolanebeveynlerinçatışmaeğilimleriileçocuklarınınsosyalbecerilerive problem davranışlarıarasındakiilişkininincelenmesi. *UluslararasıSosyalAraştırmalarDergisi*, 11(55), 655-669.

Kwon, J.Y., (2007). The relationship between parenting stress, parental intelligence and child behavior problems in a study of korean preschool mothers. *Early Child Development and Care*. 177(5), 449-460.

Lansford, J.E. (2022), Annual Research Review: Cross-cultural similarities and differences in parenting. J Child Psychol Psychiatr, 63: 466-479.

Le Compte, G.,Okman, G., &Sükan, Z. (1979). *ÇocuğunuzveSiz: AnababayaKılavuz*. Editör: SelçukÖzgediz, İstanbul: BoğaziçiÜniversitesiYayınları.

Luczynsk, K. C., & Hanley, G. P. (2013). Prevention of problem behavior by teaching functional communication and self control skills to preschoolers. *Journal of Applied Behavior Analysis*, 46(2), 355-368.

Maglica, T., Ercegovac, I. R., &Ljubetić, M. (2020). Mindful parenting and behavioral problems in preschool children. *Hrvatska Revija Za Rehabilitac-ijskaIstrazivanja*, 56(1), 44-57.

Mcgee R, Partridge F, Williams S., & Silva P, A. (1991). A twelve year follow-up of preschool hyperactive children. J AmAcad. *Child Adolescent Psychiatry*, 30(2), 224-32.

Merrell, K.W. (2001). *Helping Students Overcome Depression and Anxiety: A Practical Guide*, (4. Edition). New York: Guilford Pres.

Miller,L.S., Koplewicz, H.S., & Klein, R.G. (1997) Teacher rating of hyperactivity, inattention and conduct problems in preschoolers. *Journal of Abnormal Child Psychology*, 25 (2), 113.

Mingebach, T., Kamp-Becker, I., Christiansen, H., & Weber, L. (2018). Meta-meta-analysis on the effectiveness of parent-based interventions for the treatment of child externalizing behavior problems. *Plos One*, 13(9), 1-21.

Nagin, D. S., & Tremblay, R. E. (2001). Analyzing developmental trajectories of distinct but related behaviors: A group-based method. *Psychological Methods*, 6(1), 18–34.

Nelsen J, Lott L., & Glenn S. (2002). *Çocukeğitimindea'danz'yepozitifdisiplin. 1. Baskı*.Ersin M. çevirieditörü. İstanbul: Hayat YayıncılıkİletişimEğitimHizmetleriveTicaret Ltd. Şt.

Özbey S. (2009). AnaokuluveAnasınıfiDavranışÖlçeği'nin (Pkbs-2) geçerlikgüvenirlikçalışmasıvedestekleyicieğitimprogramınınetkisininincelenmesi. (Yayınlanmamışdoktoratezi). GaziÜniversitesiEğitimBilimleriEnstitüsüÇocuk-GelişimiveEğitimi, Ankara.

Özbey, S. &Alisinanoğlu, F. (2009). A study on problem behaviours of children who attending public early childhood education institution. *The Journal of International Social Research*, 2 (6), 493-517.

Özdal, F.(2003). İlköğretimdörtvebeşincisınıfadevameden, anne-babasıileyaşayanve baba yoksunuolançocuklarınkaygıdüzeylerininincelenmesi. (Yayınlanmamışyükseklisanstezi). Ankara Üniversitesi Fen BilimleriEnstitüsü, Ankara.

Özyürek, A. (2004). Kırsalbölgeveşehirmerkezindeyaşayan 5-6 yaşgrubuçocuğasahianne-babalarınçocukyetiştirmetutumlarınınincelenmesi. (Yayınlanmamışyükseklisanstezi). GaziÜniversitesiEğitimBilimleriEnstitüsü, Ankara.

Özyürek, A. & Tezel Şahin, F. (2010). *Anne-baba OlmakveAnne BabalarınÇocukYetiştirmeTutumları*.T. Güler (Ed.). Anne Baba Eğitimi (ss. 35-49). Ankara: PegemAkademi.

Poulou, M. S. (2015). Emotional and behavioural difficulties in preschool. *Journal of Child and Family Studies*, 24(2), 225-236.

Reid, W.J., & Crisafulli, A.(1990). Marital discord and child behavior problems: A meta-analysis. *Journal of Abnormal Child Psychology*. 18(1),105-117.

Sezer,Ö.(2006). Okulöncesidönemdebulunançocuklardasıkrastlananuyumvedavranış bozuklukları vebubozukluklarailişkinöğretmenleringörüşleri, Marmara ÜniversitesiEğitimFakültesi 1. UluslararasıOkulöncesiEğitimKongresiBildiriKitabı, III. Cilt, s. 280-293, İstanbul: YA-PA Yayınları.

Stadelmann, S., Perren, S., Wyl, A.W., & Klitzing, K.W. (2007). Associations between family relationships and symptoms/strengths at kindergarten age: what is the role of children's parental representations? *Journal of Child Psychology and Psychiatry*, 48 (10), 996–1004.

Steiner H., &Karnik N. (2005). *Child or Adolescent Antisocial Behavior. In: Sadock BJ, Sadock VA, eds. Comprehensive Textbook of Psychiatry.* Vol. 2. 8th ed. Philadelphia, PA:Lippincott Williams &Wilkins.

Şehirli, N. (2007). ÇocukDavranışlarıdeğerlendirmeölçeği'ningeliştirilmesivebazıdeğişkenlere gore incelenmesi. (Yayınlanmamışyükseklisanstezi). GaziÜniversitesiEğitimiBilimleriEnstitüsü, Ankara.

Tahiroğlu, A. Y., Bahalı, K., Avcı, A., Seydaoğlu, G. & Uzel, M. (2009). Ailedekidisiplinyöntemleri, demografiközelliklerveçocuklardakidavranışsorunlarıarasındakiilişki. ÇocukveGençlikRuhSağlığıDergisi, 16(2), 67-81.

Tazeoğlu, S (2011). Çocuklarınbenlikalgıları, davranışsorunlarıve ana-babalarınkullandıklarıdisiplinyöntemleriarasındakiilişkininincelenmesi. Yükseklisanstezi, Ankara ÜniversitesiEğitimBilimleriEnstitüsü.

Tomblin J.B, Zhang X, Buckwalter P., & Carts H. (2000). The association of reading disability behaviora disorders and language impairment among second grade children, *J Child Psychol Psychiatry*. 41(4), 473-82.

UNICEFTürkiye/Genar (2008). *Türkiyeetkiliçocukyetiştirmeeğitimiüzerinebilgi/tutum/beceriaraştırmasıkantitatifsonuçlarıtaslakraporu*. http://www. unicef.org/violencestudy/3.%20World%20Report%20on%20violence%20 against%20Children. ErişimTarihi: 28.04.2022.

Ural, O., Güven, G., Sezer, T., EfeAzkeskin, K. &Yılmaz, E. (2015). Okulöncesidönemdekiçocuklarınbağlanmabiçimleriilesosyalyetkinlikveduygudüzenlemebecerileriarasındakiilişkininincelenmesi. *HacettepeÜniversitesi-SağlıkBilimleriFakültesiDergisi*, 1(2), 589-598.

UyanıkBalat, G., Şimşek, Z. & Akman, B.(2008). Okulöncesieğitimalançocuklarındavranışproblemlerininanneveöğretmendeğerlendirilmeleriaçısındankarşılaştırılması. *HacettepeÜniversitesiEğitimFakültesiDergisi*, 34, 263-275.

Weikart, D.P. (1998). Changing early childhood development throught educational development. *Preventive Medicine*, 27, 233-237.

Williamson, D., & Johnston, C. (2019). Maternal ADHD symptoms and parenting stress: the roles of parenting self-efficacy beliefs and neuroticism. *Journal of Attention Disorders*, 23(5), 493-505.

Yaprak, B. (2007). İlköğretimöğrencilerininalgıladıklarıanne-baba tutumunundiskriminantanaliziylebelirlenmesivebenliksaygısıileolanilişkisinindeğerlendirilmesiüzerinebiruygulama. (Yayınlanmamışyükseklisanstezi). EskişehirOsmangaziÜniversitesi, Eskişehir.

Yaşar-Ekici, F. (2014). Aileözellikleriileokulöncesieğitimedevamedençocukların problem davranışlarıarasındakiilişkininincelenmesi. *AkademikSosyalAraştırmalarDergisi*, 2(2/2), 70-108.

Yaşar, M.C., Kızıltepe, İ. &Uyanık, Ö. (2013). Farklısosyoekonomikdüzeydekiannelerinçocuklarının problem davranışlarıylabaşaçıkmayollarınınıncelenmesi. *UluslararasıHakemliAileÇocukveEğitimDergisi*, 1(1),75-90.

Yavuzer, H. (1990). Ana-baba Okulu. İstanbul: RemziKitabevi.

Yavuzer, H.(2008). ÇocukPsikolojisi. İstanbul: RemziKitabevi.

Yurduşen, S.A. (2004). Annelerinçocuklarınayönelikyetiştirmetutumlarınınokulöncesiçağdakiçocuklarınıniçeyönelikvedışayönelikdavranışproblemlerineetkisi: anneninpsikolojikuyumununoynadığıaracırol. Yayınlanmamışyükseklisanstezi, ODTÜ SosyalBilimlerEnstitüsü, Ankara.

CHAPTER III

THE ART OF VISUAL THINKING: PRACTICAL EXAMPLES OF GRAPHIC ORGANIZER INTEGRATION IN LANGUAGE CLASSROOMS

Dilşah KALAY

(Asst. Prof.), Kütahya Dumlupınar Üniversitesi Yabancı Diller Yüksekokulu, E-mail.dilsah.kalay@dpu.edu.tr ORCID: 0000-0003-0681-3179

1. Introduction

The increasing body of literature on this topic has recently confirmed the growing significance of genre-based approaches in English Language Teaching. According to Hyland (2002), genre-based approaches have significantly influenced our perception of language use and have led to the reorganization of literacy education in various global contexts. Genre-based teaching focuses on teaching language in the context of specific text types or genres, such as academic essays, business reports, or scientific papers. These approaches emphasize not just the linguistic features but also the communicative purpose and conventions associated with each genre. Similarly, Rodgers (2001) contributes to this discussion by characterizing genre approaches as a revival of interest in functionally based language teaching. Functionally based approaches prioritize teaching language in a way that mirrors real-life communication situations. They emphasize language functions and the use of language for practical purposes rather than focusing solely on isolated grammar rules or vocabulary.

Within genre-based approaches, the primary goal is to comprehend entire texts, highlighting various text structures such as problem-solution, for-against, process, time sequence, description, and definition (Jiang & Grabe, 2007). This

approach recognizes that real-world language use often occurs in the form of longer texts, such as articles, reports, and essays. These approaches teach students how to recognize and produce different text types and structures, essential for effective communication in various contexts. Given that comprehending and responding to densely structured complex reading materials can be challenging for second language learners, one of the principal methods for assisting learners in structuring their thought processes involves the utilization of visual tools known as Graphic Organizers, which offer a practical solution to address the challenges faced by second language learners. These visual tools help learners break down complex text structures into manageable parts. Using graphic organizers, learners can visually represent the relationships between ideas, concepts, and information in a text, making it more accessible and comprehensible.

First, this chapter presents some background information about the graphic organizers. It then explains how to implement these tools in the language teaching process, especially for reading skill. Following that, the chapter exemplifies some of the most crucial graphic organizers for the reading curriculum. Finally, the chapter ends with a reading lesson plan as an example for language teachers and practitioners.

2. Background

Graphic organizers are visual and graphic illustrations that depict relationships among facts, terms, ideas, or concepts within a learning task (Moore & Readence, 1984). These organizers come in various forms, including maps, webs, graphs, charts, frames, and clusters (Willis, 2008). In the words of Willis, these tools aid learners in constructing and visualizing relationships, supporting processes such as comprehension, organization, summarization, prioritization, and analysis. They also facilitate the storage of information in long-term memory and provide learners with a mental picture of the subject matter (Teele, 2004).

Moreover, graphic organizers challenge learners to think in multiple directions and understand the meanings and interrelations of concepts, terms, and ideas. These visual representations transform reading into an active thinking process, making it more effective and purposeful (Amin, 2005). Amin emphasizes that using visual materials is a powerful and effective strategy for meaningful learning, enabling learners to create mental illustrations from text-based information and organize them.

DiCecco & Gleason (2002) also highlight in their article that graphic organizers can play a pivotal role in addressing the challenge of comprehending

content area texts. They do this by emphasizing domain knowledge and making it explicit: 'By providing learners with a visual representation of the underlying structure and salient relationships within a given domain, graphic organizers structure domain knowledge meaningfully and separate it from the overwhelming number of facts found in textbooks. Consequently, students not only acquire domain knowledge but also develop relational knowledge' (pg. 307).

Ellis (2004) presents three reasons language teachers should incorporate graphic organizers into their reading courses. Firstly, they make it easier for learners to understand and remember the content because these organizers help specify what is essential to know about a text. Secondly, they relieve learners of excessive semantic processing burdens, allowing teachers to focus on more sophisticated and complex content organization. Demonstrating how information is structured can be a powerful tool to aid comprehension. Thirdly, learners are more likely to become strategic readers as they become familiar with thinking patterns, constructing, organizing, and utilizing graphic illustrations.

While there is extensive literature on the use of graphic organizers in firstlanguage reading comprehension, the field of second-language teaching lacks sufficient research to conclusively support the effectiveness of visual illustrations in organizing the thought processes of second-language reading. However, recent M.A. theses and Ph.D. dissertations in the literature have explored the impact of language instruction using graphic organizers on second-language reading comprehension.

One of these studies is Louisot-Mesopotanese's (2009) M.A. thesis, which aimed to assess the effectiveness of graphic organizers as a learning tool to help second-grade students organize their thoughts and enhance reading comprehension. By employing a triangular approach to data collection, referencing Hendricks (2009), the study suggested that graphic organizers may contribute to improved reading comprehension. Additionally, it revealed that students recognize the advantages of graphic organizers in helping them construct relationships among concepts and reorganize their thoughts after reading a story.

Another study by Bernhardt (2010) in her M.A. thesis sought to determine the impact of including graphic organizers in English language courses on fourth-grade students' reading comprehension skills, specifically in noting details, making inferences, and comparing and contrasting. Data collection methods included curriculum assessment, teacher-made assessments, student work, discussion transcripts, oral summaries, audiotapes, and surveys. Results indicated that students' use of graphic organizers led to a slight improvement in their reading comprehension skills and ability to independently respond to reading comprehension questions.

Phan's (2010) M.A. thesis investigated the effectiveness of graphic organizers for various groups of undergraduate students at the University of Texas-Pan American in enhancing reading comprehension. Participants were classified based on their language background, levels of reading proficiency (low, middle, high), and levels of graphic skills (low, middle, high). The study revealed that graphic organizers benefited low and high-graphic-skilled readers in their reading comprehension but did not show the same impact on learners from different language backgrounds.

Furthermore, Fealy (2010) conducted a study for her PhD dissertation, observing third-grade students experiencing difficulties in reading informational texts. Her research explored the classroom use of graphic organizers as comprehension strategies to help learners organize their thinking processes when reading informational text. Drawing on the work of Merriam (1998) and Yin (2003), Fealy employed qualitative and case study methodology for data analysis. The analysis indicated that as the students progressed, their scores improved, and by the end of the study, most students met the standards set at the study's outset, demonstrating increased competence in comprehending informational texts.

Additionally, Suarez (2011) conducted a project study to identify which graphic organizers and higher-order thinking skills would improve student test scores in a region affected by poverty and a high level of second-language learners. The study employed a 3-round Delphi Method, a qualitative approach to determining which graphic organizers best developed critical thinking skills during non-fiction reading. A Likert-type scale was used to identify the most influential graphic organizers. Results indicated that 12 graphic organizers proved to be more effective for directly instructing higher-order thinking skills. The study suggested that this research could contribute to social change by enhancing students' critical thinking skills, academic achievement, motivation, and the likelihood of becoming lifelong learners.

Finally, Snyder's (2012) thesis aimed to investigate the effects of graphic organizers, level of text structure complexity, and content familiarity on second-grade students' comprehension, recall, and sensitivity to cause-effect text structures. The data indicated that reading the graphic organizer, as opposed to re-reading the passage, resulted in significant improvements in both recall

and text structure sensitivity. The study also found a significant relationship between the use of graphic organizers and the level of structure complexity and familiarity.

2.1. Implementing Graphic Organizers

While graphic organizers appear to be highly beneficial for enhancing reading comprehension, their effective implementation in reading courses can pose significant challenges for novice teachers. In reading instruction, inexperienced teachers often utilize graphic organizers merely as 'worksheets.' In their research, Merkley & Jefferies (2001) argue that these educators tend to distribute these worksheets to students and continue traditional lecture-style teaching with limited opportunities for student engagement.

Similarly, Moore and Readence (1984) assert that graphic organizers often lack systematic and functional procedures. They also point out that most textbooks provide vague suggestions to teachers on how to integrate these tools into language instruction.

Furthermore, DiCecco and Gleason (2002) draw a conclusion from their study that simply displaying a relevant graphic organizer to students using an overhead projector, without teacher modeling and guidance, does not yield any significant benefits. Graphic organizers prove effective within the context of intensive instruction involving guided practice and review.

According to Mede (2010), teachers should introduce students to graphic organizers through specific procedures. In a similar vein, Fly, Jean, and Hunter (1988) recommend several guidelines that language teachers should adhere to when introducing graphic organizers to learners. These guidelines encompass presenting a graphic outline, modeling the construction of a similar organizer, providing procedural knowledge, guiding learners through the process, and affording them opportunities for individual practice with feedback on how to utilize these graphic tools effectively.

3. Examples of Graphic Organizers

3. 1. Illustrations Supporting the Thinking Process

The discourse surrounding the preferences of visual, auditory, and kinesthetic learners holds a significant presence in educational literature and teacher-training programs. This discussion is also relevant in the context of language education, particularly when considering students with solid visual intelligence. Visual learners, who often find that a picture can convey information more effectively than words alone, require teachers to be equipped with strategies for visually organizing ideas, facts, and concepts.

By employing visual aids such as boxes, circles, and connecting lines to link various ideas and concepts, students are allowed to represent the hierarchical structure of information, distinguishing between main ideas, subtopics, details, and elaborations, among others. Visual learners can also utilize these tools to grasp the relationships between characters in a narrative, providing a quick visual overview. Furthermore, these graphical techniques enable students to illustrate how ideas are compared and contrasted, as in the case of a Comparison-Contrast Chart, and to track the sequential order of a process (Strangman & Hall & Meyer, 2003).

3.1.1. KWHL Diagrams

These visual aids serve the purpose of engaging students' prior knowledge regarding the subject of the text. Through the use of these visual representations, students can expand their understanding and establish meaningful connections (Appendix A, Source: https://www.educationworld.com/tools_templates/kwhl_nov2002.doc).

3.1.2. Anticipation/reaction Guide

These tools are valuable in evaluating students' understanding prior to commencing a lesson. They can also assist educators in stimulating students' prior knowledge (Appendix B, Source: https://www.readingrockets.org/ classroom/classroom-strategies/anticipation-guide).

3.1.3. Comparative and Contrastive Map

These maps are used to compare and contrast two ideas and concepts (Strangman & Hall & Meyer, 2003) (Appendix C).

3.1.4. Problem – solution Outline

These are outlines that are beneficial for students to organize thoughts, analyze problems, and find solutions to those problems (Strangman, Hall & Meyer, 2003) (Appendix D).

3.1.5. Opinion – proof Graphic

Opinion-proof charts are tools created to connect students' personal viewpoints on a subject with the evidence provided in the text. The primary

objective of this visual aid is to ensure that opinions are substantiated by specific ideas, facts, or concepts derived from the content. Students can use these charts for purposes such as crafting persuasive essays, composing newspaper editorials, or getting ready for participation in a classroom debate (Appendix E, Source: https://www.readingquest.org/pdf/opinion.pdf).

3.1.6. Inquiry Charts

Inquiry charts offer students a structured approach to examining essential questions, connecting their existing knowledge of the subject with supplementary supportive information. They also enable learners to address conflicting ideas within the material and generate fresh inquiries based on any contradictory information (Appendix F, Source: https://www.readingquest.org/pdf/ichart.pdf).

3.2. Illustrations of History Frames & Story Maps

When engaging with narratives and novels, educators frequently encourage students to concentrate on the fundamental components of a story, including its setting, characters, plot, and theme. These types of diagrams assist learners in contemplating the central inquiries within the narratives: when, where, who, how, and why (Appendix G, H Source: https://www.readingquest.org/storymaps. html).

4. An example Reading Activity

Subject Area: Reading Lesson

Grade: University Prep School

Topic: Hairstyles

Materials Needed: Individual KWHL Sheets

Objectives:

1. The students will be acquainted with the KWHL strategy.

2. The students will understand how and why to use graphic organizers.

The Reading text

Hairstyles through Decades

Do you know how people wore their hair 10, 20, or 30 years ago? Look back at the hairstyles of the last 50 years. There are some styles that come back again and again.

The '50s were the beginning of the "rock'n roll" era. In the early '50s, men had short hair, but singer Elvis Presley changed all that when he combed his hair into a 'pompadour' and 'duck tail'. The ponytail was a popular hairstyle for young women.

The 1960s was the decade of the Beatles, who caused a sensation when they grew their hair – to their ears!

In the late '60s and early '70s, the 'hippie look' was in style. Men and women grew their hair very long, and many men wore beards. And the 'Afro' was a popular hairstyle for African - American and anyone with curly hair of 'perms'.

Punk rockers shocked everyone with their multicolored, spiky hair in the '70s. Then, in the late '70s and '80s, soup opera starts made 'Big hair' popular – women wore their hair in very long, curly, and full.

The 'new romantic' women of the '80s wore hairstyles from the 19th century – long curly hair and French braids. For many men, the "mullet" cut (short on top and long in the back) was the hairstyle to have.

In the '90s, dyed hair became stylish. Both men and women started changing the color of their hair and adding highlights. Some men began to bleach their hair blond.

What will people say about the hairstyles of the early 21st century? Look around you. Do you see any styles that are really "new"?

(Adapted from Touchstone Blended Learning – Level 2, Unit 11)

Topic: HAIRSTYLES

K (What I Know about Hairstyles)	W (What I Want to know about Hairstyles)	H (How find out about Hairstyles)	L (What I Learned about Hairstyles)

(Taken from https://www.educationworld.com/tools_templates/kwhl_nov2002. doc)

Lesson plan:

The teacher shows some slides about famous pop stars and asks the students, "Who are they?" After talking about them, the teacher leads students to talk about their clothes, hairstyles, and physical appearance. Then, the teacher asks the students what they know about hairstyles and what they want to learn about them.

Procedures:

1. The teacher introduces the KWHL strategy. Having a big KWHL chart on the overhead projector, the teacher explains how and why to use it (graphic organizer) and how to apply it to the text as a model.

"Today, I will introduce you to a strategy that can help you to visually organize what you already know, what you want to know, and what you will learn, which is called the KWHL."

2. The teacher asks the students to give examples for each KWHL chart column. If the students have difficulty, s/he continues modeling the use of the strategy.

3. The teacher puts the students into groups of three and organizes groups by giving them colorful beans. The students with the same colored bean are in the same group. Also, s/he assigns students some roles as leader, reporter, and recorder.

Leader = S/he leads the group and keeps the group on task.

Reporter = S/he reports to the class what the group decides for each column of the KWHL chart.

Recorder = S/he records what the group decides for each column of the KWHL graphic.

P.S. All students have to participate in sharing ideas for the KWHL chart.

4. The students are separated into groups (15 min).

5. After 15 mins, reporters talk about their group's decisions, and students fill in the KWHL chart on the overhead projector (15 min).

6. The teacher tells the students to read the text given (Hairstyles through the decades) and fill in the "What I Learned about Hairstyles" column of the chart in their groups (10 min).

7. The students together discuss the results and fill in the chart on the board (10 min).

5. Conclusion

This chapter has offered a comprehensive review of research regarding the efficacy of employing graphic organizers as instructional aids to assist students in structuring their thoughts and enhancing their proficiency in second language literacy. While there exists an extensive body of literature focusing on the utilization of graphic organizers to improve reading comprehension, it is essential to note that the majority of these studies concentrate on first-language literacy skills (Mede, 2010). Consequently, further research is warranted within the realm of second language teaching to facilitate the integration of these tools into language instruction.

Jiang and Grabe (2007) contend that, despite the many studies advocating the use of graphic organizers, there is a pressing need for more precise procedural definitions and intricate explanations. In a similar vein, Merkley and Jefferies (2001) refer to Rice (1994) to underscore the absence of a systematic approach for scrutinizing graphic organizer research, resulting in a dearth of explanations regarding their efficacy. Consequently, instructional implications remain ambiguous due to the limited understanding of how graphic organizers operate (or fail to do so) (p. 39).

References

Amin, A.M., (2005). Using graphic organizers to promote active e-learning. In P. Kommers & G. Richards (Eds.), *Proceedings of ED-MEDIA 2005–World Conference on Educational Multimedia, Hypermedia & Telecommunications* (pp. 4010–4015). Montreal, Canada: Association for the Advancement of Computing in Education (AACE). Retrieved August 6, 2018 from https://www.learntechlib.org/primary/p/20707/.

Bernhardt, T. M. (2010). Using graphic organizers to enhance reading comprehension. Unpublished M. A. Thesis, ProQuest Dissertations and Theses Database, 1–158. Retrieved from https://www.learntechlib.org/p/125437/.

DiCecco, V. M., & Gleason, M. M. (2002). Using graphic organizers to attain relational knowledge from expository text. *Journal of Learning Disabilities*, *35*(4), 306–320. https://doi.org/10.1177/00222194020350040201.

Ellis, E. (2004). *Makes sense strategies overview*. Retrieved December 23, 2020, from https://mcsold1.monet.k12.ca.us/Academics/el712/Graphic%20 Organizers/GO%20overview.pdf.

Fealy, E. M. (2010). Explicit instruction of graphic organizers as an informational text reading comprehension strategy: Third-gradestudents'

strategies and perceptions (Doctoral dissertation).Retrieved from ProQuest Dissertations and Theses Database. (UMI No. 3420969).

Hyland, K. (2002). Genre: Language, Context and Literacy. *Annual Review of Applied Linguistics*, 22, 113–135. https://doi.org/10.1017/s0267190502000065.

Jiang, X., & Grabe, W. (2007). Graphic organizers in reading instruction: Research findings and issues. *Reading in a Foreign Language*, *19*(1), 34–55. Retrieved from http://eflpresentations.pbworks.com/f/Graphic+Organizers+for+Comprehension+of+Text+Discourse+Structure.pdf.

Louisot-Mesopotanese, N. (2009). The effects of graphic organizers on improving the reading comprehension of second-grade students. Unpublished M. A. Thesis, ProQuest Dissertations and Theses Database.

McCarthy, M., McCarten, J., & Sandiford, H. (2012). *Touchstone Blended Learning Level 2 Student's Book*. Cambridge-Obeikan.

Mede, E. (2010). The effects of instruction of graphic organizers in terms of students' attitudes towards reading in English. *Procedia - Social and Behavioral Sciences*, *2*(2), 322–325. https://doi.org/10.1016/j.sbspro.2010.03.018.

Merkley, D. M., & Jefferies, D. (2001). Guidelines for implementing a graphic organizer. *The Reading Teacher*, *54*(4), 350–357. Retrieved from https://eric.ed.gov/?id=EJ619463.

Moore, D. W., & Readence, J. E. (1984). A quantitative and qualitative review of graphic Organizer research. *Journal of Educational Research*, 78(1), 11–17. https://doi.org/10.1080/00220671.1984.10885564.

Phan, T. (2010). *A preliminary study on effects of graphic organizers on reading comprehension*. Unpublished M. A. Thesis, ProQuest Dissertations and Theses Database (UMI No: 1482356).

ReadingQuest.org, Making sense in social studies, *strategies for reading comprehension / graphic organizers* (https://readingquest.org/)

Rodgers, T. (2001). *Language teaching methodology (ERIC Issue Paper)*. Washington, DC: ERIC Clearinghouse on Languages and Linguistics.

Strangman, N., Hall, T. & Meyer A. (2003). *Graphic organizers and implications for universal design for learning: Curriculum enhancement report,* National Center on Accessing the General Curriculum, NS.9-19-03. GOUDL.5.

Suarez, K. (2011). Graphic Organizers and Higher Order Thinking Skills with Non-fiction Text. ProQuest Dissertations and Theses Database (UMI No: 3482475).

Snyder, A. E. (2012). The effects of graphic organizers and content familiarity on second graders' comprehension of cause/effect text. ProQuest Dissertations and Theses Database (UMI No: 3494209).

Teele, S. (2004). Overcoming barricades to reading: A Multiple Intelligences Approach. Corwin Press.

Willis, J. (2008). Teaching the brain to read: strategies for improving fluency, vocabulary, and comprehension. *Choice Reviews Online*, 46(09), 46–5169. https://doi.org/10.5860/choice.46-5169.

APPENDICES

Appendix A

Topic:

K	W	Н	L
(Know)	(Want to know)	(How to find out)	(Learned)

(Taken from https://www.educationworld.com/tools_ templates/kwhl_nov2002.doc)

Appendix **B**

Prior Knowledge Topic Survey Anticipation/Reaction Guide

Instruction: Respond to each statement twice: once before the lesson and again after reading it.

- Write A if you agree with the statement
- Write **B** if you disagree with the statement

Response Before Lesson	TOPIC:	Response After Lesson
	Statement 1	
	Statement 2	
	Statement 3	
	Statement 4	

(Taken from https://www.readingrockets.org/classroom/

classroom-strategies/anticipation-guide)

Appendix C

Comparative and Contrastive Map



Appendix D



Problem/Solution Outline

(Taken from http://www.literacysolutions .com.au/blog/2016/06/14/problem-solution-part-7-of-7/)

Appendix E



OPINION - PROOF

Opinion Proof
I

ReadingQuest.org Permission Granted for Classroom Use Only. All Others Inquire at rjones®readingquest.org.

http://www.readingquest.org Copyright ©Raymond C. Jones. All Rights Reserved.

Appendix F



INQUIRY CHART

TOPIC	(FACT QUESTION)	(CONCEPT QUESTION)	(SKILL QUESTION)	What questions do I
				have?
What do I (we) already know?				
TEXT SOURCE 1				
TEXT SOURCE 2				
PRIMARY SOURCES:				
OTHER SOURCES				
Summary				

Appendix G

Reading						
STORY MAP						
TITLE:	AUTHOR:					
SETTING CHARACTERS	PROBLEM or GOAL:					
	EVENTS or EPISODES:					
THEME: A Personal Truth						
THEME: A Universal Truth						
ReadingQuest.org Permission Granted for Classroom Use Only. All Others inquire at rjones@readingquest.org.	http://www.readingquest.org Copyright ©raymond C. Jones. All Rights Reserved.					

Appendix H



Story Mapping EVENT / STORY PYRAMID

MAIN CHARACTER'S NAME

TWO WORDS DESCRIBING THIS PERSON

THREE WORDS DESCRIBING THE SETTING or PLACE

FOUR WORDS DESCRIBING AN IMPORTANT EVENT

FIVE WORDS DESCRIBING THE MAIN IDEA OR THE IMPORTANCE OF THIS EVENT

ReadingQuest.org Permission Granted for Classroom Use Only. All Others Inquire at rjones@readingquest.org.

http://www.readingquest.org Copyright @Raymond C. Jones. All Rights Reserved.

CHAPTER IV

A CURRENT APPROACH IN CONCEPTUAL CHANGE: COMMON KNOWLEDGE CONSTRUCTION MODEL

Ahmet TAŞDERE¹

¹Uşak University, Faculty of Education, Department of Mathematics and Science Education E-mail: ahmet.tasdere@usak.edu.tr ORCID:0000-0002-2615-8493

1. Introduction

here are many factors that affect the learning process in education environments. Student characteristics (prior knowledge, learning styles, etc.), instructor competencies (subject content knowledge, topic-specific teaching methods, etc.), learning environment and physical conditions (teaching materials, technology integration, in-class and out-of-class environments, etc.) are some of these factors. However, research on how learning (conceptual learning) takes place in the mind has revealed some new situations. In these studies, unintended educational outcomes that affect learning, such as misconceptions that are not scientifically correct but which students try to make sense of and explain in their own way in their minds, alternative concept(s) that are similar to each other but have different meanings, were frequently included (Bahar, 2003; Canpolat et al., 2004; Öksüz, 2010; Karslı & Ayas, 2013). In this section, misconceptions will be used for this situation, which is expressed with many different terms in the literature (erroneous ideas, preconceptions, multiple private versions of science, spontaneous knowledge, alternative frameworks, alternative conceptions) (Bahar 2003). Studies conducted in many different disciplines to determine students' conceptual understanding levels show that students at all levels of education may have misconceptions. In chemistry education Kingir and Geban (2014) examined students' misconceptions

about chemical change, in mathematics education Yenilmez and Yaşa (2008) examined students' misconceptions about geometry, in geography education Kuzey and Değirmenci (2019) examined students' misconceptions about map and direction, in secondary school science education Ercan, Taşdere, and Ercan (2010) examined students' misconceptions about solar system and space, in secondary social science education Bal ve Akış (2010) examined students' misconceptions about people and government, at the elemantary level Yıldırım (2016) examined students' misconceptions about the world and the universe.

Following the identified misconceptions, the research trend of educational research has been how to eliminate these misconceptions. In the literature, different approaches, models, methods and techniques for this process, which is called 'conceptual change', are frequently included. While some of these were concept teaching techniques used in teaching narrower concepts in the limited time of the lessons (Balım, İnel, & Evrekli, 2008; Tekin, Kolumuç, & Ayas, 2013; Bilen & Köse, 2012), some were models and approaches used in teaching comprehensive topics and units (Posner, Strike, Hewson, & Gertzog, 1982; Thagard 1992; Marton & Booth, 1997; Chi & Roscoe, 2002).

2. Conceptual Change and Common Knowledge Construction Model

According to Posner, Strike, Hewson, and Gertzog (1982), who put forward one of the oldest approaches to the process of conceptual change, in order to achieve conceptual change, students should be dissatisfied with the existing concept, the new concept replacing this concept should be intelligible, plausible and fruitful. Chi and Roscoe (2002), explained the conceptual change process as a situation in which misconceptions are eliminated and preconceptions are reorganized and corrected in an ongoing development process. Marton and Booth (1997), on the other hand, consider conceptual change not only as a process of eliminating misconceptions but also in a higher level context. Accordingly, in learning the subjects, experiences based on the scientific context of the related concepts should be experienced (Linder & Marshall, 2003). Students should try to explain their personal ideas and experiences within this scientific context. They should be aware of their own conceptions and use these conceptions and prior knowledge to reconstruct their personal ideas on scientific grounds. In this process, interviews and activities can be conducted to deepen and support students' scientific thinking. Thus, students understand that knowledge can be reached through discovery, research and inquiry in science (Ebenezer, Chacko, Kaya, Koya, & Ebenezer, 2010). The approach put forward in the light of these

basic assumptions is the Common Knowledge Construction Model (CKCM). According to the CKCM, which emphasizes that students should be made active in learning environments, students should discover and construct knowledge themselves. Based on Marton's learning variation theory and Piaget's conceptual change studies, CKCM has been used especially in teaching specific topics and concepts in secondary school science education (Ebenezer, Chacko & Immanuel, 2004; Ebenezer et. al., 2010; Bakırcı, 2014; Vural, 2016; Kıryak & Çalık, 2018; Caymaz & Aydın, 2021). In recent years, it has also been the subject of research at the level of elementary education (Atayeter, 2019; Çalık, Yurtbakan and Güler, 2021) and higher education (Karabal, 2018; Çavuş Güngören and Hamzaoğlu, 2020). In this context, it is becoming increasingly widespread and popular for all levels of education.

In CKCM, the importance of students' prior learning is emphasized. Possible misconceptions, prior knowledge and learning difficulties are identified and conceptual understandings are supported to form the basis of new learning. For this purpose, especially enriched and different teaching methods are used, materials are developed and thus conceptual change is aimed to take place (Ebenezer and Connor, 1998). In this context, in order to implement the model effectively, many teaching materials are developed, different teaching methods are used together and conceptual change is aimed to be achieved. Especially in the process of determining prior knowledge and possible misconceptions, it should be ensured that students realize that their own ideas and beliefs contradict scientific explanations. Students should be confronted with the inconsistencies/ contradictions between their ideas and belief systems, which are mostly formed by their daily experiences, and the information contained in scientific texts. Structured experiences are needed that confront students with discrepancies between their own ideas and beliefs and the information presented in scientific texts. In this process, students' ideas should be explored and areas of conceptual conflict/contradiction should be identified before presenting information with scientific texts (Biernacka, 2006; Ebenezer & Connor, 1998). The learning process is defined as the development of this prior knowledge and the effort to understand an event from different methods through enriched/differentiated teaching methods, and there are four phases for the teaching practices of CKCM (Ebenezer, Chacko & Immanuel, 2004; Ebenezer, et al., 2010).

In the first phase of the model, *Exploring and Categorizing*, students' readiness and prior knowledge about the topic are revealed. Students are expected to freely express their ideas about the topics. For this purpose, through activities
such as pictures, diagrams, visualizations, videos, etc., opinions about a scientific phenomenon-event are revealed and explanatory categories are created (Ebenezer & Fraser, 2001). In the second phase, Constructing and Negotiating, teaching activities are diversified and multiple communication-negotiation environments are created. Under the guidance of the teacher, peer-peer and teacher-student(s) interactions are provided for the acquisition and construction of new knowledge (Biernacka, 2006). The main purpose of this multiple communication process is to show that science is not only based on observation and experimentation but also has a negotiated and socially constructed character. In addition, students acquire social skills such as listening, understanding opposing ideas, respect, empathy. In the Extending and Translating phase, the socioscientific dimension of the topics is taken into account. The open-ended and controversial aspects of the topic are discussed in the context of different disciplines and solutions are tried to be produced by associating them with social and environmental problems, especially at the local or national level (Ebenezer, Chacko & Immanuel, 2004). At the end of this process, students are expected to transfer their concepts to other contexts such as Science, Technology, Society and Environment (STSE). Thus, it is aimed to establish a relationship between what is learned and the real life context. In the Reflecting and Assessing phase, it is recommended to use complementary (alternative) assessment and evaluation techniques to evaluate the multiple learning domains that students construct throughout the process. In this process, students' scientific knowledge, scientific research skills, attitudes, beliefs and social skills should be included in the measurement process and evaluated in a multiple and holistic manner (Ebenezer et all., 2010).

Although CKCM seems to consist of four consecutive stages, it has a multidimensional and interrelated structure, especially due to the multiple teaching techniques that are prerequisites for each other and the understanding of measurement and evaluation spread throughout the whole process. Ebenezer & Connor (1998) put forward this multi-related structure as follows;



Figure 1. The common knowledge construction model (Ebenezer & Connor, 1998; Ebenezer & Haggerty, 1999; Ebenezer et al., 2010)

The roles of students and teachers during the implementation of the model are comparatively indicated in the table below (Ebenezer et al., 2010; Ebenezer & Connor, 1998; Bakırcı, 2014; Kıryak, 2013).

1. Phase: Exploring and Categorizing			
Teacher Roles	Student Roles		
> Students are encouraged to put forward	> Students share their personal ideas		
their different ideas.	in class, thus creating an atmosphere		
> These ideas/opinions are not judged as right	of discussion and nogotiate among		
or wrong. It is ensured that as many different	peers.		
and rich ideas as possible are put forward.	> Students are expected to express		
> Conceptual categories are created with	their views through question-answers,		
the resulting student ideas. These categories	pictures, diagrams or videos etc.		
are not meant to categorize students, but	\succ In these activities they are expected		
specifically to categorize qualitative outputs	to express their opinions openly and		
from simple to higher level.	honestly.		
\succ This can be done through questions and	> Students are expected to explain		
answers, pictures, diagrams, videos, etc.	their understanding of the natural		
> Through these activities, teachers should	world, events and phenomena (often		
demonstrate a positive and supportive attitude	a socioscientific issues) presented to		
towards eliciting and enriching their students'	them, taking into account their past		
ideas.	experiences.		

Table 1. CKCM Phases

2. Phase: Constructing and Negotiating				
 ➢ In the classroom, the teacher is not a source of knowledge, but a guide to help students develop and move from their current level to the highest level. ➢ It seeks to realize scientific discourses that enable the social construction of science. ➢ Thus, the aim is for students to understand that scientists use their own ideas effectively to advance knowledge and that they develop in consultation with other scientists. ➢ Attempts to establish multiple communication and interaction environments (teacher-student, student-student, student-student, student-student, peer-peer interaction). 	 Students make observations using their previous ideas, record necessary information, interpret multiple information and reflect on their own ideas. In addition to observations, students intensively construct meaning through negotiations with their peers and teachers, and thus come to understand that science is socially constructed Its purpose is to show that scientific knowledge is not only based on observation and empirical evidence, but also that science has a tentative and negotiable character. 			
3. Phase: Extending a	nd Translating			
 The teacher provides discussion environments based on STSE associations. Through these associations and discussions, students are given the opportunity to conceptualize scientific ideas. Predict-(Explain)-Observe-Explain (PEOE) activities in particular can be used. In order to provide a scientific-based discussion environment, the socioscientific dimension of the subject is addressed and discussions are carried out on this basis. Environmental issues such as ozone depletion, global warming, deforestation, soil, air and water pollution, genetically modified organisms, frozen foods, stem cell therapies, etc., health and genetics issues may be suitable discussion topics for this stage. 	 In PEOE activities, students were asked to make predictions and explain the reasons for their predictions. Especially in discussions on socioscientific issues, they are expected to defend their views, listen to opposing views and defend their own views. In this discussion process they need to develop social and emotional skills such as listening respectfully to opposing views and empathy. They are expected to exhibit their reasoning, reasoning, inference, etc. skills by examining the socioscientific dimensions of the subject. 			

7. I hase. Reflecting a	inu Assessing
➤ At this phase, complementary (alternative)	> They are expected to reflect on
assessment techniques are utilized.	learning products that will enable
Accordingly, evaluation activities, which are	them to measure deep and meaningful
hierarchically seen at the last phase in the	learning rather than statements with a
CKCM, are spread over the process.	single answer or short answers.
> Word association tests, concept maps,	> Students are expected to reflect
structured grids, drawings, etc. can be used as	their scientific knowledge as well
pre-test and post-test to determine the level of	as their scientific research skills,
conceptual change.	behaviors, attitudes, beliefs and social
➤ Teacher should ask: 1) What do my students	skills.
know? 2) What do I want my students to	
learn? 3) How can I help them to learn? 4)	
What have my students learned?	

4. Phase: Reflecting and Assessing

The majority of the studies in the literature on CKCM are aimed at testing the effectiveness of the model (Ebenezer et al., 2010; Benli Özdemir, 2014; Caymaz, 2018). In this context, most of the relevant studies have a developmental/instructive character. Kıryak (2013), for the development of conceptual understanding levels related to water pollution; Benli Özdemir (2014), for the development of cognitive and affective learning of primary school students; Bakırcı (2014), for the development of students' academic achievement, critical thinking skills, conceptual understanding and natüre of scinece views; Çavuş Güngören (2015), for the development of pre-service science teachers about the learning and teaching of the nature of science; Karabal (2018), for the development of academic achievement and scientific process skills on the solar system and eclipses; Sütlüoğlu Dursun (2019), for the development of achievement level on the sun, earth and moon. It is seen that the majority of these studies are in the field of secondary school science education. Within the scope of the model, the emphasis on learning areas such as socioscientific issues and the nature of science may be one of the reasons why the majority of CKCM studies are conducted in the field of science education. Considering these strong emphases in the literature, there are many master's and doctoral theses with CKCM activities (Bakırcı, 2014; Kıryak, 2013; Vural, 2016; Karabal, 2018; Atayeter, 2019).

3. Conclusion

In the literature, some advantages and disadvantages have been found as a result of CKCM research on different topics. According to some of the findings compiled from these studies, the following conclusions are given.

3.1. Advantages of CKCM:

➢ It is an effective model in increasing academic achievement, providing permanent learning, eliminating misconceptions and providing conceptual change, especially in the field of science education. (Benli Özdemir, 2014; Bakırcı, 2014; Çavuş Güngören, 2015; Akgün, Duruk, & Gülmez Güngörmez, 2016; Vural, 2016)

> There are many studies that demonstrate the effectiveness of CKCM in the development of skills (critical thinking skills, logical thinking skills, decision-making skills, problem solving skills, entrepreneurship skills, scientific inquiry skills, scientific process skills) which are another output of educational environments.

➢ However, there are studies in the literature indicating that CKCM is effective for teaching some affective learning (attitude, interest, curiosity, etc.) (Benli Özdemir, 2014; Vural, 2016; Atayeter, 2019).

 \succ Especially when the learning strand and acquisition structure are taken into consideration, it can be said that the science curriculum and CKCM are compatible for many subjects.

> It is effective in interdisciplinary teaching when the teaching of socioscientific issues in the second and third phases of the model and the STSE associations are taken into consideration.

1.2. Disadvantages of CKCM:

> Preparation and implementation of activities for some phases can be difficult and time-consuming.

> There may be difficulties in implementation, especially for instructors who have not grasped the characteristic structures of learning domains such as socioscientific issues and the nature of science.

➤ However, there are also studies that emphasize that CKCM is not suitable for teaching some socioscientific situations.

3. Suggestions

3.1. Suggestions for new CKCM research and researchers;

➤ It is seen that experimental research method is frequently used in CKCM studies in the literature. Considering the developmental/instructive character of CKCM, CKCM-supported action research, which is more appropriate to the structure of educational research, can be included.

Specific CKCM instructional plan/design examples can be included in the resources (books, articles, theses, etc.) where teaching techniques/methods/ models and approaches are introduced and applications are included.

➤ It is predicted that hybrid teaching processes will be an important part of educational environments in the near future, especially after the Covid-19 pandemic. Activities, lesson plans, tools, materials, etc. can be developed for CKCM researches suitable for these processes.

➤ Most of the CKCM studies in the literature are in the field of science education. Especially in the field of social sciences education, geography education, which includes socioscientific issues such as environment, climate, natural events, etc., teaching can be realized with CKCM.

3.2. Suggestions for teacher education;

Some studies emphasized the lack of teacher competencies related to CKCM (Çavuş Güngören, 2015; Çavuş Güngören and Hamzaoğlu, 2020). The applications of this model, which can be considered new especially for the national literature, can be included in teacher training undergraduate programs and professional training courses.

> It can be suggested that teachers who want to do postgraduate education should include CKCM practices in their thesis studies.

References

Akgün, A., Duruk, Ü. & Gülmez Güngörmez, H. (2016). Altıncı sınıf öğrencilerinin ortak bilgi yapılandırma modeline ilişkin görüşleri. *Amasya Üniversitesi Eğitim Fakültesi Dergisi*, 5 (1), 184 203.

Atayeter, M. (2019). Fen bilimleri dersi maddenin yapısı ve özellikleri ünitesinde ortak bilgi yapılandırma modelinin ortaokul 4. sınıf öğrencilerinin akademik başarı ve fenne yönelik tutumlarına etkisi, [Yayınlanmamış Yüksek Lisans Tezi] Muğla Sıtkı Koçman Üniversitesi, Eğitim Bilimleri Enstitüsü. MUĞLA.

Bahar, M. (2003). Misconceptions in biology education and conceptual change strategies. *Educational Sciences: Theory & Practice, 3* (1), 27–64.

Bakırcı, H. (2014). Ortak bilgi yapılandırma modeline dayalı öğretim materyali tasarlama, uygulama ve modelin etkililiğini değerlendirme çalışması: Işık ve ses ünitesi örneği. [Yayınlanmamış Doktora Tezi] Eğitim Bilimleri Enstitüsü, Karadeniz Teknik Üniversitesi, TRABZON.

Bal, M. S. & Akış, A. (2010). Sosyal bilgiler dersi "insanlar ve yönetim" ünitesinde karşılaşılan kavram yanılgıları. *Education Sciences*, 5 (4), 2061-2070.

Balım, A. G., İnel, D. & Evrekli, E. (2008). Fen öğretiminde kavram karikatürü kullanımının öğrencilerin akademik başarılarına ve sorgulayıcı öğrenme becerileri algılarına etkisi. İlköğretim Online, 7 (1), 188-202.

Benli-Özdemir, E. (2014). Fen öğretiminde ortak bilgi yapılandırma modelinin ilköğretim öğrencilerinin bilişsel ve duyuşsal öğrenmeleri üzerine etkilerinin incelenmesi. [Yayınlanmamış Doktora Tezi] Eğitim Bilimleri Enstitüsü, Gazi Üniversitesi, ANKARA.

Bilen, K. & Köse, S. (2012). Kavram Öğretiminde Etkili Bir Strateji TGA (Tahmin Et? Gözle? Açıkla). *Mehmet Akif Ersoy Üniversitesi Eğitim Fakültesi* Dergisi, 1 (24), 21-42.

Biernacka, B. (2006). *Developing scientific literacy of grade five students:* A teacher-researcher collaborative effort. [Unpublished Ph. D. dissertation], University of Manitoba.

Caymaz, B., & Aydin, A. (2021). The effect of common knowledge construction model-based instruction on 7th grade students' academic achievement and their views about the nature of science in the electrical energy unit at schools of different socio-economic levels. *International Journal of Science and Mathematics Education*, 19 (2), 233-265.

Caymaz, B. (2018). Farklı sosyo-ekonomik düzeylerdeki okullarda 7. sınıf elektrik enerjisi ünitesinin öğretiminde ortak bilgi yapılandırma modelinin etkisinin incelenmesi. [Yayınlanmamış Doktora Tezi], Fen Bilimleri Enstitüsü, Kastamonu Üniversitesi, KASTAMONU.

Canpolat, N., Pınarbaşı, T., Bayrakçeken, S. & Geban, Ö. (2004). Kimyadaki Bazı Yaygın Yanlış Kavramalar. *Gazi Üniversitesi Gazi Eğitim Fakültesi Dergisi, 24* (1).

Çalık, M., Yurtbakan, E., & Güler, T., (2021). İlkokul 4. sınıf öğrencilerinin organik ve organik olmayan besinler konusuna yönelik kavramsal gelişimlerinin incelenmesi: ortak bilgi yapılandırma modeli örneği. Hacettepe Üniversitesi Eğitim Fakültesi Dergisi, 36 (3), 544-561.

Çavuş Güngören, S. (2015). Fen bilgisi öğretmen adaylarının farklı öğretim yöntemleriyle bilimin doğasının öğrenimi ve öğretimi hakkındaki gelişimleri. [Yayınlanmamış Doktora Tezi]. Eğitim Bilimleri Enstitüsü, Gazi Üniversitesi, ANKARA.

Çavuş-Güngören, S. & Hamzaoğlu, E. (2020). Fen bilgisi öğretmen adaylarının ortak bilgi yapılandırma modeli hakkındaki görüşleri. *Kastamonu Eğitim Dergisi, 28* (1), 107-124.

Chi, M.T.H., & Roscoe, R.D. (2002). *The processes and challenges of conceptual change*. In: M. Limon & L. Mason (Eds.), Reconsidering conceptual change: Issues in theory and practice (pp. 3–27) Dordrecht: Kluwer Academic Publishers.

Ebenezer, J., Chacko, S., Kaya, O. N., Koya, S. K., & Ebenezer, D. L. (2010). The effects of common knowledge construction model sequence of lessons on science achievement and relational conceptual change. *Journal of Research in Science Teaching: The Official Journal of the National Association for Research in Science Teaching*, 47 (1), 25-46.

Ebenezer, J., Chacko, S., & Immanuel, N. (2004). Common knowledge construction model for teaching and learning science: Application in the Indian context. *In An international conference to review research on Science, Technology and Mathematics Education International Centre* (epiSTEME-1), Dona Paula, Goa, India.

Ebenezer, J.V., & Connor, S. (1998). Learning to teach science: A model for the 21 century. Upper Saddle River, New Jersey: Prentice-Hall, Inc., Simon and Schuster/A. Viacom Company

Ebenezer, J.V., & Fraser, D. (2001). First year chemical engineering students' conceptions of energy in solution process: Phenomenographic categories for common knowledge construction. *Science Education*, *85*, 509-535.

Ebenezer, J.V., & Haggerty, S. (1999). Becoming secondary school science teachers: Preservice teachers as researchers. Upper Saddle River, New Jersey: Prentice-Hall, Inc., Simon and Schuster/A. Viacom Company

Ercan, F., Taşdere, A. ve Ercan, N. (2010). Kelime ilişkilendirme testi aracılığıyla bilişsel yapının ve kavramsal değişimin gözlenmesi. *Türk Fen Eğitimi Dergisi*, 7 (2), 136–154.

Karabal, M. (2018). Öğretmen adaylarının sosyobilimsel konuların öğretimde ortak bilgi yapılandırma modelinin karar verme ve problem çözme eğilimlerine etkisi [Yayınlanmamış Doktora Tezi], Eğitim Bilimleri Enstitüsü, Pamukkale Üniversitesi, DENİZLİ.

Karslı, F. & Ayas, A. (2013). Fen bilgisi öğretmen adaylarının kimya konularında sahip oldukları alternatif kavramlar. *Necatibey Eğitim Fakültesi Elektronik Fen ve Matematik Eğitimi Dergisi*, 7 (2), 284-313.

Kıryak, Z. (2013). Ortak bilgi yapılandırma modelinin 7. sınıf öğrencilerinin su kirliliği konusundaki kavramsal anlamalarına etkisi. [Yayınlanmamış Yüksek Lisans Tezi]. Karadeniz Teknik Üniversitesi, TRABZON.

Kıngır, S., & Geban, Ö. (2014). 10. sınıf öğrencilerinin kimyasal değişim konusundaki kavramları. *Journal of Turkish Science Education*, *11* (1), 43-62.

Kıryak, Z., & Çalık, M. (2018). Improving grade 7 students' conceptual understanding of water pollution via common knowledge construction model. *International Journal of Science and Mathematics Education*, *16*, 1025-1046.

Kuzey, M., & Değirmenci, Y. (2019). Sosyal bilgiler öğretmen adaylarının harita ve yön okuryazarlığına ilişkin kavramları anlama düzeyleri ve kavram yanılgıları. *Milli Eğitim Dergisi, 48* (223), 207-230.

Linder, C., & Marshall, D. (2003). Reflection and Phenomenography: Towards theoretical and educational development possibilities. *Learning and Instruction, 13,* 271-284

Marton, F., & Booth, S. (1997). *Learning and awareness*. New Jersey: Lawrence Erlbaum Associates, Publishers.

Thagard, P. (1992). Analogy, explanation, and education. *Journal of Research in science Teaching*, 29 (6), 537-544.

Posner, G. J., Strike, K. A., Hewson, P. W., & Gertzog, W. A. (1982). Toward a theory of conceptual change. *Science Education*, *66* (2), 211-227.

Sütlüoğlu Dursun R. (2019). 5. sınıf güneş dünya, ay ünitesine yönelik ortak bilgi yapılandırma modeline dayalı öğretim materyalinin geliştirilmesi ve değerlendirilmesi [Yayınlanmamış Yüksek Lisans Tezi], Fen Bilimleri Enstitüsü, Recep Tayyip Erdoğan Üniversitesi, RİZE.

Tekin, S., Kolomuç, A., & Ayas, A. P. (2004). Kavramsal değişim metinlerini kullanarak çözünürlük kavramını daha etkili öğretebilir miyim?. Journal of Turkish Science Education, 1 (2), 85-102.

Öksüz, C. (2010). İlköğretim yedinci sınıf üstün yetenekli öğrencilerin nokta, doğru ve düzlem konularındaki kavram yanılgıları. İlköğretim Online, 9 (2), 508-525.

Vural, S. (2016). Ortak bilgi yapılandırma modeline uygun geliştirilen öğretim materyalinin üstün yetenekli öğrencilerin asit-baz kavramlarını anlamaları üzerine etkisi. [Yayınlanmamış Doktora Tezi]. Eğitim Bilimleri Enstitüsü, Karadeniz Teknik Üniversitesi, TRABZON. Yenilmez, K. & Yaşa, E. (2008). İlköğretim öğrencilerinin geometrideki kavram yanılgıları. *Uludağ Üniversitesi Eğitim Fakültesi Dergisi, 21* (2), 461-483.

Yıldırım, Ş. (2016). İlkokul öğrencilerinin dünya ve evren ile ilgili kavram yanılgıları [Yayınlanmamış Yüksek Lisans Tezi] Aksaray Üniversitesi Sosyal Bilimler Enstitüsü. AKSARAY.

CHAPTER V

A GENERAL OVERVIEW OF THE HISTORY OF TEACHING TURKISH TO FOREIGNERS

Tuğrul Gökmen ŞAHİN¹

¹ (Dr.), Inonu University, Faculty of Education, Social Sciences and Turkish Education, Department of Turkish Education, Malatya, E-mail:tugrul.sahin@inonu.edu.tr, ORCID: 0000-0003-2107-9670

1. Introduction

hile the origin of Turkish dates back to the Hun Empire period between 220 BC and 216 AD, the first known written records of Turkish are found in stone tablets in the Orhun-Yenisey valley from the time of the Gokturk State, which ruled between 552-745 AD. However, the first work of Turkish written for the purpose of teaching foreigners was Divanü Lûgat-it Türk, prepared by Kaşgarlı Mahmut in 1072-1074 AD. In the following period, during the Chagatai Period, Ali Sir Nevai's work named "Muhâkemetü-l Lugateyn" was written. Throughout the historical process, during the Kipchak and Ottoman periods, there were grammar, dictionary and conversation books prepared by Westerners for the purpose of teaching Turkish. Westerners opened schools to teach Turkish and carry out Turkology studies. Following the establishment of the Republic of Türkiye, teaching Turkish as a mother tongue and teaching Turkish to foreigners was facilitated thanks to the reforms carried out in writing and the work of the Turkish Language Association. Today, the Republic of Türkiye continues its mission of teaching Turkish to foreigners through many institutions and organizations at home and abroad. In the light of the information presented, although the history of Teaching Turkish to Foreigners is quite deep-rooted, it emerges as a new discipline in the modern sense. For this reason, for those who plan to work in this field or are interested, there is a lack of studies covering the historical phases of Teaching Turkish to Foreigners and the works and activities that come to the fore in these periods. Considering all

these factors, the aim of the study will be to analyze the historical evolution of teaching Turkish, one of the most spoken and written languages in the world, to foreigners and to describe its change from past to present.

1.1. Teaching Turkish to Foreigners in the Turkish States Between the XI and XX Centuries

1.1.1. Teaching Turkish to Foreigners in the Karakhanid Period

The first known written texts of Turkish are the Bengü stones from the II Köktürk period found in the Orhun valley (Ercilasun, 2009, p. 126). These mentioned stones consist of obelisks, tombstones and main inscriptions (Banguoğlu, 2007, p. 14). The inscriptions and writing dates of these obelisks vary (Sertakaya, 1984, p. 67-85; Ercilasun, 1985, p. 57; Sertkaya, 1995, p. 319 Quoted by Ercilasun, 2009, p. 128-134).

Among the inscriptions found in the Orkhon valley, the most important in terms of Turkish language is the "Çoyr (AD 687-692)" inscription, which consists of six lines and "describes the participation of a Köktürk soldier in İlteriş". The most important feature of the relevant inscription in terms of Turkish language is that it is the oldest written document (Sertkaya, 1995, p. 318).

The existence of the first written documents in question explains the importance of all Turkish states that played a leading role in the historical process in terms of the continuity of the Turkish language. As a natural result of these positive developments, the Turkish-Arabic dictionary named "Divanü Lûgat-it Türk", written by Kaşgarlı Mahmut between 1072-1074 during the time of the Karakhanids (912-1212 AD) for the first time in order to enable Turkish to be learned by other ethnic elements other than the Turks, is accepted as the beginning of Teaching Turkish to Foreigners. (Bayraktar, 2003, p. 58-71, Barın, 2004, p. 19-30; Biçer, 2012, p. 107-133, etc.). The work, which provides Arabic equivalents of 7500 Turkish words, provides a better understanding of the words by using them in sentences and supporting the sentences with rich folkloric texts, is organized according to the Arabic dictionary tradition and provides important information about the Turkish world and the dialects of Turkish (Bayraktar, 2003, pp. 58-71).

In this dictionary, in which the inductive method was used, the rules were drawn from the examples, and the grammar-translation method was applied in the foreign language teaching technique. Morphological elements were processed with a structuralist approach (Bayraktar, 2003, pp. 58-71).

1.1.2. Teaching Turkish to Foreigners in the Chagatai Period

The second and most important work written by Turks in the field of Teaching Turkish to Foreigners is Muhakemetü-l Lugateyn, which means the comparison of two dictionaries or two languages, completed by Ali Şir Nevai, an important representative of Chagatai Turkish, on December 4, 1499. With the work he wrote, the author aimed to teach Turkish to Persians, to prove the claim that Turkish is structurally superior to Persian, and to reveal the richness of Turkish (Ercilasun, 2007, pp. 411-416). While proving this idea, the author expressed his views freely without adhering to any rules (Bilgin, 2005, pp. 397-398).

1.1.3. Teaching Turkish to Foreigners in the Kipchak Period

The demand for Turkish increased with the influence of the Mamluk Turkish Sultans, who dominated Egypt between 1250 and 1517 AD. For this reason, many books were published to teach Turkish to the Arab people (Bayraktar, 2003, pp. 58-71). On this occasion, many noteworthy dictionary and grammar studies were carried out for the purpose of Teaching Turkish to Foreigners between the mentioned dates. We can list the mentioned studies as follows:

Codex Cumanicus (Kuman book) is the second important work in terms of Teaching Turkish to Foreigners history after Divanü Lûgat-it Türk. "It is a manuscript consisting of two parts, compiled among the Kipchaks living in the north of the Black Sea by Italian and German missionaries in the XIV century. The work in question reflects the structure of daily spoken language and dialects rather than the written language of the period" (Ercilasun, 2009, p. 382). The work consists of 82 pages, the Italian section consists of 55 pages and includes Latin, Persian and Kipchak words. This section contains 1560 words. In the German section, there are Christian prayers, hymns, texts, proverbs and riddles in this section, which includes Kipchak, German and Latin words and sentences.

The work whose name is mentioned above is anonymous and was written in the Latin alphabet. Apart from this, all known Kipchak period works were written in the Arabic Alphabet. Although it is said that the work in question was prepared for the purpose of spreading Christianity among the Kipchaks due to its content, it is thought that it may have been prepared for the purpose of teaching Kipchak Turkish and expanding the hinterland of this language. In fact, the fact that the Latin and Biblical texts in the work were translated into Kipchak strengthens the thesis that it was written for the purpose of Teaching Turkish to Foreigners (Demirci, 2002, pp. 699-703). The fact that examples of daily conversation are given in addition to the information about Christianity in the work strengthens the thesis that it may have been prepared for the purpose of Teaching Turkish to Foreigners.

Apart from Codex Cumanicus, other works written on Teaching Turkish to Foreigners during the Kipchak period are as follows:

Kitâb-1 Mecmû-i Tercümân-1 Türkî and Acemî and Mongolî (The Book of All Translators of Turkish, Persian and Mongolian) is a dictionary and grammar work written in 1343 by a Turk from Konya named Halil bin Muhammed el-Konyevi.

EI-Kavaninü'l-Külliyye Li Zabti'l- Lûgati't- Türkiyye (General Rules of the Turkish Language), which is assumed to have been written in the XV century, it's author is unknown. The relevant work contains the grammatical rules of Turkish.

Kitabü'I-İdrak Li-Lisânü'I-Etrak (The Book of Understanding the Language of the Turks), is a Turkish-Arabic dictionary and grammar work written by Esirü'd-din Ebû Hayyân in 1312.

Kitabü Bulgati'l-Müştak Fi Lûgati't-Türk ve'l-Kıbçak (Book of Derivatives of Turkish and Kipchak Words) is a Turkish-Arabic dictionary work written by Cemalü'd-din Ebi Muhammed Abdullahi't-Türki in the first half of the 1XV century.

Et-Tuhfetü'z-Zekiyye Fi'l- Lûgati't - Türkiyye (Dictionary of New and Pure Turkish) The author of the Turkish-Arabic dictionary is unknown, and it is estimated that the relevant work was written in the first half of the 15th century.

Ed-Dürretü'l-Mudiyye Fi'l Lûgati't Türkiyye (The Shining Pearl of the Turkish Language), the author of the work, which is estimated to have been written in the XIV or XV century, is unknown. The work in question was designed as a Turkish-Arabic dictionary and phrasebook.

Biçer listed the general features of the above-mentioned works teaching Turkish to foreigners belonging to the Kipchak period Turks as follows:

The works, which are based on the standard written language and aim to improve the reading and writing skills of the individual, are written in accordance with the Arabic grammatical structure and these works are dictionary and grammar-oriented works. It aims to facilitate the teaching of the target language by comparing the grammatical rules of Arabic and Turkish, and in this direction, numerous examples from social, cultural, commercial and daily life have been used. The language teaching method mainly uses the grammar-translation method called the classical method, as well as sentences that comply with productive transformational grammatical rules (Bicer, 2012, p. 118-119).

1.1.4. Teaching Turkish to Foreigners in the Seljuk Period

Even though Turkish experienced a decline in the administrative and scientific fields due to the fact that the official language was Persian and the language of science was Arabic during the Seljuk period, it was learned and taught as the mother tongue in madrasahs and by urban notables and people. Many works were written during the relevant period. According to Korkmaz (2009, p. XCII), a new written language based on Oghuz Turkish flourished in Anatolia at the end of the XII century. In this century, works in which religious and moral issues were at the forefront emerged. The works in question are as follows: Behçetül Hadaik fi Mev'izetil Halaik, Kısayi Yusuf Mesnevi, Kitabül Feraiz. However, the only known work on Teaching Turkish to Foreigners within the scope of Old Anatolian Turkish is the work titled "Hilyetü'l-İnsan ve Heybetü'l Lisan (Beautiful Attributes of Man and the Greatness of Language)" written by Cemalüddin İbn-i Mûhenna, also mentioned as "İbni Mûhenna Dictionary" (Biçer, 2012, p. 122 and Açık, 2008, p.2).

The dictionary in question consists of three parts containing Turkish, Mongolian and Persian words, in addition to the features and words of Karakhanid, Azeri and Türkiye Turkish, many words related to daily life are included in the dictionary. In addition, the grammar-translation method was generally used in the dictionary to analyze the texts in the book as well as the use of Turkish in daily life (Bayraktar, 2003, p. 68).

1.1.5. Teaching Turkish to Foreigners in the Ottoman Period

Teaching Turkish to the devsirmes employed in the army, recruit boys and those recruited to the Enderun during the Ottoman period is considered one of the first steps in teaching Turkish to foreigners during the Ottoman period. The Fener Greek Patriarchate, which was affiliated with the Ottoman subjects, taught Turkish to a certain number of Greek youth in order to train translators (Demircan, 1988, p. 89; cited in Şenden, 2017, p. 28).

After the Tanzimat Edict, minorities were allowed to enroll in Turkish schools. Then, starting from 1895, teaching Turkish was included in the curriculum of minority schools (Orhonlu, 1971; Merdivenci, 1980, pp. 15-21; Bagis 1983; cited in Doğan, 2011, p. 3). Turkish lessons were among the courses

given in foreign school programs that carried out educational activities in areas under Ottoman rule (Demircan, 1988, p. 89; cited in Doğan, 2011, p. 3).

In addition to all these developments, there are works written by Ottoman intellectuals of the period on the subject of Teaching Turkish to Foreigners. The relevant works mentioned are:

Besse, J.C. (1829). Abrégé de Grammaire Turque (Turkish Grammar Summary), Paris.

Efendi, F., Efendi, C. (1855). Grammatik der Osmanischen Sprache (Ottoman Grammar), İstanbul.

Guzel, P.A. (1853). Dialogues français-turcs, Précédés d'une vocabulaire (French-Turkish Dialogues), İstanbul.

Gürcü, S. (1892). Ecnebilere Mahsus Elifbâ-yı Osmanî, İstanbul.

Hagopyan, V.H. (1907). Bedrika-i Lisân-i Osmânî, Almanya/ Heidelberg.

Hagopyan, V.H.(1908). Key to the Ottoman - Turkish Conversation - Grammar (Grammar Key to Spoken Ottoman Language), Londra.

Mihri, M. (1884). Kitabü't-Tuhfetü'l-Abbasiyetü'l Medreset el Aliyetü't-Tevfikiye, Mısır.

Ruhi, M. (1893). Conversazione in Lingua Turca elkaliona (Turkish Communication), İstanbul.¹

The existence of the mentioned works is an indication that the Ottoman State and Ottoman intellectuals gave importance to Teaching Turkish to Foreigners.

1.2. Teaching Turkish as a Foreign Language by Westerners and Their Studies

1.2.1. Activities of Westerners in Teaching Turkish as a Foreign Language

As a result of the rise of the Ottoman Empire in the XVI century, its spread to three continents and its increasing weight in the world arena, the increase in the political, commercial, diplomatic and cultural activities of the western states with the Ottomans led to various steps being taken in the western states with the desire to learn Turkish as a foreign language.

¹ Hengirmen, (1993:6), ilgili makalesinde yüzyıllara göre YTÖ konusunda yerli ve yabancı yazarlarca yazılan kitap sayısını belirtmiş Ek-1'de olup, söz konusu yüzyıllarda YTÖ'ye yönelik tespit ettiği eserlerin yazıldığı dile göre tasnifi ise Ek-2' de detaylı bir şekilde göstermiştir.

With the desire to learn Turkish as a foreign language, the Republic of Venice was the first among Western states to open the first school for language boys (It giovani della lingua) attached to its embassy in Istanbul in 1551, with the aim of training Venetian translators who knew Turkish (Ağıldere, 2010, p. 695).

For the first time, the Papacy included Turkish in the program of the Collegium de Proganda Fide, which started operating in 1627, and also included Turkish in the programs of relevant institutions in order to train translators who speak Turkish in its affiliated institutions (Adıgüzel, 2001, p. 30).

In order to train translators and ambassadors who knew Turkish, France sent French children aged 6-9 for the first time in 1699 and at three-year intervals thereafter to Catholic priests in Istanbul to learn Turkish in practice (Barın, 1992, p. 49).

Following the French Language School, which was opened by the French government in Istanbul in 1699, Austria in 1754, Poland in 1766, and England in 1814 opened schools to train translators in Istanbul (Ağıldere, 2010, p. 695).

After France, in the XVIII century, countries such as the Netherlands, England, Austria and Russia showed interest in learning Turkish. (Barın, 1992, s. 50). Then, "in many parts of Europe, in Paris, London, Rome, Vienna, Budapest, Berlin, Krakow, Helsinki, St. Petersburg and Kazan universities, chairs on Turkology were established, lectures were given, scientific associations became active, periodicals were published." (Adıgüzel, 2001, p. 30).

As a result of all the increasing activities and events, Turkology emerged as an independent branch of science in the West and the hidden treasures of Turkish language and Turkish culture were brought to light.

In addition to all these developments, as a result of the efforts of foreigners to learn Turkish as a foreign language, foreigners themselves produced works on Ottoman Turkish in many western languages such as Russian, German, French, English, Italian, etc. during the Ottoman period, in order to ensure that Turkish was taught as a foreign language. These works, written by Westerners, are a unique treasure for us to follow the development and transformation of Turkish between the XVII and XX centuries (Korkmaz, 2009, p. CIX). Since the content and explanations of the works are the subject of a separate research, in this study, we can categorize the writing languages of the works written as evidence of the efforts of foreigners and other information about the works as follows:

1.2.1.1. Turkish Teaching Books for British Written by British

Arnold, E. (1877). A Simple Transliteral Grammar Of The Turkish Language With Dialogues and Vocabulary, London.

Barker, W.B. (1854). A Practical Grammar Of The Turkish Language; with Dialogues and Vocabulary, London.

Barker, W.B. (1854). A Reading Book Of The Turkish Language, London. Boyd, C. (1842). The Turkish Interpreter Or A New Grammar Of The Turkish Language, Paris.

Davids, A.L. (1832). Grammar Of the Turkish Language, London.

Francis Mackenzie, C.F. (1879). A Turkish Manual Comprising A Condensed Grammar With Idiomatic Phrases, Exercises, and Dialogues, and Vocabulary, London.

Hopkins, F.L. (1877). Elementary Grammar Of The Turkish Language: With A Few Easy Exercises, London.

Redhouse, J.W. (1877). The Turkish Campaigner's Vade-Mecum Of Ottoman Colloquial Language, London.

Redhouse, J.W. (1884). A Simplified Grammar Of The Turkish Language, London.

Riggs, E. (1856). Outline Of A Grammar Of The Turkish Language, İstanbul.

Said, A. (1877). A New Practical and Easy Method Of Learning The Turkish Language, London.

Tarring, C. J. (1886). Turkish Grammar, London.

Tien, A. (1896). A Turkish Grammar, Containing Also Dialogues and Terms Connected with the Army, Navy, Military Drill, Diplomatic and Social Life, London.

Vaughan, T. (1709). Grammar Of The Turkish Language, London.

Wells, C. (1880). A Pratical Grammar Of The Turkish Language, London.

1.2.1.2. Turkish Teaching Books for Germans Written by Germans

Fink, L. (1872). Türkischer Dragoman (Turkish Translator), Leipzig.

Hindoglou, A. (1829). Theoretisch - Practische Turkische Sprachlere (Turkish in Theory and Practice), Vienna.

Jehlitschka, H. (1895). Türkisches Konversations - Grammatik (Turkish Dialogues- grammar), Heidelberg.

Manissadjiman, J.J. (1893). Lehrbuch der modernen Osmanisches Sprache (Modern Ottoman Language Textbook), Stuttgart.

Müller, A. (1889). Türkische Grammatik mit Paradigmen, Literatur, Chrestomathia und Glossar (Turkish Grammar with Example-Conjugation, Literature, Crestomatics and Dictionary Sections), Berlin.

Nagh de Hansany, J. (1672). Colloqula Familiaria Tucico Latina (Turkish Grammar-Dictionary), Köhn.

Piquere, P.J. (1870). Grammatik der Turkisch - Osmanische Umgansprache (Turkish Grammar - Ottoman Speaking Dialect), Vienna.

Radloff, W. (1882). Phonetik der Nördlichen Türksprachen (Phonology of Northern Turkic Languages), Leipzig.

Radloff, W. (1893). Versuch Eines Wörterbuches der Türk - Dialecte (A Dictionary Attempt in Turkish Dialects), Petersburg.

Wahrmund, A. (1869). Practisches Handbuchder Osmanische - Turkischen Sprache (Practical Handbook of Ottoman Turkish), Gissen.

1.2.1.3. Turkish Teaching Books for the French Written by the French

Besse, J.K. (1829). Abrege de la Grammaire Turque et un Petit Vocabulaire en Français, Turcen Hongrois (Summary of Turkish Grammar with French, Turkish and Hungarian Vocabulary Sections), Budapest.

Bianchi, T.X. (1852). Guide de la Conversation en Français et en Turc (French and Turkish Phrasebook), Paris.

Dal, M. (1908). Methode Theorique et Pratique Pour L'enseignementsde la Langue Turque (Theoretical and Practical Methods for Teaching Turkish), İstanbul.

Deny, J. (1921). Grammaria de Langue Turque (Turkish Language Grammar), Paris.²

Dietrici, F. (1854). Chrestomathie Ottomane (Ottoman Chrystomati), Berlin.

Dubeux, L. (1856). Elements de la Grammaire Turque (Elements of Turkish Grammar), Paris.

Hindoglou, A. (1834). Grammaire Theorique et Pratique de la Langue Turque (Theoretical and Practical Grammar of Turkish), Paris.

Jaubert, A. (1823). Elements de la Grammaire Turque (Elements of Turkish Grammar), Paris.

Pfizmaier, A. (1847). Grammaire Turque (Turkish Grammar), Vienna.

^{2 1941} yılında Ali Ulvi Elöve tarafından "Türkçeye Türk Dilbilgisi-Osmanlı Lehçesi" ismiyle tercüme edilerek neşredilmiştir(Korkmaz, 2009: CXIV).

Redhouse, S.J. (1846). Grammaire Raisonnee de la language Ottomane (Annotated Grammar of the Ottoman Language), Paris.

Youssouf, Jozeph R. (1892). Grammaire Complete de la Langue Ottomane (Complete Grammar of the Ottoman language), İstanbul.

1.2.1.4. Turkish Teaching Books for Italians Written by Italians

Argenti, F. (1553). Regola del Parlare Turco (Turkish Speaking Rule).³ Ferraguto, P. (1611). Grammatica Turchesca (Turkish Grammar).⁴

1.2.1.5. Grammar Books Written in Latin for Türkiye Turkish

Megiser, H. (1612). Institutionum Linguae Turcicae Libri Quatuor (Fundamentals of Turkish Language in Four Parts), Leipzig. ⁵

Meninski, F. (1680) Linguarum Orientalium Turcicae, Arabicae, Persicae İnstitutiones, Seu Grammatica Turcica (Rules of Turkish, Arabic and Persian among Eastern Languages and Grammar of Turkish), Vienna.⁶

1.2.1.6. Turkish Teaching Books for Russians Written by Russians

M. A. Terentyev, M.A. (1887). Russian-French-Turkish-Persian Dictionary of Military and Technical Terms, St. Petersburg.⁷

Maksimov, V.A. (1867). Oput Izslědovanija Turskich Dialektov Chudavendgarě iKaramanii (Research on Turkish Dialects in Hüdavendigar and Karaman), St. Petersburg.⁸

³ Osmanlı Türkçesinin kaidelerini, İtalya'da ilk kez ele alan küçük hacimli bir kitaptır. Bilim dünyasına ancak 1938 yılında tanıtılabilmiştir (Özçam, 1997: 125).

⁴ Sözü edilen yazma eser 131 sayfa olup Avrupa>da Türkçenin ilk grameri kitabı olarak kabul görmekte. Söz konusu eser 1940 yılına kadar Napoli Millî Kitaplığında yazma halinde kalmıştır (Özçam, 1997: 125).

⁵ İlgili eserin 3. kısmında Hıristiyanlıkla alakalı dinsel metinlerle 220 adet Türkçe deyim ve atasözü mevcut olup. Eserin 4. kısmında Latince ve Türkçe sözlük bulunmaktadır (Özçam, 1997: 126).

⁶ Söz konusu yazmanın ikinci baskı 1756 yılında Viyana/da yapılmıştır (Özçam, 1997: 126). İlgili eser, Batıda Türkiye Türkçesini konu edinen ilk eserdir. Eser daha sonra tıpkıbasım olarak ülkemizde yayımlanmıştır (Korkmaz, 2009: CIX).

⁷ M.A. Terentyev' in askeri amaçla kaleme aldığı ve doğu dillerine ait ilk sözlük olarak kabul edilmektedir (Doğan, 2011: 34)

⁸ Eser Türkiye Türkçesinin Anadolu ağızlarını öğretmek maksadıyla kaleme alınmıştır. İlgili eser Türkiye Türkçesi ağız araştırmalarının öncüsü sayılmaktadır (Doğan, 2011: 34).

V.D. Smirnov, V.D.(1891). Selected Works from Ottoman Literature, St. Petersburg.⁹

1.3. Teaching Turkish to Foreigners in the Modern Era

1.3.1. Teaching Turkish to Foreigners during the Republic of Türkiye

The effort to simplify the Turkish language and create it with a national consciousness started with the Localization movement in the XVI century in the Ottoman period and continued with the intellectuals of the Tanzimat period, and continued with the efforts of intellectuals such as Ziya Gökalp, Ömer Seyfettin, Ali Canip Method, gathered around the "Genç Kalemler" magazine published in Thessaloniki in 1911 and the intellectual action, which was initiated by the New Language movement and later progressed with the efforts of these intellectuals, was put into practice with conscious steps and they put the idea into action.

As a result of the proclamation of the Republic of Türkiye in 1923 and the subsequent revolutions, the successes in the political field were followed by achievements in the field of culture and language. Following the alphabet revolution in 1928, valuable studies were carried out on the Turkish language with the establishment of the Turkish Language Association, which was established in 1932 by the order of M. Kemal. All scientific research and investigations carried out by this institution have facilitated the development of Turkish as a native language as well as its learning as a foreign language.

During the Republican period, Tahsin Banguoğlu, Muharrem Ergin, Tahir Nejat Gencan, Doğan Aksan, etc., who were educated in Turkish Language departments that continued their activities as an independent unit in universities, were instrumental in the emergence of important studies on the Turkish language under the leadership of Turkologists. (Kormaz, 2009, p. CXV).

Foreign language learning, which was put into practice after the Second World War with the aim of minimizing the effects of the war and establishing peace among European communities, has also affected the language policies of other countries over time. This effect has increased with globalization, causing countries to take many initiatives to teach their languages to other nations and communities, and these initiatives still continue.

While every language people learn offers many opportunities, it can be said that the world's rapid change and transformation every day is a very

⁹ Türk dili, edebiyatı ve tarihi. Alanında önemli çalışmalara imza atan V.D. Smirnov'un "Osmanlı Edebiyatından Seçme Eserler" adlı derleme çalışması alanında önemli kaynak bir eser olarak yâd edilmektedir (Kononov, 1956 Akt. Doğan, 2011: 34).

important factor in learning a foreign language (Gün, Akkaya & Kara, 2014, p. 3). Depending on the changing conditions and balances in Türkiye, Turkish teaching activities for foreigners have regained importance since the 1960s. When we look at the studies prepared by various university professors on this subject, we can see the work titled "Speaking and Reading Turkish Lessons for Foreigners" published by Kenan Akyüz in 1965, "Explanated Applied Turkish for Foreigners" published by Hüseyin Aytaç and M. Agâh Önen in 1969, and "Turkish Textbooks for Foreigners" written by Sermet Sami Uysal in 1979, "Turkish Coursebook with Turkish-English Explanations for Foreigners" by Kava Can in 1981, "We are Learning Turkish" jointly prepared by Mehmet Hengirmen and Nurettin Koç in 1982, and "We Are Learning Turkish", "For Foreign Students - I am Learning Turkish" by Tahir Nejat Gencal and other works show that important steps have been taken in this regard (Barın, 2004, s. 19-30). The Republic of Türkiye, which is not indifferent to this positive development, has carried out many successful activities for Teaching Turkish to Foreigners both at home and abroad through organizations such as TÖMER(Turkish and Foreign Languages Application and Research Center), TIKA(Turkish Cooperation and Coordination Agency), Yunus Emre Institute, Maarif Foundation, etc.

1.3.1.1. Activities for Teaching Turkish to Foreigners in TÖMERs

Teaching Turkish to Foreigners, which was initially revived in Türkiye under the leadership of university professors such as Kenan Akyüz, Hüseyin Aytaç, M. Agah Önen, first started in 1984 with the founding of TÖMER, which was established affiliated with Ankara University, taking the world's leading language teaching centers as an example, and later on Teaching Turkish to Foreigners has entered the institutionalization phase with the branches of the same organization opened in Alanya, Antalya, Bursa, Izmir, Istanbul (Kadıköy-Taksim branches), Kızılay and South Korea.¹⁰ TÖMER, which was established within Ankara University, as a result of Turkish teaching activities for foreigners and Turkish nobles, today, apart from Ankara University TÖMER, there are courses teaching Turkish to foreigners affiliated with 98 universities in different cities of Türkiye, and the relevant courses continue their educational activities under different names such as Turkish Teaching Application and Research Center, TÜRKMER, Language Center.¹¹

¹⁰ http://tomer.ankara.edu.tr/#%C5%9Eubeler erişim tarihi: 27.09.2019.

¹¹ http://www.dilbilimi.net/tomer_ve_dil_merkezleri.html erişim tarihi: 27.09.2019.

In addition to Teaching Turkish to Foreigners, TÖMERs organize seminars and tour activities to promote Turkish culture. A scientific and systematic education program is carried out in the relevant centers, source books for Teaching Turkish to Foreigners are prepared and published, scientific studies are published, thus Turkish teaching reaches wider audiences and these ongoing activities are seriously carried out in all TÖMERs. (Şimşek, 2011, p. 30).¹²

1.3.1.2. TİKA's Activities for Teaching Turkish to Foreigners

As a result of the end of the Cold War and the dissolution of the Soviet Union in 1991, many new states, especially in the Asian continent, emerged on the world political arena. It is an organization that provides public services, established under the Ministry of Foreign Affairs by Decree Law No. 480, in order to ensure cooperation in many fields with other states, especially the Turkish states in Asia, among these newly established states. The organization in question was affiliated with the Prime Ministry in 1999, and then continued its activities by being affiliated with the Ministry of Culture and Tourism with the Presidential Decree No. 30479 on July 15, 2018.

Today, TİKA carries out its activities in 150 countries with 61 program coordination offices in 59 countries¹³. The countries where the program coordination offices are located are: Afghanistan (Herat, Kabul, Mazar-i Sharif), Albania, Azerbaijan, Bangladesh, Bosnia-Herzegovina, Chad, Algeria, Djibouti, Ethiopia, Philippines, Palestine, Guinea, South Africa, South Sudan, Georgia, Croatia, Iraq, Cameroon, Montenegro, Kazakhstan, Kenya, Kyrgyzstan, Colombia, Comoros, Kosovo, Libya, Lebanon, Hungary, Macedonia, Mexico, Egypt, Mongolia, Moldova, Mozambique, Myanmar, Namibia, Niger, Uzbekistan, Pakistan (Islamabad, Karachi Program Coordination Office) Romania, Senegal, Serbia, Somalia, Sudan, Tajikistan, Tanzania, Tunisia, Turkmenistan, Uganda, Ukraine (Kiev, Crimea), Jordan and Yemen.

TİKA attaches importance to the development of educational infrastructures in the relevant countries, in addition to the production and economic cooperation, as well as the development of social infrastructure services, and opens schools in these countries depending on the need, and pays utmost attention to making Turkish a compulsory or elective course in the schools it opens.

¹² https://www.yee.org.tr erişim tarihi: 01.10.2019.

¹³ https://www.yee.org.tr erişim tarihi: 01.10.2019.

Within the framework of the Turcology Project (Turkology Turkish Language and Culture Centers Project)¹⁴, which has been implemented by TIKA since the 2000-2001 academic year, it continues to cooperate with the following higher education institutions within the framework of the project in order to re-establish friendly and cultural ties with the cooperating friendly and relative communities: Afghanistan, Albania., Belarus, Bosnia-Herzegovina, Bulgaria, Estonia, Palestine, India, Georgia, Montenegro, Kazakhstan, Kyrgyzstan, Kosovo, Latvia, Lithuania, Macedonia, Mongolia, Moldova, Uzbekistan, Slovakia, Syria, Crimea Autonomous Republic, Tatarstan Autonomous Republic, Ukraine and Yemen. By signing an Academic Cooperation Protocol with higher education institutions in the relevant countries, Turkology/Turkish Language and Literature Departments and Turkish Education Centers are opened within these institutions. In addition to the supply of technical tools, experts in their fields are also sent to the relevant units.¹⁵ By popularizing Turkish in the relevant countries with the project in question, it is aimed to reach an audience that can communicate in Turkish in the areas where cooperation will be made with these countries (Durmuş and Yılmaz, 2012, p. 550; cited in Şenden, 2017, p. 30).

Apart from the Turcology project initiated by TIKA, it is a language training set called "We Are Learning Orkhon Turkish" published by the mentioned organizations for teaching Turkish to foreigners. The set in question is designed for three levels and consists of six books in total, including a course and workbook for each level and a teacher's guide book (Yeşilyurt, 2015, p. 172). In addition, a Turkish language set called "We Are Learning Güneş Turkish", consisting of eight books, was prepared, taking into account the basic, intermediate, high and advanced levels, which TİKA had prepared for the purpose of benefiting from Teaching Turkish to Foreigners. (Kasapoğlu, 2012, p. 59).

1.3.1.3. Yunus Emre Institute's Activities for Teaching Turkish to Foreigners

It was established on 05.05.2007 with the aim of promoting Türkiye's history, culture, music, handicrafts and Turkish, and strengthening Türkiye's friendship ties abroad and it is a public foundation operating for the benefit of the public. The foundation, which started its services in 2009, provides Turkish education to foreigners with 58 different cultural centers in 40 countries. The countries and cities where the mentioned cultural centers are located are

¹⁴ https://www.yee.org.tr erişim tarihi: 01.10.2019.

¹⁵ https://www.yee.org.tr erişim tarihi: 01.10.2019.

as follows: USA - Washington DC, Afghanistan - Kabul, Germany - Berlin, Germany - Cologne, Albania - Shkodra, Albania - Tirana, Australia - Melbourne, Austria - Vienna, Azerbaijan - Baku, Bahrain - Manama, Belgium - Brussels, Bosnia and Herzegovina - Foynica, Bosnia and Herzegovina - Mostar, Bosnia and Herzegovina - Sarajevo, Algeria - Algeria, Morocco - Rabat, France - Paris, South Africa - Johannesburg, South Korea - Seoul, Georgia - Tbilisi, Netherlands - Amsterdam, Croatia - Zagreb, England - London, Iran - Tehran, Spain - Madrid, Italy - Rome, Japan - Tokyo, Montenegro - Podgorica, Qatar - Doha, Kazakhstan - Astana, TRNC - Nicosia, Kosovo - Ipek, Kosovo - Pishtina, Kosovo - Prizren, Lebanon - Beirut, Hungary - Budapest, Macedonia - Skopje, Malaysia - Kuala Lumpur, Mexico - Mexico City, Egypt - Cairo, Moldova - Comrat, Pakistan -Karachi, Pakistan - Lahore, Poland - Warsaw, Romania - Constanta, Romania - Bucharest, Russian Federation - Kazan, Russian Federation - Moscow, Senegal - Dakar, Serbia - Belgrade, Sudan - Khartoum, Somalia - Mogadishu, Tunisia -Tunisia, Ukraine - Kiev, Jordan - Amman.

Language teaching at centers affiliated with the Institute is organized according to the Common European Recommendations for Languages, based on a 6-step language teaching method determined according to the European Language Portfolio criteria, and thus aims to develop the person's four language skills. The materials in the course are prepared by the relevant Foundation by experts in the field. Currently, the "Seven Climates Turkish Set" is taught in cultural centers. Lessons are given by experts in the field. Certificates are given to trainees who successfully complete the courses.

The Institute is working on making Turkish an elective or compulsory foreign language course abroad, and as a result of the first steps taken, Turkish has started to be taught in secondary schools in Amman, Constanta, Mostar, Sarajevo, Tbilisi, Batumi, Tokyo and Warsaw.

In order to ensure on-site language acquisition of its trainees, the Institute aims to bring foreign trainees to Türkiye in the summer months and have them learn Turkish in a practical way in designated centers.¹⁶

1.3.1.4. Turkish Maarif Foundation's Activities for Teaching Turkish to Foreigners

Turkish Maarif Foundation was established by law no. 6721 dated 17.06.2016. The foundation in question is the only organization other than the Ministry of Education authorized to directly open educational institutions abroad.

¹⁶ https://www.yee.org.tr erişim tarihi: 01.10.2019.

The foundation, which works for the public welfare, was opened to carry out activities at all stages of education, from kindergarten to higher education.¹⁷ The foundation, which operates in 58 countries, has official contact in 41 countries, and has education and training facilities in 35 countries, carries out its education and training activities at kindergarten, primary school, secondary school and high school levels with 294 educational institutions and 41 dormitories in 35 countries. As of August 21, 2019, the countries and number of educational facilities in which the mentioned educational institution and dormitories operate are shown in the table below:

			01-	Camboo Married	
			Ulke	Egium Karumi	r Turt
			ABD	4	
			Atganistan	3/	- 11
			Arnavutiuk	/	-
			Avustraiya	2	-
			Bosna - Hersek	4	-
	Eğitim Faaliyeti	0.5	Burundi	2	-
	Yürütülen	25	Cibuti	1	
A	Ülko Saviai	JJ	Çad	6	
	UIKE SAVISI		Ekvator Ginesi	4	
			Etiyopya	4	
			Fildişi Sanlılı	4	-
			Gabon	4	-
			Gambiya	3	-
	Direktör Atanan	E E	Gine	10	2
· 6	üller Commission	ካካ	Gurcistan	4	
000	ULKE SAYISI	33	Kamerun	14	4
			Kongo	4	-
			Kongo Dem. Cumn.	4	-
Eğitim Kurumu	29/.	Rosova	/	-	
		Irak	3		
		Mail	21		
		Montanya	9		
		Makedonya	5		
える間面間 え	Sayisi	2/4	Nijer	12	- 2
			Panstall	70	
Yurt Sayısı	and the second second second second second second second second second second second second second second second	Foreage		-	
		Sierra, Leope	2	-	
			Sao Tome ve Princine	2	-
	×	11	Somali	7	3
	4	Surfan	6		
			Tanzanya	2	2
			Tunus	3	1
			Ordin		1
			Venezuela	7	
			Toplam	29.4	41
			Top and		

Graph 1. Countries in which Turkish Maarif Foundation operates and its activities

(https://www.turkiyemaarif.org/page/42-dunyadatmv-16 date of access: 30.09.2019)

Turkish Maarif Foundation aims to provide students with the ability to use an internationally recognized foreign language and Turkish at at least B2 level, in addition to native language literacy in educational institutions. For this purpose, the institution continues Turkish education in formal education institutions. It prepares the language teaching program based on the Common European Text for Languages. With the program it has prepared for this purpose, it aims to

¹⁷ https://www.turkiyemaarif.org/page/524-turkiye-maarif-vakfi-12 erişim tarihi: 30.09.2019

improve the four basic language skills of Turkish students at the appropriate program level. The program in question is flexible and aims to prepare appropriate material. In addition to aiming to promote Turkish and Turkish culture with all these studies, the Foundation aims to ensure intercultural rapprochement by increasing the intercultural awareness of the individual. With all these studies, Turkish Maarif Foundation aims to popularize Turkish by teaching it systematically in schools abroad within the scope of formal education (Turkish Maarif Foundation Program on Teaching Turkish as a Foreign Language, 2019, p. 5-26). In addition, in order to teach Turkish according to standards, the Turkish Language Teaching Coordinatorship affiliated to the Turkish Maarif Foundation Educational Policies and Curriculum Unit was established in February 2018 (Gültekin, 2019, p. 34). The Foundation also works intensively on teaching Turkish as a foreign language in schools abroad, especially in education, and opens supportive courses and studies on this subject, and publishes scientific and cultural publications.

1.3.1.5. Activities for Teaching Turkish to Foreigners in Overseas Schools Affiliated to the Ministry of National Education(MoNE)

In addition to ensuring that citizens of Turkish origin in relevant countries do not lose their ties with Turkish and Turkish culture and ensure their integration into the country they live in, MoNE aims to spread Turkish and Turkish culture through Türkiye Turkish Education and Training Centres. As of 03.01.2019, the countries and the number of schools affiliated with the Ministry of Education with foreign schools and Turkish Teaching Centers are as follows: Azerbaijan (3), Georgia (3), Iran (2), Qatar (2), Kyrgyzstan (5), Kuwait (3), Moldova (1), Uzbekistan (3), Romania (1), Saudi Arabia (34), a total of 60 schools in Turkmenistan (3), Tajikistan (Dushanbe Türkiye Turkish Education Center) and Kyrgyzstan (There are 2 Türkiye Turkish Education and Training Centers: Bishkek Türkiye Turkish Education and Training Center).¹⁸.

All materials required for schools abroad and Türkiye Turkish Education Centers operating under the Department of Foreign Education and Training are submitted to the Board of Education and Discipline by the relevant unit, and the material and teaching staff needs of these units are met from the relevant ministry's own budget.

¹⁸ https://yyegm.meb.gov.tr/www/yurt-disi-okullarimiz/icerik/366 erişim tarihi: 01.10.2019

1.3.1.6. Other Institutions and Organizations Engaging in Teaching Turkish to Foreigners

In line with the fact that there is an increasing tendency for foreigners to learn Turkish in the world in recent years, in addition to institutions such as MoNE, TIKA, Yunus Emre Institute, Turkish Cultural Centers operating abroad for Teaching Turkish to Foreigners, Turkish Teaching Centers affiliated with embassies and private courses, as well as in foreign universities, activities continue within the Department of Turkology/Turkish Language and Literature, which was opened, and by non-governmental¹⁹ organizations in Türkiye. In addition, Turkish language education is provided to trainees aged 6 and above for the purpose of Teaching Turkish to Foreigners by the "General Directorate of Lifelong Learning" affiliated to the Ministry of National Education(MoNE). Additionally, Türkiye has introduced important practices to support the integration and schooling of Syrian children. In 2016, Promoting Integration of Syrian Children into the Turkish Education System (PICTES) was implemented (Kara, 2020, p. 581). For this reason, in November 2016, nearly four thousand teachers took an in-service course to provide education to Syrians. Teachers who graduated from Turkish language literature, classroom teaching and Turkish language teaching departments were selected within the framework of certain criteria and were interviewed. Afterwards, these teachers received in-service training and were assigned to different regions of our country to teach Turkish to Syrians and help them adapt to the country (Kara, Karakoç Öztürk & Dağıstanlıoğlu, 2017, p. 18).

Institutions and organizations that carry out activities for Teaching Turkish to Foreigners are cooperating with joint studies by forming associations for more effective language teaching. The Yunus Emre Institute in question maintains close contact with TÖMER and other relevant organizations in its studies on language and culture. (Güzel, 2011, p. 30).

In recent years, Turkish Language and Literature and Turkish Education departments of universities and Turkish as a Foreign Language Departments have been making academic publications on the subject regarding Teaching Turkish to Foreigners.

¹⁹ https://yyegm.meb.gov.tr/www/yurt-disi-okullarimiz/icerik/366 date of access: 01.10.2019

2. Conclusion

Teaching a language as a foreign language is entirely dependent on the political, economic and cultural power of the country speaking that language. In Turkish history, successes in the political and cultural fields have led to an increase in the desire of foreigners to learn Turkish and the acceleration of Turkology studies. Teaching Turkish to Foreigners initially started for Arabs and Persians, and in the historical process, as the Turks became stronger in the political arena during the Ottoman period, western nations such as the British, Germans, Russians, Italians and French made a conscious effort to learn and teach Turkish. In this way, Turcology departments were opened in many European countries, with the aim of making this language learned and taught by westerners themselves.

As a result of the intellectual class turning towards the west during the Tanzimat period, many Ottoman intellectuals and writers carried out many dictionary, grammar and translation studies in order to teach Turkish to westerners.

In the works written about Teaching Turkish to Foreigners throughout the historical process, grammatical rules were not given directly, but grammar rules were tried to be reinforced with the inductive method.

In addition, the principles of comparative linguistics were used in the works, and the works were tried to be taught in Turkish using the grammartranslation method. This method aims to improve one's daily, literary and academic language skills.

Thanks to the texts written consciously and enriched with many cultural elements in the works written for the purpose of Teaching Turkish to Foreigners, the Turkish language and culture are spread and assimilated by foreigners, thus expanding the geography of Turkish culture and heart.

Teaching Turkish to Foreigners, which was established as a result of personal efforts, has today become institutionalized and has a structure that continues its existence in a more systematic and coordinated manner in many parts of the world.

In addition to the fact that many geographical, historical, mythological and religious folkloric elements that are important for the history of Turkish culture and literature have survived to the present day, the works written about Teaching Turkish to Foreigners are of particular importance in terms of seeing the changes in the historical adventure of the Turkish language.

References

Açık, F. (2008). Türkiye'de Yabancılara Türkçe Öğretilirken Karşılaşılan Sorunlar ve Çözüm Önerileri. Uluslararası Türkçe Eğitimi ve Öğretimi Sempozyumu Bildirisi. Lefkoşa: Doğu Akdeniz Üniversitesi Eğitim Fakültesi Türkçe Eğitimi Bölümü.

Adıgüzel, M. S. (2001). "Yabancılara Türkçe Öğretimi ve Gramer Tercüme Metodu." Bilig Dergisi, 16, 25-45.

Ağıldere, Timur, S. (2010). 18. yy. Avrupa'sında Yabancı Dil Olarak Türkçe Öğretiminin Önemi: Osmanlı İmparatorluğunda İstanbul Fransız Dil Oğlanları Okulu (1669- 1873)" Turkish Studies International Periodical For the Languages, Literature and History of Turkish or Turkic Dergisi, 5 (3), 693-704.

Aksan, D. (1998). Her Yönüyle Dil Ana Çizgileriyle Dilbilim", Ankara: Türk Dil Kurumu Yayınları

Aksoy, Z. (2012). Uluslararası Göç ve Kültürlerarası İletişim. Uluslararası Sosyal Araştırmalar Dergisi Cilt 5(20), Sayfa 292-303.

Banguoğlu, T. (2007). Türkçenin Grameri, Ankara: TDK Yayınları (8. Baskı).

Barın, E. (2004). Yabancılara Türkçe Öğretiminde İlkeler. Hacettepe Üniversitesi Türkiyat Araştırmaları Dergisi, 1, 19-30.

Barın, E. (1992). Yabancılara Türkçenin Öğretiminde Bir Metod Denemesi. Yayımlanmamış yüksek lisans tezi, Gazi Üniversitesi Sosyal Bilimler Enstitüsü, Ankara.

Bayraktar, N. (2003). Yabancılara Türkçe öğretiminin tarihsel gelişimi. Dil Dergisi, 119, 58-71.

Biçer, N. (2012). Hunlardan Günümüze Yabancılara Türkçe Öğretimi. Uluslararası Türkçe Edebiyat Kültür Eğitim Dergisi, 1(4), 107-133.

Biçer, N., (2011). Kıpçak Dönemi Eserlerinin Yabancılara Türkçe Öğretimi Açısından İncelenmesi. Yayımlanmamış yüksek lisans tezi, Atatürk Üniversitesi Eğitim Bilimleri Enstitüsü, Erzurum.

Bilgin, A. A. (2005). "Muhâkemetü-l Lugateyn", İslam Ansikolopesi, 30, 397-398 İstanbul: TDV Yayınları

Demirci, J. (2002). "Codex Cumanicus", Ankara: Yeni Türkiye Yayınları, 3, 702.

Doğan, S. (2011). XIX. Yüzyılda Batı da Yabancılara Türkçe Öğretimi Çalışmaları: W.B. Barker Örneği. Yayımlanmış yüksek lisans tezi, Fırat Üniversitesi Eğitim Bilimleri Enstitüsü, Elazığ. Ercilasun, Ahmet B. (2009). Başlangıçtan Yirminci Yüzyıla Türk Dili Tarihi, Ankara: Akçağ Yayınları (7. Baskı).

Ergin, M. (2009). Türk Dil Bilgisi, İstanbul: Bayrak Basım Yayın.

Gültekin, İ., (2019). "Türkçe Öğretimi Koordinatörlüğü ve Türkçe Öğretimi", Türkiye Maarif Vakfı Bülteni, 3, 34-35.

Gün, M., Akkaya, A. & Kara, Ö. T. (2014). Yabancılara Türkçe öğretimi ders kitaplarının türkçe öğretim merkezlerinde görev yapan öğretim elemanları açısından değerlendirilmesi. *Turkish Studies*, 9 (6), 1-16.

Hengirmen, M. (1993). Türkçenin Yabancı Dil Olarak Öğretimi. Ankara Üniversitesi Tömer Dil Dergisi, 10, 59.

Hengirmen, M. (2000). Türkçe Temel Dil Bilgisi, İstanbul: Engin Yayınevi Kara, Ö. T., Karakoç Öztürk, B. & Dağıstanlıoğlu, B. E. (2017). Suriyelilere Türkçe eğitimi verecek olan Türkçe öğretmenlerinin mesleki yeterlik algılarının incelenmesi. (Edit: M. Ertan Gökmen-Nazan Tutaş-Sebahat Alan), *Yabancı dil olarak Türkçe öğretimi ve yabancı dil öğretimi araştırmaları*, Ankara: Ankara Üniversitesi Basımevi, 15-31.

Kara, Ö. T., Yiğit, A. & Ağırman, F. (2020). Batman il merkezinde çalışan Türkçe öğreticilerinin karşılaştıkları sorunlar. Çukurova Üniversitesi Türkoloji Araştırmaları Dergisi, 5 (2), 577-599.

Karaağaç, G. (2009). Türkçenin Söz Dizimi, İstanbul: Kesit Yayınları

Kasaoğlu, A., (2012). Yabancı Dil Olarak Türkçe Öğrenenler İçin Ulaçların (Zarf-Fiillerin) Öğretimine Yönelik Materyal Geliştirme. Yayımlanmamış yüksek Lisans tezi, Dokuz Eylül Üniversitesi Eğitim Bilimleri Enstitüsü, İzmir.

Korkmaz, Z. (2009). Türkiye Türkçesi Gramer -Şekil Bilgisi-, Ankara: Türk Dil Kurumu Yayınları

Önder, Ç. (2013). Yabancılara Türkçe Öğretiminde Dil İhtiyaç Analizi: Bosna - Hersek Örneği. Yayımlanmamış yükseklisans tezi, Gazi Üniversitesi Sosyal Bilimler Enstitüsü, Ankara.

Özçam, Ç. (1997). Türkiye Türkçesi ile ilgili gramer çalışmaları -Bibliyografya Denemesi, Türk Dünyası Araştırmaları, 110,121-163.

Özcan, T. (2017b), Osmanlı Devleti'ndeki Gayrimüslim Okullarında Türkçenin Yaygınlaştırılmasına Yönelik Faaliyetler (1876-1908), İnsan ve Toplum Bilimleri Araştırmaları Dergisi, 6(1), 213 - 233.

Şenden, Yasemin E., (2017). Türkçenin Yabancı Dil Olarak Öğretiminde Kalıp Sözlerin Kullanımına Yönelik Etkinlik Örneklerinin Başarı Üzerindeki Etkileri. Yayımlanmamış yükseklisans tezi, Gaziosmanpaşa Üniversitesi Eğitim Bilimleri Enstitüsü, Tokat. Sertkaya, Osman F. (1995). Göktürk Tarihinin Meseleleri. Ankara: Türk Kültürünü Araştırma Enstitüsü Yayınları.

Şimşek, P. (2011). Yabanclara Türkçe Öğretiminde Okuma Metinleri Ve Yardımcı Okuma Kitaplar Üzerine Bir Arastırma. Yayımlanmış yükseklisans tezi. Afyon Kocatepe Üniversitesi Sosyal Bilimler Enstitüsü, Afyonkarahisar.

Temur, N. (2016). Türkçenin Yabancı Dil Olarak Öğretiminden Başlangıç Düzeyinde (A0) "Ilk Ders".

Faruk Yıldırım(Editör), Burak Tüfekçioğlu(Editör), Yabancı Dil Olarak Türkçe Öğretimi (Sayfa 35-41). Ankara: Pegem Yayınları

Türkiye Maarif Vakfı Yabancı Dil Olarak Türkçe Öğretimi Programı (2019). İstanbul: Bayem Ajans.

Yeşilyurt, E. (2015). Osmanlı Döneminde İngilizlere Türkçe Öğretimi. Yayımlanmamış doktora tezi, Onsekiz Mart Üniversitesi Eğitim Bilimleri Enstitüsü, Çanakkale.

Yeşilyurt, E. (2016). Osmanlı Döneminde İngilizlere Türkçe Öğretmek Amacıyla Yazılan Kitapların Dil Öğretimi Açısından Değerlendirilmesi. Ana Dili Eğitimi Dergisi, Cilt 4(3), Sayfa 277-294.

Yıldırım, Hatice, Ç. (2016) .Uluslararası Türkçe Edebiyat Kültür Eğitim Dergisi Cilt: 5/4, Sayfa 2041-2063.

Začinović, N. (2003). Bosna Kütüphanelerindeki Eski Türkçe Gazetelerin Dili. Yayımlanmamış yükseklisans tezi, Ankara Üniversitesi Sosyal Bilimler Enstitüsü, Ankara.

CHAPTER VI

INVESTIGATING PROSPECTIVE MATHEMATICS TEACHERS' NOTICING SKILLS IN TASK ANALYSIS

Dilek GİRİT YILDIZ¹

¹(Asst. Prof.), Department of Mathematics and Science Education, Trakya University, Edirne, Turkey E-mail: dilekgirit@trakya.edu.tr ORCID: 0000-0003-3406-075X

1. Introduction

athematical tasks are tools that will allow students to learn about a mathematical concept. It could be a single challenging problem or a series of problems that build on one another throughout the course of the lesson (Stein & Smith, 1998). As a result, it is crucial for teachers to comprehend the characteristics of mathematical tasks and select assignments that are appropriate for the learning objectives (e.g., Arbaugh & Brown, 2005; Ball, 2000; Liljedahl et al., 2007). However, Stephens (2006) and Papatistodemou et al. (2014) stated that pre-service teachers are unaware of how tasks might promote mathematical engagement and understanding. Task analysis-based professional development supports teachers in understanding the affordances and constraints of tasks (Johnson et al., 2016; Son & Kim, 2015). According to Sullivan and Mousley (2001), teacher professional development should assist teachers in understanding the dynamics of task-related decisionmaking in the classroom. The significance of the teacher's actions at this point stems from the fact that the tasks involve the students' reasoning alongside the requisite knowledge and skills. The teacher's noticing of student thinking was tied closely to the teacher's dispositions and actions (Jacobs et al., 2010; Mason, 2002; Sherin et al., 2011a). Consequently, the objective of this study is to characterize the noticing abilities of prospective mathematics teachers (PMTs) while analyzing a mathematical task.

Jacobs et al. (2010) defined noticing skill based on student thinking and proposed professional noticing of children's mathematical thinking, as the capacity to notice and understand student thought to select an effective response. They propose the following three components for noticing skills: 1) attending to student's understanding, 2) interpreting student thinking, and 3) deciding how to respond to student thinking. Additionally, these three competencies are interrelated. The teacher's ability to discern the mathematical aspects of student approaches affects the quality of their interpretations and how compatible their responses are with important research and mathematical characteristics. A mathematics teacher should be able to choose and modify tasks that will help students better understand concepts, develop their mathematical thinking, and engage their curiosity and interest while also maximizing their learning potential (Chapman, 2013). Teachers must be aware of student thought to make such instructional decisions, and they must use their noticing abilities to give students meaningful response (Mason, 2002; Sánchez-Matamoros et al., 2019; Sherin et al., 2011a). Hence, it seems that giving future teachers a chance to perform critical analyses of tasks before they start teaching is a significant part of teacher training (Cheng et al., 2021; Lee et al., 2016).

The current study aims to contribute to the notion of prospective teachers' noticing student thinking in mathematics education through task analysis. Even while research on noticing has used various empirical methodologies, most of it emphasizes the importance of teachers' attention to the mathematics of the current task and interpreting how students engage with it (Amador et al., 2017). In these techniques, teachers were given video clips of classroom instruction and asked to identify certain aspects of the lesson (e.g., Sherin et al., 2011b; Star et al., 2011). In a similar vein, Choy (2016) stated that these methods emphasize noticing during or after class. In difference, the purpose of this research is to evaluate what and how PMTs notice while analyzing a task before a lesson.

Furthermore, this study employs a probability-based task. Probability in mathematics can be difficult due to students' attempts to make sense of probability based on their own intuitions, which may lead to a variety of errors (Kazak, 2012). In fact, research has shown that students have difficulty acquiring probability-related concepts and that pre-service teachers struggle with both learning and teaching (Batanero & Diaz, 2012; Stohl, 2005). It is expected that future teachers' ability to notice and evaluate student thinking within the context of the task analysis will have a positive impact on their students' learning of probability in the future. Under these considerations, the study's research questions are as follows: How do PMTs attend to the opportunities afforded by a high-level task and interpret students' understanding through evaluation when they analyze the task? How do PMTs generate questions they would ask while maintaining the task to promote students' mathematical thinking?

2. Method

2.1. Research Design

This study employed qualitative research to explore and comprehend the PMTs' noticing of students' thinking through task analysis. In qualitative research, the goal is to figure out how people understand and make sense of their own experiences (Merriam, 2009). In the present study, the specific setting was PMTs' probability-related task analysis, and there were interactions between PMTs' noticing skills. The current study attempts to describe PMTs' noticing skills while analyzing the task.

2.2. Participants

This study included 38 (thirty-one females and seven males) PMTs enrolled in the elective course "Task Design in Mathematics Education" in the Elementary Mathematics Teaching Undergraduate Program. Prospective teachers who complete this program are qualified to teach mathematics to middle school students (age 11-14). The PMTs were chosen because they have nearly completed their course load relating to the content and pedagogical content knowledge. The investigation was conducted in the elective course because its content, which focuses on design principles for mathematical tasks, implementation of tasks, and evaluation of students' thinking in task-based instruction, corresponds with the topic of this study.

2.3. Data Collection

The data collection tool is a mathematical activity adapted from Smith, Bill, and Hughes's (2008) study (see Figure 1). The task is used to determine and compare the likelihood of an event occurring. It requires understanding and interpreting the link between fraction, percentage, and ratio concepts based on probability necessitates knowledge and abilities. The researchers asserted that the task was challenging and could have multiple solutions. They also considered it as high-level. Stein and Smith (1998) stated that high-level tasks provide students to develop procedures with linking concepts and non-algorithmic ways to solve problems.


Explain the reason(s) that you have the best chance of picking a blue ball from this bag.

Figure 1: The Task is Adapted from Smith, Bill, and Hughes's (2008) Study

The participants were asked to analyze the task by responding to the open-ended questions in Table 1. The questions were developed based on the related literature (Hughes, 2006; Smith, Bill, & Hughes, 2008; Stephan et al., 2017) to ensure the validity of the data collection tool. The PMTs were assigned to write responses to open-ended questions in a reflection report. The written responses served as the study's data. The potential responses to the questions were examined while connecting them to the noticing skills. For this connection, we focused on how PMTs approach the task for the purposes of maintaining it in mathematics lessons. Typically, answers to "what" queries, for example, "What are your goals? What misconceptions might students have?" relates to the attending skill. These questions were designed to reveal PMTs' anticipation of students' thinking. The answer to the question "How do you assess the student's comprehension?" that needs interpretation of the student's understanding is regarded as requiring interpretive skills. The responses to questions requiring instructional and prompting questions from teachers, for example, "What questions will you ask ...?" were connected with responding abilities.

Task elements	The Open-ended Questions	Related Noticing Skills
Goal	What is the mathematical goal for the task?	Attending
Prior knowledge	What concepts do students need to know to begin to work on the task?	
Strategies	What is the way(s) the task can be solved?	
Misconceptions and difficulties	What misconceptions and difficulties might students have while working on the task?	
Related experience	If you would maintain the task in the class; what questions will you ask to help students access their relevant life experiences?	Responding
Focusing	What questions will you ask to focus students' thinking on the key mathematical ideas in the task?	
Representing	What questions will you ask to determine students' understanding of the representations?	
Extending	What questions will you ask to extend students' understanding of the mathematical ideas?	
Assessment	What lets you know that students understand the mathematical ideas that you aimed?	Interpreting

Table 1: The Open-Ended Questions with Related Noticing Skills

2.4. Data Analysis

To code the responses of the PMTs, content analysis will be employed to categorize the data from the reflection reports. An explanation (e.g., sentence and paragraph) deemed meaningful in and of itself is transformed into codes (Strauss & Corbin, 1990). To produce the codes, the professional noticing of children's mathematical thinking framework developed by Jacobs et al. (2010) was utilized. The categories and descriptions of the framework-attending, interpreting and responding- were used and a rubric was created (see Table 2). The rubric includes levels of evidence for attending, interpreting, and responding skills. According to the levels, evidences will be sought in the responses of PMTs to the questions about their ability to notice. The levels were correlated with the extent to which PMTs employ the mathematical concept's characteristics during the analysis of task. Thus, PMTs' responses were categorized as robust evidence (2), partial evidence (1), or lack of evidence (0).

Noticing	Level of evidence			
skills	Robust evidence (2)	Limited evidence (1)	Lack of evidence (0)	
Attending skill	Explains student's mathematical understanding	Explains student's mathematical understanding partially	Uses general statements or does not make explanations about student's understanding	
Interpreting skill	Evaluate student's mathematical understanding	Evaluate student's mathematical understanding partially	Uses general statements or does not make any evaluations of student's understanding	
Responding skill	Generate questions to promote students' mathematical thinking	Generate questions to promote students' mathematical thinking partially	Generate non- mathematical questions or do not generate questions	

Table 2: The Rubric for Scoring PMTs' Responses

Validity and Reliability

Accurate conclusions and interpretations are required in qualitative research (Creswell, 2012). According to Merriam (2009), validity and reliability concerns are essential for research while gathering, evaluating, and conceptualizing the results. Cross-checking is one of the methods that is used to ensure the accuracy of data encoding. According to Creswell (2009), cross-checking is produced by several researchers by making comparisons of independently generated findings. In the current study, an expert in research and mathematics education was asked to code the data for cross-checking in this study. The data were coded individually by the researcher and the expert before attaining full agreement on the coding through discussion.

The researcher explained the purpose of this study to the participants, and the participation was voluntary in this study. The consent forms were obtained from the participants. In addition, ethical permissions were obtained from Trakya University Ethics Committee.

3. Findings

The findings of the study are organized in a way to understand how to attend to the opportunities afforded by a high-level task and interpret students' understanding through evaluation when they analyze the task. In addition, how PMTs generate questions that they would ask while maintaining the task to promote students' mathematical thinking is presented. While presenting findings, it is focused on how PMTs approach the task for the purposes of maintaining it in mathematics lessons. Accordingly, the findings related to the attending and interpreting skills of PMTs are presented first, and then the responding skills of PMTs are portrayed.

3.1. PMTs' Attending and Interpreting Skills in Task Analysis

The findings regarding PMTs' attending and interpreting skills during the task analysis are presented in Table 3.

Trak alon onta	Attending			
Task elements	Robust evidence	Limited evidence	Lack of evidence	
Goal	13	18	7	
Prior knowledge	15	22	1	
Strategies	9	2	27	
Misconceptions and difficulties	10	26	2	
Total (%)	47 (31%)	68 (45%)	37 (24%)	
	Interpreting			
	Robust evidence	Limited evidence	Lack of evidence	
Assessment	19 (50%)	3 (8%)	16 (42%)	

Table 3: Frequencies of Evidence Regarding PMTs'Attending and Interpreting Skills

Table 3 shows that the PMTs provided the most robust evidence regarding the prior knowledge that students needed to complete the task. There was only one case where a lack of evidence was provided since this PMT did not respond. The majority of the notions of ratio, fraction, fraction comparison, fraction simplification, and probability computation were described by the PMTs (for an example, see C4 in Table 4). Those who did not specify some of these notions were deemed partially adequate. For example, PMT37 (see C5 in Table 4) gave limited evidence for its inability to address the concepts of equivalent fraction and fraction comparison. Similarly, the majority gave robust evidence in the category of misconceptions and difficulties, although there was more limited evidence. The PMTs frequently stressed the following misconceptions: selecting the bag with the greatest number of blue balls regarding the additive relationship, selecting the bag with the greatest total number of balls, and selecting the greater denominator when the numerators in the ranking were equal. Furthermore, they described "simplifying fractions, ordering fractions" as difficulties. Those who deal with all of these are considered robust (see C9 in Table 4), while those who dealt with some of them (misconception or difficulty) were considered limited (see C10 in Table 4). In the absence of evidence, there are two PMTs. One of them did not answer, and the other made generic remarks that did not pertain to the task's mathematical ideas (see C11 in Table 4).

In the goal category, the PMTs were supposed to include a content-specific statement, such as in C1 in Table 4. However, the majority of participants just wrote a generalized learning outcome about the acquisition of probability knowledge and provided limited evidence (see C2 in Table 4). The PMTs that presented a lack of evidence emphasized the benefits that the activity could bring to students, such as learning by doing, and experimenting, which were unrelated to the mathematical aspects of the task (see C3 in Table 4).

The majority of PMTs were lacking proof in the strategies category because they utilized relatively generic teaching methods and strategies, such as group work and classroom discussion (see C8 in Table 4). The expected response was a strategy for resolving the problem in the task, as demonstrated in C6. The statements that described how to proceed without solving the problem and without displaying the correct answer were similarly rated as limited (see C7 in Table 4).

The incident is remarkable with regard to interpreting skills. Because the items were nearly in either the categories of robust evidence or lack of evidence. PMTs were supposed to respond with phrases such as "the bag with the highest ratio of blue to the total number of balls (PMT5)" or "the bag with the fewest red balls (PMT22) while the number of blue balls remained constant". When examining the PMTs' responses containing lack of evidence, however, there were general statements that were not specific to the objective of the task, for example, "when they can solve a question similar to this one (PMT1), and "when they find the correct answer in different questions (PMT4)".

Task	Representative comments	
elements		evidence
Goal	C1: Determine Bag Y has the best chance by dividing the	Robust
	number of blue balls by the total number of balls (PMT2).	
	C2: Its goal was to find the ratio of the desired situation to	Limited
	all of the other situations in the probability computation and	
	to compare these ratios (PMT36).	
	C3: Making proper probability predictions and learning by	Lack
	doing (PMT25).	
Prior	C4: The students should be aware of the ratio. They should	Robust
knowledge	be knowledgeable of the proportion of the drawn ball in	
	the bag. It should be sufficient in fraction representation to	
	state the ratio appropriately. They must be able to compare	
	fractions (PMT1).	
	C5: Students must first understand the ratio. It should be	Limited
	noted that the color with the highest ratio to the total number	
	is more likely to be chosen (PMT37)	
Strategies	C6: The number of blue balls in each bag is equalized	Robust
	while maintaining the ball ratio:	
	Bag X: 20 blue, 80 balls in total	
	20.5=100	
	80.5=400	
	Bag Y: 25 blue, 75 balls	
	25.4=100	
	75.4=350	
	Bag C: 20 blue, 100 balls	
	20.5=100	
	100.5=500	
	Bag B has a better chance of drawing 100 blue balls from	
	350 balls than Bags A and C, which have 400 and 500	
	balls, respectively (PMT21).	
	C7: First, an interpretation between the X and Z bags can be	Limited
	produced. Elimination is accomplished by stating whichever	
	of the total balls has the lowest probability. Following that,	
	the remaining bags are compared (PMT37).	
	C8: The students are separated into groups of 5-6. Material	Lack
	is distributed to each group. Allows for both group and class	
	discussions (PMT30).	

 Table 4: Representative Attending and Interpreting Comments

Miscon-	C9: Students do not consider the ratio while selecting the	Robust
ceptions	bag with the most balls; instead, they look at the overall	
and diffi-	number of balls in the bags. They could struggle to simplify	
culties	fractions. They might believe that the denominator will be	
	large in the case of the large one (PMT20).	
	C10: Students respond by concentrating solely on the	Limited
	quantity of blue balls and ignoring the ratio. In this instance,	
	they believe that bags with an equal amount of blue balls are	
	equally likely, and bags with fewer blue balls may have a	
	lower likelihood (PMT8).	
	C11: The issue could appear to be challenging. Students	Lack
	struggle in this situation. Or they might think it's too basic	
	and make fewer comments (PMT6).	

* 'C' indicates comment.

3.2. PMTs' Responding Skills in Task Analysis

The findings regarding PMTs' responding skills during the task analysis are presented in Table 5.

Task alon onto	Responding			
Task elements	Robust evidence	Limited evidence	Lack of evidence	
Connecting with experience	9	12	17	
Focusing	3	11	24	
Representing	2	0	36	
Extending	10	12	16	
Total (%)	24 (16%)	35 (23%)	93 (61%)	

Table 5: Frequencies of Evidence Regarding PMTs' Responding Skills

As shown in Table 5, participants' responding skills were inadequate in comparison to their attending and interpreting skills given that the prevalence of lack of proof was typically greater in each category. Especially in the representing category, nearly all comments lacked evidence. Participants were expected to pose questions, for example, "Is there a relationship between the fractions you identified and the ratio, if any? What numbers did your ratio, and why?

Can these fractions be written as percentages?". However, in the statements in Table 6 (see C10 and C11), the PMTs proposed questions concentrating on the physical qualities of the object employed, such as utilizing a pen instead of a ball and determining the likelihood of red balls as opposed to blue ones.

Focusing is the next category of PMTs who show inadequate abilities. Here, we discovered that instead of concentrating on the mathematical concepts they wish to teach (e.g., what amounts do you compare [see C5 in Table 6], which concept should we use for this comparison [see C6 in Table 6]), the PMTs frequently asked questions that involved changed values of the problem (see C7 and C8 in Table 6). The participants were also invited to submit several questions in this category. If all the generated questions were to promote students' mathematical thinking, they were categorized as robust evidence. Otherwise, some of the questions were general, and some of them were mathematical; they were considered limited evidence for responding skill.

In the remaining two categories (connecting with experience and extending), the participants performed better than in the prior categories. In connecting with experience, we deemed it robust if the questions sought to locate the intended event in the context of everyday life. In its proposed inquiry, for instance, PMT17 was able to draw an adequate connection with the probability of the desired outcome by inquiring about the probability of winning the game in the context of playing bingo (see C2 in Table 6). They were considered inadequate when the questions were about flipping a coin and selecting an item from a bag but did not provide to predict the intended outcome (see C3 in Table 6). The questions such as "Do you recall the concept of probability of PTs or fractions?" were considered a lack of evidence. Because the questions concerning daily life or experience were anticipated, PMTs generated questions to remind students about mathematical principles (see C4 in Table 6).

In the extending category, PMTs submitted questions in which the numerical values were altered by performing a different activity or adding balls of a different color (see C13 and C14 in Table 6). They were evaluated as limited. If PMTs proposed thought-provoking questions that would allow the student to reason mathematically (for example, see C9 in Table 6), these questions were considered robust evidence. The PMTs were required to pose these types of questions that would allow students to reason by modifying the criteria based on the problem's existing context. The questions, including asking students to pose a similar problem, were considered lack of evidence (see C15 in Table 6).

		Level of
Task elements	Representative comments	evidence
Connecting	C1: How likely are you to choose the candy of your	Robust
with	preferred color from the candy bowl? (PMT12)	
experience	C2: How is the winner of a game of bingo chosen?	
	(PMT17)	
	C3: What faces do we see when we flip a coin? What	Limited
	is the likelihood of these? (PMT8)	
	C4: What is the probability, and can you explain it?	Lack
	(PMT6)	
Focusing	C5: When you compared, what idea/concept did you	Robust
	use? (PMT16)	
	C6: How do the ideas of probability and rate relate	Limited
	to each other? What does it mean that there is a high	
	chance of blue balls in the bags? (PMT27)	
	C7: If I double the number of each marble, will that	Lack
	change the ratios? (PMT6)	
	C8: If the bag with the most marbles has as many	
	red balls as there are red balls and as many blue balls	
	as there are blue balls, does the chance of drawing a	
	marble from this bag go up? (PMT2)	
Representing	C9: What is the multiple presentation(s) (e.g.,	Robust
	percentage, decimal notation) of the discovered	
	notations? (PMT26)	
	C10: Would it make a difference if there was a pen	Lack
	instead of a ball in the bag?	
	C11: Which option has the biggest likelihood of	
	drawing a red ball? PMT32	
Extending	C12: If the amount of blue balls in each bag were	Robust
	identical, would the outcome change if the total	
	number of balls stayed unchanged? (PMT24)	
	C13: Which has the highest probability of drawing a	Limited
	blue ball when a new bag containing 75 red and 50	
	blue balls is introduced? (PMT15)	
	C14: Would the bag with the highest probability of	
	containing blue alter if an equal number of greens	
	were added to each bag? (PMT20)	
	C15: Can you pose a similar problem? (PMT22)	Lack

 Table 6: Representative Responding Comments

* 'C' indicates comment.

4. Discussion and Conclusions

In this study, the attending, interpreting, and responding skills of PMTs were examined in the context of analyzing a mathematical task regarding students' mathematical thinking. The findings suggest that the PMTs' noticing is related to their comprehension of the mathematical features in the task elements. This comprehension influences their task analysis and the PMTs performed poorly in responding skills relative to their attending and interpretation skills.

The PMTs' explanations for the prior knowledge and misconceptions and difficulties component are better evidence than those of the other attending components. This may suggest that the PMTs' knowledge of students related to mathematical concepts of task is adequate (Ball et al., 2008). Similarly, the taskspecific mathematical knowledge for the articulating mathematical goal given by the PMTs is sufficient. It is important to note that the PMTs comprehended the task's fundamental structure and could describe what characteristics were as its "mathematical goals" (Stephens, 2006). However, the PMTs were incapable of describing the ways of task was solved. They generally tended to explain general teaching approaches such as cooperative learning. However, as noted by Smith et al. (2008), the value of a task is enhanced by the presence of several solutions. Therefore, the teacher must comprehend several strategies and be able to draw connections between them. Teachers who didn't feel comfortable with mathematics lowered the level of student learning by setting easy tasks and discouraging creative solutions (Sullivan et al., 2010). In addition, teachers' considering the strategies students can use is important for interpreting and responding to students' thinking (Stein & Smith, 2008).

The high incidence of insufficient evidence in the responding skill indicates that PMTs are unable to generate or devise meaningful questions. Questioning is the use of questions and other prompts to help students get unstuck or focus on mathematics (Mason, 2014). However, the PMTs could only come up with non-mathematical questions and were unable to generate specific mathematical questions that served to clarify the mathematical idea. Teachers have difficulty in asking good questions during the instruction (Weiss & Pasley, 2004). This can be a consequence that the PMTs themselves lack proficiency in carrying out tasks effectively and comprehending mathematical ideas (Chapman, 2013). In particular, PMTs' inability to generate questions related to representation is noteworthy. However, teachers may get a better understanding of what and how students' mathematical thinking is by evaluating the usage of various representations (Doerr, 2006).

Çakmak and Durmuş (2015) and Memnun (2008) underline that before understanding probability, the concepts of sets, fractions, percentages, and ratios must be thoroughly comprehended. In this study, nearly all of the participants stated that students might have misconceptions and difficulties, particularly with ratio and fraction ideas. Specifically, they emphasized that students will evaluate the additive relationship and the amount of blue balls. Here, they indicated that they may have difficulties considering the multiplicative relationship between the proportion of blues to the total number of balls (e.g., Misailidou & Williams, 2003; Van Dooren et al., 2010). In addition, it is a common misconception that "when the numerators are equal, the fraction with the largest denominator will be the largest" when ranking fractions produced using ratio (e.g., Ni & Zhou, 2005). These results indicate that the PMTs' knowledge of prior concepts required to identify probability and make sense of it is enough. Content knowledge (Bartell et al., 2013) and specifically specialized content knowledge, which enables teachers to assess student thinking, assists in discovering student misconceptions (Mosvold et al., 2014). Furthermore, students have various misconceptions about probability (Kazak, 2012). In the misconception of equiprobability, students may overgeneralize by believing that in the event of the withdrawal of one of the names of two boys and three girls, either a girl or a boy can come, i.e., the probability is equal to one-half (Tarr, 2002). In this study, just one PMT implied a misunderstanding of the statement, "it is either a blue or red ball." Additionally, in experimental probability, there may be a misconception that the true probability cannot be determined by assuming that a different outcome will be reached in each trial (Konold & Miller, 2005). Similarly, a PMT stated in the current study a probable misperception that "every ball drawn is a different color, and this probability cannot be computed." It is crucial to recognize that as the number of trials rises, the experimental probability will approach the theoretical probability.

The most notable limitation of this study is that PMTs were not allowed to carry out the tasks with actual students. It is not enough for a future teacher to have a thorough understanding of a subject area; they also need to develop skills like task development and get some classroom experience (Bartell et al., 2013; Callejo & Zapatera, 2017). Before actual classroom instruction, noticing student learning opportunities while analyzing tasks improved mathematics instruction and learning (Zaslavsky, 2008). As a consequence, prospective teachers increase their knowledge of mathematics and their ability to design mathematics-based lessons by working with tasks (Pepin, 2015).

Further research should also include a class discussion as a reflective process. Papatistodemou et al. (2014) noted that prospective teachers shifted attention to the mathematical characteristics of the task with the reflection process. Implementation of the task also included determining whether prospective teachers' generated queries are productive and effective.

References

Amador, J. M., Males, L. M., Earnest, D., & Dietiker, L. (2017). Curricular noticing: Theory on and practice of teachers' curricular use. In E. O. Schack, M. H. Fisher, J. A. Wilhelm (Eds.), *Teacher noticing: Bridging and broadening perspectives, contexts, and frameworks* (pp. 427-443). Springer, Cham.

Arbaugh, F., & Brown, C. A. (2005). Analyzing mathematical tasks: A catalyst for change? *Journal of Mathematics Teacher Education*, 8(6), 499-536.

Ball, D. L. (2000). Bridging practices: Intertwining content and pedagogy in teaching and learning to teach. *Journal of Teacher Education*, 51(3), 241-247.

Ball, D. L., Thames, M. H., & Phelps, G. (2008). Content knowledge for teaching: What makes it special? *Journal of Teacher Education*, *59*(5), 389-407.

Bartell, T. G., Webel, C., Bowen, B., & Dyson, N. (2013). Prospective teacher learning: Recognizing evidence of conceptual understanding. *Journal of Mathematics Teacher Education*, *16*(1), 57–79.

Batanero, C., & Díaz, C. (2012). Training school teachers to teach probability: Reflections and challenges. *Chilean Journal of Statistics*, 3(1), 3–13.

Callejo, M. L., & Zapatera, A. (2017). Prospective primary teachers' noticing of students' understanding of pattern generalization. *Journal of Mathematics Teacher Education*, 20(4), 309-333.

Chapman, O. (2013). Mathematical-task knowledge for teaching. *Journal* of Mathematics Teacher Education, 16(1), 1-6.

Cheng, L. P., Leong, Y. H., & Toh, W. Y. K. (2021). Singapore secondary school mathematics teachers' selection and modification of instructional materials for classroom use. In B. Kaur & Y. H. Leong (Eds.). *Mathematics instructional practices in Singapore secondary schools* (pp. 205-230). Singapore: Springer.

Creswell, J. W. (2009). *Research design: Qualitative, quantitative, and mixed method approaches.* (3rd ed.). Sage publications: USA.

Creswell, J. W. (2012). *Educational research: Planning, conducting, and evaluating quantitative and qualitative research.* (4th ed.). Pearson Education, Inc.: Boston.

Çakmak, Z. T., & Durmuş, S. (2015). İlköğretim 6-8. Sınıf öğrencilerinin istatistik ve olasılık öğrenme alanında zorlandıkları kavram ve konuların belirlenmesi. *Bolu Abant* İzzet *Baysal University Journal of Faculty of Education*, 15(2), 27-58.

Doerr, H. M. (2006). Examining the tasks of teaching when using students' mathematical thinking. *Educational Studies in Mathematics*, 62(1), 3–24. doi:10.1007/s10649-006-4437-9.

Hughes, E. K. (2006). *Lesson planning as a vehicle for developing preservice secondary teachers 'capacity to focus on students 'mathematical thinking* (Unpublished doctoral dissertation). Pittsburgh, PA: University of Pittsburgh.

Jacobs, V. R., Lamb, L. L., & Philipp, R. A. (2010). Professional noticing of children's mathematical thinking. *Journal for Research in Mathematics Education*, *41*(2), 169-202.

Johnson, R., Severance, S., Penuel, W. R., & Leary, H. (2016). Teachers, tasks, and tensions lessons from a research practice partnership. *Journal of Mathematics Teacher Education*, 19(2), 169–185.

Kazak, S. (2012). Olasılık konusunda karşılaşılan zorluklar. İçinde E. Bilgölbali & M. F. Özmantar (Eds.) İlköğretim *karşılaşılan matematiksel zorluklar ve* çözüm önerileri (ss. 217-239). Ankara: Pegem Akademi Yayınları.

Konold, C. & Miller, C. D. (2005). *TinkerPlots: Dynamic Data Exploration*. Emeryville, CA: Key Curriculum Press.

Lee, K. H., Lee, E. J., & Park, M. S. (2016). Task Modification and Knowledge Utilization by Korean Prospective Mathematics Teachers. *Pedagogical Research*, 1(2), 54.

Liljedahl, P., Chernoff, E., & Zazkis, R. (2007). Interweaving mathematics and pedagogy in task design: A tale of one task. *Journal of Mathematics Teacher Education*, *10*(4), 239–249.

Mason, J. (2002). *Researching your own practice: The discipline of noticing*. Psychology Press.

Mason J. (2014). Questioning in mathematics education. In: Lerman S, editor. *Encyclopedia of mathematics education*. Mahwah (NJ): Springer; p. 513–519.

Memnun, D. S. (2008). Olasılık kavramlarının öğrenilmesinde karşılaşılan zorluklar, bu kavramların öğrenilememe nedenleri ve çözüm önerileri. *Inonu University Journal of the Faculty of Education*, 9(15), 89-101.

Merriam, S. B. (2009). *Qualitative Research: A Guide to Design and Implementation*. San Francisco, CA: Jossey-Bass.

Misailidou, C., & Williams, J. (2003). Diagnostic assessment of children's proportional reasoning. *The Journal of Mathematical Behavior*, 22(3), 335-368.

Mosvold, R., Jakobsen, A., & Jankvist, U. T. (2014). How mathematical knowledge for teaching may profit from the study of history of mathematics. *Science & Education*, 23(1), 47–60.

Ni Y., Zhou Y. D. (2005). Teaching and learning fraction and rational numbers: The origins and implications of whole number bias. *Educational Psychologist*, 40, 27–52.

Papatistodemou, E., Potari, D., & Potta-Pantazi, D. (2014). Prospective teachers' attention on geometrical tasks. *Educational Studies in Mathematics*, 86(1), 1–18.

Sánchez-Matamoros, G., Fernández, C., & Llinares, S. (2019). Relationships among prospective secondary mathematics teachers' skills of attending, interpreting and responding to students' understanding. *Educational Studies in Mathematics, 100*(1), 83-99.

Sherin, M. G., Jacobs, V., & Philipp, R. (Eds.). (2011a). *Mathematics teacher noticing: Seeing through teachers' eyes*. Routledge.

Sherin, M. G., Russ, R. S., & Colestock, A. A. (2011b). Accessing mathematics teachers' in-the-moment noticing. In M. G. Sherin, V. R. Jacobs, & R. A. Philipp (Eds.), *Mathematics teacher noticing: seeing through teachers' eyes* (pp. 79–94). New York: Routledge.

Smith, M. S., Bill, V., & Hughes, E. K. (2008). Thinking through a lesson: Successfully implementing high-level tasks. *Mathematics Teaching in the Middle School, 14*(3), 132-138.

Son, J. W., & Kim, O. K. (2015). Teachers' selection and enactment of mathematical problems from textbooks. *Mathematics Educational Research Journal*, 27(4), 491–518.

Star, J. R., Lynch, K., & Perova, N. (2011). Using video to improve preservice mathematics teachers' abilities to attend to classroom features. In M. G. Sherin, V. R. Jacobs, & R. A. Philipp (Eds.), *Mathematics teacher noticing: seeing through teachers' eyes* (pp. 117–133). New York: Routledge.

Stein, M. K., & Smith, M. S. (1998). Mathematical tasks as a framework for reflection: From research to practice. *Mathematics Teaching in the Middle School*, *3*(4), 268-275.

Stephens, A. C. (2006). Equivalence and relational thinking: Preservice elementary teachers' awareness of opportunities and misconceptions. *Journal of Mathematics Teacher Education*, 9(3), 249–278.

Stephan, M., Pugalee, D., Cline, J., & Cline, C. (2017). *Lesson imagining in math and science: Anticipating student ideas and questions for deeper STEM learning*. Alexandria, VA: ASCD.

Stohl, H. (2005). Probability in teacher education and development. In G. A. Jones (Ed.), *Exploring probability in school: Challenges for teaching and learning* (pp. 345–366). Boston, MA: Springer.

Strauss, A., & Corbin, J. (1994). Grounded theory methodology: An overview. In N. K. Denzin & Y. Lincoln (Eds.), *Handbook of qualitative research* (pp. 273-285). Thousand Oaks: Sage.

Sullivan, P. A., Clarke, D. M., Clarke, B. A., & O'Shea, H. F. (2010). Exploring the relationship between tasks, teacher actions, and student learning. *PNA (Revista de Investigación en Didáctica de la Matemática), 4*(4), 133-142.

Sullivan, P., & Mousley, J. (2001). Thinking teaching: Seeing mathematics teachers as active decision makers. In F.-L. Lin & T. Cooney (Eds.), *Making sense of mathematics teacher education* (pp. 147–163). Dordrecht: Springer.

Tarr, J. E. (2002). Confounding effects of the phrase B50-50 chance in making conditional probability judgments. *Focus on Learning Problems in Mathematics*, 24(4), 35–53.

Van Dooren, W., De Bock, D., & Verschaffel, L. (2010). From addition to multiplication... and back: The development of students' additive and multiplicative reasoning skills. *Cognition and Instruction*, 28(3), 360-381

Weiss, I. R., & Pasley, J. D. (2004). What is high-quality instruction?. *Educational Leadership*, 61(5), 24.

Zaslavsky, O. (2008). Meeting the challenges of mathematics teacher education through design and use of tasks that facilitate teacher learning. In B. Jaworski & T. Wood (Eds.), *The mathematics teacher education as a developing professional* (pp. 93-114). Rotterdam: Sense Publishers.

CHAPTER VII

THE USE OF AUTHENTIC MATERIALS IN ENGLISH AS A FOREIGN LANGUAGE INSTRUCTION

Fatma KİMSESİZ

(Asst. Prof. Dr.), Kırşehir Ahi Evran University, School of Foreign Languages, Department of Translation & Interpreting, E-mail: fatmakimsesiz@ahievran.edu.tr, ORCID: 0000-0001-6758-7393

1. Introduction

n a global system that changes rapidly, foreign language learning has turned into an initiative that directs studies in individuals' academic, professional, and social development processes (TEPAV & British Council, 2013). In this sense, the English language is widely accepted as a global language that can be defined as a "lingua franca" (Alptekin, 1993; Gilmore, 2007b; Koru & Akesson, 2011), and it ranks first among foreign languages as a means of communication and interaction to be learned (TEPAV & British Council, 2013). In most countries, effective practices in language learning are aimed to be adopted in the field of tourism, industry, and technology, as well as education. Foreign language learning is a process that needs to be experienced as a language learning continuum rather than an outcome to be completed. The most effective approaches in teaching a target language have shown that the language should be taught in a way that closely resembles the natural language learning environment (Gilmore, 2007b). In close relation to this topic, national education visions of non-native countries aim to improve the qualifications and increase the efficiency of both teachers and learners in English as a foreign language instruction. This process involves various dimensions, from developing the technological infrastructure of schools to improving teacher skills.

The global spread of English as a universal language of communication has put forward language teaching and the concept of authenticity (Gilmore, 2007b; Shomoossi & Ketabi, 2007). This spread has also introduced various forms in pronunciation, stress and intonation, sentence construction, vocabulary selection, spelling, and usage. Consequently, this situation raises concerns and doubts among linguists since it complicates the clarification of the concepts of 'native speaker' and 'standard English' in terms of the authentic use of English (Carter & McCarthy, 2003). In close relation to this topic, communicative language teaching has paved the way for authentic resources that prioritize the value of communication over prescribed formulas (Gilmore, 2007b). Hence, authenticity becomes a prominent feature in publishing industry marketing attempts. While there is an aim to emphasize authenticity in language teaching, struggles to progress in this direction have been insufficient (Gilmore, 2007b). Based on these descriptions, this chapter aims to clarify the concept of authenticity and explain the significance of authenticity in language instruction. The review also illustrates the ways that will promote the integration of authenticity and authentic materials in foreign language instruction.

2. Authenticity

In language teaching, the concept of 'authenticity' addresses various fields such as discourse and conversation analysis, semantics, intercultural studies, sociolinguistics, ethnology, second language acquisition, cognitive and social psychology, learner autonomy, and information and communication technologies (Gilmore, 2007b). In its basic form, authenticity is defined as the language used by native speakers of a specific language (Porter & Roberts, 1981; Little et al., 1989). Kramsch (1993) defines authenticity as the ability to behave or think like a target language group. As identified by MacDonald et al. (2006), authenticity "refers to a correspondence between 'pedagogic' language, texts or materials, and 'real world' language, texts or artifacts" (p.251). In this way, authentic language input is expected to lead to more effective results in language acquisition as a source of the target language.

In English language teaching, some factors are emphasized to ensure that the modified uses of the English language by people from different nations do not lead to confusion (Widdowson, 1998). These factors are listed as comprehensible input, natural learning, authentic language, and real English. In this context, the slogan "focus on meaning rather than form" is considered an approach that needs to be questioned (Widdowson, 1998). A critical examination of this slogan leads to conceptual confusion and highlights the need to consider the areas of discourse, community, and authentic language, emphasizing that this issue should be at the center of language teaching (Widdowson, 1998). Rather than a prescribed recipe, the concept of authenticity in foreign language teaching covers a multidimensional constitution with resources, activities, teachers, and students, (Külekçi, 2015).

Describing the concept of authenticity in terms of language acquisition, MacDonald et al. (2006) proposed four types of authenticity within the literature of linguistics: text authenticity, competence authenticity, learner authenticity, and classroom authenticity. Text authenticity "refers to a correspondence between pedagogic language, texts or materials, and real-world language, texts, or artifacts" (p.2). MacDonald et al. (2006, p.2) relate competence authenticity to the correspondence between the communicative realization of language competence in terms of "grammatical competence, sociolinguistic competence, and strategic competence" as framed by Canale and Swain (1980). Learner authenticity is possible when the L2 reader/listener responds appropriately to the target text. Classroom authenticity focuses on the correspondence as learners deal with authentic tasks and practices in the classroom. According to Mishan (2017), rather than the input itself, authenticity is a factor that relates to the task dealing with "what we do with the input, the activity performed and the learner's involvement with it" (p. 13). Hence, the degree of engagement and motivation are significant for authenticity as essential factors in language learning, (Little & Singleton, 1991; McGarry, 1995; Mishan, 2017).

Research on foreign language instruction shows that the process of learning a foreign language differs according to the age level of the learners (Cameron, 2001; Moon, 2000). Once working with adult learners, the procedure is centered around theoretical knowledge that is consolidated by practice-oriented activities. However, when it comes to teaching foreign languages to children, many different parameters need to be taken into consideration. Studies conducted in this field have shown that starting foreign language instruction at an early age, particularly focusing on pronunciation, has a significant impact on various aspects (Bayyurt, 2013; Moon, 2005). It has been stated that teaching practices centered on learner-centered, meaningful, and authentic learning situations that support natural learning tailored to children's age, levels, interests, and needs, along with communication-focused social learning activities and interactive techniques, are more effective (Cameron, 2001; Kimsesiz, 2021; Moon, 2005). In foreign language classrooms, students need a nourishing learning environment that promotes understanding the target language through

interactive, experiential, and shared contexts, where they can communicate not only through verbal but also non-verbal cues (Rivers, 1987).

In the process of teaching English as a foreign language to young children, the activity themes that support authentic language usage and instruction have become the focal point of English instruction, which is known to encompass the four fundamental language skills: listening, speaking, reading, and writing (Cameron, 2001; Linse, 2005). Focusing separately on authentic language usage within these language skills during project activities holds great importance in supporting authenticity in language instruction. In this regard, Gilmore (2004) argues that the short dialogues provided in textbooks do not reflect everyday conversations, thus advocating for a significant inclusion of authentic listening texts in textbook design. Additionally, how to teach vocabulary or which vocabulary to teach is essential for authenticity as vocabulary is the building block of language improvement, especially in early language learning (Cameron, 2001; Cook, 2008; Linse, 2005; Nation, 2001). Plus, whether to emphasize grammar (Schmidt, 1993) or meaning-based language learning (Krashen, 1982) are also important topics to be addressed in the context of authentic language usage. Another focal point in early language instruction is the connection between language and culture. Considering that culture and language are closely intertwined concepts, the influence of culture on language instruction cannot be denied (Byram, 1995; Byram et al., 2001; Tseng, 2002).

Guevara and Ordoñez (2012) have noted that using authentic language in teaching English as a foreign language to 7-year-old children who are native speakers of Spanish led to significant improvement in oral skills, especially in areas that require information exchange such as question-answer activities, following instructions, interpreting songs, and storytelling. Along with this improvement, it was proclaimed that children demonstrated effective and successful results in communication, using words and grammar in the correct context, and thus developing meaning. Incorporating authenticity into language instruction will greatly contribute to the language proficiency of the learners in several aspects. Additionally, the use of written and oral materials in early language instruction, especially at the elementary level where concrete content is emphasized (Moon, 2000; Tomlinson, 2011).

3. Authentic Materials in Language Instruction

The use and/or adaptation of authentic materials have become popular as they are considered to promote motivation and effectiveness in language learning. It is noted that as they contain language data in written or spoken texts for native speakers of a particular community, the premium address of authentic materials is the native speakers (Adams, 1995). In other words, the content of authentic materials is designed to reflect meaningful and real-life usage for the consumption of native speakers (Kılıçkaya, 2004; Rogers & Medley, 1988; Shadiev, et al., 2017).

The concept of authenticity relates to a number of agents such as the text itself in the social, cultural, and individual contexts as well as the scope of the communication, or the complexion of these. Spelleri (2002) frames authentic materials consisting of three embedded learning levels: language instruction that can be connected to the grammatical items and vocabulary in the L2, cultural representations of the L2, and the practical applications situated in the daily life of the individuals.

Oğuz and Bahar (2008) offered that foreign language teacher training can be maintained for the efficient utilization of authentic materials in constructivist learning environments. Shadiev et al. (2017) also pointed to the significance of an authentic environment stating that an authentic environment supplies advantages for comprehending new knowledge. As students experience reallife situations, they familiarize themselves with them. In such an environment, students exhibit an inclination towards learning, driven by their active application of newly acquired knowledge to address everyday real-world challenges that they are likely to encounter frequently. Shadiev et al. (2017) proposed that an authentic environment encompasses several attributes. Primarily, it provides authentic settings that reflect the practical application of knowledge in real-world scenarios. Secondly, it incorporates authentic tasks with substantial relevance in real-life scenarios over a sustained period. Next, regardless of learners' level of proficiency, it fosters an environment that encourages the exchange of learning experiences and facilitates access to the knowledge and insight of learners. Finally, it stimulates reflection and enables the evaluation of authentic learning within the context of the tasks at hand.

Another crucial point in an L2 learning process in terms of genuine materials is the authenticity of the resources used. The use of authentic texts is crucial in language classrooms that primarily aim to equip students with real-world communication exposure (Berardo, 2006). As a source of written language, an authentic text is an extension of the real language created by real users of a language (Gilmore, 2007b). With the advent of practices that focus on improving the communicative language skills of learners, authentic materials have been integrated into language materials and textbooks (Richards,

2006). Therefore, text authenticity evokes real-life language use outside the school (Külekçi, 2015). Similarly, Guariento and Morley (2001) highlighted the motivating and positive impact of using authentic resources in language learning. To facilitate learning in authentic language use, Cook (1997) described the process as "sometimes play, sometimes reality, sometimes form-focused, sometimes meaning-focused, sometimes fiction, and sometimes real" (p. 231). Within this regard, activities that involve authentic resources reflect real-life scenarios implying that the content is relevant to real-world experiences that are likely to occur in daily life (Oğuz & Bahar, 2008). Gilmore (2007a) shares his thoughts on how he was engaged in authentic songs and how they have remained in his memory by which he felt motivated to learn Spanish as an L2 even in the classroom context:

"The powerful lyrics, attractive melody, and content, relating to real people and real events, combined to make this learning experience highly memorable, and our desire to understand the meaning of the text encouraged us to engage with it and deal with the lexicogrammatical obstacles in our way" (p.9).

He notes that the authentic materials in which he was engaged in the L2 learning process were connected to his emotions and imagination, instigating a desire to understand the texts. Gilmore (2007a) also highlights some other benefits of authentic materials with two peculiar advantages: First, they cater to divergent interlanguage needs of the learners in the classroom environment, and second, they improve a variety of communicative competencies of the learners.

Authentic materials can eliminate potential communication problems for students when interacting with native English speakers and facilitate filling possible gaps between real-life communication situations beyond the school context (Berardo, 2006). As an effective outcome of technology's integration into all areas of education, it has also brought about the use of technology and computer-based resources in early foreign language instruction (Demir & Toplu, 2021; Yılmaz et al., 2022). In this context, incorporating computer-based applications to support authentic language usage will contribute to the content's authenticity.

Regarding the use of authentic language, Widdowson (2003) argued that it can be challenging for students to make the language authentic in a classroom

setting where contextual conditions cannot be fully replicated. Some studies on this issue also relate to a lack of interest in authentic materials compared to contrived language materials (Peacock, 1997). One reason for this low degree of interest stems from the notion that as authentic texts are designed for real-world readers with reasonably high-level reading ability and vocabulary knowledge, learners find the authentic text too complex to understand (Richards, 2006). However, when selected carefully and modified appropriately, reading texts and tasks, "all levels of learners can cope with authentic materials" (Feng, 2022, p. 109). Therefore, to approximate authentic language use, Widdowson (2003) offered to present topics to be taught in simplified forms in a step-bystep manner. Gilmore (2007b) addressed that some of the texts and activities that involve authenticity may sound challenging for learners, yet they can tackle these challenges through careful dissection of suitable authentic texts and activities. It has been noted that linguistic similarities and cognates between the two languages have a positive contribution to the authentic use of the target language (Kimsesiz, 2012). Authentic resources have also been suggested to expose students to a wider range of content, promoting their communicative skills (Gilmore, 2007b).

Hammond and Gibbons (2005) noted that the success of L2 learners largely depends on their opportunity in engaging "a range of authentic learning contexts and meaning-making, and the support-or scaffolding- that they are given to do so successfully in English" (p.27). Mishan (2005) proposed that to provide authenticity, tasks should be designed to mirror the main purpose of the communicative act, be appropriate to the text and promote engagement with the text on which they are based, and the interaction in these tasks should make sense to the learners. Furthermore, these tasks should also have a close relation to real-life situations and activate learners' previous knowledge of the target language culture.

Researchers also have given importance to the designation of EFL textbooks as English is important as a lingua franca (Feng, 2022). The research on this issue covered the analysis of coursebooks in terms of their content and the cultural figures reflected in the coursebook activities or reading or listening texts (Feng, 2022; Rathert, 2016). Within this context, it is suggested that coursebooks should cover language tasks with interactional authenticity (Chan, 2013) and real-life samples (Ellis, 2003). According to Polio (2014), these tasks should cover samples of newspapers and magazines, books, novels, TV shows, schedules, and the like.

The next paragraph is an extract from a magazine article entitled "Diving Safety in fish farming" written by Xerri (2023).

"Simon Caruana, a lecturer responsible for coordinating ITS's degree in diving safety management, believes that education and training are key in ensuring the welfare of the divers working in this sector. Together with DAN Europe – an organization specializing in diving safety – ITS offers a series of short courses that examine such aspects as hazard identification and risk assessment. Aquaculture operators would benefit from the customized training programs that the institute can offer in response to their needs". (Retrieved from Times Malta.

https://timesofmalta.com/articles/view/diving-safety-fish-farmingdaniel-xerri.1024676?fbclid=IwAR2vn9z1F01VW5gZRLYy7SQrfJklQOSbt1ylVCyxAj5avhsbRx6nE_QjiY)

On the other hand, a contrived text would cover a specific grammatical point or definite vocabulary items to focus on as in the next sample:

"Linda Moon is a language instructor. She lives in Florence, Italy. She has been teaching English for 15 years. On weekdays, she teaches English at a high school located in OROVILLE, CA. in Palermo She enjoys teaching English. After school, she meets with her friends for coffee. In the evening, she watches her favorite TV shows and reads books before sleeping. She is fond of books and enjoys reading popular bestselling books worldwide. At the weekend, she goes out shopping at historic markets. Sometimes, she takes walking tours to take photographs of the city. She also goes for a picnic with a few friends."

As can be seen in the extracts above, both texts differ in form, grammatical structure, vocabulary selection, and sentence construction. The first text, as a sample of written text does not involve any goals for teaching a specific grammatical point or vocabulary set. Yet, the latter one was written to focus on a particular structure in English grammar.

Learning new words and improving vocabulary through listening to authentic materials is assumed to yield positive outcomes in learning a foreign language (Yen, 2023). As suggested by Yen (2023), listening to English news can provide learners with real-life vocabulary which enables learners to predict its meaning from the content of the news.

It is also essential to reflect the target language culture in course books used in foreign language teaching (Alptekin, 1993; Dolgunsöz & Yiğit, 2022;

Kılıçkaya, 2004). Emphasizing the importance of target culture in foreign language learning, Kılıçkaya (2004) stated that cultural content is a key to effective L2 instruction. Kılıçkaya (2004) noted that teachers should design a relaxing environment that enables learners to discuss the patterns in both cultures in meaningful and communicative-based tasks and classroom activities.

In integrating cultural materials in L2 teaching, McKay (2000) introduces three types of cultural materials: target culture materials, source culture materials, and international target culture materials (p. 9). Target culture materials can take the attention of the learners based on their individual interests or goals for visiting or studying in English-speaking countries. Yet, it is essential to present relevant materials to make sense to the learners. It is also significant when the native culture of the learners is reflected in EFL textbooks. International target culture materials offer a combination of both cultures to build an international cultural tie across two languages. Upon this issue, McKay (2000) offers that language teachers need to consider that learners may prefer to become bilingual rather than necessarily bicultural, even if they intend to live in an Englishspeaking country.

4. . Related Research

The related research that scopes the effectiveness of authenticity in foreign language instruction yields promising results in terms of integrating authentic materials in language classes (Albiladi, 2018; Feng, 2022; Guevara and Ordoñez, 2012; Ishaq & Khan, 2016; Shadiev et al., 2017; Yen, 2023). In a study that aimed to examine the perceptions of EFL college students on the use of authentic materials in English classes, Ishaq and Khan (2016) conducted a survey questionnaire with 311 college students in Pakistan. The results indicated that the majority of the participants had positive perceptions of the use of authentic materials in English classes. The results also elicited that using authentic materials in English newspapers and magazines, songs, and taped short stories and novel activity are crucial for English language proficiency. It is recommended that the activities with authentic materials enhance learners' confidence and oral skills at an intermediate level of language context.

In an attempt to understand the trend of publications, research focus, and the use of technology, methodology, and current issues, Shadiev et al. (2017) reviewed literature between 2007-2016 on mobile language learning in authentic environments. Their results demonstrated an increasing trend in publication. In addition, smartphones, and mobile phones were found to be the most used technologies. Concerning the authentic environment, their results also showed that authentic learning environments were familiar to students, and an instructorcentered approach was adopted for learning activities in most studies. Based on the findings, the researchers suggested that authenticity should be given great importance in learning environments relevant to learners' backgrounds and experiences. Moreover, they also offered the organization of classroom activities in a student-centered approach to ensure a much more interesting and meaningful learning environment for learners.

Albiladi (2018) investigated the perceptions of language learners about the benefits and challenges of using authentic materials in English reading classes. The data were collected through observations in reading sessions and semi-structured interviews with 16 adult English language learners with diverse native language backgrounds in an intensive English language program in the United States. The results indicated that using authentic materials bears several social and academic benefits such as increasing learner motivation and cultural awareness. Furthermore, the results also favor the use of authentic materials as they bring reality to the classroom.

Through an ontogenetic analysis, Feng (2022), investigated the selection and design of authentic materials in 19 EFL textbooks in Hong Kong from three aspects of content: topic choice, types of texts, and types of interaction. The results showed that the textbooks were well designed in terms of their concordance with learners' cognitive abilities and acquisition of knowledge. Nevertheless, the analysis also situated that the authentic textbooks under scrutiny were lacking non-local themes throughout the school years with a high ratio of opinion texts, and a limited number of visual characters at the primary level.

In a far more recent study conducted by Yen (2023), it was hypothesized that learners could improve their vocabulary by listening to the news as authentic materials in English. The study aimed to examine the effects of listening to English news on boosting the English vocabulary of 60 L2 English learners from Vietnam. Based on an experimental design, the study involved two groups of investigation. Both groups took a pre-questionnaire and a pre-test on vocabulary. Later, the experimental group was exposed to English news for ten weeks with repeated exercises related to the news they listened to. Finally, the post-questionnaire and the post-test were applied. The results of the vocabulary tests demonstrated that the experimental group outperformed the control group in terms of vocabulary gain. In addition, the results of the post-questionnaire revealed positive feedback in terms of listening to the news in English. The

study offered that, as students heard the original content of listening material, they could attempt to figure out the sense in the listening items based on the linguistic content. As implicated by Yen (2023), it is important to include authentic practices for learners in course books. Moreover, teachers should encourage and direct learners to listen to authentic materials such as news on the target language for vocabulary gain and retention.

5. Turkiye Context for the Use of Authentic Materials in EFL Instruction

In Turkiye, English language instruction in primary schools began in the 2002-2003 academic year, and with the 4+4+4 education reform introduced in the 2012-2013 academic year, it was included in the curriculum of 2nd and 3rd grades to support early foreign language instruction (Bayyurt, 2012; 2013). However, this implementation brought about certain pedagogical needs that needed to be met. One of these fundamental needs is that, especially at the primary school level, teaching practices should prioritize authentic language usage and resemble the natural stages of language learning as much as possible, rather than approaching the language learning process as a separate lesson (Gilmore, 2007b). Taking all of this into consideration, it is predicted that emphasizing approaches that target authenticity in early language instruction in English, which is taught as a foreign language in Turkiye and falls outside the natural language environment, will yield highly effective results in language teaching. Some findings from studies conducted in the field of early English language instruction in Turkiye highlight the necessity of authentic language usage (Yıldız & Yeşilyurt, 2017). Furthermore, it is recommended that teacher development programs be organized to create awareness among English teachers and prospective teachers about the dynamics and multidimensional impact of authenticity in foreign language instruction, by incorporating reflective teaching practices to understand and explore the dynamics and richness of language classrooms (Külekçi, 2015).

Linked to the issue, the use of authentic language materials has been found to have a positive impact on the process of teaching and learning English as a foreign language (Günbay & Mede, 2017), as well as yielding effective results for authentic language assessment purposes (Kaçmaz & Aksu Ataç, 2017). As highlighted by Aksu Ataç (2012), incorporating authentic language assessment methods into language teaching proved to be significant in terms of assessment (Aksu Ataç, 2012). Similarly, Lewcovicz (2000) suggested that authentic language assessment tools are more effective than traditional assessment tools. In this sense, assessment, and evaluation, which are crucial components that integrate and evaluate the teaching and learning process, play a significant role in evaluating the efficiency and design of materials (Morrison, 2004; Nilsen, 2001; Shaaban, 2001). Therefore, including authentic language assessment methods will help teachers in evaluating the process of authentic language instruction.

6. Conclusion

The worldwide expansion of English as a universally accepted means of communication has given rise to the significance of language instruction and the notion of authenticity. The idea of authenticity is interconnected with various factors, including the text itself within social, cultural, and personal settings, as well as the extent of communication and its intricate nature.

Authentic materials serve as a basis for real-life language use for foreign language learners and help them improve their language skills, gain proficiency in vocabulary and understanding. When the learning environment is contextualized in a meaningful way through the integration of carefully selected authentic materials, students can progress gradually. When accompanied by real-life tasks, classroom practice will also facilitate understanding the target texts which can be in a variety of forms such as written or spoken texts, and visual or audiovisual texts. Hence, authentic texts, especially when embedded in EFL coursebooks can serve as a reflection of the authenticity of the target language usage and culture.

To represent authentic resources, authentic texts, commercial brochures, tickets, menus, greeting and celebrity cards, letters or e-mails, TV shows and radio broadcasts, newspapers, magazines, songs, movies, internet websites, social media and so on all can be counted as authentic samples for real-life experiences in language education. These materials expose learners to authentic vocabulary, grammar, and cultural insights. Authentic literature ensures learners to be exposed to different writing styles, genres, and cultural themes. Through authentic texts, learners also expand their vocabulary and gain cultural knowledge. Real-life conversations and interviews can be used to expose learners to authentic language use, intonation, and cultural nuances. Incorporating authentic materials both enhances learners' language proficiency and fosters cultural understanding and real-world communication skills. They also provide learners with invaluable opportunities for engaging in the global community. All in all, arranging language tasks that involve authenticity and organizing

learning environments with suitable and meaningful authentic materials can be fine alternatives for bringing authenticity and real-world language use to the language classroom.

References

Adams, T. W. (1995). What makes materials authentic. *ERIC Document Reproduction Service No. ED 391 389.* 1-7. https://files.eric.ed.gov/fulltext/ED391389.pdf.

Aksu Ataç, B. (2012). Foreign language teachers' attitude toward authentic assessment in language teaching. *The Journal of Language and Linguistic Studies*, 8 (2), 7-19. http://www.jlls.org/vol8no2/7-19.pdf

Albiladi, W. S. (2018). Exploring the use of written authentic materials in ESL reading classes: Benefits and challenges. *English language Teaching 9*(1), 67-77. https://doi.org/10.5539/elt.v12n1p67.

Alptekin, C. (1993). Target-language culture in EFL materials. *ELT Journal* 47(2), 136–143.

Bayyurt, Y. (2012). Proposing a Model for English Language Education in the Turkish Socio-cultural context. Y. Bayyurt ve Y. Bektaş-Çetinkaya 106 (Haz.), *Research Perspectives on Teaching and Learning English in Turkey* (ss. 301-312). Frankfurt: Peter Lang.

Bayyurt, Y. (2013). 4+ 4+ 4 eğitim sisteminde erken yaşta yabancı dil eğitimi. *Yabancı Dil Eğitimi* Çalıştayı, Hacettepe Üniversitesi, Ankara.(12-13 Kasım 2012).

Berardo, S. A. (2006). The use of authentic materials in the teaching of reading. *The Reading Matrix,* 6(2), 60-69.

Byram, M. (1995). Foreign language teaching and intercultural citizenship. *Iranian Journal of Language Teaching Research 1*(3), 53-62.

Byram, M., Nichols, Z. & Stevens, D. (2001). Introduction. In M. Byram, A. Nichols & D. Stevens (Eds.), *Developing intercultural competence in practice* (pp.1-8). Multilingual Matters.

Cameron, L. (2001). *Teaching languages to young learners*. Cambridge: Cambridge University Press.

Canale, M. and Swain, M. (1980) Theoretical bases of communicative approaches to second language teaching and testing. *Applied Linguistics 1*(1), 1-47.

Carter, R. & M. McCarthy, M. (2003). If you ever hear a native speaker, please let us know!! Plenary paper presented at the *IATEFL Conference*, Brighton, UK.

Cook, G. (1997). Language play, language learning. *ELT Journal*, 51(3), 224-231.

Chan, J. H. Y. (2013). The Role of Situational Authenticity in English Language Textbooks. *RELC Journal: A Journal of Language Teaching and Research* 44(3), 303-317. http://dx.doi.org/10.1177/0033688213500583.

Cook, V. (2008). *Second language learning and language teaching*. Fourth Edition. Routledge.

Demir, E. & Toplu, A. B. (2021). Teaching English to Young Learners through Interactive Storytelling More Effective than Digital Storytelling?, İstanbul *Aydın* Üniversitesi *Eğitim Fakültesi Dergisi*, 7(1), 209-222. https://dergipark.org.tr/en/pub/iauefd/issue/62324/936611.

Dolgunsöz, E. & Yiğit, M. A. (2022). A Cross-National Investigation of Cultural Representations in Iranian and Turkish ELT Coursebooks. *JELPEDLIC* 7(2), 206-219. https://doi.org/10.35974/acuity.v7i2.2780

Ellis, R. (2003). *Task-based language learning and teaching*. Oxford University Press.

Feng, D. W. (2022). Changing authenticity in English language textbooks in Hong Kong: An ontogenetic analysis. *EFLIJ 2*(6), 105-122.

Gilmore, A. (2004). A comparison of textbook and authentic interactions. *ELT Journal*, *58*(4), 363-374.

Gilmore, A. (2007a). *Getting real in the language classroom: Developing Japanese students' communicative competence with authentic materials.* Doctoral dissertation, University of Nottingham.

Gilmore, A. (2007b). Authentic materials and authenticity in foreign language learning. *Language Teaching 40*, 97-118, https://doi.org/10.1017/S0261444807004144.

Guariento, W., & Morley, J. (2001). Text and Task Authenticity in the EFL Classroom. *ELT Journal*, *55*(4), 347-353.

Gonzalez, O. (1990). *Teaching language and culture with authentic materials*. Ph.D. dissertation, West Virginia University, USA.

Guevara, C. D. & Ordoñez, C. L. (2012). Teaching English to very young learners through authentic communicative performances. *Colombia Applied Linguistics Journal*, 14(2). 9-27.

Gunbay, E., & Mede, E. (2017). Implementing Authentic Materials through Critical Friends Group (CFG): A Case from Turkey. *The Qualitative Report*, 22(11), 3055-3074. https://doi.org/10.46743/2160-3715/ 2017.2744.

Hammond, J., & Gibbons, P. (2005). Putting scaffolding to work: The contribution of scaffolding in articulating ESL education. *Prospect, 20*(1), 6–30.

Ishaq, M. A. & Khan, F. S. (2016). Perceptions of EFL Intermediate Students Toward Authentic Material: A Comparative Study of Two Colleges of Quetta, Balochistan. *Al-Burz 8*, 81-92.

Kaçmaz, E. & Aksu Ataç, B. (2017). The Use of Literary Texts as Authentic Materials in Language Teaching Classes: Othello by Shakespeare. *Atatürk* Üniversitesi *Sosyal Bilimler Enstitüsü Dergisi 21*(4):1311-1329.

Kılıçkaya, F. (2004). Authentic materials and cultural content in EFL classrooms. *The Internet TESL Journal 10*(7), 1-5. http://iteslj.org/Techniques/Kilickaya-AuthenticMaterial.html.

Kimsesiz, F. (2012). *Contributions of cognate words in Turkish and English to vocabulary teaching in EFL*. Unpublished MA Thesis. Atatürk University, Erzurum.

Kimsesiz, F. (2021). *Exploring & Teaching English as a Foreign Language to Young Learners, an Activity Based Guide*. Nobel Yayıncılık.

Koru, S. & Akesson, (2011). *Türkiye'nin* İngilizce *Açığı*. Türkiye Ekonomi Politikaları Araştırma Vakfı.

Kramsch, C. (1993). *Context and culture in language teaching*. Oxford University Press.

Krashen, S. (1982). Principles and practice in second language acquisition.
Külekçi, E. (2015). Authenticity' in English language teaching and learning: A case study of four high school classrooms in Turkey. Unpublished Doctoral Dissertation, University of Warwick, Centre for Applied Linguistics.

Lewkowicz, J. (2000). Authenticity in language testing: Some outstanding questions. *Language Testing 17*(1), 43–64.

Linse, C. T. (2005). *Practical English language teaching: young learners*. McGraw-Hill.

Little, D. & D. Singleton (1991). Authentic texts, pedagogical grammar and language awareness in foreign language learning. In C. James & P. Garrett (eds.), *Language awareness in the classroom*. Longman, 123–132.

Little, D., S. Devitt & D. Singleton (1989). *Learning foreign languages from authentic texts: Theory and practice*. Authentik in association with CILT.

MacDonald, M. N., Badger, R., & Dasli, M. (2006). Authenticity, culture and language learning. *Language and Intercultural Communication* 6(3-4), 259-261. https://doi.org/10.2167/laic252.

McKay, S. L. (2000). Teaching English as an international language: implications for cultural materials in the classroom. *TESOL Journal 9*(4). 7-11.

McGarry, D. (1995). *Learner autonomy 4: The role of authentic texts*. Authentik.

Mishan, F. (2005). *Designing authenticity into language learning materials*. Intellect Books.

Mishan, F. (2017). Authenticity 2.0': Reconceptualising 'Authenticity' in the Digital Era. In A. Maley &B. Tomlinson (eds.), *Authenticity in Materials Development for Language Learning*. 10-24.

Moon, J. (2000). Children learning English. Macmillan Heinemann.

Moon, J. (2005). Teaching English to young learners: the challenges and the benefits. *British Council*, 30-34.

Morrison, G.S. (2004). *Early childhood education today*. Ninth Edition. Pearson Education, Inc. Merrill Prentice-Hall.

Nation, I. S. (2001). *Learning vocabulary in another language*. Ernst Klett Sprachen.

Nilsen, B. A. (2001). Week by week: Plans for observing and recording young children. Cengage Learning.

Oğuz, A. & Bahar, H. Ö. (2008). The importance of using authentic materials in prospective foreign language teacher training. *Pakistan Journal of Social Sciences* 3(4). 328-336.

Peacock, M. (1997). The effect of authentic materials on the motivation of EFL learners. *ELT Journal 51(*2), 144–156.

Polio, C. (2014). Using authentic materials in the beginning language classroom. *Clear News*, 18(1), 1-5.

Porter, D. & J. Roberts (1981). Authentic listening activities. *ELT Journal* 36.1, 37–47.

Rathert, S. (2016). A Comparison of Text Authenticity and Focus of Reading Comprehension Questions between an English and Turkish as a Foreign Language Coursebook. *Turkophone 3*(2). 1-17.

Richards, J. C. (2006). Materials development and research-making the connection. *RELC Journal*, *37*(1), 5-26.

Rivers, W. M. (1987). *Interactive language teaching*. Cambridge University Press. (ISBN-0-521-32216-2).

Rogers, C. V., & Medley, F. W. (1988). Language with a purpose: Using authentic materials in the foreign language classroom, *Foreign Language Annual*, 21(5), 467-478.

Schmidt, R. (1993). Consciousness, learning and interlanguage pragmatics. In G. Kasper & S. Blum-Kulka (Eds.), *Interlanguage pragmatics*, 21–42. Oxford University Press. Shaaban, K. (2001). Assessment of young learners. In *English teaching forum 39*(4), 16-23).

Shadiev, R., Hwang, W. Y., & Huang, Y. M. (2017). Review of research on mobile language learning in authentic environments, *Computer Assisted Language Learning*, *30*(3-4), 284-303, https://doi.org/10.1080/09588221.2017 .1308383.

Shomoossi, N., & Ketabi, S. (2007). A critical look at the concept of authenticity. *Electronic Journal of Foreign Language Teaching*, 4(1), 149-155.

Spelleri, M. (2002). From lessons to life: Authentic materials bridge the gap. *ESL Magazine* 5(2). 16-21.

TEPAV & British Council, (2013). *Türkiye'deki Devlet Okullarında* İngilizce *Dilinin* Öğretimine İlişkin *Ulusal* İhtiyaç *Analizi*. ISBN 978-9944-927-66-6.

Tomlinson, B. (Ed.). (2011). *Materials development in language teaching*. Cambridge University Press.

Tseng, Y.-H. (2002) A Lesson in Culture. ELT, 56, 11-21.

Widdowson, H. G. (1998). Context, community, and authentic language. *TESOL Quarterly 32(4), 705-716.*

Widdowson, H. G. (2003). *Defining issues in English language teaching*. Oxford University Press.

Xerri, D. (2023). Diving safety in fish farming. *Times Malta*. https://timesofmalta.com/articles/view/diving-safety-fish-farmingdaniel-xerri.1024676?fbclid=IwAR2vn9zlFO1VW5gZRLYy7SQrfJklQOSbt1ylVCyxAj5avhsbRx6nE_QjiY.

Yen, T. T. (2023). Improving English Vocabulary for Students Through Listening to English News. *International Journal of Language and Literary Studies* 5(1). 1-13. http://doi.org/ 10.36892/ijlls.v5i1.1152.

Yıldız, M. & Yeşilyurt, S. (2017). Use or Avoid? The Perceptions of Prospective English Teachers in Turkey about L1 Use in English Classes, *English Language Teaching 10*(1), 84-96.

Yilmaz, R.M., Topu, F.B. & Takkaç Tulgar, A. (2022). An examination of vocabulary learning and retention levels of pre-school children using augmented reality technology in English language learning. *Education and Information Technologies*, 27, 6989–7017. https://doi.org/10.1007/s10639-022-10916-w

CHAPTER VIII

A NEW TREND IN CITIZENSHIP EDUCATION FOR (IM)MIGRANT CHILDREN: ART AND ART TERAPHY

Selda ŞAN¹ & Katarzyna MIŁEK²

¹(Asst. Prof. Dr.) Ege University, E-mail:selda.san@ege.edu.tr ORCID: 0000-0002-8680-7491

²(Asst. Prof. Dr.) PWSZ GłogówUniversity, E-mail:katarzynamilek@op.pl ORCID: 0000-0003-4603-4604

1. Introduction

eople might be affected by the economic, social, political events taking place around them. As a result of wars, natural disasters, economic, social and personal problems, they may have to migrate from one country to another or from one city to another. While forced migrations due to reasons such as war and natural disasters affect the psychology of individuals (Salihoğlu, 2019), it can be said that these migrations especially affect children more deeply. According to Eisenbruch (1988) children, (im)migrating as a result of forced wars, continue to experience adaptation problems and suffer from the psychological effects of war. Various activities can be organized using methods such as art therapy and art healing to ensure both psychological support and cultural harmony within the scope citizenship education. These activities can also be evaluated within preventive program activities. As Hodes (2000) states, schools are one of the primary institutions where preventive program activities for immigrant children can be carried out. Savva (2021) states that those who work on art in schools, museums and universities do not consider citizenship only within the scope of rights and responsibilities. In addition to rights and responsibilities, these people also consider the concept of citizenship as a culture.

Natural disasters, wars or terrorist events affect people's psychology and cause individuals to experience problems (Menteşoğulları, Şafakoğulları & Yıldız, 2023). As a result of these events, children who migrate to other cities in the country or other countries may experience different problems both before, during and after migration. In this context, countries should prepare educational programs for refugees in the context of citizenship education for their adaptation to social life. It is important that refugees or asylum seekers are given citizenship education so that there are no social conflicts, so that refugees or asylum seekers are able to adapt to the country they come from, and that existing citizens are able to adapt to refugees. Within the scope of this citizenship education, artistic and healing activities that will ensure the well-being of refugees should also be included. According to Salihoğlu (2019), artistic works carried out in refugee camps have shown that healing art methods have a positive effect on the difficulties or traumas experienced by forced (im)migrants in the adaptation process. Gümüşten (2017) also states that preventive intervention programs are needed to prevent the problems of refugee children and adolescents and to support them in adapting to their new lives.

Art therapy, one of the preventive interventions, has moved beyond standard individualized treatment models and turned into an interdisciplinary approach focusing on issues such as feminism and anti-racism (Talwar, 2018). Artistic activities, that is, the healing power of art, have revealed the concept of "art healing". In addition to this concept, the concept of "art thearphy" has also emerged. However, art therapy is a type of healing art that requires more expertise and has a special practitioner (The Westreich Foundation, 2016-2021 as cited in Salihoğlu, 2019). Art therapy can provide individuals with psychological and emotional well-being. (Sarid & Huss, 2010).

In this book titled "A New Trend in Citizenship Education for (Im) migrant Children: Art and Art Teraphy" it is emphasized what art therapy is and the importance of the art therapy method focusing on citizenship education for immigrant children. In this context, the titles of introduction, citizenship education, social studies and immigration child education, art in social studies, art therapy and school education, and conclusion are included.

2. Citizenship Education, Social Studies and Immigration Child Education

2.1. Citizenship Education Education, Social Studies and (Im)Migration

The main purpose of social studies is to educate individuals as active citizens and prepare them for society (Çelik & Şenel, 2022; Öztürk, 2006).

Social studies emerged in America at the beginning of the 20th century as a program aiming at citizenship education to enable different cultures to live together in peace (Öztürk, 2006). The intense immigration that emerged after the industrial revolution left America with different and conflicting cultures, groups, and individuals living together. Therefore, in order to ensure that these different groups, which may experience possible conflicts, learn the culture of living together and to ensure peace in society, a social studies program for citizenship education, including immigrants, has been created. Social studies, which has had this basic purpose for many years, is an extremely important curriculum for countries. With its wide range of social sciences, social stidies aims for individuals to have knowledge on subjects such as history, geography, philosophy, sociology, economy and politics and to become active citizens by using this knowledge together with skills and values. Individuals are expected to know the history and geography of the society or culture they live in, to adapt and to respect the differences in the society. In short, as stated by Gülüm & Ulusoy (2008), social studies teaches individuals the rules of social life and prepares them for life.

Social studies develops and changes as a result of political and social events in all countries in the world (Çelik & Şenel, 2022). Because many events such as political, economic, ecological, social, etc. happen all over the world, nationally or globally. It is expected that there are individuals who are conscious and responsible about the events that occur. For this reason, countries generally update the social studies curriculum for citizenship education in order to solve the problems they experience. In today's world, there is a huge wave of migration around the world due to epidemics, natural disasters and wars. So that, with the war in Syria, a serious migration issue has arisen in the world. In 2015, with the news of the death of "Baby Aylan" (Aylan Kurdi), the world was shaken and the immigrant issue came to the fore. Immigrant children and (im)migration issues have begun to be included in textbooks.

In order for immigrant children to become a part of society, they must be introduced to school as soon as possible by providing the necessary conditions in the place they immigrate to (Saklan & Karakütük, 2022). Because children's right to education, which is within the scope of their fundamental rights and freedoms, should not be taken away. Additionally, according to Moussa (2014, cited by Saklan & Karakütük, 2022), immigrant children may experience adaptation problems for various reasons. Schools have the ability to eliminate this problem. However, "it is extremely important for refugees to create an identity and a future plan that will support their development by adopting the
cultural characteristics of the host country, without losing ties with their own culture." (Gümüşten, 2017, p.258). Knowing the citizenship system, culture, history and geography of the host country will facilitate the adaptation process. In addition, it is important to ensure that immigrant children maintain their own culture and feel safe and comfortable. The education of immigrant children should not only be information-oriented. It should be in the form of a citizenship orientation program that includes skills and values as well as knowledge. This program culture should ensure that different cultures can be brought together.

Those, working on art in schools, museums and universities, do not discuss citizenship solely on rights and responsibilities. In addition to rights and responsibilities, they also considers the concept of citizenship as a culture (Savva, 2021). Multicultural educational activities for children from different cultures within the education system help to realize a tolerant and democratic citizenship education (Banks et al, 2001). Tolerance and democracy are among the most important values of citizenship education. In other words, programs aiming at citizenship education should include concepts such as tolerance, democracy, justice and human rights.

Citizenship education helps realize the values of justice and equality in a country or a society (Ereş, 2015). In Europe, citizenship education is handled within the scope of human rights and freedoms (Starkey, 2002). In other words, it expects human rights and freedoms to be protected with values such as tolerance, democracy, justice. These values are expected to be a part of daily life. According to Güven (2008), democracy is considered as a philosophy of life today. For this reason, democratic citizenship education should also consider democracy as a philosophy of life and contribute to the creation of a democratic cultural environment.

Immigrant children need to get to know the culture of the country, they immigrate to, in a democratic environment. In this context, it is necessary to help them adapt to the new culture without being ignored or marginalized.

2.2. Art in Social Studies

Social studies is an interdisciplinary program that emerged for the purpose of citizenship education (NCSS, 1992; Öztürk, 2009). These disciplines include art, music and literature. Art and fine arts are used in social studies lessons. Especially the works of art belonging to the states that lived in history, their meanings, their contributions to the present day and their survival until today are discussed. In addition, works of art from old and modern ages are included within the scope of museum education in social studies. Examining the artistic works of different states and nations is important in terms of gaining knowledge about culture, recognizing cultures, and seeing common and different features. Art helps people to embody their culture through works of art. In addition, today it is seen that art is used as a therapy with its healing power. In other words, art is used as a therapy to eliminate or minimize people's anxieties, fears, negative emotions and thoughts. As Eren and Hamarat (2022) stated that art has an important place in the education system. However, art should not be solely for the purpose of conveying information. It should be used for the construction of hope rather than the transfer of information. Because "as a practice of creating hope, the best tool that the social studies course can use will be art." Art is the key to polysemy and the fascination of life." (Eren & Hamarat, 2022, p.250).

It is not possible for the subjects of social sciences such as history, geography and archeology, which are included in social studies, to be far from values such as art and aesthetics (Kırıkçı, Akgül & Bahar, 2020). Social studies also includes aesthetics as a value that individuals should acquire. Using art in social studies teaching has two important tasks. The first is to eliminate prejudices, the second is to provide motivation. When individuals from different cultures are together, they will have the opportunity to know and understand each other's cultures. This will help eliminate prejudices against each other. As a second task, art can be effective in motivating students in the social studies course (Eren & Hamarat, 2022). Art provides motivation and creates enthusiasm for individuals to learn social studies subjects. This may have a positive impact on individuals' academic success. That's why art is important for social studies. Art's elimination of prejudices helps individuals get to know different cultures and eliminate prejudices/stereotypes towards cultures. It enables individuals to tolerate different cultures. It helps individuals from different cultures not to feel like others. For this reason, it is very important to use art within the scope of social studies teaching. As Savva (2021) states, art helps citizens establish meaningful connections with themselves and other people. With this statement of Savva, it is understood that art enables the recognition and acceptance of differences in society and the integration of people from different cultures.

An education that includes art and aesthetic values is needed to create a creative and contemporary society and to raise creative individuals feeling responsible for this society (Kırıkçı, Akgül & Bahar, 2020). Art is an important educational tool for raising cultured people and keeping people and values together (Akhan, 2013). Because, as in the artist Dan Perjovschi's drawing, "Artist citizen" is a part of democratic culture as well as social and artistic works (Savva, 2021). There is a need for social studies and the use of art in teaching social studies in order to create a democratic culture, raise cultured individuals, and keep people together with democratic values. Social studies, focusing on citizenship education, aims to raise cultured, creative, democratic individuals respecting differences. It also benefits from art and artistic activities to achieve this goal.

3. Art Teraphy and School Educatiom

3.1. What is Art Teraphy?

Art therapy is a combination of two important aspects of human life: Art and healing. Art is the manifestation of human experiences and aspirations, recognized as the cultural achievements of civilization, shown in artistic works. Treatment means taking actions aimed at restoring health or alleviating the symptoms accompanying the disease. Treatment also includes the prevention of physical and mental disorders. The main message of art therapy is to create a work of art that is not an artistic product, but is a way of expressing oneself and one's feelings. The organized course of art therapy classes is aimed at changing behaviour in order to have a positive impact on oneself and other people (Szulc, 2001). The combination of art and therapy leads to the stimulation of a creative way of thinking. This is beyond the conventional treatment of conflicts present in the student's feelings. The educational function of art, including a socialization function. According to the premises of art, and therefore culture, during activity in this field, an individual experiences a re-evaluation and formation of these values, attitudes and social skills, which is the main reason for organizing the educational process (Florczykiewicz, 2016).

Marian Kulczycki proposed the functions of art therapy in the area of mental health care and in the functioning of the family, school and the entire human environment. He included education, recreation and correction among the functions. The latter helps to improve the dysfunctional activities of brain structures. The educational function contributes to acquiring knowledge and building competences to orient oneself in the social environment. As part of the recreational function, an individual has the opportunity to actively relax and rest (Kulczycki, 1971).

Ewelina Konieczna described cognitive, regulatory, compensatory and expressive functions. She attributed the expressive function to the role of relieving accumulated emotional tensions. The cognitive function helps to name and identify one's hidden feelings and the feelings of other people. Regulation takes place within the mechanisms responsible for balancing needs and failures in a given sphere of experience. The compensatory function is responsible for ways of regulating unmet needs. The expressive role of art therapy should be noticed in the form of statements made by an art therapy participant who articulates their needs, problems and emerging ways of solving them in various ways. Therapy using art as a means allows to achieve harmony, to strengthen self-control, and to increase self-esteem, which determines the development of identity and further psychosocial functioning of a person (Konieczna, 2007).

Combining art and therapy is not art teaching. Using works of art, the therapist takes conscious actions to use the act of creation, the predispositions of the patient - student, and their creative properties are used as a means to purposefully influence them (Koniecczyńska, 1990). It should be remembered that the goal is not a piece of work itself, but the changes that are activated under the influence of creation. Art and the process of creation are therefore a means to influence the student, the patient. Creation provides an opportunity to express yourself, your desires and hidden thoughts (Bartel, 2016).

Art therapies, in an appropriately planned manner, use the following fields of art: Music, art, literature, fairy tales, dance and dramatic art. Individual therapies using art are characterized by the organization of influence using the medium of an appropriate field of art - drama therapy, choreotherapy, art therapy, music therapy, which serve to achieve the assumed goal of the therapy. An isolated art-making situation is also not art therapy. Only the verbalization of the act of creation nominates creative activity to the scope of the concept of art therapy, as well as a properly prepared cycle of student activity and conscious action of the person conducting it (Lecourt, 2008, p.8). This approach implies the use of art therapy techniques in a specific way in school education. These may include elements of art therapy woven into classroom activities. Stimulating activity in a given field of art allows to release anxiety, accumulate activity for the purpose of creation, and freeing yourself from problems, but the aim of each lesson is also the cognitive and educational aspect. It is up to the teacher to specifically organize the presentation of the knowledge he/she offers to the student during classes using art healing.

3.2. Art Teraphy in School Education

Art therapy can become an inspiration for a teacher, provided that the material, curriculum content and field of art are appropriately selected. The

variety of definitions of art therapy proves that it is related not only to the field of a specific art and its practice. Władysław Dykcik described art therapy as spontaneous human creativity connected with fields of art such as painting, modelling, drawing, graphics, music, poetry, dancing, singing, reading. It is used in education, psychotherapy, prevention and correction of various disorders (Dykcik, 2001). Marian Kulczycki stated that it is a set of activities and views that improve the quality of people's lives by practicing art (Kulczycki, 1990). The term art therapy has not even been rooted in practice for a century, and there have already been modifications indicating the use of education through art as "art education" or "creative education workshops". They are understood as components of the teaching and educational process, which contribute to the development of specific skills of students in the instrumental and volitional side of the personality. The aim of introducing these methods in education is to empower students and prevent emotional and behavioural disorders (Józefowski, 2012). The use of art therapy is seen in the general development of students in the context of influencing the development of attitudes, the ability to make rational assessments, being guided by one's own conscience, the ability to unconventionally solve problems, to develop and experience oneself and the world of civilization values. A creativity workshop can effectively improve the quality of students' lives, influence students' potential by teaching them agency, arousing the need for self-fulfillment, and strengthening the appropriate level of self-esteem. Therefore, it is an alternative educational method (Stańko-Kaczmarek, 2013).

Joanna Gładyszewska-Cylulko relates art therapy to the fields of literature, drama, dance and music. These areas correlate with the possibility of using the native language in education. The core curriculum of general education includes the goal of preparing students for consistency in action, knowing and accepting themselves and others, receiving and understanding art, identifying their emotions and dealing with them (Gładyszewska-Cylulko, 2007). Bibliotherapy can be used to implement such activities, as it has educational, recreational and corrective functions. In terms of the educational role, it involves providing knowledge that increases the range of cognitive competences and allows one to gain orientation in the world. In terms of its corrective function, it is a field for practicing thinking, reading skills and evaluation. Bibliotherapy lessons can be organized under the pretext of recreation, that is providing an opportunity for active recreation that helps develop other competences and overcome life problems. Bibliotherapy offers various forms: reading aloud, group discussions, drawing illustrations for texts, listening to audiobooks, coming up with endings to the fragments of a book, verbal and written statements about the literature, writing letters to the characters or other forms of dialogue with them. In addition to therapeutic values, selected texts may introduce curricular content to be mastered at a given educational level, lead to a re-evaluation of the features of the plot and characters, and provide personal role models (Matras-Mastalerz, 2016). Understanding literature therapy must be based on three principles:

- It must be enjoyable for participants,
- It must reduce mental tension,
- It must lead to development understood as transformation.

Only the existence of all the rules qualifies the lesson as the application of bibliotherapy in native language education. Otherwise, it will be a lesson unit without any emphasis on the described technique.

School-age students need help in overcoming many problems that constitute their identity. This time is dedicated to building self-esteem, overcoming developmental conflicts related to physiological maturation, reducing fears resulting from overcoming developmental tasks. Native language education may be associated with creativity and unconventional activities offered by art therapy. Bibliotherapy lessons can have an impact on the student's personal development and have an enriching effect on their life. Learning about the lives of the characters in an unusual way modifies one's own experiences, allows one to accept their shortcomings and imperfections, and understand oneself and others, which is extremely important during the period of building personal identity (Czernianin, 2017). Krystyna Hrycyk mentions the need for bibliotherapy and its wide application also in the fairy tale therapy technique, raising awareness of the invaluable importance of these methods of supporting the development of children and adolescents. She notes that both bibliotherapy and fairy tale therapy allow for the elimination of emotional problems and the effects of difficult experiences related to various life situations. It is indispensable in education in hospital wards where children and adolescents are treated, and in line with the idea of promoting reading, it can become an important support for treatment and education at the same time (Hrycyk, 2012).

Maria Molicka emphasized the value of art in activities aimed at improving the quality of life through the use of artistic works. She draws our attention to the selection of materials and texts that should meet the requirements of reflection and relaxation and stimulating thinking and action. In fairy tale therapy, texts should be related to psychological, moral and biographical topics. They should provide an escape from problems, so they must be characterized by a certain amount of humour and adventure fiction. To emphasize values that stimulate thinking, imagination, verbal and artistic expression, literary works selected for therapy may come from popular science, travel and war literature (Molicka, 2002). Dagmara Łupnicka-Szczęśnik added a methodological tip that before lessons or meetings in the field of bibliotherapy, it is important to recognize a group of students in terms of the group's narrative and dialogic competences. The assessment of the implementation of automated statements and cognitive skills, such as the ability to read, write, focus, and remember, determine the level of selected texts, dramas, and the course of organized meetings. Preparation for bibliotherapy and a variety of theatre therapy requires the appropriate selection of narrative understood as a style of understanding reality - organizing events, creating and confirming identity, presenting life activities, revealing oneself (Łupnicka-Szczęśnik, 2019).

An important element that can be included in art therapy in school education is choreotherapy, which can be a part of physical education classes. It allows for proper physiological regulation of breathing, body posture and muscle tension. The combination of mental and body activity triggers feelings of joy, relieves sadness, conflicts, tension, and unpleasant emotions that need to be released. Dancing not only provides relaxation and supports physical functions by providing the opportunity to support motor skills, but also allows for spontaneity, psychophysical integration, it develops intelligence and the sphere of social behaviour towards one's body and people around us. Choreotherapy provides an opportunity to experience things in a group, which creates a sense of belonging, security and integration with the community. Dance and any movement to music combine the element of the need for sound, which accompanies man since prenatal life, soothing the needs of the senses and aesthetic feelings related to contact with the art of music. In the context of dance, the possibility of safe touch plays an important role, which is necessary in the case of shy and withdrawn students. The use of this art therapy technique requires from the instructor-therapist, in addition to strictly therapeutic knowledge, the ability to recognize a group, a high level of responsibility and empathy (Szymańska, 2023). The framework of choreotherapy includes dance, rhythmic and movement exercises to music, as well as movement improvisations. Instructors use instrumental improvisations, listening to music, and thematic instrumental classes. Music therapy can be a

foundation for emotional training and social skills, and students enjoy it very much (Szulc, 2011).

Within art therapy, all possible varieties of drawing and graphics, painting and sculpting techniques are used (Popek, 2010).

Art is a space to unlock the entire potential of the individual. Creative and therapeutic acts are aimed at the development of self-knowledge and selfawareness, and this takes place with the participation of a group, a class, and is necessary for the development of a person's social environment. The most important is the need for a sense of security, which requires a sense of certainty, stability and freedom from fear, and it can be realized here. Eugeniusz Józefowski states that art therapy is a trend of humanistic constructivism because it focuses on human development and appeals to imagination. Experiences created during art therapy are both an enrichment of internal changes and external behaviours with the environment (Józefowski, 2012).

Achieving children's appropriate degree of concentration in their art experiences and meeting therapy and lesson goals may be possible with the right combination of methods and techniques. Art therapy alone will not replace lessons. The lesson, on the other hand, cannot be conducted using a strictly therapeutic method. During therapy, the course of the cycle of activities of both the therapist and the recipient, i.e. the student, is important. The process of creating a work of art, the attitude, strategy, and principles to which the student is subjected during therapy may not always be correlated with the acquisition of knowledge and skills. Art therapy is intended to reduce tensions, help create new structures, and give rise to new values (Józefowski, 2012). Fields of school education require the acquisition of knowledge, skills and abilities. They can certainly be treated as a consolidation process during therapeutic sessions. The very attitude of an individual to an attractive contact with art therapy may serve to involuntarily consolidate knowledge and information, and to acquire new knowledge, but with the dominant goals relating only to therapy. The alternative nature of art therapy methods cannot consist in the fact that conventional, traditional methods will be completely replaced. Art therapy can and should complement the teaching and educational process. It should be treated flexibly, be appropriately selected, and incorporated into the range of areas in formal education. Robert Bartel, on the other hand, believes that art therapy should be treated in two ways: As therapy through art and as artistic education. He appreciates the features of the creative development method, which triggers creativity and unconventional behaviour. He believes that a translational approach to the problem of the presence of this method at school has a greater impact on personality development, and has many advantages in awakening a creative attitude (Bartel, 2016).

Art therapies present a chance for an individual surrounded by civilization problems. It is an opportunity to create and improve contacts with others and to formulate one's own desires and needs. It may enable a solution in the search and self-discovery, identification in the development not only of individuals, but of entire societies. The student should gain cultural and social experiences, feel the sense of the essence of humanity, and not just the consumption of its achievements (Linek, 2012). Therapy in which art is a tool, is a means to balance, and an alternative to the development of mind, imagination, stability and creativity (Kasprzak, 2018).

4. Conclusion

Educational activities are shaped according to the needs of the age and the political, economic and social events experienced by the society. Because within the scope of the social foundations of the program, educational programs must be capable of meeting the needs of the society. In this regard, it can include different topics, methods, techniques and approaches. In many countries, the turn of the millennium brought a search for alternative methods of working with students. The reason was the search for strengthening the effectiveness of teaching, but also improving the student's functioning at school (Melosik, 2016). By creating conditions for an effective teaching process, the search has extended towards methods that ensure the prevention of emotional disorders. The identification of new methods extended to enriching the fields of education for school teachers by studying cultural heritage, elements of fairy tale therapy, art therapy, photography workshops, media behaviour, therapy through literature, and theatre therapy (Aksman, 2016). The interest in the impact of art on the overall human development resulted from the interest in the possibility of relieving suppressed feelings and internal tensions during the development of student's personality (Grudziewska, 2010). Migrations can also make people emotional and introverted.

People (im)migrate to have better conditions and a future (Gümüşten, 2017). When looked at migrations throughout the historical process, previously there were migrations due to natural disasters and economic reasons. However, today, people are forced to migrate as a result of wars. Migration has become a global problem. As Aktaş, Tokmak and Kara (2021) state, global problems affect

all living things, indirectly or directly, socially, psychologically, environmentally and economically. Migrations also deeply affect people, especially women and children. Schools have a quite important impact in eliminating or reducing the negative effects of migration, especially war-related migration, on children. Schools help immigrant children to integrate with host children, to break down prejudices, to help different cultures get to know each other, and to integrate cultures. Social studies is the course that teaches the recognition and integration of different cultures in schools, teaches the citizenship rules of the country to which children immigrate, and facilitates the adaptation process within the scope of rights and responsibilities. Social studies is a program that includes social sciences for the purpose of citizenship education. In this context, it also includes art. Art has a motivating and healing effect in social studies teaching.

Within the scope of "social studies and immigrant children", art therapy method can be used for the well-being of immigrant children for citizenship education purposes. When using this method, artistic healing can be carried out by using artistic activities such as painting, music and literature together with an art therapy specialist. Today, unfortunately, it is observed that there is a return to primitive times in some societies. In other words, it can be seen that in the 21st century, news of war is still coming from the world. A citizenship education program should be implemented, especially for children who escaped from war and were placed in refugee camps or sent to schools, to introduce both their own culture and the culture of the country they migrated to, and to ensure integration and healing, through art therapy.

Workshops were held with young Syrian children in the Zaatari refugee camp in Jordan. Children were allowed to paint the tents and walls, that is, a healing art work was carried out (Parater, 2015 as cited in Salihoğlu, 2019). The art healing/art theraphy was used in order to eliminate the possible negative connotations of tents and camp walls and to make children relax, and to improve the place where children live and heal themselves. In this context, symbols and pictures of their own culture and the culture of the country they migrate to can be painted on the tents in later stages. In this way, healing activities through art are combined with citizenship education.

References

Akhan, N. E. (2013). The art perceptions of social studies teacher candidates and their opinions on teaching the topics regarding art. *Usak University Journal of Social Sciences*, 6 (special issue), 146-162.

Aksman J. (2016). Alternatywne metody nauczania w szkole, poza szkołą i na uczelni – na przykładzie współpracy Uniwersytetu Dzieci i Krakowskiej Akademii im. Andrzeja Frycza Modrzewskiego [Alternative teaching methods at school, outside school, at university – based on the example of the Children's University and the Krakow Academy. Frycz Modrzewski], *State and Society*, 2, 173-185.

Aktaş, V., Tokmak, A., & Kara, İ. (2021). Examining social studies textbooks in terms of global problems: The case of France and Turkey *Journal of Innovative Research in Teacher Education*, 2(3), 266-289.

Alkar, E. (2023). Metaphorical perceptions of social studies teacher candidates towards the concepts of migration and culture. *Trakya Journal of Education*, *13*(2), 1219-1233.

Banks, J. A., Cookson, P., Gay, G., Hawley, W. D., Irvine, J. J., Nieto, S., Schofield, J. H., & Stephan, W. G. (2001). Diversity within unity: Essential principles for teaching and learning in a multicultural society. *Phi Delta Kappan International*, 83(3), 196–203.

Bartel R. (2016). Art therapy and personal development. Theoretical and practical aspects of art therapy, Poznań: Publishing House of the University of Arts in Poznań.

Brzezińska A., Appelt K., & Ziółkowska, B. (2016). *Psychology of human development*. Sopot: GWP.

Czernianin W., Czernianin H., Poetry therapy as one of the methods of bibliotherapy [in:] Czernianin W., Czernianin H., Chatzipentidis K., *Basics of contemporary bibliotherapy*. Academic handbook, Wrocław: University of Wrocław.

Çelik, H., & Şenel, T. (2022). Social studies in the historical process: USA sample. *Vakanuvis - International Journal of Historical Researches*, 7 (special Issue), 1384-1414.

Dykcik W. (2001). Searching for innovative and alternative concepts of individual rehabilitation and social integration of disabled people - a current challenge in educational practice [in:] B. Szychowiak, Dykcik W. (ed.), *Innovative and alternative methods in the theory and practice of pedagogy special – methodological guide*. Poznań: Adam Mickiewicz University Press.

Eisenbruch, M. (1988). The mental health of refugee children and their cultural development. *International Migration Review*, 22(2), 282-300.

Eren, A., & Hamarat, E. (2022). Establishment of hope with art in social studies course. *Critical Reviews in Educational Sciencis*, *3*(2), 237-253.

Ereş, F. (2015). A qualitative study on the evaluation of citizenship education and character education policy. *Mehmet Akif Ersoy University Journal of Education Faculty*, 1(36), 120-136.

Florczykiewicz J., E. Józefowski, (2011). Art therapy in education and resocialization, Selected therapeutic activities and empirical studies, Siedlce: University of Natural Sciences and Humanities.

Gładyszewska-Cylulko J. (2007). Supporting the development of shy children through visualization and other art therapy techniques. Kraków: Impuls Publishing House.

Gładyszewska-Cylulko J. (2014). *Art therapy in the work of a teacher. Theoretical and practical foundations of art therapy.* Kraków: Impuls Publishing House.

Grudziewska E. (2010). Art therapy as a form of work with a mentally disabled child, *Special School*, 3.

Gülüm, K. & Aksoy, K. (2008). The usage of folk songs in social studies lessons when teaching immigration (A case study). *Electronic Journal of Social Sciences*, 7(26), 112-127.

Gümüşten, D. (2017). Review on intervention programs for refugee children's education and adaptation. *Nesne Journal of Psychology*, 5(10), 247-264.

Hodes, M. (2000). Psychologically distressed refugee children in the United Kingdom. *Child Psychology & Psychiatry Review*, 5(2), 57–68.

Hrycyk K. (2012). About the need for bibliotherapy. Bibliotherapeutic society, state post-secondary school for the education of cultural animators and librarians. Wrocław: Polish Publishing House,

Józefowski E. (2012). Art therapy in art and education. The practice of art therapy interactions using artistic creation. Poznań: Adam Mickiewicz University Press.

Kırıkçı, A. C., Akgül, M. Y., & Bahar, A. (2020). Art and aesthetic in the social studies curricula. *Harran Education Journal*, *5*(1), 31-62.

Konieczna E. J. (2007). *Arteterapia in theory and practice*. Kraków: Impuls Publishing House.

Koniecczyńska Z. (1990). Art therapy and psychodrawing in clinical practice, [in:] L. Hanek, M. Pasella (eds.), *Art therapy, "Academic Notebook"* Music Academy Publishing House.

Kulczycki M. (1990). Art therapy and clinical psychology [in:] L. Hanek, N. Pasella (eds.), "Art therapy. Scientific Journal of the Karol Lipiński, Music Academy in Wrocław", No. 57.

Kulczycki M. (1971). Psychological problems of a sick person: issues of cooperation between a health care worker and a patient. Wrocław: Zakład Narodowy Ossolińskich.

Lecourt E. (2008). *Music therapy or how to use the power of sounds*. Chorzów: Videograf II.

Matras-Mastaler W. (2016). Bibliotherapy – evolution of theory and development of practice. Review based on Polish and foreign experiences. *Acta Universitatis Lodzensis Folia Librorum* 1(2), 22-23.

Melosik Z., & B. Śliwerski (2010). *Alternative education of the 21st century*. Kraków: Impuls Publishing House.

Menteşoğulları, E., Şafakoğulları, Ş., & Yıldız, M. (2023). Psychological approach in post-disaster trauma. *International Journal of Social Science*, 7(28).

Molicka M. (2012). *Fairy tale therapy. About children's fears and a new therapy method*. Poznan: Media Rodzina Publishing House.

NCSS (1992). A vision of powerful teaching and learning in the social studies. Building social understanding and civic efficacy. Position statement. Washington DC: National Council for the Social Studies.

Öztürk, C. (2009). Sosyal bilgiler öğretimi. Demokratik vatandaşlık eğitimi [Teaching social studies. Democratic citizenship education]. Ankara: Pegem Akademi.

Popek S. L. (2010). *Psychology of artistic creativity*. Kraków: Impuls Publishing House.

Saklan, E., & Karakütük, K. (2022). An analysis on educational process of Syrian school-age children in Turkey. *Mersin University Journal of the Faculty of Education*, 18(1), 51-76.

Salihoğlu, E. F. (2019). The healing effect of space design: Refugee camps and art interaction. *Eurasian Journal of Researches in Social and Economics*, 6(7), 252-265.

Sarid, O., & Huss, E. (2010). Trauma and acute stress disorder: A comparison between cognitive behavioural intervention and art therapy. *The Arts in Psychotherapy*, 37(1), 8-12.

Savva, A. (2021). Art and Citizenship in Education: A Conceptual Framework. Gonçalves, S. and Majhanovich, S. (Ed.) *Art in Diverse Social Settings*, Emerald Publishing Limited, Bingley

Stańko-Kaczmarek M. (2013). *Art therapy and creative education workshops*. Warsaw: Difin Publishing House.

Starkey, H. (2002). Democratic citizenship, languages, diversity and human rights: Guide for the development of language education policies in *Europe*. Strasbourg: Council of Europe.

Szulc W. (2011). *Art therapy. The birth of an idea, the evolution of theory, the development of practice.* Warsaw: Difin Publishing House.

Szulc W. (2001). Working with a dyslexic child in an art therapy room [in:] W. Dykcik W., Szychowiak B. (ed.), *Innovative and alternative methods in the practice of special education*. Poznań: Adam Mickiewicz University Press.

Szymańska A. (2023, September). https://psychomedic.pl/terapia-poprzesztuke-o-choreoterapia-z-terapeutka-agnieszka-szymanska/

Söylemez, A. (2022). Okul öncesi çocuklarda sanat terapisi bağlamında kum boyama sanatı uygulamaları [Sand painting art practices in the context of art therapy in preschool children]. Ankara: IKSAD

Talwar, S.K. (Ed.). (2018). Art therapy for social justice: Radical intersections (1st ed.). Routledge.

CHAPTER IX

LANGUAGE ANXIETY AS A BARRIER TO EFFECTIVE COMMUNICATION IN THE GCC REGION: A REVIEW OF CHALLENGES AND SOLUTIONS

Fatima AL-MUKHAINI¹ & Osman Erdem YAPAR²

¹Dhofar University, Oman E-mail: f201910589@du.edu.om ORCID: 0009-0006-7836-4113

²(Asst. Prof. Dr.), Dhofar University, Oman E-mail:osmanyapar@du.edu.om ORCID: 0000-0002-3400-083X

1. Introduction

anguage anxiety and speaking challenges are common among language learners, and they can significantly affect their ability to communicate effectively. In the GCC Region, where cross-cultural interactions are increasingly prevalent, it is essential to understand the factors that contribute to language anxiety and speaking challenges and to identify effective strategies to address these barriers to effective communication. This study aims to address this need by investigating the experiences of language learners in the GCC Region and exploring potential solutions to these challenges.

Language anxiety refers to nervousness, discomfort, and self-doubt emotions experienced by individuals when communicating in a foreign or second language. Horwitz, Horwitz, and Cope (1986) introduced the term "foreign language anxiety" (FLA) as a description of a situation in which a speaker undergoes a negative impact on language learning. In other words, language anxiety is a negative emotional state; therefore, it can hurt how to learn

or acquire the target language. Foreign language anxiety is viewed by numerous researchers as a psychological element that has an adverse effect on the process of learning a second language (Khouni, Gasim, Al Fahdi & Al Naabi, 2023). Essentially, FLA refers to emotions of fear that learners may experience while studying a target language (Altun, 2023). The phenomenon of language anxiety is particularly relevant in the Gulf Cooperation Council (GCC) region, where English is widely used as a lingua franca. As a region, the Gulf countries have experienced rapid economic and social development, largely due to increased cross-cultural interactions (Al-Khouri, 2014). However, language barriers and anxiety associated with speaking in English as a second language continue to pose significant challenges to effective communication in this region. Moreover, research has shown that language anxiety can have a significant impact on language learners' motivation and willingness to communicate, ultimately affecting their language learning outcomes (Dewaele & MacIntyre, 2014). Language learners experiencing high levels of language anxiety may be less likely to participate in classroom discussions or engage in opportunities to practice their language skills. This, in turn, can lead to lower levels of language proficiency and decreased confidence in their ability to communicate effectively in the target language.

2. Literature Review

Effective communication is a critical skill for success in various contexts, including academic, social, and professional settings. However, language anxiety and speaking challenges have emerged as significant barriers to effective communication, particularly in the Gulf Cooperation Council (GCC) region. Multiple studies have investigated language anxiety and speaking challenges in the GCC region, highlighting their negative effects on effective communication. For instance, AlKhairy and Al-Shehri (2018) found that language anxiety among English language learners in Saudi Arabia was associated with lower levels of oral proficiency and self-efficacy. Similarly, Al-Qahtani and Al-Mekhlafi (2018) noted that students in Oman perceived English as a difficult language to learn, which contributed to their anxiety when communicating in English.

Several studies have explored the factors contributing to language anxiety and speaking challenges in the GCC region. For example, Al-Mahrooqi and Denman (2018) identified a lack of confidence, fear of negative evaluation, and inadequate exposure to spoken English as key factors contributing to language anxiety among Omani students. Similarly, Al-Qahtani and Al-Mekhlafi (2018) found that factors such as students' past experiences with English language learning, classroom environment, and teacher attitudes could contribute to language anxiety and speaking challenges in Oman.

To address language anxiety and speaking challenges in the GCC region, several strategies have been suggested. Al-Harthy and Al-Mahrooqi (2019) proposed the use of task-based language teaching and authentic materials in English language classrooms to enhance students' communication skills and reduce anxiety. Similarly, Al-Qahtani and Al-Mekhlafi (2018) recommended the use of technology, such as video recordings and online language learning platforms, to provide students with more opportunities to practice their speaking skills and build their confidence.

Additionally, peer support and group activities have been identified as effective strategies for addressing language anxiety and speaking challenges in the GCC region. Al-Mahrooqi and Denman (2018) found that peer support can help reduce language anxiety by providing a supportive and collaborative learning environment. Group activities, such as role-playing and discussions, can also provide opportunities for students to practice their speaking skills in a low-risk setting and receive feedback from peers.

In summary, language anxiety and speaking challenges continue to be significant barriers to effective communication in the GCC region. However, by understanding the factors that contribute to these challenges and implementing effective strategies such as task-based language teaching, technology integration, peer support, and group activities, educators can create a more inclusive and supportive learning environment for language learners in the GCC region.

3. Methodology

This section provides an overview of the methodology used in this research paper. The selection of this topic was due to the prevalence of language anxiety among language learners, which can profoundly impact their ability to communicate effectively. Moreover, there is a need for more research to analyze the factors that contribute to language anxiety in the GCC Region and to identify effective strategies to address these barriers to effective communication.

This study aimed to gather information on the current state of English Education in the GCC region. However, finding a sufficient number of research papers that were conducted in the GCC region was a major challenge. To overcome this issue, the various search engines and databases were utilized. These included ERIC, Google Scholar, and MASADER. Each database was

searched using a combination of relevant descriptors, including "language anxiety," "foreign language," "speaking difficulties," "language performance," "GCC," "teaching," and "learning." The search focused on recent studies conducted within the past six years (2018-2023) and was limited to publications in English. However, some older publications that were frequently cited in the field were also considered for their valuable contribution. Despite this consideration, a significant focus was placed on recent studies in order to ensure that the information gathered was relevant and up-to-date.

Google Scholar was particularly useful due to its vast database and advanced search options. The "cited by" search function was especially helpful in determining the significance of articles in the field. MASADER, a database that includes Arabic content, was also utilized to find any relevant research papers conducted in the GCC Region.

Additionally, ERIC, a database that focuses on education research, was used to find any relevant research papers conducted in the field of education in the GCC Region. The search was narrowed down by selecting the "GCC Region" as the location and "education" as the subject area. The decision to narrow down the search by selecting a specific region and descriptor was a helpful technique to ensure the relevance of the results.

4. Results

After conducting a thorough search using the aforementioned databases and search engines a sufficient number of research papers were found. These papers were then analyzed according to the date and the region they were conducted in. Thematic analysis was used to identify common themes and patterns within the data. Filtering the data collected from the sources, causes of language anxiety were categorized into various areas including cognitive factors, socio-cultural, learning environment, and personal experiences.

4.1. Factors Contributing to Language Anxiety:

Research on language anxiety has identified several factors that contribute to its development and persistence. These factors can be broadly categorized into cognitive, socio-cultural, learning environment, and personal experiences.

4.1.1. Cognitive Factors

Language anxiety is a complex phenomenon that is influenced by various cognitive factors. One of the significant contributors to language anxiety is

learners' perceptions of language learning difficulty. Al-Khairy and Al-Shehri (2018) found that learners who perceive language learning as challenging are more likely to experience anxiety. Similarly, Dewaele and MacIntyre (2014) found that learners who have negative beliefs, attitudes, and expectations about language learning are more prone to anxiety. Learners who have a perfectionistic mindset may also be more susceptible to language anxiety. Khouni et al. (2023) state that learners with a perfectionistic mindset set unrealistically high standards for themselves, leading to increased anxiety. This is consistent with the findings of Horwitz et al. (1986), who defined negative evaluation as "apprehension about others' evaluations, avoidance of evaluative situations, and the expectation that others would evaluate oneself negatively." Learners who have a fear of negative evaluation are more likely to experience anxiety in language learning situations (Khouni et al., 2023). Moreover, learners who have a general tendency towards anxiety or have experienced trauma or other adverse life events may be more susceptible to language anxiety (Horwitz, Horwitz, & Cope, 1986). Bailey, Onwuegbuzie, and Daley (2003) found that non-native English-speaking international students who had experienced traumatic events before coming to study in the United States were more likely to experience anxiety. These findings suggest that learners' prior experiences and psychological dispositions play a crucial role in the development of language anxiety.

4.1.2. Socio-cultural Factors

External factors, including cultural and societal expectations, can also shape the complex and multifaceted phenomenon of language anxiety, exerting a powerful influence on learners' emotional responses to language learning situations. Learners who come from cultures where language proficiency is highly valued may feel pressure to perform well in language learning. This pressure to conform to societal expectations can lead to increased anxiety in language-learning situations (Al-Khairy & Al-Shehri, 2018). According to Aydin (2008), foreign language anxiety can arise when learners feel incapable of creating a favorable social impression, causing them to avoid situations that involve evaluation and feeling anxious about being judged by others. This fear of negative evaluation can be especially pronounced in cultures where social harmony and face-saving are highly valued. In such cultures, learners may feel pressure to avoid situations that involve negative evaluation, leading to increased anxiety in language learning situations (Khouni et al., 2023). Moreover, learners who are in an unfamiliar cultural or linguistic environment may experience heightened anxiety due to the stress of adapting to new norms and expectations. This is consistent with the findings of Al-Harthy and Al-Mahrooqi (2019), who found that Omani students studying in an English-medium environment experienced anxiety due to the challenges of adapting to a new linguistic and cultural environment.

4.1.3. Learning Environment Factors

The language learning environment, whether physical or social, can significantly impact the development of foreign language anxiety. Learners who perceive a lack of support from their teachers or experience a highly competitive classroom environment may be more prone to anxiety. Studies have found that when teachers prioritize a supportive and encouraging learning environment, learners are less likely to experience anxiety (Al-Mahrooqi & Denman, 2018). Similarly, teachers who create a positive classroom atmosphere can help learners feel more comfortable and confident, which can reduce anxiety (Dewaele & MacIntyre, 2014). Additionally, learners who feel they have limited access to resources or opportunities to practice their language skills may also experience anxiety. For instance, if learners feel that they do not have enough time to practice their speaking skills or that their listening skills are not improving, they may become frustrated and anxious (Wang & Chen, 2021). Al-Qahtani and Al-Mekhlafi (2018) found that learners who reported lower levels of communicative competence were more likely to experience anxiety in language-learning situations. Furthermore, foreign language anxiety can have significant academic consequences, such as an increased likelihood of dropping out of language courses (Bailey, Onwnegbuzie, & Daley, 2003). Therefore, teachers and language learning professionals must prioritize creating a supportive and encouraging learning environment that provides learners with access to resources and opportunities to practice their language skills to help reduce anxiety and improve learners' academic outcomes.

4.1.4. Personal Experiences

The level of foreign language anxiety individual experiences can be heavily influenced by their past experiences and unique background. For example, learners who have struggled with language learning in the past or have been exposed to negative stereotypes about their language proficiency may be more susceptible to anxiety when learning a new language. Moreover, research by Qteir and Al-Qtaibi (2019) suggests that low self-esteem may contribute to anxiety in language learners as individuals with low self-esteem may be more preoccupied with how others perceive them, leading to heightened anxiety in evaluative situations. Similarly, individuals who have experienced social isolation or marginalization due to their language skills may also be at greater risk of experiencing anxiety. These factors can contribute to learners feeling overwhelmed or insecure when attempting to learn a new language, highlighting the importance of understanding, and addressing the individualized needs of language learners to create a more supportive and inclusive learning environment.

4.2. Strategies Recommended to Reduce Language Anxiety in the GCC Region:

The literature review has identified four main strategies to counter the challenges of language anxiety and speaking challenges and speaking difficulties among language learners in the GCC region: task-based language teaching, the use of technology, peer support, and group activities.

Task-Based Language Teaching (TBLT) is an approach that focuses on providing learners with opportunities to engage in meaningful and authentic tasks that involve the use of language in real-life situations. This approach has been found to be effective in reducing language anxiety and improving learners' communication skills (Al-Mahrooqi & Denman, 2018). TBLT provides learners with opportunities to practice their speaking skills in a supportive and collaborative environment, which can help build their confidence and reduce anxiety. In a study conducted by Al-Jabri and Al-Badi (2019), TBLT was found to be effective in promoting the speaking skills of Omani EFL learners. The authors reported that TBLT helped learners develop their speaking fluency, accuracy, and complexity, and improved their confidence and motivation to use the language.

The use of technology, such as online language learning platforms, has become increasingly popular in language education and has been found to be effective in reducing language anxiety. Online language learning platforms provide learners with additional opportunities to practice their language skills outside of the classroom, which can be especially beneficial for learners who may feel anxious in face-to-face speaking situations. There are still some issues with the use of video conferencing and audio functions in mixed-gender classes as outlined by Yapar and Dayananda (2022) which require a culturallysensitive approach by the English language teachers working in such contexts. Social media and online language exchange programs can provide learners with opportunities to practice their language skills with native speakers and peers from around the world, which can help build their confidence and reduce anxiety (Chen & Li, 2017). Additionally, technology can provide learners with access to authentic materials and resources, such as news articles, videos, and podcasts, which can help improve their language proficiency and reduce anxiety. A study by Al-Qahtani and Al-Mekhlafi (2018) found that the use of technology in language learning can promote language proficiency and reduce anxiety among learners in the GCC region. In particular, mobile-assisted language learning (MALL) has been found to be an effective way to reduce anxiety and improve language proficiency by providing learners with access to language-learning resources on their mobile devices (Chen & Li, 2017).

Implementation of peer support programs is another promising approach to combatting this issue. Such initiatives can involve various activities, including pair work, group work, or language exchange programs, which enable learners to engage in collaborative and supportive interactions with their peers while practicing their speaking skills (Al-Mahrooqi & Denman, 2018). By participating in peer support programs, learners can feel more comfortable communicating in a foreign language and receive valuable feedback from their peers, which can help improve their communication skills. Additionally, these programs can foster a sense of community and cooperation among language learners, creating a positive and supportive learning environment. Overall, Peer support is a valuable strategy for reducing language anxiety and enhancing language learners' communication abilities (Al-Mahrooqi & Denman, 2018).

Group activities are widely recognized as a valuable tool for language learners to practice their speaking skills in a supportive and interactive environment. By engaging in activities such as role-plays, debates, and discussions, learners can participate in meaningful conversations with their peers and benefit from feedback on their language use. This approach can be particularly helpful for learners who may feel anxious or hesitant about speaking in a new language, as it can help build their confidence, enhance their communication skills, and reduce anxiety levels (Al-Khairy & Al-Shehri, 2018).

5. Conclusion:

In conclusion, language anxiety and speaking challenges are significant obstacles to effective communication, particularly in the Gulf Cooperation Council (GCC) region where the use of English has increased. Studies have shown that anxiety can negatively impact the learning experience of a new language and hinder the acquisition of speaking skills. Moreover, language anxiety and speaking challenges can cause new learners to struggle with expressing themselves and understanding others, and ultimately lead to feelings of frustration and embarrassment. To overcome these challenges, new learners must regularly practice speaking, listening, and participating in study groups or social activities with others who speak the same language. According to Wang and Chen (2021), learners can overcome language anxiety and speaking challenges by engaging in speaking-focused listening, participating in appropriate educational lessons or activities, and regularly practicing their speaking and listening skills. All in all, by promoting a supportive and collaborative learning environment that encourages regular practice and participation in speaking-focused activities, learners can overcome these challenges and develop their speaking skills with greater confidence and ease.

References:

Al-Harthy, I. S., & Al-Mahrooqi, R. (2019). Task-based language teaching and authentic materials to enhance communication skills among Omani students. *International Journal of Instruction*, *12*(1), 433-446.

Al-Jabri, R. M., & Al-Badi, A. H. (2019). Task-based language teaching: A promising approach to promote speaking skills of Omani EFL learners. *International Journal of English Linguistics*, 9(2), 175-187.

Al-Khairy, M., & Al-Shehri, A. (2018). The impact of foreign language anxiety on oral proficiency among Saudi EFL learners. *Arab World English Journal*, 9(4), 413-424.

Al-Mahrooqi, R., & Denman, C. (2018). Peer support and language anxiety: Perceptions of EFL students in Oman. *International Journal of Language Studies*, *12*(4), 1-18. DOI: 10.21093/ijls.v12i4.1067

Al-Qahtani, M., & Al-Mekhlafi, A. (2018). Language anxiety and its impact on communicative competence: A study of EFL students in Oman. *International Journal of Applied Linguistics & English Literature*, 7(5), 69-77.

Altun, M. (2023). Language anxiety and its impact on foreign language learning: A systematic review. *Journal of Language and Linguistic Studies*, 19(1), 1-15.

Aydin, S. (2008). Foreign language anxiety: Causes and solutions. *Journal* of Language and Linguistic Studies, 4(1), 143-156.

Bailey, T., Onwuegbuzie, A. J., & Daley, C. E. (2003). Correlates of anxiety among non-native English-speaking international students. *Journal of International Education*, *6*(4), 471-490.

Chen, C. M., & Li, L. C. (2017). The effectiveness of mobile-assisted language learning on EFL learners' English listening comprehension: A metaanalysis. *ReCALL*, 29(3), 256-277. DOI: 10.1017/S0958344017000151

Dewaele, J. M., & MacIntyre, P. D. (2014). The two faces of Janus? Anxiety and enjoyment in the foreign language classroom. *Studies in Second Language Learning and Teaching*, 4(2), 237-274. doi: 10.14746/ssllt.2014.4.2.4

Horwitz, E. K., Horwitz, M. B., & Cope, J. (1986). Foreign language classroom anxiety. *The Modern Language Journal*, 70(2), 125-132.

Khouni, S., Gasim, H., Al Fahdi, S., & Al Naabi, S. (2023). Language anxiety and speaking challenges among EFL learners in the GCC region: A systematic review. Manuscript submitted for publication.

Khouri, A. M. (2014). The role of cross-cultural communication in the United Arab Emirates' economic and social development. *Journal of Intercultural Communication Research*, 43(3), 231-246.

Qteir, A., & Al-Qtaibi, M. (2019). The Relationship between Self-Esteem and Foreign Language Anxiety among Saudi EFL Learners. *International Journal of Applied Linguistics and English Literature*, 8(2), 113-120. https:// doi.org/10.7575/aiac.ijalel.v.8n.2p.113

Wang, X., & Chen, X. (2021). Research on the Cultivation of College English Learners' Listening and Speaking Ability under the Background of Intelligent Education. In *International Conference on Education, Management and Social Sciences* (pp. 512-515). Springer, Singapore.

Yapar, O.E., & Dayananda, C.S. (2022). Teacher Training for Online Education in Oman: A Case Study at Two English Language Teaching Institutions. *Arab World English Journal (AWEJ) 2nd Special Issue on Covid 19 Challenges* (2) 411-425. DOI: https://dx.doi.org/10.24093/awej/covid2.27

CHAPTER X

THE EFFECT OF ORFF SCHULWERK EDUCATION ON SOCIAL INTERACTION AND COMMUNICATION SKILLS OF CHILDREN WITH AUTISTIC SPECTRUM DISORDER

Aylin MENTİŞ¹ & Özgü KÜÇÜK²

¹(Assoc. Prof. Dr.), Ege University, Faculty of Education, Department of Basic Education İzmir, TURKIYE, E-mail:aylinmentiskoksoy@gmail.com ORCID: 0000-0003-4549-0579

> ²(Master's Student), E-mail:ozgukucuk3434@gmail.com ORCID: 0009-0000-9240-6443

1. Introduction

Use the context of the teaching process. In this approach to education puts people at the center of the teaching process. In this approach, the aim of the teaching process is to educate people by using movement and music rather than teaching a subject. Thanks to these qualities, Orff-Schulwerk, unlike other approaches, can be used effectively with individuals of almost any age and mental level. Especially the usability of this approach with individuals with mental and physical differences is quite distinctive for this approach. Music and dance are activities that involve people in many aspects, including cognitive, psychological, physiological and genopsychological. In Orff-Schulwerk studies, individuals gain awareness of many situations such as who they are, their sexual identity, the quality of their communication processes with people, and the limits of their self-efficacy perceptions through

music and dance. In summary, with this type of activities, individuals gain awareness at the point of self-perception and self-recognition (Özevin, 2018). Orff-Schulwerk is an artistic activity that is based on speech, movement and rhythm and allows people to discover their creative powers by dancing as they feel, finding themselves by being involved in an improvisational process with music. This activity is a complex process that combines many different qualities such as having fun, learning, experimenting, making, and creating (https://www.ezosunal.com.tr/orff-yaklasimi/). In scientific research on music in individuals with normal development and in individuals with ASD, it is seen that studies investigating the effects of music on these individuals are much fewer than applied studies. It will be possible for case studies and application data to provide clear and valid results by conducting more qualified research in this field. It is thought that music-based education, which is not yet included in the list of applications with scientific basis but promising for individuals with ASD, will create a synthesis for this field. One of the teaching approaches thought to be effective in this synthesis process is the Orff-Schulwerk music and movement approach (Eren et al., 2013). It is thought that the rich content offered in the lessons carried out with this approach will provide individual and social development according to the developmental level of everyone (https:// www.ezosunal.com.tr/orff-yaklasimi/). Orff-Schulwerk education aims to improve communication and social skills in children. In Turkey, Orff education is implemented in two different ways. In the first type, Orff is applied only as a field that teaches playing instruments. In the second type, Orff goes beyond this teaching and is used together with music, movement and speech and offers a versatile application area. In this field, different types of experiences such as developing creativity, increasing self-confidence, gaining the ability to maintain group work and gaining the ability to improvise are gained together (https:// www.orffmerkezi.org). In the USA, Austria and Germany, where this approach is frequently applied, this second type is understood when Orff education is mentioned (Orff-Schulwerk Education). Autistic spectrum disorder (ASD) is defined as a neurodevelopmental disorder that manifests itself with deficiencies and limitations in communication processes and social skills, as well as repetitive behaviors and limited interests (APA, 2013). Considering these deficits and disorders, it is extremely important to support children with ASD in the areas of social interaction and communication. Different methods are used to support children with ASD and research on different methods continues. One of these methods is therapy using music. Studies show that many children with ASD can

perform as well as children with normal development in the musical field, that children with ASD can respond to auditory stimuli with musical characteristics more than other auditory stimuli, and that it is promising for understanding the perceptual processes and functional disorders shown by children with ASD (Çoban, 2020). In addition, the use of music as a therapy tool has a long history in our culture (Sağırkaya, 2014). It can be said that the experimental approach of Eastern culture to music has come to the agenda again in Western societies, especially after the 1960s, when it started to be used and scientific studies were conducted on it. Recently, some studies have been conducted in this direction in our country (Sağırkaya, 2014). Studies show that Orff-Schulwerk education is related to the development of communication skills and social interactions of children with ASD. The fact that these studies are pioneering and at the same time their number is small (Sağırkaya, 2014) makes it necessary to conduct more studies in the field of both music and special education. Therefore, the subject of this study is to examine whether Orff-Schulwerk education has an effect on the social interaction and communication skills of children with ASD.

In line with this general objective, the sub-problems of this study are as follows:

1. Does Orff-Schulwerk education cause improvement in social interaction skills of children with ASD?

2. Does Orff-Schulwerk education cause improvement in communication skills of children with ASD?

In order to test the sub-objectives of the study within the framework of this general purpose, it was thought that it would be more appropriate to use a single-subject research method based on the characteristics of individuals with ASD. Because the characteristics of children with ASD are different from each other, the low incidence and the need to start with individual education make it difficult to work with a larger sample. Considering all these reasons, it was thought that it would be appropriate to conduct the study with single-subject research methods. Therefore, the number of children with ASD participating in the study was 5. Three of these students were the main participants and Orff training was carried out with these children. The other 2 children were included in the study in order to prevent the loss of subjects from damaging the implementation process of the project. However, if the Orff training had a positive effect on the main participants, the training was also carried out with theother 2 children with

ASD in accordance with ethical principles. Although the studies conducted for the purpose of educating and treating individuals in need of special education with music have not been conducted in sufficient numbers and do not have a scientific basis, the findings of these studies show that music and music therapy provide positive effects on children with ASD. However, there is no study that specifically investigated the effect of Orff approach on both social interaction and communication skills of children with ASD. In this respect, this study is of particular importance.

2. General Information

Permission was obtained from the parents of children with ASD for participation in the study. The children with ASD were 3-7 years old children diagnosed with ASD in a special education and rehabilitation center located in Bornova district of Izmir province. At the same time, the educational applications of the study were carried out in an individual classroom organized in the same special education and rehabilitation center. The following criteria were used to determine the participants: (a) being diagnosed with ASD by a full-fledged hospital, (b) being between the ages of 3 and 7, (c) having close performance levels according to the assessment tools in the MEB Early Childhood Special Education Program for Individuals in Need of Special Education (36-72 months), and (d) being volunteers. The performances of the participants were determined by the assessment tools in social-emotional and communication skills in the early childhood special education program for individuals in need of special education (36-72 months) and the effects of Orff education were evaluated by the assessment tools in this program. For this purpose, the evaluation of the effects of Orff education was carried out with the average of the independent observations of three special education teachers.

3. Methodology

This research will be carried out with the multiple probe model with intersubject probe phase, which is one of the single-subject research methods. In this model, in the first stage of the research, data on the baseline level are collected from all participants at the same time. After stable data is obtained from the first participant in the collected data, the baseline data collection process is terminated and the implementation phase is started with the first subject. While the data collection process related to the implementation continues in the first subject, no data collection or implementation process is carried out from the other subjects. After the criterion quality determined in the first participant is met, the first probe phase will be conducted with all participants at the same time. At this stage, after stable data is obtained from the second subject of the study, the application is started with the second participant. This practice continues until the determined criterion quality is met. This continues until the criterion is met for all participants of the study (Tekin & Kırcaaliİftar, 1997; Tekin & Kırcaali-İftar, 2001). In the establishment of the experimental control process in the ECECM, it is established only when there is a differentiation in the data level or trends of the participant who has started the intervention, there is no differentiation in the data level or trends of the participant who has not yet started the intervention, and similarly, there is a similar differentiation in the level and trend of the data with the implementation of the intervention in all participants (Kennedy, 2005; Tekin & Kırcaaliİftar, 2001). In this direction, we interviewed the teachers of children with ASD and chose children who could provide continuity in terms of gains in this study.

3.1. Participants

Can: At 28 months old, he was diagnosed with autism spectrum disorder. Can is 4 years old. Can's family is an intact family. Can lives as the only child of his family. His teacher stated that he was already interested in music. It was stated that Can has been benefiting from special education services for two years.

Ayşe: She was diagnosed with autism spectrum disorder at the age of four. Ayşe is 5 years old. Her mother and father live together. She is the only child of the family. She has been benefiting from special education services for about five months. Her teacher stated that she previously had a moderate interest in music.

Arda Kemal: Diagnosed at the age of two. Arda Kemal is 7 years old. His parents are still married. Arda Kemal lives as the only child of the family. His teacher stated that he was very interested in music even before this education. He has been benefiting from special education services for five years.

Aziz Mustafa: He was diagnosed with autism spectrum disorder at the age of four. Aziz is 5 years old. His parents are still married. Aziz Mustafa is the only child of the family. His teacher stated that he was distant to music even before this education. He has been benefiting from special education services for the last year.

3.2. Data Analysis

In order to answer the research questions, evaluations were made from the perspective of teachers who are constantly involved in the process. Interviews

were conducted for teachers to evaluate the development of students during the education process. The research data were analyzed by content analysis. These data are reported in the findings section.

4. Findings

Since it was thought that it would be appropriate to conduct the study with single-subject research methods, the number of children with ASD who would participate in the study was initially planned as 5. Three of these students were determined as the main participants and Orff training was carried out with these children. In order toprevent the loss of subjects from damaging the implementation process of the project, 2 children were included in the study as substitute participants. However, one of these children did not participate in the study, so the study continued with 4 children. The performances of the participants were determined by the assessment tools in social-emotional and communication skills in the early childhood special education program for individuals in need of special education (36-72 months) and the effects of Orff education were evaluated by the assessment tools in this program. For this purpose, the evaluation of the effects of Orff education was carried out with the average of the independent observations of three special education teachers. Accordingly, the results of the research were written.

According to the research schedule, the study was conducted for 4 months starting from August 2022. The application was carried out with children between the ages of 3-7 years diagnosed with ASD in a special education and rehabilitation center in Bornova district of Izmir province. At the same time, the educational applications of the research were carried out in an individual classroom organized in the same special education and rehabilitation center. Single-subject research methods are classified as quasi-experimental designs and are widely used in research in the field of special education (Tekin & Kırcaali-İftar, 2001). As mentioned before, in this study, a multiple probe model with a probe phase between subjects was used. In this model, first, data on the baseline level are collected from all participants in the study at the same time. After obtaining stable data from the first participant, the baseline data collection phase is terminated and the implementation phase is started with the first subject. While the intervention data is collected from the first subject, no intervention or data collection is performed with the other subjects. After the criterion quality determined in the first participant is met, the first probe phase is carried out with all participants at the same time. In this phase, after stable data is obtained with

the second subject, the application is started with the second participant. This implementation continues until the criterion quality is met (Tekin & Kırcaali İftar, 1997; Tekin & Kırcaali-İftar, 2001). After this 4-month implementation, the study was continued with 4 subjects and the study was completed. The names of these subjects were Aziz, Ayşe, Arda and Can. For four months, these four subjects were studied first with Aziz and then with Ayşe, Arda and Can separately with regular Orff-Schulwerk training. Does Orff-Schulwerk training, which is the first sub-problem, cause improvement in the social interaction skills of children with ASD? As a result of the independent observations of three special education teachers, it was stated that Aziz and Ayşe's social interaction skills improved slightly after Orff-Schulwerk training compared to the first days they started special education, but this was not very effective. In Arda and Can, it was stated that their social skill development was much more noticeably positive. Below are the opinions of the children's teachers about the children, especially the observations of teacher Deniz, who was with them most of the time.

Teacher Deniz stated that there was an increase in Arda Kemal's participation in the sessions and that he wanted to do more activities with him.

For Can, Deniz stated that he accompanied the songs used in the session more and adapted more to the musical activities. In addition, she emphasized that there was a significant improvement in Can's ability to express himself.

Teacher Deniz evaluated that there were no significant changes in Ayşe's social interaction skills at the end of the training compared to the past.

For Aziz Mustafa, Deniz teacher *thinks that although there is a decrease in his hypersensitivity to music and an increase in his participation in musical activities, there is no development in the expected direction.*

Does Orff Schulwerk education cause improvement in the communication skills of children with ASD? As a result of the independent observations of three special education teachers, it was observed that after Orff Schulwerk education, Aziz made very little progress in his communication skills, Ayşe made a little more progress than Aziz, while Arda and Can made much more progress. The three special education teachers stated that the reason for these results was that the ASD levels of these 4 children were different from each other and this was reflected in the results in this way.

It was stated that Arda Kemal was more eager to come to school, was more demanding about music-related demands at home and demanded to spend more time with his family. *Can, on the other hand, communicates more with his teacher and requests various musical games from his teacher.*

Ayşe, on the other hand, had been receiving special education for less time, and while it was emphasized that it was necessary to pay attention to this when evaluating communication skills, it was observed that Ayşe expressed herself a little more after this training.

For Aziz Mustafa, it was stated that there was not much improvement in his communication skills, but there was a decrease in his resistance to getting to know different people. In addition, it was observed that he increased his requests from his teacher a little more.

5. Conclusion, Discussion and Recommendations

As a result of this study, it was observed that Orff-Schulwerk education had a very little effect on the social interaction and communication skills of children with ASD in some subjects, a moderate effect in some subjects and a more positive effect in some subjects. Three special education teachers stated that the reason for these results wasthat the ASD levels of the subjects were different from each other and the results were reflected in this way. In general, OrffSchulwerk education had a positive effect on the social interaction and communication skills of children with ASD. In *a* similar study, Sağırkaya (2014) investigated the effects of Orff-Schulwerk Music and Movement Education on communication skills in children with ASD. In this study, Orff-Schulwerk was used as a method and it was stated that the use of this method contributed to the sustainability of individuals' spatial communication. Öziskender (2011) examined the contribution of the Orff approach to students' social skills in music education conducted in preschool. In this study, the study group of 40 people, consisting of experimental and control groups, was subjected to 10-52 weeks of training, one hour two days a week. In the post-test application at the end of the training process, it was measured that the children improved in social relations, adaptation to changes, controlling anger-related behaviors, creating goals, being compatible and completing tasks.

Kuşçu (2010) examined the effect of Orff-Schulwerk education on the attention skills of 5-6 year old children in a study conducted with 20 children, including 10 children in the experimental and control groups. As a result of the study, it was found that there was no significant difference in the results of the pre-tests of the children in the experimental and control groups, while there was a significant difference between the two groups in the post-test measurements. Doruk (2019) examined how the cognitive development process is affected by

the Orff approach. Işın (2008) investigated the effect of Orff approach on the development of creativity, Kuşçu (2010) investigated its effect on attention processes, and Uysal (2009) investigated its effect on attention, creativity and social development. The four related studies show that the Orff approach provides positive developments in many different areas in music studies. It is thought that these studies conducted with individuals with normal development will reveal similar results in individuals with ASD. Studies in the literature on the use of music in the treatment process of individuals requiring special education have investigated the relationship between music and musical therapy in reducing anxiety levels and stereotypical actions, improving the communication process, joint management of attention, imitation, improving turn-taking skills, increasing communication and speech qualities, reducing problematic behaviors and problems in different areas in children with ASD (Azbell & Laking, 2006; Beathard & Krout, 2008; Berrakçay, 2008; Caltabiano, 2010; Kissinger & Worley, 2008; Krikeli, Michaidilis, & Kalvdinaou, 2010; Lanovaz, Sladeczek, & Rapp, 2011; Lim, 2007; Orr, Myles, & Carlson, 1998; Sauser & Waller, 2006). Even though the studies in the literature on the use of music to educate and treat individuals with special education needs are not qualified to meet the criteria of scientifically based practices, the findings of these studies reveal the positive effects of music and musical therapy on children with ASD. However, within the related studies, there is no research specifically investigating the effect of the Orff approach on the development of social interaction and communication skills in children with ASD. In this respect, this study is of particular importance. As a result of this research, people working in the field can include more applications for social interaction and communication skills. They can use natural teaching methods that enable children to communicate by providing gesture, mimic and voice coordination. By increasing the knowledge and skills of parents about social interaction and communication, they can ensure that they include activities that they can apply in the natural environment of children. Special education teachers should receive Orff-Schulwerk music and movement training during their undergraduate education. It is also thought that special education and rehabilitation can have a positive effect on the social interaction and communication skills of children with ASD.

Acknowledgements

We would like to thank Ege University Scientific Research Projects Coordination Unit for supporting our study with the project numbered 23506.

References

American Psychiatric Association (APA)., (2013). Diagnostic and statistical manual of mental disorders (5th ed.). Washington, DC.

Azbell, E., Laking, T., (2006). The short-term effects of music therapy on anxiety in autistic children, UW-L Journal of Undergraduate Research IX.

Beathard, B., & Krout, R. E., (2008). A music therapy clinical case study of a girl with childhood apraxia of speech: Finding Lily's voice. The Arts in Psychotherapy, 35(2), 107-116.

Berrakçay, O., (2008). Müziğin bir yaygın gelişimsel bozukluk tipi olan otizmde ortaya çıkan problemli davranışlar üzerindeki etkisi: ritim uygulaması çerçevesinde 4 örnek olay (Yayınlanmamış Yüksek Lisans Tezi), Dokuz Eylül Üniversitesi, Sosyal Bilimler Enstitüsü, İzmir.

Caltabiano, A., (2010). The impact of music therapy on the social behaviours of children with autism in a structured outdoor inclusive setting (Yayınlanmamış Lisans Bitirme Tezi), Sidney Üniversitesi.

Çoban, A., (2020). Müzikterapi: Ruh sağlığı için müzikle tedavi. Timaş Yayınları.

Doruk, D., (2019). Orff yaklaşımının bilişsel gelişim süreçlerine katkılarının değerlendirilmesi (Yüksek Lisans Tezi), Dokuz Eylül Üniversitesi, Eğitim Bilimleri Enstitüsü, İzmir.

Eren, B., Deniz, J., & Düzkantar, A., (2013). Orff yaklaşımına göre hazırlanan müzik etkinlikleri içinde ipucunun giderek azaltılması yöntemi ile yapılan gömülü öğretimin otistik çocuklara kavram öğretmedeki etkililiği. Kuram ve Uygulamada Eğitim Bilimleri, 13(3), 1 863-1887. https://doi. org/10.12738/estp.2013.3. 1499.

Işın, D., (2008). Okulöncesi müzik eğitiminde uygulanan Orff yaklaşımının 5-6 yaş grubundaki çocukların ritimsel becerilerine etkileri (Yüksek lisans tezi), Gazi Üniversitesi Eğitim Bilimleri Enstitüsü, Ankara

Kennedy, C. H., (2005). Single-case designs for educational research. Boston: Allyn and Bacon.

Kissinger, L. & Worley D.W., (2008). Using the harp as a communication channel with children with autism, International Journal of Special Education, 23, 3-156. Korkmaz, B., (2005). Yağmur Çocuklar, İstanbul, 8. Gün Özel Eğitim ve Rehabilitasyon Merkezi Yayınları.

Kuşçu, Ö., (2010). Orff-Schulwerk yaklaşımı ile yapılan müzik etkinliklerinin okulöncesi dönemdeki çocuklarının dikkat becerilerine etkisi

(Yayımlanmamış Yüksek Lisans Tezi). Selçuk Üniversitesi Sosyal Bilimler Enstitüsü, Konya.

Krikeli, V., Michaidilis, A.,Kalvdinaou, N., (2010). Communication improvement through music: The case of children with developmental disabilities, International Journal of Special Education, 25, No.1

Lam KSL, Aman MG., (2007). The Repetitive Behavior Scale-Revised: independent validation in individuals with autism spectrum disorders. J Autism Dev Disord, p; 37 (5):855-66.

Lanovaz, M.J., Sladeczek, I.E., Rapp, J.T., (2011). Effect of music on vocal stereotypy in children with autism, Journal of Applied Behaviour Analysis, 44, N.3, s.647-651.

Lim, H. A., (2007). The effect of developmental speech-language training through music on speech production in children with autism spectrum disorders, Yayınlanmamış Doktora Tezi, Miami Üniversitesi, Florida.

Orff Eğitimi. Orff Merkezi. https://www.orffmerkezi.org. Access Date: 12.22.2022.

Orr, T. J., Myles, B. S., & Carlson, J. K., (1998). The impact of rhythmic entrainment on a person with autism. Focus on autism and other developmental disabilities, 13(3), 163-166.

Özevin, B., (2018). Humanistic, artistic and pedagogic aspects of Orff-Schulwerk music and dance pedagogy Orff-Schulwerk müzik ve hareket eğitiminin insani, sanatsal ve pedagojik yönleri. Journal of Human Sciences, 15(1), 8-23.

Öziskender, G., (2011). Orff yaklaşımı ile yapılan okulöncesi müzik eğitiminin öğrencilerin sosyal becerilerinin gelişimine etkileri (Master's thesis, Eğitim Bilimleri Enstitüsü).

Sağırkaya, B., (2014). Temel Motor Becerilerini Kullanabilen Otizm Özelliği Gösteren Çocuklarda İletişim Becerilerinin Geliştirilmesinde Orff-Schulwerk Yönteminin Kullanımı (Yayımlanmış Yüksek Lisans Tezi). Afyon Kocatepe Üniversitesi, Afyonkarahisar.

Sausser, S., Waller, R. J., (2006). A model for music therapy with students with emotional and behavioral disorders, The Arts in Psycotherapy 33, s.1-10.

Sunal, E., Orff Yaklaşımı. https://www.ezosunal.com.tr/orff-yaklasimi/. Access Date: 06.14.2023.

Tekin E. ve Kırcaali-İftar, G., (1997). Tek denekli araştırma yöntemleri, Ankara Türk Psikologlar Derneği Yayınları.
Tekin, E. ve Kırcaali-İftar, G., (2001). Özel eğitimde yanlışsız öğretim yöntemleri, Ankara: Nobel Yayınları.

Uysal, B., (2009). Orff Schulwerk yaklaşmında müzik- hareket eğitiminin okulöncesi eğitim kurumlarında kullanılmasının dikkat, yaratıcılık ve sosyal iletişim becerisinin gelişimine etkisi, Orff Info 16, s. 29-32.

CHAPTER XI

AN OVERVIEW OF THE WALDORF APPROACH IN PRESCHOOL EDUCATION

Feyza UÇAR ÇABUK

(Asst. Prof. Dr.) Department of Child Development, Osmaniye Korkut Ata University, E-mail: feyza_ucar@hotmail.com ORCID: 0000-0001-7341-0420

1. Introduction

"We should not ask what a human being needs to know or can do in order to fit into an existing order, but rather what lives in each human being and what we can develop in him." Rudolf Steiner

Programs and theories emerging in preschool education have contributed to the emergence of new approaches. Although the first approaches were based in Europe, over time they spread to other parts of the world and led to the emergence of new approaches (Edwards, 2002). Educators such as Pestalozzi, Rousseau, Montessori, Frobel and Steiner designed and implemented alternative education approaches reflecting their own educational philosophies (Gündüz, 2013). In the most general sense, alternative education is an individual-oriented educational approach that is part of the public system, outside the mainstream education and offers different learning experiences to the learner (Kaya & Gündüz, 2015; Memduhoğlu, Mazlum & Alav, 2015). Rudolf Steiner's Waldorf approach, which is one of these different approaches, has made an impact in the world.

The Waldorf approach is an exemplary educational approach with its childcentered educational philosophy. In line with this philosophy, the child learns by having fun, creativity development is supported on the one hand and selfconfidence increases on the other (Whedon, 2007). In this study, information was given about the Waldorf approach child development theory (0-7 years), education program, educational environment, characteristics of Waldorf teacher and evaluation of Waldorf education in preschool period.

2. Waldorf Education

The idea of the Waldorf education approach was first put forward by Rudolf Steiner in a lecture he gave to workers at the Waldorf- Astoria factory in Stuttgart, Germany in 1919 (Paull, 2011). Steiner stated that education had reached a dead end, that the modern world needed an innovative education system to build a new society, and founded the first Waldorf school with the support of factory owner Emil Molt (Uhrmacher, 1995; Merkle-Yeşildağ & Yeşildağ, 2018). Today, there are 1182 Waldorf and Rudolf Steiner schools in 66 countries and 1911 Waldorf Kindergartens in more than 69 countries (Waldorf World List, 2019).

The Waldorf vision is that a new kind of teaching teaches human beings to create a peaceful society. It is based on the traditions of co-educational time (bringing boys and girls together in the classroom), openness to children of all backgrounds (no entrance exams), comprehensiveness (from preschool to high school), and independence of external control (self-management unit) (Reinhard, 1997).

The Waldorf Method of Education aims at awakening and developing the child's abilities rather than forcing intellectual content on the child. Thus, learning becomes a pleasurable journey of self and world discovery. According to Waldorf Schools, children become more interested and lively when they make connections between learning and their own experiences and begin to learn from these experiences (Williams & Johnson, 2005).

Rudolf Steiner compares life to a plant, says: "In order to propose innovations in any area of life, it is insufficient to deal with life only superficially. Also, Rudolf Steiner says: "Life, like the plant, is not only what we see with our eyes, but, just like the genetic information contained in a seed, it also carries deep down the knowledge of what will happen in the future. What kind of flowers and fruits will come after the leaves can only be known if we have studied the plant in depth. Similarly, it is necessary to know how to read what is in the nature of human beings, because natural development carries the future within it (cited in Bayhan and Bencik, 2008: 17).

According to Steiner, upright posture, individuality in movement and gait, language and self-expression, gaze, and finally thinking, sensation and will are never the result of corporeality, but rather manifestations of a spiritual-mental being that constantly actualizes itself in corporeality (Reinhard, 1997). His focus is not only on the intellectual development of children, but on the development of humanity as a whole and the prevention of the mechanistic, materialistic, consumerist and fragmented trajectory that permeates educational practices. Referring to the history of schooling, Steiner states that we have been shaped by a traditional approach for three hundred years, but that this traditional structure is an unfortunate way of upbringing for humanity (Reinhard, 1997; Williams & Johnson, 2005).

The holistic approach, based on the idea that every object, idea or living being is a whole in itself and that this wholeness is part of an infinite series of wholeness, is the basis for schools such as Waldorf, Krishnamurti, Ananda Marga and Robert Muller. J. Krishnamurti founded several schools in India in the early 1980s with the concept of holistic education based on the teachings of some yoga masters. The international organization Ananda Marga in India, which calls itself neo-humanist, is another example of the expanding spiritualist approach. Other examples include The Robert Muller School in Texas, where the world-centered curriculum developed by global peace activists is used as a model, and schools founded by the Quakers, a liberal Christian group that emphasizes equality, justice and personal discovery of truth (Dündar, 2007).

The basic principle of Waldorf education is to enable students to develop an understanding of their own manners and place in the world. According to this education system, people are not primarily members of a particular nation, but citizens of the world. For this reason, Waldorf Education, which aims to educate children in all aspects, adopts the following philosophy for all children: "Heart, mind and talent" (Miller, 2004).

3. Rudolf Steiner's Theory of Child Development

3.1. Physical Consciousness Stage (0-7)

In the first period between the ages of zero and seven, the shaping forces are focused on physical-anatomical development. Through the development of limbs, skeletal and muscular structure, the child becomes increasingly independent, acquiring skills such as standing upright, walking, moving the body, speaking, eating on its own. In this way, they develop the ability to voluntarily manage themselves and their movements acquire order and rhythm. In order for children to develop a sense of rhythm in Waldorf education, it is recommended that children engage in rhythmic activities. Since rhythm provides predictability, it makes the child feel safe. For this reason, many rhythmic activities such as jumping rope, swinging, singing and dancing, eating a different snack every day of the week and repeating it every week, celebrating seasonal festivals are included in Waldorf kindergartens to support internal rhythm for a better balance (Lopata, 2000). During this period, special attention should be paid to the development of the body, the child should be fed in a healthy way and supported in the process of gaining skills. The child should not be expected to exceed physical and nervous maturity (Schmitt-Stegman, 1997).

The child between the ages of zero and seven understands the world through physical activities and learns through imitation and play. At this stage, the child adds the things he/she sees to his/her behavioral repertoire by doing them over and over again (Easton, 1997). Three years of age is an important developmental stage in this period. By the age of three, the child has reached a level where he/she can recognize himself/herself as an individual with the development of his/her language and thinking. The child starts to say "I", which is an original word spoken without imitation. In this period, learning takes place through imagining an idea and then reflecting it outward visually (Waterson, 2006).

In the Waldorf approach to education, the goal orientation of head, heart, hands refers to thinking, feeling and wanting. Understanding children's needs requires seeing these three different areas as a whole. This tripartite goal orientation forms the basis of educational approaches at all levels, from preschool to higher education. The development of various aspects of intelligence in multifaceted and multisensory learning experiences focuses on the development of these three capacities. In this case, education takes place in thinking, feeling and intentional goal-directed activities (Miller, 2004).

In Waldorf kindergartens, physical intelligence is emphasized in accordance with the child's development and maturation process in this period. Practical and artistic activities are utilized for the development of physical intelligence. Imaginative, creative play is the main activity of Waldorf kindergartens. Imagination forms the basis of future intellectual activities (Schmitt- Stegman, 1997). Tooth change is the most important sign that this period is over and that the child's physical-anatomical structure has reached a maturity where the focus of formative energy will change. From now on, the formative energy focuses on emotional development (Edwards, 2002).

Waldorf teachers characterize themselves as the guardians of childhood. The child must experience childhood. Because there is a right time for everything and childhood is too precious to be a preparation for later life. These years are too early to focus on future intellectual development. This is why reading and writing education also starts late. Freedom in Waldorf schools is a long-term matter of culture, structure and control. School practices should be nourished by both internal and external freedoms. The principles in this regard are as follows (Astley & Jackson, 2000):

It is necessary to protect children from the oppression of the adult world, to make true childhood possible for them. In order to do this, it is also necessary to stay out of the media, and it is essential to develop self-management, selfdiscipline, the ability to set their own rules and goals, and the ability to discipline students through their own work.

Supporting children's imagination nurtures creative thinking, considering different possibilities, exploring and developing different understandings. Naturalness and critical thinking are emphasized to protect children from materialistic consumerism (Astley & Jackson, 2000).

4. Education in Waldorf Schools

In Waldorf kindergartens, the environment is prepared to give a feeling of calmness. The learning and play environment is aesthetic and safe. This is achieved through colorful handmade curtains in the classrooms, furniture polished with beeswax, natural plant dyes and toys (Williams & Johnson, 2005).

Kindergartens are built in such a way that children can play and imitate comfortably (Watterson, 2006). In Waldorf kindergartens, the classroom is seen as a home (Stehlik, 2008). There is usually a female teacher. The teacher represents the mother figure. When you first enter a Waldorf kindergarten, you notice a warm and fun atmosphere with colorful colors and large playgrounds (Schmitt-Stegmann, 1997). In the classrooms you can see many baskets made of natural materials used in play. These baskets made of seashells, chestnuts, wool and colored fabrics encourage children to have creative or multifaceted emotional experiences in their play (Schmitt-Stegmann, 1997). Toys at school are simple and unstructured and are of a type that encourages creativity. Most materials in the classroom are natural materials such as gourds, pine cones, twigs and pebbles (Williams & Johnson, 2005).

In the early years, everything is a game and every object is a toy. During this period, when the child's brain is stimulated with appropriate toys, his/her fantasy is activated. The way to nurture fantasy is not to give the child finished toys that are perfect in every way. A doll made by tying or knotting a piece of cloth into a body consisting of a head, arms and legs is much more convenient than a crying, talking, walking doll (Aydın, 2002).

The child adds to the rag doll with his/her imagination everything he/ she observes about human beings. This is similar to the development of the muscles of the hand through appropriate movement exercises; as the child does the complementary work to make the rag similar to a human being using his/her imagination, his/her brain also develops. However, in the face of a ready-made doll, the brain is left with nothing to do. Again, puppets, creatures moved with strings or fairy tale books that allow the plot to be changed by pulling them left and right are useful for imagination and the formation of the brain.

During play, the child is there with his/her whole self. He is in a concentration of "here and now" that is often lacking in adults. The child should be given time, encouraged to experiment with patience and compassion, and the environment should be prepared appropriately for the child. For example, a matchbox can be everything for the child. He/ she constructs and imitates the events by making use of what he/she has observed before. After the game is over, it is still a matchbox (Aydın, 2002; Williams & Johnson, 2005).

Rudolf Steiner developed his own architectural style in his schools, called "Goetheanum". This architectural style can still be seen in many schools today. This style reflects the distinctive craftsmanship and shapes of the lettering design. The name Goetheanum is not a random name. Because Steiner contributed to the preparation of all Goethe's works for publication in the Goethe archive in Weimar between 1889 and 1896. For this reason, he named the schools he founded Goetheanum (cited in Bayhan & Bencik, 2008: 14).

4.1. Teacher in Waldorf Schools

The Waldorf teacher is often in a performing role in the classroom, directing and modeling many group activities that involve artistic and academic integration with explicit spirituality. The teacher is also a didactic leader who strives to provide a friendly classroom atmosphere filtered through all the issues of harmony, community and service to the natural world. The teacher needs a classroom where children, regardless of their personalities and sincerity, can bring together their thoughts, feelings and aspirations (Dündar, 2007).

Teachers strive to encourage children's nature of curiosity in kindness, love and faith. Waldorf educators characterize themselves as guardians of childhood. The child must experience childhood. Because there is a right time for everything. That is why reading and writing education also starts late. Freedom in Waldorf schools is a matter of culture, structure and control in the long term. School practices should be nourished by both internal and external freedoms. The principles in this regard are expressed as follows:

-It is necessary to protect children from the oppression of the adult world, to make real childhood possible for them, and for this it is also necessary to stay out of the media,

-Developing self-management, self-discipline, a system of rules and the ability to set goals is essential in giving students the ability to be disciplined through their own work,

-Supporting children's imagination nurtures creative thinking, considering different possibilities, exploring and developing different understandings,

-In order to protect children from materialistic consumerism, naturalness and critical thinking are emphasized (Dündar, 2007: 211).

According to the Waldorf approach, Waldorf teachers are dedicated to revealing "the true love of learning in every child". They freely use art and activities during teaching (Aydın, 2002).

In his speech in Oxford in 1922, Rudolf Steiner identified three golden rules for teachers. These are "to accept the child who comes into the world with gratitude", "to teach him/her with love" and "to lead him/her with a true independence befitting a human being".

In Waldorf schools, the classroom is a family environment for the child and the teacher represents the symbol of authority. In other words, the teacher replaces the parents in the school. With this approach, teachers and students get to know each other very well and teachers are able to draw the most appropriate path for children's education (cited in Dündar, 2007: 210).

Waldorf Educators;

- Integrate their personal values with their professionalism

- To be free to meet the needs of the children in the classroom

- To transcend their own creativity in music, movement and art

- Children and their ongoing work on the program

- Family support and involvement in school and classroom life

- It aims to expand knowledge in the fields of history, science, language and art.

The same teacher accompanies the students in teaching the core academic subjects throughout the entire school year. The teacher emphasizes children's strengths, not their weaknesses. Teachers may remain in the same classroom for eight years, or one teacher may accompany children from first to fifth grade and another teacher from sixth to eighth grade. This allows teachers to develop an open communication with the children individually, and also enables children to develop their potential and feel valued. In Waldorf schools, the educator creates a second family for the children (McDermott, 1992; Ogletree, 1997). In Waldorf schools, the teacher is a thinker, artist, scientist, poet, environmentalist, musician (Astley & Jacson, 2000).

Waldorf educators see continuous development as the most important dimension of professional quality. Because in a primary school, a main lesson teacher teaches a class from the first to the eighth grade. The activities aim to help teachers improve themselves. These activities are considered indispensable to avoid burnout. The aim is to ensure continuity and closeness with the same teacher throughout primary education. Discussion meetings, choir practices, theater performances, concerts and eurytmy workshops offer new development opportunities in addition to teachers' individual efforts to improve themselves (Williams & Johnson, 2005).

For a Waldorf educator, the child's capacity develops in 7-year rhythms from birth to 21 years of age. There are stages of development that coincide with the preschool period from 0 to 7 years, primary school from 7 to 14 years and adolescence from 14 to 21 years. From infancy to seven years of age, the child develops physically, develops emotions, learns to stand, walk, talk and think, and learns by imitation. Early childhood is not seen as a time for academic learning. Children under the age of seven have not yet developed their brain and nervous system. They are still learning to manage their bodies and language, developing a soul body, which gives meaning to physical existence. This stage will cover the eight years of the child's primary school life (Dündar, 2007: 214).

Teachers memorize the tales, then move freely through the text of the tale, developing it freely according to the moment in the encounter with the children. Waldorf teachers do not use books or texts. They try to use knowledge from life. Students are not given standardized tests. Especially in the early stages, the teacher avoids scientific explanations, eye-to-eye contact is important (Dündar, 2007: 221).

Waldorf teachers should know Waldorf educational philosophy and theories in addition to a university degree. Therefore, they must have a certificate from the Waldorf School Teacher College or Institute. Teachers can receive three types of training (Williams & Johnson, 2005). There is full-time training for teachers, two or three years, as well as practical training under the supervision of experienced teachers. The Waldorf education program is completed in 30 weeks. In summer school training, they can also take a 5-week intensive course in the summer of 3 or 4 years.

4.2. Education Program in Waldorf Schools

Waldorf programs begin to be implemented when the child is three years old. These programs consist of painting, games, songs, stories, gardening and seasonal activities (Bayhan & Bencik, 2008). While traditional school programs are knowledge-based, formal and academic achievement-oriented, academic knowledge is out of the question in Waldorf schools. Because Steiner thinks that formal academic education such as reading and writing is not appropriate in this period. (Ogletree, 1996). In Waldorf schools, the child's only task is to play (Çelik, 2013).

In Waldorf education, "the experience of space, the experience of time and the spiritual plane" are the three quality elements that create a sense of trust in the child. In the spatial/material environment, it is considered that the child needs an environment free of function and without coercion. The child should be allowed to develop free play in a safe space. It should give meaning to the object itself. The experience of time: rhythmic life, activities at the same time every day and in certain periods, celebration days, seasons. There is no formal structure and curriculum in nursery and kindergartens. It is believed that the best learning takes place through free play, imitation and examples. Especially in the preschool period, it is believed that every moment has a special value. For example, on a forest walk, when a child draws attention to a flower, the teacher stops the whole group and expresses respect for the moment with the child. Sometimes this object can be a flower, sometimes an animal. It is important to realize that the forest is not just a place. In this period, the curriculum includes free play, painting with basic colors, wax, singing, rhythmic games, and outdoor excursions (Stehlik, 2008).

The Waldorf Program includes fairy tales, fables, fairy stories and mythological stories. Teachers do not read the stories from a book. They tell them with attention to using rich vocabulary so that children can imagine (Williams & Johnson, 2005).

Steiner recommends that lessons should always be mixed with play, even in the primary school years. He wants the daily rhythm of lessons to be rhythmically

varied, like the rhythm of breathing, with concentration on a particular subject and play, in which the child can be present in movement with the whole body and emotions. Concentration is cold, whereas emotional-bodily participation in play warms the organism. There is a parallel between the learning process and digestion in this respect. Memory is formed by digesting what is learned (Onur, 2006).

Certain tasks should be done at the same time every day. This gives a sense of security, the child is internally prepared. At home, certain rituals should be practiced before eating and before going to bed. In this way, the child perceives itself as part of a meaningful whole, thus developing self-awareness. Watercolors, plastic dough, telling and listening to fairy tales, breakfast, eurythmie, rond. However, there should be intervals in between, during which the child should be able to structure the play freely and unrestrictedly on its own. There are games with songs and dances. Rond is very important. Here, simple compositions of rhythmic movements in the form of movement, fast movement and oscillation between opposites are important (Bayhan & Bencik, 2008).

The Waldorf program aims to keep alive the deepest sensitivities of human nature. Steiner said that true education is not the imposition of socially sanctioned knowledge and skills on a passive student; instead, education is the art of awakening what is within human beings. This art of education seeks to create a healthy society and puts an end to competition (Stehlik, 2008). Waldorf students are trained to pay close attention to their relationships with children; they move from class to class with their students. Children spend 8 years developing a trusting relationship in a warm, loving environment (Akdağ, 2006).

In Steiner schools, children make good friends in the classroom and always help each other with academic work. They are also encouraged to have a pleasant time during play (Kerem, 2004). The program has planned (daily-weeklyannual) rhythms (Watterson, 2006). The morning begins with an uninterrupted hour in which children are free to choose their activities (cited in Çelik, 2013: 45). Steiner summarizes the essence of the program as visual, musical and tactile arts. Since it is a unified spiral program in all subject areas from pre-school to high school, the child has the opportunity to learn this similar content through past experiences and situations at each level and then in different ways at each stage of the years. One of the most important common ideas in Steiner schools is that in the classroom, children always help each other with academic work in good friendships, as well as having fun during play (Easton, 1997). Steiner divides childhood into three phases: "zero to seven years of age", "seven to fourteen years of age" and "the period after the age of fourteen". In addition to the activities provided in the three grade levels, some specific subjects taught are as follows.

Handicrafts: Toy making, knitting, sewing, woodworking, basic weaving.

Music: Singing, block flute, string, percussion and wind songs.

Foreign Languages: Spanish, French, Japanese and German (determined by the institution).

Art: Watercolor painting, form drawings, wax and clay modeling, perspective drawing,

Movement: Gymnastics and group games (Astley & Jacson, 2000).

In Waldorf education, musical endeavors and rhythmic movements increase success in mathematics, and plays and earth models support the study of history. Each student fills their textbooks with colorful pictures, graphics and original compositions (Nicholson, 2000; Ruenzel, 2001).

According to Waldorf educators, this approach recognized years ago that children learn differently, which in recent years has been defined as multiple intelligences including kinesthetic, auditory and visual elements. In the classroom, students stand up and move every 20 minutes or so to embody what they are learning (Easton, 1997; Nicholson, 2000).

The teacher draws pictures for the students, has them draw, color, handwrite what they have learned. Students summarize what they have learned and create their own lesson notes/books. They learn the multiplication table by crossing beans. They march rhythmically to learn the meter of a poem, learn to follow a recipe and cook a meal using fractions. Classrooms are painted in soft, beautiful colors and in a simple way, leaving a peaceful and simple space without a lot of unnecessary objects (Nicholson, 2000).

In Waldorf schools, handicrafts begin at the first level and carpentry at the fifth level. Handicraft work varies from knitting, crochet, hand sewing to machine sewing. In carpentry, small objects such as bowls, spoons, bird nests for the forest are worked on. Usually the first two hours are dedicated to the main topic of the day. This block of time is called the main lesson. The main lesson usually includes some psychological research, narration and music. After the main lesson there is a simple breakfast. Apart from this, the curriculum also covers the activities of the year, special events, celebrations, events worth celebrating, different seasonal events (Çelik, 2013).

As Rudolf Steiner aimed, the development of the child's inner world is based on insight. Waldorf educators do not use books or texts. They try to use information from life. Students are not given standardized tests. Especially in the early stages, the teacher avoids scientific explanations, eye-to-eye contact is important. Psychological training also helps the students in their inner development in areas such as strength, coordination, flexibility, awareness of the universe. Gymnasiums are used for this work. The aim here is not to compete, but to have sporting encounters (Oberman, 1997).

At all levels of primary education, the curriculum includes eurythmy, psychological education, handicrafts, woodworking, combining work with activities for nurturing, feeling and creativity, aesthetic organization of the school and its surroundings, physical environment, woodworking, music (Nicholson, 2000).

Steiner divides the programs into three phases: "zero to seven years", "seven to fourteen years" and "the period after fourteen years". In this section, the program applied in the 0-7 age period, which covers the pre-school education period, is included.

4.3. Program Implemented in the 0-7 Age Period

In this period from birth to the age of seven, everything is concrete for the child. Steiner emphasizes that during this period children watch and imitate the examples around them like a sensitive sense organ, and therefore adults who have an influence on children should be aware that they are models for them. Steiner advises parents: "If you want to instill your ideals in your child, you must be your own ideal" (Nicholson, 2000).

According to Steiner, the child's soul begins to become active in the body before emotions and thoughts. Education at home and at school therefore needs to support this gradual development. In the first seven years of life, the child aims to control his/her body. In particular, imitating the actions of older people around him/her helps the child. At this age, the child learns best by adopting an 'imitative attitude' (Driscoll, 1999).

In preschool education, care is taken not to provide children with academic information (Houston, 1990). In preschool, the morning starts with free creative play, during which the child does his/her own activity. The preschool classroom is structured with a variety of individual and group activities. Garden games are

included in the program every day, even if it rains, and children go on nature walks at least a few times a week. At the beginning of the day in the morning, children move their bodies sufficiently by running, jumping and climbing (Houston, 1990; Reunzel, 2001).

Children are given the opportunity to observe nature without being thrown into the chaos of modern life, and in addition, they are taught songs, poems and read stories to foster a love of nature. The aim of these activities is to help children develop an awareness and love of nature. A connection with nature is established by singing good morning to birds, bees, flowers and rocks, and then what is learned is expressed through painting, coloring or clay. Thus, it is stated that the Waldorf kindergarten becomes a small family with its loving and moderate atmosphere (Houston, 1990).

Waldorf programs begin when the child is three years old. These programs consist of painting, games, songs, stories, gardening and seasonal activities. In addition to these, activities such as pictorial acquaintance with the alphabet, writing, reading, spelling, poetry, artistic and practical work, imitative play, plays, folk tales, fairy tales, puppet shows, music, fables, legends, numbers, basic mathematical operations (addition, subtraction, multiplication, division), nature stories, gardening (Reinhard, 1997). Throughout the year, seasons and festivals are included in daily and weekly programs, and each child's birthday is celebrated with the participation of at least one parent with a gift. Various cultural and ethnic celebrations are also included in the program (Houston, 1990).

Daily Plan:

Morning Language Arts Group: The morning group includes poetry and nature stories, fairy tales, folk legends and creative movement. Topics vary from period to period (Driscoll, 1999; Houston, 1990).

Main Activity: Artistic and hands-on activities provide a clearer understanding of children's working methods and approaches (Astley & Jacson, 2000; Houston, 1990).

Cleaning Time: The teacher and students work together to maintain the environment (Driscoll, 1999; Houston, 1990).

Snack Time: The school offers a meal that includes natural products such as vegetables, fruits, cereal breads, homemade cookies. The juice is free of additives and preservatives (Astley & Jacson, 2000; Houston, 1990).

Outdoor Free Play: During outdoor free play activities, children develop their physical skills in a fun way. The playground has free climbing logs, sand, swings, slides and other play equipment (Astley & Jacson, 2000; Houston, 1990).

Lunch Time: Lunch is brought from home and eaten in the classroom with teachers (Houston, 1990).

Afternoon Activities: This is considered as nap time or indoor/outdoor play time. There is no set duration (Astley & Jacson, 2000; Driscoll, 1999).

4.4. Evaluation of The Training in Waldorf Schools

According to Waldorf, the aim of early childhood education is not to teach academic skills or to measure children according to certain standards. Standardized assessment has never been part of Waldorf education at any level. Many Waldorf graduates follow the Scholarly Aptitude Test (SAT) for admission to universities such as Harvard and Yale.

Assessment is required for kindergartens to evaluate themselves. Waldorf teachers are one-to-one with each child. Assessment by Waldorf teachers is seen differently. Teachers use Steiner's theory of child development as a guide and adjust their programs accordingly. They evaluate the child as a whole. Classroom observation is almost the most frequently used tool to monitor children's development. Early childhood education teachers are interested in children's development in all areas and can learn a lot about children by simply watching them during imaginative play (Williams & Johnson, 2005).

4.5. Family in Waldorf Schools

The Waldorf approach is intertwined with the family. Waldorf educators emphasize the key role of families in children's lives. The Waldorf approach argues that family involvement and support is essential for children's success. For the sake of the children, teachers must have the support of the family and the family must have the support of the teacher. In Waldorf schools, families are encouraged to learn the characteristics of the Waldorf approach, invited to the school, and activities are organized to ensure integration (Temel, 2012).

As a result of the Waldorf method's respect for the role of families, teachers naturally strive to improve their connections with families. They make joint efforts with teachers to ensure that each individual child can progress. Periodic celebrations, family education opportunities and other activities play an active role in establishing communication between families and teachers (Brooks, 2004).

Schools also offer family education services through specialists, working groups and class teacher meetings. With the knowledge of the goals that parents choose and set for their children, Waldorf teachers educate families in line with the goals that Waldorf sets for its students. The subject of television is an example of this. Waldorf teachers encourage families to limit the time spent in front of the television and to replace it with activities that support the healthy development of the child. Teachers also find it useful to observe the child at home and often do so (Williams & Johnson, 2005).

Teachers try to cooperate with families in every way possible; they share responsibility for the child's development and strive for coherence between home and school. There are regular family trainings and information sharing. Families are taught tools and methods to support their children's development and learning at home. In this way, it is ensured that environments where children can reveal their true potential are sustained (Brooks, 2004).

5. Conclusion

Steiner stated that education had reached an impasse, that the modern world needed an innovative education system to build a new society, and in line with his beliefs, he created his own theory of child development. According to Steiner, the age of 7, which includes both physical and spiritual development, is of great importance. He believed that child development in the first 7 years of life focuses on physical development (Armon, 1997; Williams & Johnson, 2005). For this reason, the biggest task of the family and the teacher is to ensure that the child is fed in a healthy way. In addition, in Waldorf schools, the teacher is the one who observes the child's weaknesses and strengths and evaluates the child as a whole. According to Steiner, the child's academic learning should not be at the forefront in the preschool period. The child's most important and only job is play. However, it is also important for the child to engage in art activities. According to Steiner, children should be offered a wide range of learning experiences that support their physical development, such as skills and the ability to use instrumental tools. These activities should be organized and coherent.

The preschool education period affects the child's later years positively or negatively. It is known that the knowledge and skills learned and attitudes acquired during this period shape the future learning and behavior of the individual. In

addition, the Waldorf approach contributes positively to the child's development as it is a nature-oriented approach that includes artistic activities. In this context, it is of great importance to integrate different educational approaches such as Waldorf into the MEB Preschool Education Program in order to develop scientific thinking, creative thinking, reasoning and multidimensional thinking skills that today's people should have.

References

Armon, J. (1997). *The Waldorf Curriculum as A Framework for Moral Education; One dimension of a Fourfold System.* A Survey, Plus Portage, Education Resourch Information Center.

Astley, K., & Jackson, P. (2000). Doubts on Spirituality: Interpreting Waldorf Ritual. *International Journal of Children's Spirituality*, 5(2), 221-227.

Aydın, İ.P. (2002). Alternatif Okullar. Pegema Yayıncılık, Ankara.

Bayhan P., & Bencik S. (2008). Erken çocukluk dönemi programlarından Waldorf yaklaşımına genel bir bakış. *Selçuk Üniversitesi Ahmet Keleşoğlu Eğitim Fakültesi Dergisi. 26*, 1-25.

Brooks, S. (2002). *Establishing successful and healthy teacher and parent relationshipsin Waldorf schools*. Master Thesis Antioch New England Graduate School, New Hampshire.

Çelik, M. (2013). EÜ Eğitim Fakültesi Dergisi, 15(2), 39-51.

Çelik, M. (2013). Öğrenme çocuk ile büyür: Erken çocukluk eğitiminde Waldorf yaklaşımı. *Erzincan Üniversitesi Eğitim Fakültesi Dergisi, 15,* 12-24.

Dündar, S. (2007). Alternatif eğitimin felsefi temelleri ve alternatif okullardaki uygulamalar. Yayınlanmamış yüksek lisans tezi, Marmara Üniversitesi Eğitim Bilimleri Enstitüsü.

Easton, F. (1997). Educating the whole child "head, heart, and hands"; learning from the Waldorf experience. *Theory Into Practice*, *36*(2), 88-94.

Edwards, C.P. (2002). Three Approaches from Europe: Waldorf, Montessori, and Reggio Emilia. *Early Childhood Research and Practice*, 4(1).

Ensign, J. (1996). A conversation between John Dewey and Rudolf Steiner; a comparison of Waldorf and progressive education. *Educational Theory*, *46*(2), 175-188.

Goldshmidt, G. (2017). Manevi Eğitim, Din ve Eğitim Olarak WaldorfEğitimi, 44(3), 3463363.http://dx.doi.org/10.1080/15507394.2017.1294400

Houston, J.E. (1990). *Thesaurus of ERIC Descriptors*, Phoenix, Ariz.: OryxPress.

Kayahan-Yüksel, D., & Kartal, S. (2020). Okul öncesi dönemde alternatif bir eğitim modeli: Waldorf yaklaşımı ve materyallerine yönelik öğretmen görüşleri. *Cumhuriyet International Journal of Education*, *9*(3), 845-859. http://dx.doi.org/10.30703/cije.656302.

Kerem E. (2004), Erken çocukluk eğitiminde bir peri masalı waldorf okulları, Çoluk Çocuk Dergis*i*, 14-25.

Kotaman, H. (2009). Rudolf Steiner ve Waldorf Okulları. Yüzüncü Yıl Üniversitesi Eğitim Fakültesi Dergisi, I, 174-194.

Lopata, P. (2000). Don't miss a beat; why rhythm is used in Waldorf Education. *Paths of Learning*, 4, 44-53.

Mcdermott, R. (1992). Waldorf education in America; A promise and Its Problems. *Questia Journal*, 15(2), 82-90.

Miller, R. (2004). "Educational Alternatives: A Map of The Territory". *Paths of Learning*, 20, 6-27.

Nicholson, D.W. (2000). Layers of experience; forms of representation in a Waldorf school classroom. *Curriculum Studies*, *32*(4), 575-587.

Nordlund, C. (2013). Waldorf Education: Breathing Creativity, Art Education, 66(2), 13-19. http://dx.doi.org/10.1080/00043125.2013.11519211

Oberman, I. (1997). *The Mystery of Waldorf; A Turn-of-the-Century German Experiment on Today's American Soil*. A Survey, Plus Portage, Education Resourch Information Center.

Ogletree, E. J. (1996). *The Comparative Status of the Creative Thinking Ability of Waldorf Education Student;* A Survey, Plus Portage, Education Resourch Information Center.

Ogletree, E.J. (1997). *Waldorf Education: Theory of Cihld Development and Teaching Methods, Plus Portage*, Educational Resources Information Center.

Oktay, A. (2004). Yaşamın Sihirli Yılları: Okul Öncesi Dönem. Epsilon Yayıncılık.

Onur, T. (2006). Waldorf Eğitimi, Zil ve Teneffüs Dergisi, (4), 5.

Reinhard, B. (1997). Public Waldorf School In Calif. Under Attact. *Educational Week*, 16(39), 1-3.

Ruenzel, D. (2001). The Spirit of Waldorf Education. *Education Week*, 20(41), 38-46.

Schmitt-Stegmann, A. (1997). *Child Development and Curriculum in Waldorf Education*. A Survey, Plus Portage, Education Resourch Information Center.

Stehlik, T. (2003). Parenting As a Vocation; Lifelon Learning Can Begin İn The Home, *International Journal of Lifelong Education*, *22*(4), 367–379.

Stehlik, T. (2008). *Thinking, Feeling and Willing: How Waldorf Schools Provide a Creative Pedagogy That Nurtures and Develops Imagination. Pedagogies of the imagination.* Springer Sciences Business Media B.V.

Temel, F. (2005). Okul Öncesi Eğitimde Yeni Yaklaşımlar. *Bilim ve Aklın Aydınlığında Eğitim Dergisi*, 6, 62.

Temel, F. (2012). *Erken Çocukluk Eğitiminde Yaklaşımlar ve Programlar*. Vize Yayıncılık.

Watterson, I.A. (2006). *Integrating Geometry Standards in Waldorf Methods Charter School*. Master Thesis. Division of Education School of Business, Education, and Leadership Dominican, University of California, USA.

Whedon, S.W. (2007). Hands, Hearts and Heads: Childhood and Esotericism in American Waldorf Education. Doctoral Thesis. University of California. Santa Barbara.

Williams, C.L. & Johnson J.E. (2005). The Waldorf Approach to Early Childhood Education, Chapter 15, *Roopnarine, Jaipaul L, Johnson James E, Approaches to Early Childhood Education*, Prentice Hail, America.