# RESEARCHES IN Editor Abdülkadir KABADAYI LIVRE DE LYON **Educational Sciences** 2023

## RESEARCHES IN EDUCATION

### Editor Abdülkadir KABADAYI



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### Researches in Education

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### **FOREWORD**

The theme of this term's book is *Researches 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. *Researches in Education* address 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.

Editor Prof. Dr. Abdülkadir KABADAYI

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### CHAPTER I

### A BRIEF INTRODUCTION TO INFOGRAPHICS USE IN ELT RESEARCH AND PRACTICE

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### 1. Introduction

echnological developments have been advancing rapidly ranging from daily life to the fields such as health, education, tourism, and industry. Nowadays, depending on these developments, many new-generation instructional technologies are being integrated into learning environments, and several multimedia elements are employed in classroom practice. It can be easily perceived that technology is the key to rapid global developments and changes. With technological developments, the significance of organizing and consuming information is increasing in modern life. In other words, the information age requires people to efficiently exploit information. The tremendous increase in daily information people is exposed to makes it necessary for individuals of our age to develop different skills. In other words, information literacy, among 21st-century human skills, is essential for modern life. Moreover, the developments in all these areas significantly impact daily life. The learning and pedagogical characteristics and demands of the new

generation of learners are constantly changing in the 21<sup>st</sup> century. The learning characteristics of Generation Z is quite diverse and rich when compared to the previous generations. In this regard, individuals of Generation Z in learning environments are regarded as a part of a social-global process, a generation with high visual literacy intertwined with technology (Karadoğan, 2019). Generation Z is also seen as a generation that attaches great importance to visual elements and can communicate through visual symbols since they were born as digital natives in a visual age (Reeves & Oh, 2008). Such fundamental differences between generations cause instructional technologies to be a must in learning environments to diversify and change the pedagogical perspective. Hence, teaching materials known as knowledge graphics or infographics, which significantly impact the effective organization and visualization of information, have begun to be popular in recent years.

From the language learning and teaching perspective, infographics may act as a mediating tool to help EFL learners and instructors with their visual properties. Modern learners of English like to exploit concise, short but clear information to progress. Traditional tools in language instruction may sometimes be cumbersome for learners, which causes learners to have a negative attitude toward the target language. EFL coursebooks with traditional exercises on 4 skills (reading, writing, listening and speaking) may lead to boredom in EFL classroom from time to time since new generation learners demand materials rich in visuals and free from long texts. At this point, infographics, which are rich in visuals and concise information, may be helpful in providing clear information that supports retention in EFL classrooms. These tools also have the potential to create a favorable language learning experience due to their colorful and understandable nature.

### 2. Historical Development of Infographics

Nowadays, infographics can be considered an effective tool used in almost every field to present information visually and effectively and allow the transfer of information in an organized way (Vizoso et al., 2020). From news bulletins to explaining historical processes, infographics are adopted in many application areas in almost every field, from education to tourism. In this horizon, it is expected that infographics, which have become widely used in society, are also used in learning environments. Even though infographics are regarded as an up-to-date technology, some researchers date their beginnings to cave drawings

(Smiciklas, 2012). However, it is stated that its first use in literature was made in 1626 by visualizing the solar movements in a book by Christopher Scheine. In addition, some infographics-related studies confirmed that infographics have an older history that goes back to the 18th century. The graphics and explanatory maps developed in this process are the first examples of infographics (Fernando, 2012). Nevertheless, a body of research also proposed that despite infographics's long existence and history in pedagogical practice, the tools developed exactly with infographic logic are relatively new (Yıldırım et al., 2014). Additionally, Veszelszki (2014) states that infographics are not a groundbreaking invention and have been exploited by teachers for a long time. Dick (2013) similarly states that infographics contain innovations in the presentation and structuring of information. From this perspective, it can be said that although infographics do not have a long history, they are tools used in many fields and contain various multimedia elements.

### 3. Efforts to Define Infographics

Although it is considered crucial to present information through various visuals in the 21st century, it is also emphasized that communication through visuals dates back to cave drawings (Bicen & Beheshti, 2017; NEA, 2001). However, considering visuals are so concentrated today and the amount of information is increasing, people can get lost among the piles of information (Güler, 2008). This may lead to an increase in the importance given to infographics. Peter Sullivan first used the concept of infographics in the 1970s. In the literature, infographics are defined as "A visualization of data or ideas that tries to convey complex information to an audience in a manner that can be quickly consumed and easily understood" (Smiciklas, 2012). Yıldırım et al. (2014) defined infographics as presenting information in a visual form in a meaningful flow through various representations (graphs, pictures, figures, etc.) and texts. When the literature is examined, many researchers define infographics as tools that enable complex and bulk information to be presented quickly and clearly, allowing for the graphical visual representation of data (Adams, 2011; McCartney, 2013; Smiciklas, 2012). In addition, Alshehri (2017) analyzed the definitions of infographics within the scope of his research and made a classification.

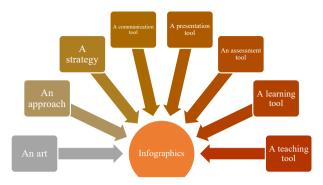


Figure 1. Conceptual categorization of infographics definition Alshehri (2017)

While in some definitions, infographics are seen as a pedagogical strategy (Martix & Hodson, 2014), others are seen as a communication and presentation tool. Again, in some definitions, it is emphasized that infographics are effective learning, teaching and evaluation tools (McCartney, 2013; Sudakov et al., 2014). When the definitions are examined in general, attention is constantly drawn to different aspects of infographics in the developmental journey of communication and information technologies.

### 4. Classification of Infographics

Considering the features of infographics, it has been stated that they can be designed in various ways throughout the process. This also allows infographics to be classified under different headings. Generally speaking, Yavar et al. (2012) mention four types of infographics: static, dynamic, interactive, and physical. In addition to the classification mentioned in Figure 2, Siricharoen (2013) focuses on the purpose of using infographics. It divides it into four groups: statistics-based, timeline-based, processes-based and location or geography-based.

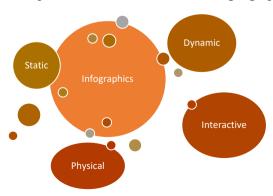


Figure 2. Classification of Infographics

In addition to the existing classifications mentioned in the literature, infographics are divided into three groups: static, interactive and video (Damyanov & Tsankov, 2018). In this context, static infographics appear to users as the simplest and most common type. It generally consists of a static image without animation elements. Another group, interactive infographics, creates an environment incorporating animated elements where users can interact with data and individual elements. Considerable amounts of data can be visualized with interactive infographics in a single view. The last group, video infographics, allows the specified flow to be presented using basic video elements. In addition, in recent years, infographic types have been categorized in detail into nine different types by McGuire (2023).

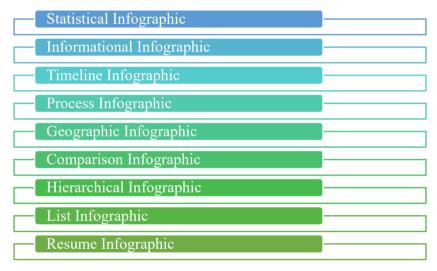


Figure 3. Types of Infographics

In general, the categorization of infographics showed change as their application areas increased over time. Some of these classifications are very detailed, while others are limited. However, it is considered that existing classifications may change as the application area of infographics expands and the purpose of use diversifies. Especially with the diversification of infographic creation tools and the addition of new features, there will be changes in the purposes of creating infographics as well as modifications in their types.

### 5. Designing Infographics

In the information age, organizing information effectively is considered important. This reveals that information literacy has a vital role in 21st-century human skills. Infographics can be attained a crucial role in creating effective learning processes in today's world where information is quickly produced and consumed. In this context, when the literature is scanned, it is seen that it emphasizes that well-designed infographics positively affect the cognitive load of users (Martin et al., 2019). It is stated that presenting short and effectively presented infographics to users with various multimedia elements is effective in making the information more meaningful and memorable in the process of preserving information in long-term memory (Martin et al., 2019).

Good design of infographics is important in organizing the information effectively by the user. In achieving this, the flexible structure of infographics and their ability to visualize information, as stated by Schroeder (2004), play an important role. It is mentioned in the literature that some principles need to be considered in designing infographics that incorporate innovations in the presentation of information (Davis & Quinn, 2013). In particular, a well-designed infographic is expected to tell a story to its readers and attract readers with well-structured titles and visuals (Siricharoen, 2013). These important points are summarized in Figure 4.

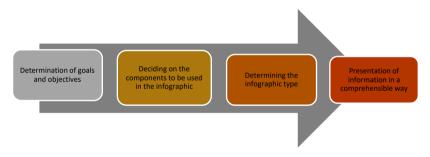


Figure 4. Points to consider during the design of infographics.

As seen in Figure 4, in preparing infographics, developers must first determine for what purpose they will develop these tools. This process is critical in the infographic design process. Because different design suggestions may arise according to different goals and objectives. In the ongoing design process, choosing the components such as pictures or figures to be embedded in the infographic and determining the appropriate infographic type is important. Naturally, incorrectly or incompletely determined goals and objectives weaken the rest of the process. Following these steps, the infographic's clarity, comprehension, and intelligibility determine the design's success. In this context, the necessity for infographic developers to have visual literacy skills comes to the fore (Naparin & Saad, 2017). From this perspective, Özpınar and

Aydın (2020) emphasized that presenting infographics is important; short and concise information should be presented with various visual elements instead of long texts and stated that infographics supported by visuals are important in attracting the attention of users. Naparin and Saad (2017) also stated that infographics can convey information rapidly and more effectively than traditional texts can. However, it is also emphasized that success relies on how well it is designed and how it is presented. Naturally, considering these steps all together, developers must have visual literacy skills, take instructional design principles into account, and have knowledge about message design and multimedia design. Additionally, Lamb and Johnson (2014) remark that there are some points to consider in the process of developing infographics. The points to consider are presented in Figure 5.

### **Infographics Design Process**

- Simple information should be presented to users in infographics
- •Care should be taken to present short and concise information.
- •Utmost care should be given in the use of key concepts
- •The main context should be adhered to without using too many words.
- •Consideration should be given to displaying data in different ways
- •General design principles of visual elements should be taken into consideration.
- •Citations should be provided for users, taking into account the need for more information
- Texts and images should form an integrity within themselves.
- It should be interesting

Figure 5. Basic principles to consider when designing infographics

As highlighted in Figure 5, some basic principles must be considered for infographics to be practical rather than used in learning environments. From this perspective, clear, understandable, and clear information presentation is essential for infographics to provide more benefit to the user. In addition, using text-intensive content in infographics should be avoided, and a good balance of visuals and text should be ensured. The visuals should be presented according to general design principles. In addition, since short and summary information is presented in infographics, attention should be paid to creating interactive content through various links to meet the users' extra information needs. Considering the characteristics of today's generation, it is crucial to design the content to attract the learners' attention and interest in increasing its use and effectively delivering the intended message to the learners.

- Advantages and Limitations of Infographics
- When the literature is examined, many superior aspects of infographics are generally mentioned. The known superior aspects of infographics in the conducted research are summarized as follows (Meeusah & Tangkijviwat, 2013; Taspolat et al., 2017; Yıldırım, 2016).
- Infographics are efficient tools. Much information can be transferred in a short time.
- Infographics are easy to exploit and digest due to their user-friendly characteristics.
- It is easy to understand and remember because it enables information to be encoded in the mind in different channels.
  - Increases the permanence of information.
  - Clear, understandable, and concise information presentation is provided.
  - Offers high reliability.
  - It can enable easy transfer of information.
  - It can facilitate understanding of the relationship between concepts.

The related literature underlines that well-designed and fit-for-purpose infographics have many superior aspects. Although no severe limitations were reported in the related literature, infographics inhabit some limitations when they are used as a pedagogical tool. The limitations of the infographics mentioned in the literature are summarized as follows (Aydın et al., 2019; Lynch, 2021).

- Preparing infographics is seen as a complex and laborious process.
- Preparing infographics is time-consuming.
- It is not easy to express the content clearly as short and concise information is presented.
- It is difficult for search engines to notice infographics if they are not indexed.

Considering the advantages and limitations of infographics, it can be said that although their development is time-consuming and difficult, their educational effects can be pretty successful. Considering the characteristics of today's learners, it is thought that it may have profound effects, especially in learning environments. From this perspective, it is thought that positive changes may occur in the current limitations mentioned above, especially with the influence of developing technology.

### 6. Use of Infographics in Instructional Context

Considering the superior aspects of infographics, they may have significant potential in learning environments. Infographics-related studies are abundant in the general instructional context.

Naparin and Saad (2017) examined the use of infographics in learning environments between 2004 and 2016, and the results showed several studies on the use of infographics in various disciplines ranging from public health to education. It is emphasized that infographics are practical tools, especially in developing visual literacy skills (Naparin & Saad, 2017). While the study revealed that some of the studies examined the general use of infographics in learning environments, it is emphasized that some people examine the effectiveness of infographics in learning environments. Moreover, some of the studies examined also scrutinized the effects of infographics on learning styles and creating a fun learning environment. It has been said in these studies that they can be seen as practical tools, especially in learning environments.

Within the scope of their research, Elaldi and Çiftçi (2021) reinterpreted the findings of studies investigating the effectiveness of infographic use on academic success. For this purpose, 12 empirical studies conducted between 2016 and 2021 were examined and they emphasized that infographics have a positive effect on academic success. Here, they emphasized that the application time of infographics is essential and stated that studies lasting 4 to 5 weeks give more effective results.

Başak et al. (2017) emphasized the role of infographics in facilitating learning in their research on the use of infographics by students with mathematics learning difficulties.

### 7. Infographics in Recent EFL Research

Research on the use of infographics in foreign language teaching on Google Scholar was searched with the keywords "infographics in EFL" and when the relevant studies were examined, 18 studies conducted between 2016 and 2023 were found. The distribution of the infographic-related EFL research over the years was not linear; the studies are limited and progressing stagnantly, including in 2020. It has been observed that related EFL research has increased relatively since 2021 and reached the highest number in 2023. In general, it can be proposed that infographics have started to be used more frequently in the EFL field in recent years. Among the studies conducted, the related research with full-text and full access has been scanned in detail and the infographic studies conducted are briefly summarized below.

In his study, Al Hosni (2016) examined the effectiveness of infographics in developing undergraduate students' comprehension and retention skills. The research results indicate that using infographics in foreign language classes improves learners' perception of language learning gains in class and strengthens their ability to remember them a week later emphasizing permanence.

In a review study by Alshehri (2017), the effect of infographics in EFL classes on the development of various language skills was examined. It has been remarked that the instructional use of infographics has significant effects. The emphasis was put on the different features of infographics to diversify and enable their use in foreign language classes. In addition, as learners are constantly exposed to tools similar to infographics in their daily routines and are used to visual tools, they adopt infographics more in learning environments, are more active in the classroom, love such environments and are motivated. Hence, it was underlined that the use of infographics in EFL classes can have numerous benefits.

Akbarov et al. (2018) examined students' attitudes toward blended learning and related concepts. When the results for infographics were examined, it was stated that students had a moderately positive attitude towards infographics and paperless classes in the EFL environment.

Cupita and Franco (2019) utilized infographics in the EFL reading to scrutinize its benefits for EFL classrooms. The study enrolled 26 psychology students between ages 19-26, in academic English programs. They were in their fourth semester. Using infographics—visual aids that mix visuals and text to help users communicate information—this intervention was conducted for a semester to assist students in improving their reading comprehension in English. Instructors interviewed students to reveal their opinions on the use of infographics and utilized the infographics created by the students to gauge their comprehension of brief academic materials written in English. Their results showed that the infographics helped the learners to improve their reading abilities.

A study by Supraba and Silvana (2020) sought to understand EFL students' experiences with infographics in reading classes. Collecting information through surveys, teacher diaries, and the study's findings on students' reading comprehension tests showed positive outcomes regarding incorporating infographics in EFL reading sessions. Fostering a positive mindset on data

usage, the participants indicated that technology in the classroom allowed their comprehension of the relevant subjects, infographics inspired reading, enticed students to complete reading assignments, and fostered their inventiveness in English language courses.

Within the scope of his research, Sornkeaw (2021) focused on the use of infographics on students' reading skills in the EFL classroom. The results showed a significant difference in students' academic success in favor of those who used infographics. In addition, among the results obtained, students are satisfied with using infographics.

Nhan and Yen (2021) investigated the motivation of EFL learners to study grammar through experimental research. Two groups were created with sixty high school students as participants: a control group with thirty members and an experimental group with thirty members. The findings demonstrate that participants' motivation to learn English grammar has considerably enhanced after the intervention. According to the results, the experimental group's usage of infographics to teach grammar significantly increased the students' motivation to learn the language.

Khan (2021) conducted a mixed-method study to determine how well children learn using infographics. According to the findings of this study, the experimental group and control group differ significantly from one another. Additionally, the results demonstrated that infographics are an engaging and educational tool.

Biçer and Baheshti (2022) conducted another investigation. The aim of this research was to focus on language learners' opinions about the use of infographics in flipped classrooms. This mixed-method study reveals information on ESL students that they felt favorably about the use of infographics in technology-enhanced learning settings. Additionally, they learn about the use of infographics as instructional resources in flipped classrooms. They encouraged the understanding of the English by ESL learners.

The study by Wu and Kuwajima (2022) on undergraduate students focused on the use of infographics as a supplementary material. The study revealed that students can learn effectively using the presented infographics, but using infographics after textbook teaching is more effective. It is stated that students are more motivated to learn English after the interventions and show great interest in using infographics in English language classes.

Tavanapour et al. (2022) conducted their research on 60 EFL students. In this context, they tried to evaluate the use of animated infographics on vocabulary acquisition and retention of intermediate English language learners in Iran. The findings showed significant results favoring individuals using animated infographics on post-test scores. In other words, it is emphasized that animated infographics have a significant impact on learning English words.

Tavanapour et al. (2023) investigated students' attitudes towards using infographics in vocabulary learning in foreign language classes, within the scope of their research on adult women (20 - 30 age range). It was stated that the learners exhibited positive attitudes towards using infographics in learning English and had an enjoyable learning experience.

Alwadei and Mohsen (2023) examined the use of infographics by EFL class students to improve their vocabulary knowledge. They concluded that the group using infographics had better knowledge of introducing and producing words than conventional learners in short and long-term measurements and that infographics had serious benefits in terms of learning.

In another related research, Pho and Trang (2023) examined the effects of infographics in the undergraduate grammar course and looked at their effects on learners' attitudes and retention. The results stated that integrating infographics in English language education can improve students' perspectives and grammatical memories on the subject. In this regard, the study put the emphasis on the recommendation that language instructors should regard learners' attitudes in developing materials for EFL classrooms.

In the research conducted by Dolgunsöz and Yildirim (2023), the effect of infographics in the Flipped Classroom application on students' writing skills was examined. In the quantitative side, no significant difference between the groups regarding test performances was found. The qualitative findings revealed a positive attitude towards infographics and most of the students found infographics concise, easy to use and more compact.

In addition to the screening mentioned above, the Web of Science database was also subjected to scanning for infographic and EFL-related research. Studies containing the words infographic and EFL were examined and six studies were found.

The research conducted by Dahmash, Al-Hamid, and Alrajhi (2017) examined the effect of infographics in teaching Linguistics to Saudi students. It is stated that the findings show that students have positive attitudes towards the use of infographics, although the majority are not knowledgeable. It also emphasizes that participants had to demonstrate high-level thinking skills in the

process of creating infographics. It is said that technical problems that may be experienced as limitations are among the hindering factors.

Li and Pham (2022) say that digital multimodal composing (DMC) has recently been an increasing trend in language education. However, it emphasizes that DMC products have not been studied sufficiently and that the studies comparing collaborative DMC products with individual DMC products is deficient. Their study used Visme to complete two infographic tasks, one collaborative and one individual, with 185 EFL university students taking an English course in Vietnam. It was stated that the results did not reveal a significant difference regarding the general qualities of the infographics between the two tasks (collaborative writing and individual writing), and the effects between the participants showed that collaborative DMC products were advantageous.

In their research, Pham and Li (2023) implemented various tasks for infographics in the EFL context. They conducted their study in an English for Specific Purposes (ESP) course at a university in Vietnam. They examined learners' perceptions of learning English as a foreign language by creating infographics individually and collaboratively using the Visme program. Students stated that Visme was a valuable and suitable tool for infographic tasks that enhanced their learning experience and improved creativity and writing skills.

### 8. Conclusions

Today's dizzying developments in technology require adopting new technologies in learning environments. Especially considering the characteristics of today's learners, It is emphasized that the information supported by visuals and presented concisely is precious for the learners. Moreover, considering the increasing amount of information and the brain's need for information, it becomes clear that individuals need to benefit from the escalating amount of information with utmost efficiency. Infographics are also seen as practical tools that enable information to be organized effectively and are supported by visuals. Recent technologies allow the use of several infographic design software and websites with which anyone with basic IT knowledge can easily exploit. Especially with the newly developing and increasing number of Web 2.0 tools, the infographic development process of users has become much more manageable. However, this convenience does not mean some basic situations can be ignored. In other words, when developing infographics, along with regarding basic design principles, attention is also needed to the points that need to be considered. Many superior aspects of infographics are mentioned in the literature. In addition to these advantages, the limitations of infographics should not be ignored. For this reason, it is considered important to prepare qualified and careful infographics, which have many educational advantages for language classrooms. Most EFL learners may tend to learn language elements with visuals designed appropriately. Infographics fit this aim which can provide invaluable visual support in teaching EFL skills. In the conducted research, it is frequently emphasized that infographics positively affect learners' attitudes, academic success, and knowledge retention. This shows that it can give effective results, especially in EFL instruction. For this purpose, it can be mentioned that many studies use infographics as an instructional tool in EFL classrooms for skills such as reading, grammar, vocabulary, and writing.

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### References

Adams, D. (2011). What are infographics and why are they important? *URL: www. instantshift. com/2011/03/25/whatare-infographics-and-why-are-they-important.* 

Akbarov, A., Gönen, K., & Aydogan, H. (2018). Students' Attitudes toward Blended Learning in EFL Context. *Acta Didactica Napocensia*, 11(1), 61-68.

Al Hosni, J. (2016). The power of image in English language teaching. *Journal of Teaching English for Specific and Academic Purposes*, 4(1), 229-235.

AlShehri, A. M. A. (2017). Can Infographics be Pedagogically Used in EFL Classes?. *CDELT Occasional Papers in the Development of English Education*, 63(2), 5-30.

Alwadei, A. M., Mohsen, M. A. (2023). Investigation of the use of infographics to aid second language vocabulary learning. *Humanities and Social Sciences Communications*, 10(1), 1-11.

Aydın, F., Aksüt, P., & Demir, N. S. (2019). The Usability of Infographics within the Framework of Learning Outcomes Containing Socioscientific Issues. *Cumhuriyet international journal of education*, 8(1).

Başak, B., Yucehan, Y., Huseyin, U., & Deniz, Ö. (2017). Can infographics facilitate the learning of individuals with mathematical learning

difficulties?. International Journal of Cognitive Research in Science, Engineering and Education, 5(2), 119-128.

Bicen, H., & Beheshti, M. (2017). The psychological impact of infographics in education. BRAIN. Broad Research in Artificial Intelligence and Neuroscience, 8(4), 99-108.

Bicen, H., & Beheshti, M. (2022). Assessing perceptions and evaluating achievements of ESL students with the usage of infographics in a flipped classroom learning environment. Interactive Learning Environments, 30(3), 498-526. https://doi.org/ 10.1080/10494820.2 019.1666285

Cupita, L. A., & Franco, L. M. (2019). The Use of Infographics to Enhance Reading Comprehension Skills Among Learners. Colomb. Appl. Linguistic. J., 21(2), 230-242. doi:10.14483/22487085.12963

Dahmash, A. B., Al-Hamid, A., & Alrajhi, M. (2017). Using infographics in the teaching of linguistics. Arab World English Journal (AWEJ) Volume, 8.

Damyanov, I., & Tsankov, N. (2018). The role of infographics for the development of skills for cognitive modeling in education. International Journal of Emerging Technologies in Learning (iJET), 13(1), 82-92.

Davis, M., & Quinn, D. (2014). Visualizing Text: The New Literacy of Infographics. Reading Today, Vol. 31 Issue 3, p16.

Dick, M. (2013). Interactive Infographics And News Values. Digital Journalism, (ahead-of-print), 1-17.

Dolgunsöz, E., & Yildirim, G. (2023). The Use of Interactive Video Embedded Infographics in EFL Writing Courses with Flipped Classroom Learning Environment. i-manager's Journal on English Language Teaching, 13(1).

Elaldi, S., Çifçi, T. (2021). The Effectiveness of Using Infographics Academic Achievement: A Meta-Analysis and a Meta-Thematic Analysis. Journal of Pedagogical Research, 5(4), 92-118.

Fernando, A. (2012). Killer infographic! But does it solve TMI. Communication World, 29(2), 10-12.

Güler, T. (2008). Grafik tasarımda yeni bir alanı: Bilgilendirme tasarımı ve bir uygulama (Yayımlanmamış Doktora Tezi). Dokuz Eylül Üniversitesi, İzmir.

Karadoğan, A. (2019). Z kuşağı ve öğretmenlik mesleği. Ağrı İbrahim Çeçen Üniversitesi Sosyal Bilimler Enstitüsü Dergisi, 5(2), 9-41.

Khan, A. I. (2021). Psychology of color, integration of local culture and effect of infographics on English language learning. PSU Research Review, 1-18. https://doi.org/10.1108/PRR-02-2021-0013

Lamb, A., & Johnson, L. (2014). Infographics part 1: Invitations to inquiry. Teacher Librarian, 41(4), 54-58.

Li, M., & Pham, Q. N. (2022). Three heads are better than one? Digital multimodal composition completed collaboratively versus individually. *Language Teaching Research*, 13621688221102536.

Lynch, A. (2021), "Potential disadvantages of infographics", available at: Potential Disdvantages of Infographics (edrawsoft.com). (accessed 07 November 2023).

Martin, L. J., Turnquist, A., Groot, B., Huang, S. Y., Kok, E., Thoma, B., Van Merriënboer, J. J. (2019). Exploring the role of infographics for summarizing medical literature. *Health Professions Education*, 5(1), 48-57.

Martix, S., Hodson, J. (2014). Teaching with infographics: practising new digital competencies and visual literacies. *Journal of Pedagogic Development*, 4(2), 17-27. Retrieved from: https://uobrep.openrepository.com/bitstream/handle/10547/335892/Teaching-with-Infographics-Practicing-New-Digital-Competencies-and-Visual-Literacies.pdf?sequence=1

McCartney, A. (2013). How to turn infographics into effective teaching tools. *Blog Home. Retrieved from: blog-visual. lu/how-to-turn-infographics-into-effective-teaching-tools.* 

McGuire, S. (2023). What Are the 9 Types of Infographics? (+Infographic Templates). available at: What Are the 9 Types of Infographics? (+Infographic Templates) - Venngage. (accessed 07 November 2023).

Meeusah, N., & Tangkijviwat, U. (2013). Effect of data set and hue on a content understanding of infographic. *ACA2013 Thanyaburi:Blooming Color for Life*, December 11-13,2013, 272-275

Naparin, H., Saad, A. B. (2017). Infographics in education: Review on infographics design. *The International Journal of Multimedia & Its Applications (IJMA)*, 9(4), 5.

National Education Association. (2001). Thriving in academe: A rationale for visual communication. *Advocate Online, December*.

Nhan, L. K., Yen, P. H. (2021). The Impact of Using Infographics to Teach Grammar on EFL Students' Learning Motivation. European Journal of Foreign Language Teaching, 5(5), 85-102. https://doi.org/10.46827/ejfl.v5i5.3919

Özpınar, Ş. B., & Aydın, G. (2020). Kriz İletişiminde İnfografik Kullanımı: Covid-19 Pandemi Sürecinde İnfografikler Üzerine Bir İnceleme. İstanbul *Ticaret* Üniversitesi *Sosyal Bilimler Dergisi*, 19(37), 240-261.

Pham, Q. N., & Li, M. (2023). Digital multimodal composing using visme: EFL students' perspectives. *The Asia-Pacific Education Researcher*, *32*(5), 695-706.

Pho, L.T. & Trang, N. H. (2023). Investigating the Effects of Infographics-Based Teaching on EFL Students' Grammar Retention. International Journal of Social Science And Human Research. 6(8). p. 4659 – 4669.

Reeves, T. C., & Oh, E. (2008). Generational differences handbook of research on educational communications and technology: Chapter: 25. Publisher: Taylor & Francis Group.

Schroeder, R. (2004). Interactive Info Graphics in Europe--added value to online mass media: a preliminary survey. Journalism Studies, 5(4), 563-570.

Siricharoen, W. V. (2013, May). Infographics: the new communication tools in digital age. In The international conference on e-technologies and business on the web (ebw2013) (Vol. 169174).

Smiciklas, M. (2012). The power of infographics: Using pictures to communicate and connect with your audiences. Que Publishing. Indianapolis, IN. https://doi.org/10.4324/9780203075609

Sornkeaw, J. (2021). The Effects of Using KWL-Plus Strategy through Infographics on Thai EFL Students' Reading Comprehension Skills: The Effects of Using KWL-Plus Strategy through Infographics on Thai EFL Students' Reading Comprehension Skills. Social Sciences Research and Academic Journal, 16(3), 27-40.

Sudakov, I., Bellsky, T., Usenyuk, S., & Polyakova, V. (2014). Mathematics and climate infographics: A mechanism for interdisciplinary collaboration in the classroom. arXiv preprint arXiv:1405.6435.

Supraba L, D., Silvana, R. (2020). The Effects of Summarizing Using Infographics on EFL Learners' Reading Comprehension. Globish (An English-Indonesian journal for English, Education, and Culture), 9(2), 129-144. doi:10.31000/globish.v7i2

Taspolat, A., Kaya, O. S., Sapanca, H. F., Behesthi, M., & Ozdamli, F. (2017). An investigation toward advantages, design principles and steps of infographics in education. Il Ponte, 73(7), 157-166.

Tavanapour, S., Chalak, A., & Heidari Tabrizi, H. (2022). Effect of animated infographics on vocabulary gain and retention of Iranian intermediate EFL learners. Iranian Journal of Applied Language Studies, 14(2), 17-30.

Tavanapour, S., Chalak, A., & Heidari Tabrizi, H. (2023). Students ' Attitudes Toward Using Infographics on Learning Vocabulary in the EFL Classes. Research in English Language Pedagogy, 11(2), 302-316.

Veszelszki, Á. (2014). Information visualization: Infographics from a linguistic point of view. Benedek, András–Nyíri, Kristóf (Editörler) *The Power of the Image (series Visual Learning 4.)*, 99-109. Peterlang.

Vizoso, Á., Figueiras, A., & Dick, M. (2020). From infographics to post-infographics. *Information Visualization in The Era of Innovative Journalism*, (1st Edition), 64-79.

Wu, M., & Kuwajima, K. (2022). The Effects of Infographics on Enhancing Language Learning Outcomes and Motivation in a Japanese EFL Context. *European Journal of Foreign Language Teaching*, 6(4).

Yavar, B., Mirtaheri, M., Farajnezam, M. S., & Mirtaheri, M. (2012). Effective role of infographics on disaster management oriented education and training. *In Proceedings of the 27th DMISA Conference on Disaster Risk Reduction*.

Yildirim, S. (2016). Infographics for educational purposes: Their structure, properties and reader approaches. *Turkish Online Journal of Educational Technology-TOJET*, 15(3), 98-110.

Yıldırım, S., Yıldırım, G., Çelik, E., & Aydın, M. (2014). Bilgi grafiği (infografik) oluşturma sürecine yönelik öğrenci görüşleri. *Journal of Research in Education and Teaching*, 3(24), 247-255.

### CHAPTER II

### INVESTIGATION OF SPORTS MANAGEMENT IN TURKEY IN THE CONTEXT OF INDIVIDUALS WITH SPECIAL NEEDS

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### 1. Introduction

any conditions are taken into consideration when classifying individuals with special needs according to their behavioral and Llearning characteristics; The degrees of difference between these conditions are factors such as the cause of the disability, the period in which it occurred, growth age and gender. According to these characteristics, individuals with special needs are individuals with autism spectrum disorder, intellectual disability, hearing and visual impairment, or special talents. (Yıldırım & Akçamete 2014). Education for individuals with special needs involves tailored curricula delivered by specialized staff. It's a method of education supported by suitable tools and techniques in an environment adapted to students' requirements, often referred to as special education. (Çitil, Karakoç & Küçüközyiğit, 2018). The Ministry of National Education's Special Education Services Regulation (2020) defines special education as a unique program tailored to address an individual's distinct educational and social requirements. Delivered by specialized personnel, this program significantly differs from standard education due to an individual's distinctive developmental and educational characteristics. It encompasses an educational approach designed to meet the specific needs of individuals who deviate significantly from their peers in terms of their individual and educational qualifications, considering each person's unique disabilityHowever, in order to recognize these difficulties and determine their needs, and to make better arrangements and plans for the education of individuals with special needs, classification can be made in line with the common characteristics of individuals and the educational needs determined according to these common characteristics (Cavkaytar & Diken, 2005). Individuals exhibiting variances in their individual, developmental, and educational traits might benefit from special education due to varying degrees of physical or mental abilities. This specialized education aids in their adaptation to social life and fulfillment of daily requirements. Consequently, these individuals are categorized based on specific educational or medical classifications that highlight the differences they display (Altınışık, İlhan & Kurtipek, 2021). The Ministry of National Education identifies individuals with special needs across various categories, including those with mental disabilities (mild, moderate, severe, very severe), hearing impairments, visual impairments, orthopedic disabilities, language and speech difficulties, learning disabilities, multiple disabilities, chronic illnesses, autism, social adaptation difficulties, attention deficit and hyperactivity disorder, as well as gifted or specially talented individuals.

Public authorities are increasingly recognizing the significance of sports in society, acknowledging its educational, social, and cultural contributions alongside the prominence of international competitions. This recognition has propelled sports into a realm where it is deemed a public service for the greater societal benefit, stemming from the acknowledgment of its positive impact on communities (Gök & Sunay, 2010). Nowadays, the scope of sports types has spread to a wide range. This ability is used in baby sports, preschool sports, children's sports, youth sports, school sports, club sports, lifelong sports, performance sports, holiday sports, corporate sports, workplace sports, centerprison sports, sports in the elderly, women and sports, There are forms with different content and organization patterns and features such as sports for the disabled, regular sports, family sports, integrated sports, chronic disease and sports, sports for everyone, health sports (Konar & Yıldıran, 2012). Sport is an important tool to achieve goals such as gaining status, gaining popularity, providing financial income, making the country proud and gaining global recognition. Sustaining success and attracting attention is not easy; At the same time, carrying fanaticism and meeting the expectations of fans is a difficult process. Thousands of athletes have shared the same feeling and excitement since the first Olympic games. Perhaps this feeling is the only common point that brings them together throughout their lives (Başkan, Özgül, Kolukısa, Çolak & Başkan, 2020).

### 2. Sports

Sports is one of the elements that the state cannot give up or leave to chance. Because raising a society that is physically, mentally and spiritually healthy is one of the fundamental responsibilities of every state. For this reason, the structural organizations, management approaches and participation styles of physical education and sports in a country are of great importance in terms of sports management. Sports cannot be managed and developed without the financial and moral support of the state (Gök & Sunay, 2010). The National Youth and Sports Policy Document (2013) lists its main objectives under the following headings: To ensure the development and dissemination of sports and to provide the necessary opportunities for every individual to do sports. To support the raising of healthy generations, to determine the facilities and meet the requirements in order to ensure the institutionalization of sports at the national level, to ensure the presence of expert and qualified technical personnel, to support the training of elite athletes, to prevent prohibited substances, to encourage disabled individuals to do sports and to develop projects in this field. According to the same document, the main areas of sports policies are: Sports culture and sports for all, sports management, training elite athletes, disabled people and sports, athlete health, sports law, international sports organizations and the Olympics. These areas constitute priority issues in shaping national sports policies.

### 3. Sports Management

On a global scale, there is also another unit of management such as sports management. The increasing importance of sports worldwide makes management in this field inevitable. Because the success expectations of those who cannot effectively manage their goals and plans often end in disappointment. Sports management provides support to athletes on various issues. This guides athletes in many areas, from discipline to psychology, from self-awareness to opponent and audience control. Therefore, it is possible to investigate sports management awareness on athlete individuals (Başkan et al., 2020). Sports management incorporates key managerial functions like planning, organizing, directing, coordinating, and controlling within sports events and organizations. It acts as a bridge between management principles and the unique landscape of sports domains, aiming to analyze and streamline promotional strategies within sports organizations. This field focuses on policies and activities tied to achieving sporting objectives, aligning them with efficient management practices to optimize performance (Sunay, 2017). Sports management involves the strategic utilization of available resources in a logical and effective manner, considering specific principles, contemporary leadership concepts, and the distinctive nature of sports. It encompasses the rational allocation of human and material resources, guided by modern management principles and practices, aiming to attain predefined goals within sports organizations and events while adapting to the particular conditions inherent in sports (Yetim, 2019).

### 4. Features of Sports Management

Management begins in the inner world of man, and this concept is often identified with external factors. In fact, managing oneself and balancing one's emotions and responsibilities is an important skill for athletes. Considering the functioning of the organism and today's needs, the need for management and governance clearly emerges. Management is divided into different areas and this starts from individuals and extends to states and even the world. As a result, management, starting from the individual to the world, is always necessary and this need will continue (Başkan et al., 2020). Changes in people's physical, mental and social behavior can lead to a variety of choices when they differ from society's expectations. One of the purposes of sports is to develop thinking and critical thinking abilities in the field. Sports management, like education, focuses on long-term goals. Therefore, the lack of rapid realization of his goal can lead to his independence. The individuals managing a sports institution often come from diverse backgrounds, which can potentially pose challenges for those in positions of technical authority. Sports, being a significant social institution, encompasses various facets beyond technical expertise. The management of a sports institution requires an understanding not just of the technical aspects but also of the social, cultural, and administrative dimensions inherent in sports. Balancing these diverse elements is crucial for effective leadership within the realm of sports institutions. As in the current field of medicine, sports also share common responsibilities with various branches of science in contributing to people's healthy lives (Sunay, 2021).

### 5. Sports Management in People with Special Needs

The decisions formulated during the Sports Council convened in Turkey from May 8th to 11th, 1990, materialized on November 21st, 1990, at the Turkish Disabled People's Sports Federation headquarters within the General

Directorate of Youth and Sports. The Federation's primary objective was to centralize and propagate all sporting endeavors conducted by disabled athletes, strategizing and executing initiatives aimed at revitalizing sports by disseminating these activities nationwide. Additionally, the Federation aimed to furnish modern training for disabled athletes within international competitive settings, fostering their preparation for such arenas. In 1997, the name of the federation was changed to "Turkish Disabled Sports Federation". In 2000, the Turkish Disabled Sports Federation was divided into four separate federations: Turkey Physically Disabled Sports Federation, Turkey Hearing Impaired Sports Federation, Turkey Visually Impaired Sports Federation and Turkey Special Athletes Federation. The common strategy of disabled sports federations in Turkey is to determine, organize and authorize national and international events. As the only institution with a, it is represented at the highest level in activities such as creating an archive of disabled athletes, increasing the promotion of disabled athletes by collaborating with schools, clubs, written and visual media, and supporting their communities (Mumcu, 2018). Since sport is directly related to people, it has become an effective tool for purposes such as creating a healthy and productive society, raising healthy, productive youth with confidence in the future, or reducing social problems and alienation. For this reason, sports has become a very effective and indispensable social phenomenon today (Yıldıran & Yetim, 1996). The National Youth and Sports Policy Document underscores the preservation of sports as integral to sustaining the health of future generations, fostering social cohesion, and contributing to societal harmony. The successes attained and investments directed towards sports organizations in Turkey have not only sustained sports events but have also yielded substantial contributions over time. Fostering a widespread culture of sports, ensuring ample sports facilities across various regions, and consistently promoting regular sporting activities necessitate not only changes within the sports realm but also seamless coordination across all sectors. This synergy and collaboration facilitate the expansion of the sports system, presenting increased opportunities for community engagement and broader contributions. By harmonizing efforts across various domains, the sports landscape becomes more pervasive and offers enhanced prospects for enriching societal involvement in sports-related activities.

The difficulties experienced by disabled individuals in accessing sports facilities and services have been stated as a common problem of our country. In addition, the fact that disabled individuals are not aware of sports services stands out as another problem that limits their access. In our country, there are basic needs for disabled sports such as infrastructure, access and trained personnel. There are also various problems in the management of disabled sports. Among these, issues such as who will manage disabled sports and the fact that mainstream sports institutions do not provide support for disabled sports stand out. The problems of organizing and expanding disabled sports in our country are quite obvious. The main reason for this situation is the lack of financial resources and the fact that disabled sports clubs are generally small-scale. The fact that the history of disabled sports in EU countries is older than in our country has contributed to these countries being ahead of us in terms of participation and success in international competitions (Mumcu, 2018). The literature highlights historically low participation levels of disabled individuals in sports activities, often contingent upon the nature and extent of their disabilities. However, recent advancements in technology and sports sciences have catalyzed an observable rise in the engagement of disabled individuals in sports. Alongside this trend, significant strides in sports management have been noted.

The establishment of sports federations, particularly aimed at fostering professional sports among disabled individuals, and the proliferation of disabled sports clubs at regional and national levels stand out as pivotal measures in enhancing the involvement of disabled individuals in sports events. Augmenting the participation of disabled individuals in sports carries immense significance, not only in fortifying sports management but also in amplifying the sporting achievements of disabled individuals on both national and international platforms. This collective effort contributes to rendering sports management more effective and propels the success of disabled athletes to greater heights globally (Karataş, 2021). In our country, there are inadequacies in disabled individuals' ability to benefit from sports services and access appropriate sports opportunities. The administrative problems of disabled sports arise in terms of the level of participation and achievements in this field. Sports opportunities are inadequate not only for professional and amateur athletes, but also for disabled individuals who want to do sports for recreational purposes (Mumcu, 2018). The shift towards making sports accessible for disabled individuals as a state policy has yielded tangible results in Turkey. One significant outcome is the notable increase in the number of licensed disabled athletes. This policy emphasis has evidently encouraged more disabled individuals to pursue sports, leading to a growth in the registered and licensed athletes within the country. These athletes operate within various federations such as the Turkish Physically Disabled Sports Federation, the Turkish Visually Impaired Sports Federation, the Turkish

Hearing Impaired Sports Federation and the Turkish Special Athletes Sports Federation. Some of the disabled athletes have become individuals with special needs due to congenital or early childhood reasons, while others have become individuals who need special needs during their youth or adulthood. However, considering the general disabled population rate in Turkey, it is seen that the rate of disabled individuals doing sports is quite low. Despite the increasing number of athletes in recent years, it becomes clear that the rate of sports participation and participation of disabled individuals should be further increased (Argan, Gürbüz, Koçak, & Atıcı, 2021).

### 6. Conclusion

In Turkey, the Ministry of Youth and Sports serves as the primary governing body overseeing sports for disabled individuals. Beyond its direct provision of sports services for this demographic, it collaborates with other governmental bodies like the Ministry of Labor and Social Services, the Ministry of Environment and Urbanization, and the Ministry of National Education to facilitate support and arrangements for the inclusion of individuals with special needs in sports. Furthermore, municipalities and Metropolitan Municipalities also contribute by offering physical activity services within their scope of duties and responsibilities to benefit disabled individuals.

When we evaluate the sports services of 30 metropolitan municipalities, we see that there are generally specialized commissions related to sports. Distribution of the presence of administrative structures in this developed variety of municipalities. However, there are some deficiencies in the formation and interruptions of these commissions. In the process of determining advanced selection options, candidates with a profile that can work in relevant commissions and contribute to installation decisions with their knowledge list and experience are preferred. Municipal commissions include not only elected members, but also people who will provide access to the relevant area by the mayor. These commissions are the decision-making bodies of the relevant service. These commissions also decide on the studies carried out in the field of sports. Decisions are made after the assembly of information after parliamentary approval (Sivrikaya, 2022). It's evident that both governmental bodies and nongovernmental organizations are actively engaged in fostering the participation of individuals with special needs in sports. The ongoing support from these institutions and organizations, coupled with efforts to address deficiencies encountered in this field on a daily basis, signifies a promising trajectory. This collective commitment indicates a path toward greater success for individuals with special needs in the realm of sports.

### References

Altınışık, Ü., İlhan, E. L., & Kurtipek, S. (2021). Zihinsel engelli bireylerde sporun etkilerine yönelik farkındalık: spor yöneticisi adayları üzerine bir araştırma. *CBÜ Beden Eğitimi Ve Spor Bilimleri Dergisi, 16(2)*, 79-90. https://doi.org/10.33459/cbubesbd.973598

Argan, M., Gürbüz, B., Koçak, F., & Atıcı, M. (2021). Engelli sporcuların objektifinden spor deneyimini görmek: engelleyici faktörlerin sosyo-ekolojik model perspektifinden analizi. *Spor Bilimleri Dergisi*, *32(2)*, 75-97. https://doi.org/10.17644/sbd.898381

Başkan, A. H., Özgül, F., Kolukısa, Ş., Çolak, H., & Başkan, A. H. (2020). Giresun üniversitesi spor bilimleri fakültesi öğrencilerinin "spor yönetimi" kavramı hakkında faydasal algıları. *Avrasya Sosyal ve Ekonomi Araştırmaları Dergisi*, 7(10), 58-67.

Cavkaytar, A. & Diken, İ. H. (2005). Özel eğitime giriş. Kök yayıncılık.

Gök, Y., & Sunay, H. (2010). Türkiye ve Fransa'da uygulanan spor yönetiminin kamu yönetimi açısından karşılaştırılması. *Spormetre Beden Eğitimi Ve Spor Bilimleri Dergisi*, 8(1), 7-16. https://doi.org/10.1501/Sporm 0000000170

Konar, N., & Yıldıran, İ.. (2012). Engelliler için beden eğitimi ve spor öğretmenliği: gereksinim ve bir program modeli. *Selçuk Üniversitesi Beden Eğitimi ve Spor Bilim Dergisi*, *14*(2), 208-216.

Milli Eğitim Bakanlığı. (2020). Özel eğitim hizmetleri yönetmeliği. https://orgm.meb.gov.tr/meb\_iys\_dosyalar/2020\_06/24163215\_ozel\_eYitim\_yonetmeliYi\_son\_hali.pdf adresinden 03.12.2023 tarihinde erişilmiştir.

Mumcu, H. E. (2018). Engelli Spor Politikaları (Avrupa Birliği Ülkeleri İle Türkiye Karşılaştırması). Ankara: Akademisyen Yayınevi.

Sivrikaya, Ö. (2022). Türkiye'de Büyükşehir Belediyelerinin Spor Yönetiminde Rolü ve Etkinliği.

Sunay, H. (2017). Spor yönetimi. Ankara: Gazi Kitapevi.

Sunay, H. (2021). Spor yönetimi. Ankara: Gazi Kitabevi,

Yetim, A. (2019). Yönetim ve spor. Ankara: Gazi Kitabevi,

Yıldıran, İ., & Yetim, A. (1996). Orta öğretimde beden eğitimi dersinin öncelikli amaçlari üzerine bir araştırma. Gazi Beden Eğitimi ve Spor Bilimleri Dergisi, 1(3), 36-43.

Yıldırım, E., S. & Akçamete, G. (2014). Çoklu yetersizliği olan çocuğa sahip annelerin erken çocukluk özel eğitimi hizmetleri sürecinde karşılaştıkları güçlüklerin belirlenmesi. Cumhuriyet Uluslararası Eğitim Dergisi, 3(1): 74-89.

Çitil, M., Karakoç, T. & Küçüközyiğit, M. S. (2018). Özel eğitim lisans dersinin öğretmen adaylarının bilgi düzeylerine ve engellilere yönelik tutumlarına etkisi. Abant İzzet Baysal Üniversitesi Eğitim Fakültesi Dergisi, 18 (2), 815-833

# CHAPTER III

# ANALYZING THE PRESCHOOL TEACHERS' OPINIONS ON STORY CARDS\*

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#### 1. Introduction

tory cards are tools that play an important role in strengthening children's imaginations, developing their creativity, increasing their interest and enthusiasm for painting and painting, developing vocabulary and language skills, developing listening skills, learning to solve problems, distinguishing different thoughts and feelings, and developing empathy. In this context, it can be stated that story cards should be included in pre-school education. Preschool years are considered a process in which the skills that children need to acquire in advance and that support subsequent literacy development are acquired (Sayeski at all, 2001). Story reading activities, which are applied to prepare children for reading and writing in pre-school, offer children a rich imaginative world and contribute to the visualization of those who are listened to in their minds (Akçay ve Akçay, 2017).

This period, which can be considered the beginning of the child's educational life; social, linguistic, mental, etc. is of great importance for development. Literary writings that are based on observation or design in a short, emotional, exciting way, together with the characters of realistic events that usually take place among a small number of people, at certain times and in certain places, are called stories (Ciravoğlu, 2000). The child's gaining a healthy psyche in a constantly changing society; is supported by the fact that conscious

<sup>\*</sup> It is an oral presentation in "DISTANCE EDUCATION: INNOVATIVE, NORMATIVE-LEGAL, PEDAGOGICAL ASPECTS", the National Aviation University 18 th of May, 2023 Kyiv, Ukraine.

communication and interaction are handled meticulously in illustrated fairy tales and storybooks. Literary texts prepared in this style are important both in the relations of families with their children and in that children see the ways of communication and the ways of preventing conflicts from these works they listen to (Kaya Bağdaş ve Demir, 2016).

Stories are widely used in the development of receptive and expressive language. Stories have been one of the most effective tools used in every aspect of life, told by adults from past to present, and used to support the language development of preschool children (Varol at all, 2020).

While the child identifies with the person of the story in the context of the event and situation he enters through the story -in proportion to the author's realism and his success in editing-, recognizing and evaluating himself through interaction; gaining social behaviors, adopting universal principles, acquaintance with the values of contemporary civilization; questioning their beliefs, principles and behaviors; as a result, it can form the infrastructure of approved adult characteristics such as being able to change them, recognizing and assimilating national values, and thus developing a sense of belonging in harmony with their society (Sever, 1995).

Children gain knowledge through the stories that are told and read to them, and they learn to look at life from different perspectives. At the same time, during the story activities, children listen to each other's speech by waiting their turn, thereby improving their listening skills (Aral, at all, 2002).

There are different techniques in storytelling. One of them is narration with story cards. Story cards are tools that are mostly prepared in square or rectangular form, contribute to the visual presentation of a story told to children, and mediate the understanding of the elements that make up the story such as event, person/persons, place, or time. For story cards to be effective, they must meet certain conditions. The basic qualities that should be included in the story cards are that the pictures on the cards are large enough for children to see, the cards are hardened with cardboard, they are not bent left and right during the narration, the pictures drawn on the cards are colored with paints, and the pictures reflect the events and characters in the story well (Bektaş, 2010).

While educating children by embodying them through the pictures in the story cards, it is possible to evaluate the children's understanding of the subject with the pictures that will be drawn by the children after the use of these cards. That's why children's drawings reveal the state of children's psychological

states, psycho-motor abilities, knowledge levels, and visual expression skills (Aksoy ve Baran, 2010).

In this respect, pictures are frequently used in educational and psychological evaluations.

# 2. The Role of Story Cards in Developing Children's Developmental Domains

Story cards can play a significant role in the development of children's various developmental domains, encompassing cognitive, and language, social, emotional, and physical aspects. Here's an exploration of how story cards can contribute to each of these domains:

Story cards enhance the cognitive development and critical thinking skills of children in that story cards can stimulate a child's critical thinking by encouraging them to analyze and understand the sequence of events in a story. They prompt children to make predictions, identify cause-and-effect relationships, and conclude.

Story cards affect the language development of children. Story cards expose children to a variety of words and phrases, expanding their vocabulary. Discussing the stories also provides opportunities for children to learn new words in context. In addition to this, using story cards to retell or create narratives helps children articulate their thoughts and ideas. It promotes language fluency, sentence structure, and communication skills.

Story cards can contribute to the social development of children in that story cards can be used in group settings, promoting collaborative play and social interaction. Children can take turns selecting cards, contributing to the story, and sharing ideas. Moreover, they often involve characters facing different situations. Discussing these scenarios can help children understand and empathize with the feelings and perspectives of others.

Story cards can stimulate the emotional development of children in that story cards provide a medium for children to express their emotions. They can relate to characters' experiences and use the stories as a way to convey their feelings. Furthermore, exploring characters' emotions in stories helps children recognize and understand a range of emotions, fostering emotional intelligence.

Story cards can enhance the fine and gross motor skills of children in that manipulating and handling story cards contribute to the development of fine

motor skills, and acting out parts of the story or engaging in movement games, can support the development of gross motor skills.

Story cards can develop the creativity and imagination of children. By storytelling, story cards can serve as creative prompts, inspiring children to invent their narratives.

The aim of this research is to identify the contributions of the story cards in developmental domains in preschool settings from preschool teachers' perspectives.

#### 3. Model

#### 3.1. Research Model

A qualitative research method was used in this study. Qualitative research is defined as a study in which qualitative data collection methods such as observation, interview and document analysis are used, and a qualitative process is followed to reveal perceptions and events realistically and holistically in the natural environment.

## 3.2. Working group

In this section, the opinions of 10 preschool teachers working in 1 kindergarten and 2 kindergartens affiliated with the Ministry of National Education in the province of Konya in the 2020-2021 academic year as a working group for the research was taken.

#### 3.3. Data Collection Tools

Semi-structured interview technique, which is a qualitative research method, was used as a data collection tool in the research, and the semi-structured Interview Form prepared by the researcher was applied to preschool teachers. 10 open-ended questions were prepared for the interview in accordance with the subject and purpose of the research.

## 4. Results

In this study, the views of preschool teachers about story cards were examined. In this section, the views of 10 pre-school teachers working in 1 kindergarten and 2 primary schools affiliated with the Ministry of National Education in Konya were examined in line with the purpose of the research.

In order to determine the opinions of the teachers, the answers given to the questions prepared with the semi-structured interview technique were analyzed. In this section, the findings obtained with the data collection tools, the analysis of the data and the comments on the findings are included.

# What are the points to be considered while preparing story cards?

While 40% of the teachers believe that the story cards should be suitable for the developmental levels of the children, 30% of them think that they should be simple and understandable. 10% think that story cards should be interesting, 10% think that the format should comply with the standards, and 10% think that the visuals and content should be compatible.

S3: "Care must be taken to ensure that the images are clear, plain and in harmony with the story."

# What is the contribution of the story cards to the developmental areas of the child?

40% of the teachers stated that the story cards contribute to the cognitive development area by improving the imagination, problem-solving skills and creativity of the children, 40% of the teachers contribute to the language development area by enabling the development of the children's vocabulary and self-expression skills, 20% of the teachers say that they contribute to the language development area. They believe that it contributes to the field of socialemotional development by enabling the development of skills.

S2: "Story cards contribute positively to the cognitive field by contributing to the development of the child's creativity and imagination."

# What are the points to be considered when using the story card technique?

While 40% of the teachers think that eye contact should be established with the children during storytelling, 40% of them think that the children should be lowered to their level, paying attention to gestures, mimics and accents, 20% of the teachers said that the story card used should be in a size that all children can see and the seating arrangement should be adjusted accordingly. considers it necessary.

S5: "I pay attention to the size of the story card I use is large, the material is strong and of high quality, the colors are vivid, and the pictures are clear and understandable."

# What do you think might be difficult points when preparing a story card?

While 60% of the teachers stated that they had difficulties in drawing and coloring pictures while preparing the story card, 30% stated that they had difficulties in choosing the content to be used in the story and 10% in the preparation of the size of the story card.

S10: "While preparing the story card, I think that I have difficulties in finding the appropriate image for the story and adjusting the size of the story cards."

## What messages should the story cards be prepared to contain?

70% of teachers should give messages containing values education (love, respect, friendship, helpfulness, etc.), 20% should give messages aimed at gaining self-care skills, and 10% should reduce social messages to children as messages on story cards.

S9: "The rules about self-care skills, empathy, social solidarity, benevolence, friendship, game etc. There may be messages covering topics.

# What kind of activities should be included after the story card narration technique?

50% of the teachers think that drama activities should be included after the story, 30% art activities, 10% musical activities, and 10% game activities.

S4: 'Song, play, painting, and most importantly drama activities can be included because this way, the message to be conveyed can be understood more clearly and more permanent learning can be achieved."

# What features should the images on the story cards have?

40% of the teachers stated that the colors used in the story cards should be in a tone that could attract the attention and interest of the children, 30% of the teachers said that the visuals used should be simple and understandable, 20% of them said that the visuals should be suitable for the developmental level of the children, 10% should be related to the content of the story. thinks it should be compatible.

S3: "First and foremost, it should be able to attract the attention of children, the harmony of colors should be ensured, it should not tire the eyes, it should be related to the story, it should be in an appropriate size for children to see."

# In which activity types can the story cards narration technique be used?

60% of the teachers stated that they used the story card narration technique in Turkish activities, while 30% stated that they used it in drama activities and 10% in art activities.

S8: "The story can be used in storytelling time, in story drama studies, in drama or language activities (in Turkish or English)."

## How often do you use the story cards technique in your preschool class?

The frequency of use of story cards by teachers is as follows; 40% stated that they use story cards once a week, 40% use story cards twice a week, and 20% use 3 or more story cards a week.

S10: "I use it at least twice a week. I have never told a story without using story cards. I always present my stories to my students using cards."

# According to which criteria do you choose the subject in the story cards you use?

The criteria that the teachers use as a basis in the selection of the topic covered in the story cards are as follows: 60% of the children's age and developmental level should be chosen according to this criterion, 20% should be chosen according to these criteria, 20% should be chosen for the children's daily life. problems that he may encounter in life should be included in the story cards.

S10: "The topics should be suitable for the age and developmental characteristics of the children. There should be issues that they can understand, think about, and question in their daily life so that they can share and discuss their thoughts on it.'

#### 5. Conclusion

The results of this research aimed at determining the opinions of preschool teachers about story cards are given below.

• Certain conditions are required for story cards to be effective. The main qualities that should be included in the story cards are that the pictures on the cards are large enough for children to see, the cards are made solid, the coloring of the pictures on the cards is remarkable, and the pictures reflect the events and characters in the story well (8).

- It is important to draw attention to the story that the story cards are in sizes that children can easily see and understand the pictures.
- As a result of the research, most of the issues that teachers pay attention to while preparing story cards; It is the opinion that it is suitable for the developmental level of the children.
- The use of story cards in science subjects where event patterns and abstract concepts are abundant will increase the quality of teaching. For this reason, it is very important for preschool teachers to include story cards in terms of the rapidly developing concept treasures of children in the preschool period (Akçay ve Akçay, 2017).
- In this study, teachers stated that they made eye contact with children in storytelling by using the story card technique, descended to the level of children, and embodied the story by using gestures effectively, making the children feel and feel the story.
- Having children draw pictures after the story-reading activities helps the teacher to evaluate the various skills of the children.
- Based on the study, it can be said that story-reading activities are frequently used activities in pre-school education. Supporting some of these activities with story cards will develop children in various aspects.
- It is seen that the teachers answered the question about the contribution of the stories to child development as developing the imagination of the child, contributing to the language development, supporting their creativity, contributing to the child's self-expression and supporting being benevolent. From this point of view, it is seen that teachers know the effects of stories on the development of the child.

In summary, story cards offer a versatile tool for holistic child development. They engage children in a multi-faceted learning experience, fostering cognitive, language, social, emotional, and physical skills enjoyably and interactively.

#### REFERENCES

Akçay, A. ve Akçay, N. O. (2017). Hikâye kartlarının çocukların görsel ifade becerileri üzerindeki etkisi. Ana Dili Eğitimi Dergisi, 5(3), 417-432.

Aksoy, P. ve Baran, G. (2010). 60-72 aylik çocukların okula ilişkin algılarının resim yoluyla incelenmesi. International Conference on New Trends in Education and Their Implications, 11-13 Kasım, Antalya, Turkey

Aral, N., Kandır, A. ve Can Yaşar, M.,(2002). Okul Öncesi Eğitim, Okul Öncesi Eğitim Programı. İstanbul: Ya-Pa Yayınları.

Bektaş, H. (2010). Okulöncesi öğretmenlerinin Türkçe dil etkinliklerinde kullandıkları hikâye anlatım yöntemlerinin incelenmesi: Karaman ili örneği. Yüksek lisans tezi, Selçuk Üniversitesi Eğitim Bilimleri Enstitüsü, Konya.

Ciravoğlu, Ö. (2000). Çocuk edebiyatı. Esin Yayınevi: İstanbul

Kaya Bağdaş, Ç. ve Demir, E. (2016). Preschool teacher and investigation of story books story about comments (erzincan examples I), Erzincan Üniversitesi Sosyal Bilimler Enstitüsü Dergisi (ERZSOSDE) ÖS-III: 219-230.

Sayeski, L.K.; Burgrss, A.; Pianta, K.; Lloyd, C.R.; Wills, J. (2001). Literacy Behaviors Of Preschool Children Participating İn An Early İntervention Program. Center For The Improvement Of Early Reading Achievement. America. (12. 06. 2006).

Sever, S. (1995). Çocuk kitaplarında bulunması gereken yapısal ve eğitsel özellikler. Abece Eğitim Ekin ve Sanat Dergisi: Ankara, S.107, ss.14–15.

Varol, İ., Âlâ, S. & Eti, M. (2020). Okul Öncesi Eğitimde Türkçe Etkinliklerinde Kullanılan Hikaye Anlatım Tekniklerinin Çocukların Dikkat Süresi Üzerine Etkisi. Temel Eğitim, 2 (1), 26-39.

# CHAPTER IV

# SUPERVISOR FEEDBACK AND SUPERVISORY WORKING ALLIANCE: FOUNDATIONS OF CLINICAL SUPERVISION<sup>1</sup>

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#### 1. Introduction

Supervisor feedback and supervision working alliance are essential components of clinical supervision. However, it is almost impossible to say which of the two components comes to the fore in clinical supervision. Just as it is difficult to answer the question "Does the egg come out of the chicken or the chicken come out of the egg?", it is difficult to say whether supervisor feedback and supervision working alliance come to the fore in clinical supervision. In this context, it would be appropriate to say that supervisor feedback and supervision working alliance constitute the foundations of clinical supervision.

<sup>&</sup>lt;sup>1</sup>This study was conducted within the scope of the TÜBİTAK 1001 research project titled "Understanding and Contributing to Effective Supervisor Feedback in Counselor Training in Turkey: A Research and Development Project" (Research Number: 121K877)

Feedback is related to the extent to which the supervisee's performance is progressing in the desired direction by the supervisor. Feedback also involves the expectation that some change in the supervisee's understanding, attitude or behavior will occur in response to the feedback (Freeman, 1985). Effective feedback includes statements that are clear, specific to the behavior, support cooperation and trust, and directly related to the supervisee's learning goals (Campbell, 2005). Therefore, supervisor feedback is an important factor for the supervisee's professional development. Bernard and Goodyear (2019, p.228): "When supervisees think about their supervision process, what comes to mind is mostly the quality and quantity of the feedback they receive.", expressing how important feedback is for clinical supervision. As a matter of fact, Ellis (2001) defined an ineffective supervision process as a process in which at least one of the factors such as the supervisor giving inadequate feedback, not being open to the ideas and criticisms of the supervisee, not being able to manage the evaluation process, not being interested in the supervision process and the supervisee. From this point of view, effective supervisor feedback is very decisive in achieving the purpose of the supervision process.

According to the relevant literature, one of the most determinant variables on the supervision process and outcome is supervisory working alliance (Bernard & Goodyear, 2019; Mehr et al., 2010; Ramos-Sanchez et al. 2002; Park et al. 2019; Watkins, 2013, 2014). Although working alliance is a concept introduced to the literature by the psychoanalytic tradition, Bordin (1979, 1983) has provided comprehensive explanations in terms of the therapeutic relationship and supervision relationship by addressing this concept in a transtheoretical framework. Supervisory working alliance refers to a secure relationship involving the perceptions of the supervisor and supervisee towards each other and consists of three dimensions (Bordin, 1983). These dimensions are the goals that will guide the supervision process, the emotional bond between the supervisor and the supervisee, which includes feelings of closeness and trust, and the tasks to be fulfilled during the process. Bordin (1983) defines the goals to be achieved through the supervision process as: a) specialization in specific skills; b) improving client understanding and empathy skills; c) increasing awareness of the therapeutic process; d) increasing awareness of the impact of personality traits on the therapy process; e) overcoming personal and mental barriers to learning and specialization; f) deepening conceptual and theoretical understanding; g) encouraging research; h) maintaining service standards.

The healthy functioning of the dimensions in Bordin's (1983) definition of supervisory working alliance is closely related to the supervisor's feedback. For example, under the dimension of "goals", goals such as increasing awareness of the therapeutic process, recognizing the effects of personality traits on the therapeutic process, overcoming personal and mental obstacles on the way to learning are achieved through the feedback of the supervisor. In the definition of effective feedback, it is emphasized that the supervisor gives feedback in a way that encourages trust and cooperation and that the feedback is related to the supervision goals (Campbell, 2005). From this point of view, it can be easily said that both the goals and the emotional bond dimension of the working alliance between the supervisor and the supervisee are referred to.

Feedback leads to direct or indirect changes in the behavior of the supervisee. Looking at the direct effects; it provides determining the steps in the process, clarifying the previous steps, understanding the factors that prevent reaching the goal, determining whether the steps taken meet the performance criteria and whether they are related to the goal (Freeman, 1985). The indirect effects of feedback are mostly related to the triadic system in the supervisory relationship (Bernard & Goodyear, 2019). Supervisors model skills such as empathy and support to the supervisee while giving feedback. The feedback style of the supervisor (language, communication style, etc.) also affects the relationship style of the supervisee with the client (Freeman, 1985). In this context, it can be said that effective feedback improves all dimensions of supervision rapport, including goals, tasks, and emotional bonding.

Supervisors frequently use corrective feedback throughout the process, in other words, they give feedback to correct the deficient or faulty behaviors of the supervisee. While giving corrective feedback, it is recommended that supervisors should be as empathetic as possible, use I language, and give examples from their experiences by opening themselves when necessary (Campbell, 2005). Corrective feedback can harm the supervision relationship when it is perceived by the supervisees as focusing on their mistakes. In the context of these recommendations, it is understood that the aim is both to make the feedback effective and to maintain a quality supervision relationship.

Supervisor feedback has an important role in the development of a harmonious relationship between supervisor and supervisee. Supervisory working alliance increases the comfort of the supervisor in giving feedback and prevents the supervisee from perceiving the feedback as a negative experience. Therefore, it is possible to talk about the existence of a reciprocal relationship rather than a cause-and-effect relationship between supervisory working alliance and supervisor feedback. In this study, empirical and theoretical explanations about supervisor feedback and supervisory working alliance, which constitute the foundations of the clinical supervision process, were presented. Studies about both concepts are given in detail and the results are discussed in the context of the interaction of the concepts in the supervision process.

# 2. Supervisor Feedback and Types of Feedback

In the literature, supervisor feedback is discussed under the title of evaluation as formative and summative feedback (Bernard & Goodyear, 2019, p.222). In a sense, evaluation is done through feedback that is given continuously during the process (formative) and at the end of the process based on the overall evaluation (summative).

Formative feedback (or evaluation) is defined as the process of facilitating skill acquisition and professional development through direct feedback (Robiner, Fuhrman, & Ristvedt, 1993, as cited in Bernard & Goodyear, 2014, pp.205). Supervisors' feedback on the appropriateness of the specific skills used by supervisees in the counseling process is evaluative in nature. Therefore, the supervision relationship is by its very nature continuously related to evaluation and feedback.

Summative feedback (evaluation) is the feedback given at the end of the process and includes the general evaluation of the supervisee's performance. The supervisor evaluates the whole process retrospectively and evaluates the quality of the supervisee's performance. At this point, it is important that supervisors and supervisees agree on the evaluation criteria (Bernard & Goodyear, 2014).

Taken together, summative feedback or evaluation are often challenging. Since supervisors are primarily mental health professionals, they may not feel comfortable with the process of summative feedback (evaluation). Factors such as poor organization of the supervision process, ineffective use of communication skills, and lack of standards may make this process difficult. It is recommended that formative feedback should be given regularly and diligently throughout the process for the summative feedback and evaluation process to function properly (Bernard & Goodyear, 2014).

# 3. Some Key Factors Determining Effective Supervisor Feedback

There are various views on the determinants of effective feedback. Campbell (2005, pp. 139) characterizes effective feedback as clear, specific behavior-oriented, supportive of cooperation and trust, and containing statements directly related to the supervisee's learning goals. This view has been proven in some studies (e.g., Aladağ, 2014; Carifio & Hess, 1987; Pamukçu et al., 2022; Worthington & Roehlke, 1979) and it has been observed that supervisees find clear, comprehensible, supportive feedback effective as suggested by Campbell (2005). Freeman (1985) lists the conditions for effective feedback as follows:

- 1) Systematic: Systematic feedback is considered more objective as it is based on specifically defined behavioral criteria. Objective feedback provides information about the functionality of the supervisee's behaviors and their conformity to the goals. Objective feedback is more likely to be reliable and less affected by bias, distortion, and other subjective factors. Therefore, it facilitates the progress of the supervisee.
- 2) Timely and Regular: One component of effective feedback is timely and regular. It has been proven that feedback provided immediately after the performance is more effective than feedback provided later. Feedback provided immediately after performance is more effective than feedback provided later, because behavioral factors related to the causes and consequences of the current situation may be forgotten over time. Therefore, timely feedback is more effective in correcting unsuccessful performance. This increases the supervisee's hope and belief that he/she will succeed. It also allows the performance and the goals for it to become progressively more difficult.
- 3) Understandable: Feedback is expected to be clear, include both positive and negative aspects and be credible. The feedback should provide clear information about the nature of the behavior. Unclear feedback prevents the supervisee from correcting erroneous behaviors. In addition, it is important to provide feedback with techniques that appeal to as many sensory organs as possible and balanced in terms of positive and negative content. While consistently providing positive feedback reduces the credibility of the supervisor, providing negative feedback frequently weakens the supervisee's belief in improvement. The reliability of the feedback is related to the statements reflecting the professional competence of the supervisor. In addition, when the feedback is expressed in a way that considers the worldview and cultural characteristics of the supervisee, it is considered more reliable by the supervisee. Supervisees internalize the feedback they find reliable and develop professionally faster.
- 4) Reciprocal: In the supervision process, it is important that feedback is mutual between the supervisor and the supervisee. The supervisee should also give feedback to the supervisor when the feedback given by the supervisor

is not sufficiently understood or when the logic of the feedback needs to be grasped. Supervisors should also be open to criticism from the supervisee about the quality of the supervision relationship and the elements that hinder the learning process. In addition, the supervisor is expected to be a model in giving and receiving feedback and clarifying issues through his/her responses to the supervisee's feedback. It is also recommended that the supervisor should display a democratic attitude by avoiding an authoritarian style while giving feedback.

One of the types of feedback frequently used by supervisors is corrective feedback. In the literature, it is reported that supervisors do not feel comfortable giving corrective feedback and even avoid giving feedback on issues such as personal or professional competence of the supervisees (Hoffman, Hill, Holmes, & Freitas, 2005; Ladany, & Melincoff, 1999). However, factors such as the sensitivity of the supervisees, their perceptions, and their attitude towards dealing with difficulties may also negatively affect the process of giving corrective feedback by the supervisor. For example, it has been found that attachment anxiety increases cognitive distortions in supervisees and accordingly, receiving corrective feedback turns into a difficult experience (Rogers, Luke, Gilbridge, & Goodrich, 2018). In another study, it was observed that counselor candidates with prejudices towards self-development had more difficulties in receiving corrective feedback (Sohn, 2009). Although corrective feedback is often seen as unpleasant experiences, it accelerates development when it is presented effectively and seen as an integral part of the learning process.

A certain amount of challenge and confrontation is necessary for the development of the supervisees. Supervisors play a key role here. When too much corrective feedback is provided, it can overwhelm the supervisees and damage the supervision relationship. When it is not provided sufficiently, the development process of the supervisee is negatively affected (Campbell, 2005). When providing corrective feedback, it is important to avoid a style that may cause the other party to become defensive. Campbell (2005) provides some suggestions to ensure that corrective feedback is presented effectively:

a) Sandwich Technique: This technique is that corrective feedback is presented between two positive feedback. The point to be noted here is that the word "but" should not be used and corrective feedback should not be given after the sentence containing general praise. Corrective feedback given after praise

usually prevents the receiver from directing his/her attention to the feedback. Instead, a sequence of positive feedback-corrective feedback-general praise about the specific behavior may be preferred. For example, language such as "The way you ask your client questions is appropriate. Maybe you could reflect more. Nevertheless, you are making great progress, and you seem comfortable in the sessions." is preferable.

- b) Use of I Language: The use of I language in corrective feedback prevents the other party from becoming defensive. "My interpretation is that..." Statements such as "From my point of view..." can be given as examples.
- c) Emphasizing Contradictions: In a sense, it can be described as confrontation. It is the expression of inconsistencies between what the supervisee says and his/her actions/emotions. For example: "You are concerned that you are not making progress with your client, but you are unable to take action to implement my suggestions."
- d) Use of Empathy and Self-disclosure: Self-disclosure and empathic responding allow supervisors to relieve anxiety and be open. Especially when the supervisor shares his/her own supervision experiences, it helps the supervisee to express himself/herself more comfortably.
- e) XYZ Technique: The XYZ formula for parent-child relationship (Goleman, 1995, as cited in Campbell, 2005) can also be used when giving corrective feedback. The XYZ formula is as follows: Statements such as "I understand that you are worried about my evaluation of you, but I cannot give you feedback when you do not talk enough about your counseling process, and I expect you to be more active in supervision sessions." can be used by supervisors when giving serial feedback.
- f) Use of Metaphors: Metaphors, stories, objects, or small artistic activities help to better understand feelings and thoughts that are relatively complex to express. For example, when the supervisee insists on using a therapy technique that is not compatible with his/her personality traits, the supervisor might say: "That jacket is too small for you; the sleeves are short, and the shoulders are narrow. But you like it very much and you are doubled over to put it on. What do you feel when you are doubled over like that?" with an analogy such as this can shed light on the supervisee's understanding of his/her own situation.

Bernard and Goodyear (2019) suggest that the feedback given during the process should be of a nature that encourages supervisees to make self-evaluation. As a matter of fact, as counselors' professional development processes progress, their self-reflection skills are expected to improve (Rønnestad & Skovholt, 2003). For example, when the supervisor asks a question about the supervision or counseling process and then asks why he/she might have asked such a question, it activates the reflective thinking process of the supervisee and helps him/her gain insight.

# 4. Effects of Supervisor Feedback

Feedback has some effects on both the supervisee and the supervision relationship. Considering the effects on the supervisee, variables such as counseling self-efficacy, anxiety level, supervision satisfaction, and self-awareness can be listed (e.g. Daniels & Larson, 2001; Worthington & Roehlke, 1979). In addition, feedback has an important role in the quality of the supervision relationship (e.g., McKibben, Borders, & Wahesh, 2019).

In the literature, there are studies examining the direct effects of supervisor feedback on the supervisee. In Daniels and Larson's (2001) study, it was concluded that positive feedback from the supervisor about the supervisee's performance increased supervisees' self-efficacy levels, while negative feedback decreased the self-efficacy level. Negative feedback was found to increase the level of anxiety. In an early study, the perceptions of beginning counselor trainees about the elements of effective supervision process were examined (Worthington & Roehlke, 1979). In the study in which factors such as supervisor behaviors, supervision relationship, supervision satisfaction, and supervisor competence were determined, it was observed that counselor trainees generally evaluated their satisfaction with the supervision process according to the feedback they received from their supervisors. It was stated that counselors practicing at the beginning level want to expand their behavioral repertoire of counseling skills by receiving not only negative feedback but also positive feedback. Aladağ (2014) examined the experiences of the supervisees regarding individual counseling practices carried out at different levels of counselor education, the effect of these experiences on their professional development and tried to determine the elements of effective supervision process. It was determined that negative feedback was not clear, explicit, and timely. Positive feedback was reported to contribute to counseling self-efficacy, therapeutic skills, session management, self-awareness, and emotional experiences. On the other hand, negative feedback was found to be hindering in areas such as therapeutic skills, professional self-efficacy, and supervision. In addition, it has been stated in different studies (Büyükgöze Kavas, 201; Erkan Atik, 2017; Fickling et al.,

2017) that the supervisor's supportive, directive, corrective and self-awarenessenhancing feedback positively affect the professional development of the supervisees.

In studies examining the effects of feedback on the supervision relationship (e.g., Büyükgöze Kavas, 2011; Erbaş, Koç, & Esen, 2020; Meydan, 2019; Meydan & Denizli, 2018), it was observed that supportive, directive and encouraging feedback strengthens the supervision relationship perceived by the supervisees. However, McKibben, Borders, and Wahesh (2019) observed a high positive correlation between the quality of the supervision relationship and supervisees' perception of critical feedback as valid. Limited studies examining the effects of supervisor feedback on the therapeutic process of the supervisee have been also found. In a study examining live supervision and therapy processes, it was observed that the immediate feedback provided by the supervisor positively affected the empathic reactions of the supervisee in the therapy process (Carlson, 1974).

# 5. Supervisory Working Alliance

Supervision is an organized process that is instructive, evaluative, and carried out within the framework of the relationship between the supervisor and the supervisee. According to the international literature, it is noticeable that there are many studies emphasizing the importance of the supervision relationship (e.g., Beinart, 2014; Berger & Buchholz, 1993; Horrocks & Smaby, 2006; Karpenko & Gidycz, 2012; Kennard et al., 1987; Ladany & Friedlander, 1995; Muse-Burke et al., 2001; Pearson, 2000; Summerel & Borders, 1996; Webb & Wheeler, 1998; Worthington & Stern, 1985). Supervisory working alliance can be characterized as the foundation of this relationship. Related studies show that one of the most determinant variables on supervision process and outcome is working alliance (Bernard & Goodyear, 2019; Mehr et al., 2010; Ramos-Sanchez et al., 2002; Park et al., 2019; Watkins, 2013, 2014).

Supervision working alliance is a common factor emphasized in all supervision models. Although each supervision model addresses the supervision relationship from different perspectives, there is a consensus that the most determining factor in the supervision process is the supervision working alliance (Watkins, 2013). Psychotherapy-based models propose a similar supervision relationship with the theoretical explanations they bring to the counseling process. For example, in psychoanalytic therapy supervision, there is a transference-oriented relationship between the supervisor and the supervisee (Frawley-O'Dea & Sarnat, 2001). In developmental supervision models, it is encouraged to establish an empathic, trust-based relationship in accordance with the developmental level of the supervisee and to set goals and tasks to support development (Stoltenberg & McNeill, 2010, pp.137-150). In process models, a collaborative, empathic relationship is established with the supervisee and goals and tasks are set in line with the needs of the supervisee (Watkins, 2013). In addition, supervisory working alliance is influenced by various factors and brings along some consequences (Bernard & Goodyear, 2019). Accordingly, some characteristics of the supervisor and the supervisee are determinant on supervision working alliance, and the professional development of the supervisee and the effectiveness of the supervisor's feedback are also affected by the quality of working alliance.

# 6. Factors Affecting Supervisory Working Alliance

# 6.1. Factors Related to the Supervisor

# 6.1.1. Supervisor's Use of Power

The supervision relationship is characterized by an unequal balance of power between the parties. Supervisors have several powers such as legitimate power arising from their status, expert power arising from knowledge and experience, referent power, coercive power, and evaluative power (French & Raven, 1959). In the supervision relationship, it can be said that the power types of expertise, referent power, legitimate power and evaluative power come to the fore (Strong, 1968). The supervisor's use of power has an impact on the supervision study compliance. When supervisors make the inequality of power felt too much, supervisees may feel uncomfortable (Bernard & Goodyear, 2019). Considering that supervisors use their power through feedback, their empathic and understanding attitude positively affects the supervision relationship.

Supervision is a process of social influence aimed at professional development (Claiborn et al., 1995). Therefore, the supervisor can use his/her power of expertise to help the supervisee to acquire certain attitudes and behaviors. However, using their power in an unethical way can have negative consequences and distract supervision from being an instructive process. Ellis and colleagues (2014) examined the damaging supervision process and found that supervisors' discrimination on issues such as age, gender, race, cultural characteristics and using their power in violation of ethical rules led to a

damaging process in supervision. In another study by Ellis (2017), behaviors such as supervisors sharing detailed information about their private and sexual lives, forcing the supervisee to undergo psychological tests, and disclosing the test results, the supervisor's lack of time and indifference were cited as examples of negative use of power. In conclusion, it is emphasized that the supervisor should use his/her power in line with ethical principles and in a way that does not harm the supervisee and the clients.

# 6.1.2. Supervisor's Attachment Style

Attachment styles are a variable that has an impact on relationship dynamics. Supervisory working alliance is closely related to attachment styles since it is a structure that includes emotional bonding. As a matter of fact, studies in the literature reveal that there is a relationship between supervisory working alliance and the attachment style of the supervisor. White and Queener (2003) examined the effects of the social support network and adult attachment styles on supervision work adjustment and found that only the attachment style of supervisors affected the work adjustment assessed by both supervisors and supervisees. The higher the social relationship and bonding abilities of the supervisors the higher supervisory working alliance. In another study Foster et al. (2006) reported that supervisors with anxious attachment style evaluated supervisees' professional development more negatively. Dickson et al. (2011) and Riggs and Bretz (2006) also found negative relationships between insecure attachment style in supervisors and supervisory working alliance.

# 6.1.3. Supervisor's Self-Disclosure

The supervisor's self-disclosure by providing examples from his/her own experiences has an important place in the supervision relationship. To reduce the anxiety of the supervisees and support their development, supervisors can share experiences from their personal lives, counseling, or supervision processes when they deem necessary. In the literature, there are some studies examining the relationship between supervisor self-disclosure and supervisory working alliance. Ladany and Lehrman-Waterman (1999) observed a positive relationship between supervisor's self-disclosure behaviors and supervision working alliance perceived by supervisees. Norcross and Popple (2017, p.49) state that self-disclosure behavior strengthens the supervision relationship, and the supervisees feel more comfortable. Mehr and Daltry (2022) found a positive relationship between supervisors' self-disclosure behavior and supervisees' perceived supervisory working alliance. In another study, it was observed that the supervisor's self-disclosure behavior helped to reduce supervisees' feelings of shame (Yourman, 2003). As a matter of fact, Campbell (2005) also states that the supervisor's self-disclosure behavior increases the effectiveness of feedback.

## 6.1.4. Supervisory Styles

Supervisory style is defined as the general approach and feedback style of supervisors (Friedlander & Ward, 1984). Three supervisor styles have been defined as attractive, interpersonally responsive and task oriented (Friedlander & Ward, 1984). These styles are also compatible with Bernard's (1997) supervisor roles. For example, the attractive style, which corresponds to a warm and friendly approach, overlaps with a supervisor who assumes the role of advisor. However, supervisors alternate these roles and styles according to the needs of the supervisee (Ladany et al., 2001). The style adopted by the supervisor affects the supervisory working alliance. Ladany et al. (2001) found that attractive supervisor style positively predicted all sub-dimensions of supervisory working alliance (goal, tasks, and emotional bond), while sensitive and task-oriented styles in interpersonal relationships positively predicted the tasks dimension of supervisory working alliance. In Li's (2022) study, it was found that the developmental level of the supervisees (beginner level, advanced level, etc.) had a moderating effect on the relationship between supervisor styles and supervisory working alliance. In particular, the relationship between sensitive style in interpersonal relationships and supervisory working alliance was found to be higher in counselor candidates practicing at the beginner level. On the other hand, according to the findings, responsive style in interpersonal relationships has a positive effect on supervisory working alliance for supervisees at all levels. Chen and Bernstein (2000) also found that sensitive and attractive styles in interpersonal relationships positively affected supervisory working alliance.

# 6.2. Factors Related to the Supervisee

# 6.2.1. Anxiety Level of the Supervisee

The supervision process can be anxiety-provoking, especially for supervisees who are practicing at the beginning level supervisees (Rønnestad &

Skovholt, 2003). When anxiety reaches high levels, it can damage the supervision relationship. The fact that supervision is an instructive process depends on the openness of the supervisees about the counseling process and their personal experiences. However, supervisees with high levels of anxiety may convey distorted or incomplete information about counseling sessions to their supervisor. This situation prevents the supervisor and supervisee from working in harmony (Bernard & Goodyear, 2019). In the literature, there are some studies examining the relationship between anxiety and supervisory working alliance. Gnilka et al. (2012) concluded that high stress levels negatively affect perceived supervisory working alliance. In Mehr et al.'s (2010) study, high anxiety level was found to be an inhibiting factor for the self-disclosure behaviors of supervisees, and a positive relationship was observed between self-disclosure behaviors and perceived supervisory working alliance. To maintain working alliance, supervisors should make some interventions for anxiety. These interventions are expressed as expressing that anxiety and making mistakes are normal, being neither too supportive nor too challenging, and clarifying the roles in the process (Bernard & Goodyear, 2019).

## 6.2.2. Attachment Style

While the supervisee is initially more dependent on the supervisor, over time he/she gains autonomy and determines his/her own professional style (Ronnestad & Skovholt, 1993). Since a quality supervision relationship is based on trust, attachment styles are determinant on supervisory working alliance. For example, it is stated that people with anxious attachment style constantly demand help from their supervisors and try to be their supervisor's favorite (Pistole & Watkins, 1995). In the literature, there are some studies examining the relationship between the attachment styles and supervisory working alliance. Marmarosh et al. (2013) and Renfro-Michel and Sheperis (2009) found that supervisees with secure attachment style perceived the supervision relationship more positively. However, in some studies, no significant relationship was found between the attachment style of the supervisee and the supervisory working alliance (Dickson et al., 2011; White & Queener, 2003).

# 6.2.3. Negative Supervision Experiences

Although it is difficult to make a general definition of negative experiences in the supervision process, some studies in the literature give an idea about what these situations may be. Examining relates studies, it is seen that negative experiences are related to supervisor behaviors. Supervisees express situations such as authoritarian or indifferent supervisor attitudes, sexual harassment, unethical use of force, distraction of the supervisor as negative experiences (Allen et al., 1986; Chung, Baskin, & Case, 1998; Ellis, 2014).

In the literature, the characteristics of "bad supervision" process have been examined by various researchers. In Nelson and Friedlander's study (2001), supervisor characteristics related to poor supervision process are: a) Supervisor's power struggle with the supervisee, b) Supervisor's feeling threatened by the supervisee's competencies, f) Theoretical or technical disagreement with the supervisee, g) Misperceptions of the person's cultural characteristics and gender, h) Inappropriate sexual behavior of the supervisor, i) Criticizing the supervisee in front of peers and angry behavior, j) Supervisor's inflexibility, k) Seeing the supervisee as the source of problems, 1) It is expressed as inappropriate self-disclosure by the supervisor. Another study examining inadequate and damaging supervision experiences was conducted by Ellis and colleagues (2017). According to the findings of the study, inadequate supervision process is associated with more negligent behaviors of the supervisor, while damaging supervision process is associated with behaviors that abuse the supervisor's power. Inadequate supervision process: a) Supervisor not knowing what to do, b) Clients having traumatic experiences due to supervision, c) Supervisor not being sensitive to cultural differences, d) Supervisor not giving evaluative feedback, e) Supervisor not allocating enough time, f) Distraction of the supervisor g) Features such as the supervisor being cold and distant are listed. In the damaging supervision process, there are behaviors such as physically and sexually inappropriate behaviors, violating professional boundaries, and emotionally abusing the person. Negative supervision experiences decrease the perceived level of supervisory working alliance.

In a study conducted by Ramos-Sanchez et al. (2002), the negative experiences identified by the supervisees that decreased supervisory working alliance were grouped under four categories. These categories were relational characteristics including judgmental and critical attitudes of the supervisor, characteristics related to duties and responsibilities including elements such as the supervisor not allocating enough time or not being helpful, characteristics related to conceptualization and theoretical orientation including case conceptualization, interventions and treatment planning, and ethical, legal, and multicultural issues.

# 7. The Effects of Supervisory Working Alliance on the Supervisee

# 7.1. Supervision Satisfaction

A supervision process carried out in harmony increases the satisfaction levels of supervisees (Park et al., 2018). Supervision satisfaction refers to the general perception of the quality of the supervision process, its contribution to professional development, and the level of fulfillment of needs (Crockett & Hays, 2015). In the literature, there are several studies examining the relationship between supervisory working alliance and satisfaction. Ladany et al. (1999) examined the effects of working rapport on supervision satisfaction and counseling self-efficacy and found that only the emotional bond dimension of working alliance positively predicted supervision satisfaction but had no significant effect on self-efficacy.

In another study, the effects of ethical practices of supervisors on supervisory working alliance and supervision satisfaction were examined (Ladany et al., 1999). The findings revealed that supervisors' acting in accordance with ethical rules increased supervisees' perceived supervisory working alliance and supervision satisfaction. Crockett and Hays (2015) examined the effect of supervisor's multicultural competence and supervisory working alliance on supervision satisfaction and counseling self-efficacy and found that supervisory working alliance positively affected supervisees' perceived supervision satisfaction. In a cross-cultural study conducted in South Korea and the United States of America (USA), Son et al. (2007) found that supervisory working alliance perceived by US students was more effective on supervision satisfaction compared to South Korean students.

# 7.2. Self-Disclosure of the Supervisee

Supervisees are expected to express themselves about both counseling and supervision processes to benefit from the supervision process (Muse-Burke et al., 2001). As in the counseling relationship, self-disclosure behavior in the supervision process is possible with a relationship based on trust and cooperation. When the supervisory working alliance is not sufficiently developed, supervisees may not want to talk about personal issues or issues related to counseling and supervision processes. Although this may sometimes be due to personality traits or cultural elements (e.g., Hutman, 2015), research draws attention to the importance of supervisory working alliance. In a qualitative study conducted by Hess et al. (2008), those who had a good relationship with their supervisor avoided disclosing themselves mostly because of their personal issues, while those who were dissatisfied with the supervision relationship did not disclose themselves because of the quality of the relationship. In Ladany et al.'s (1996) study, 97% of the supervisees did not disclose themselves and the reasons for this were found to be poor supervisory working alliance. Self-disclosure or hiding behaviors were observed in the following areas: negative reactions towards the supervisor, personal issues, clinical errors, anxiety about being evaluated, observations about the client, negative reactions towards the client, countertransference, client-psychological counselor attraction, positive reactions towards the supervisor, supervisor's appearance, supervision environment and positive reactions towards the client. In the literature, there are different studies with similar findings (Cook & Welfare, 2018; Gibson, 2017; Hess-Holden, 2019; Ladany et al., 2013; Li, 2019; Meydan, 2020; Ofek, 2013; Powell, 2019).

# 7.3. Counseling Process and Self-Efficacy Level of the Supervisee

A harmonious supervision relationship positively affects the learning experiences of the supervisees and the counseling process. A qualified supervision reduces role conflicts and anxiety levels of supervisees (Friedlander et al., 1986). In addition, it supports their level of competence in counseling skills (Lambert & Ogles, 1997), self-efficacy (Marmarosh et al., 2013), and therapeutic working alliance with their clients (Park et al., 2019).

In the international literature, there are studies examining the relationship between supervisory working alliance and the counseling process of supervisees. Patton and Kivlighan (1997) conducted a study with counselor candidates and observed that supervisory working alliance perceived by candidates positively predicted therapeutic working alliance perceived by clients. In another study, the relationships between the supervision relationship and counselors' therapeutic success and therapeutic relationship were examined (Bell et al., 2016). The findings showed that the perceived supervision relationship positively affected the level of recovery in clients, in other words, the therapeutic success of supervisees. Gerstenblith, Kline, Hill, and Kivlighan (2022) examined the effects of supervisory working alliance perceived by supervisor and supervisee counselor trainees on counselor trainees' therapeutic working alliance and clients' session satisfaction. In the study in which they examined the 663-

week therapy processes of 15 supervisors and 28 counselor trainees, when the supervisory working alliance perceived by the counselor trainees was high, the therapeutic working alliance in their clients was also high. On the other hand, high supervisory working alliance perceived by the supervisors positively predicted only the session success of the counselor trainees.

In Denizli's study (2010), the effect of supervision effectiveness on counselor candidates' therapeutic working alliance, counseling skills and session effectiveness perceived by clients was examined. According to the findings, supervision effectiveness did not significantly predict therapeutic working alliance and counseling skills effectiveness. In another study, the effects of supervisor roles and styles and supervisory working alliance on counseling self-efficacy of counselor trainees were examined (Sarıkaya, 2017). The results showed that supervisory working alliance positively predicted counseling selfefficacy.

# 8. Alliance Rupture and Repair in Supervisory Relationship

Conflicts in the supervision relationship may manifest themselves explicitly or implicitly and lead to a deterioration in working alliance. Disruption in supervisory working alliance is defined as "difficulties that negatively affect the quality of interaction between supervisor and supervisee" (Watkins et al., 2016). Bernard and Goodyear (2019) attribute the deterioration of supervisory working alliance to three main reasons: a) mismatch of expectations and miscommunication; b) developmental conflicts; and c) problems in interpersonal dynamics. There are occasional breakdowns in supervisory working alliance; however, the supervisor should recognize this situation and intervene to repair it (Watkins et al., 2016).

According to Bernard and Goodyear's (2019) categorization, the first factor that leads to a breakdown in rapport is mismatched expectations and miscommunication. The supervisors' evaluation role can make the supervisory relationship prone to conflicts. At this point, it is recommended that supervisors should structure the evaluation criteria and the functioning of the process and clearly define the expectations and developmental level of the supervisee. Safran and Muran (2000) mention two types of intervention methods, direct and indirect interventions, in the face of deterioration caused by misunderstandings. In direct interventions, conflicts or misunderstandings in communication are discussed directly. Indirect interventions, on the other hand, involve changing the tasks and goals that cause conflict rather than addressing conflicts directly. However, researchers state that direct interventions are more effective.

Developmental conflicts are another factor that causes deterioration in supervisory working alliance. It is stated that developmental conflicts are more common in counselors who practice at an advanced level. During this period, efforts to become autonomous and to determine a personal style as a counselor may lead to conflict with the supervisor (Rønnestad & Skovholt, 1993). The last factor that disrupts working alliance is interpersonal dynamics. These conflicts are considered in two types: confrontation and withdrawal. In the case of confrontation, the supervisee reflects his/her anger or unhappiness directly to the supervisor; in the case of withdrawal, the supervisee does not fulfill his/her responsibilities or does not participate in the process. In this case, it is suggested that the supervisor should recognize the maladaptive communication patterns and encourage the person to talk about the relationship and openly share their own feelings and thoughts about the situation.

The intervention methods suggested by Safran, Muran, Stevens, and Rothman (2008) in cases where the therapeutic working alliance is disrupted can also be considered for the supervision process. The researchers suggest a five-step intervention process. The first step is to identify the indicators that point to the deterioration in working alliance. Deterioration in working alliance is manifested by the supervisee's direct reflection of anger and unhappiness or detachment from the process. In such a situation, if the supervisor displays a defensive attitude, he/she may act in accordance with the supervisee's expectations and drag the relationship to a dead end. The second step is expressed as breaking the vicious cycles in the relationship. After discovering the repetitive patterns that harm the relationship, the supervisor should talk to the other party about the relationship. In doing so, he/she should prevent the other party from feeling guilty by opening about his/her own feelings and behaviors that caused the situation. The third step is to explore the supervisee's cognitive configuration of the situation. By focusing on the here and now, the person's interpretations of the negative situations in the relationship are revealed. In this way, the supervisee is modeled in addressing the impasses they experience with clients or people in their social environment. The fourth step in the interventions is to avoid vulnerability and anger. Focusing on the impasse in the relationship may make it difficult to disclose the underlying emotions due to anxiety. Therefore, the parties need to establish a communication focused on the here and now. In addition, the supervisee should be allowed to explore his/ her anxiety and underlying feelings about the situation. The last step towards restoring working rapport is the expression of needs and wishes. The supervisee may find it difficult to express their needs, thinking that they are difficult or impossible to meet. The supervisor should allow the person to express his/her needs and wishes by showing a supportive and accepting approach.

Watkins (2021), on the other hand, explains the process of repairing supervisory working alliance with the pyramid model. According to the order from the bottom to the top of the pyramid: 1) Observing/Detecting, 2) Identifying/ Defining, 3) Exploring (Exploring/Elaborating), 4) Discussing (Discussing/ Processing), 5) Acting/Intervening and 6) He defined a 6-step process called Reviewing/Analyzing. In the first step, the supervisor observes the behaviors that disrupt working alliance. While disruptions due to confrontation are noticed immediately, disruptions due to withdrawal are noticed over time. At this point, it is important for the supervisor to skillfully follow the communication patterns in the process. The second step is for the supervisor to address and identify the situations that disrupt the dynamic of the relationship. Following this, the supervisor should try to understand the situation thoroughly and discover the dynamics that lead to the breakdown. He/she should learn which of his/her behaviors anger the supervisee or cause him/her to withdraw from the process. In the fourth stage, the situations that cause deterioration in the supervisory working alliance should be discussed with the supervisee and discussed in detail. The situations discussed in detail should continue with some interventions of the supervisor (e.g. apologizing, etc.) and in the last stage, the dynamics that disrupt the supervisory working alliance and the steps to repair it should be reviewed together with the supervisee. In the last stage, it is important for the supervisor to consider the effects of the interventions on the supervisee and what could be done differently to make progress. If the interventions did not work, it is recommended to go back to the discussion stage and clearly identify the needs.

#### 9. Conclusion

This study presents a review of empirical research and theoretical explanations on supervisor feedback and supervisory working alliance. Literature shows that supervisory working alliance and supervisor feedback are the main factors that are effective in achieving the purpose of supervision (Erkan Atik, 2017; Fickling et al, 2017; Ladany et al, 1999; Ladany et al, 2001; Marmarosh et al, 2013; Meydan, 2019; Pamukçu et al, 2022; Watkins, 2013; Watkins, 2014;

Worthington & Roehlke, 1979). A quality supervision relationship and effective supervisor feedback support the professional development of supervisees and increase their satisfaction with the supervision process (Bell et al., 2016; Daniels & Larson, 2001; Gerstenblith et al., 2022; Patton & Kivlighan, 1997; Worthington & Roehlke, 1979). There are some common points in the suggestions for effective supervisor feedback and improving supervisory working alliance. It is important for supervisors to consider the developmental characteristics of the supervisee, to follow the path in line with the determined goals and tasks, to contribute to the autonomization of the supervisee, to be as supportive as possible but confrontational where necessary, and to share their own experiences in terms of the effectiveness of feedback and the development of supervisory working alliance.

In the supervision relationship model defined by Beinart (2014, pp. 257-281), it is stated that supervisor feedback is an important dimension of the supervision relationship. Beinart (2014) suggests a relationship model in which positive and negative feedback are balanced and the supervisee can give feedback to the supervisor. In addition, he bases the maintenance of a qualified supervision relationship on two main points: making a supervision contract and learning to give and receive feedback. At this point, it can be said that Bordin (1983) has a parallel view with the dimensions of goals, tasks, and emotional bond in his model of supervisory working alliance. Examining the related literature, it is seen that effective supervisor feedback supports supervisory working alliance. For example, among the supervisory styles defined as the general approach of the supervisor in giving feedback and communication, sensitive and attractive style in interpersonal relations positively affects the bonding dimension of working rapport, while task-oriented style positively affects the tasks dimension of supervisory working alliance (Chen & Bernstein, 2000; Ladany et al., 2001).

In addition, negative supervision experiences are mentioned among the factors that disrupt supervisory working alliance. The supervisor's behaviors such as not structuring the process well, humiliating the supervisee in front of his/her peers, showing an authoritarian or indifferent attitude (Friedlander & Nelson, 2001; Wulf & Nelson, 2000), being critical and judgmental, not spending enough time with the individual (Ramos-Sanchez, 2002) were expressed as negative experiences by the supervisees. Supervisor behaviors such as being judgmental, humiliating, authoritarian, and not spending enough time with the individual prevent feedback from being effective (Campbell, 2005; Freeman, 1985). Therefore, the quality of feedback has an impact on supervisory working

alliance. Supervisory working alliance can be disrupted for many different reasons. Supervisors are recommended to handle conflicts openly and honestly with an empathic approach while intervening to repair the working alliance (Bernard & Goodyear, 2019; Safran et al., 2008). The supervisor's receiving feedback on his/her own behavior by allowing the supervisee to express his/her feelings, expectations and needs facilitates the healthy resolution of conflicts. In this case, it is seen that the supervisor's effective use of feedback is effective in re-establishing supervisory working alliance.

In a supervision process in which the supervisor provides effective feedback and supervisory working alliance develops, counselors' counseling skills improve and their therapeutic working alliance with their client's increases (Gerstenblith et al., 2022; Patton & Kivlighan, 1997; Worthington & Roehlke, 1979). In addition, they open themselves more comfortably during the supervision process and do not perceive the feedback they receive from their supervisors as a threat. In this context, the competence of supervisors also comes to the fore. Clinical supervisors are expected to be competent and experienced (ACA, 2014). It is important for supervisors to have a good command of supervision methods and techniques, dynamics in the supervision process, ethical rules, organization of supervision, therapeutic knowledge and skills, personal and developmental characteristics of the supervisee, assessment processes, and supervision record in order to provide effective feedback and establish a qualified supervision relationship [Association for Counselor Education and Supervision (ACES), 1990; Bernard & Goodyear, 2019]. While in many Western countries, especially in the United States, there are specialization fields such as supervision or counselor education, there is no such field in Turkey yet. In addition, in countries such as the USA, supervision has an important place in professional practice after graduate education. In Turkey, supervision is mostly offered during undergraduate and graduate level. It is known that not all academics who work as supervisors receive training on supervision methods and techniques during their undergraduate level or after graduation, and supervision is mostly carried out based on master-apprentice relationship (Aladağ & Kemer, 2016). In addition, it is observed that trainings on supervision and practices carried out with supervision after graduation are generally included in private psychotherapy trainings (Koçyiğit Özyiğit & İşleyen, 2016). To train qualified supervisors and indirectly psychological counselors, there is a need for a separate specialization called "counselor training and supervision". However, the undergraduate and graduate level Individual Counseling Practice course is not conducted in a standardized manner in Turkey. It is important to standardize the Individual Counseling Practice course by determining the general structure of the supervision process and the competencies that supervisors should have.

In Turkey, recent attempts to improve supervisor skills are noteworthy. For example, in Aladağ's (2021) project titled "Supervisor Training in the Field of Counseling", supervisor skills training was provided for academics in the field of Counseling and Guidance in Turkey. In Meydan's (2023) "Understanding and Contributing to Effective Supervisor Feedback in Counselor Training in Turkey: A Research and Development Project", it is aimed to increase the effective feedback skills of supervisor academicians through a web-based training program. However, there is still a need for different studies to be conducted to improve the supervision skills of counselor educators. According to the Council for Accreditation of Counseling and Related Educational Programs (CACREP) standards, faculty supervisors are expected to have completed the necessary training on supervision methods and techniques. In addition, in counseling doctoral education programs, it is aimed to train counselor trainees to be able to supervise after graduation. In this respect, the addition of a theoretical and practical course called "supervision methods and techniques" to the doctoral education programs in counseling and guidance in Turkey will fill the gap in providing supervision skills to academicians and counselors working in the field.

#### References

Association for Counselor Education and Supervision (1990). Standards for counseling supervisors. *Journal of Counseling & Development*, 69(1), 30-32.

Aladağ, M. (2014). Psikolojik Danışman eğitiminin farklı düzeylerinde bireyle psikolojik danışma uygulaması süpervizyonunda kritik olaylar. *Ege Eğitim Dergisi*, 15(2), 428–475. doi: 10.12984/eed.82217

Aladağ, M. (2021). Psikolojik Danışma Alanında Süpervizör Eğitimi. (TÜBİTAK-2237 Project Number: 1129B372000063).

Aladağ, M., & Kemer, G. (2016). Clinical supervision: An emerging counseling specialty in Turkey. *The Clinical Supervisor*, *35*(2), 175-191.

American Counseling Association (2014). ACA code of ethics. Alexandria Atik, Z. (2017). Psikolojik danışman adaylarının bireyle psikolojik danışma uygulaması ve süpervizyonuna ilişkin değerlendirmeleri. Yayınlanmamış Doktora Tezi, Hacettepe Üniversitesi, Ankara.

Beinart, H. (2014). Building and sustaining the supervisory relationship. CE. Watkins Jr. (Ed.) In Wiley international handbook of clinical supervision, (pp. 257-281). Wiley.

Bell, H., Hagedorn, W. B., & Robinson, E. M. (2016). An exploration of supervisory and therapeutic relationships and client outcomes. Counselor Education and Supervision, 55(3), 182-197. https://doi.org/10.1002/ceas.12044

Berger, S. S. ve Buchholz, E. S. (1993). On becoming a supervisee: Preparation for learning in a supervisory relationship. Psychotherapy: Theory, Research, Practice, Training, 30(1), 86. doi: 10.1037/0033-3204.30.1.86

Bernard, J. M. (1979). Supervision training: A discrimination model. Counselor Education and Supervision, 19, 60-68 https://doi. org/10.1002/j.1556-6978.1979.tb00906.x

Bernard, J. M., & Goodyear, R. K. (2019). Fundamentals of clinical supervision (Pearson new international ed). Pearson.

Borders, L. D., Welfare, L. E., Sackett, C. R., & Cashwell, C. (2017). New supervisors' struggles and successes with corrective feedback. Counselor Education and Supervision, 56(3), 208-224. doi:10.1002/ceas.12073

Bordin, E. S. (1979). The generalizability of the psychoanalytic concept of the working alliance. Psychotherapy: Theory, Research, and Practice, 16, 252-260. doi: 10.1037/h0085885

Bordin, E. S. (1983). A working alliance model of supervision. The Counseling Psychologist, 11, 35-42. doi: 10.1177%2F0011000083111007

Campbell, J. M. (2005). Essentials of clinical supervision. John Wiley & Sons.

Carifio, M. S., & Hess, A. K. (1987). Who is the ideal supervisor? Professional Psychology: Research and Practice, 18(3), 244-250. doi: 10.1037/0735-7028.18.3.244

Carlson, K. W. (1974). Increasing verbal empathy as a function of feedback and instruction. Counselor Education and Supervision, 13(3), 208-213. Doi:10.1002/j.1556-6978.1974.tb01955.x

Chen, E. C., & Bernstein, B. L. (2000). Relations of complementarity and supervisory issues to supervisory working alliance: A comparative analysis of two cases. Journal of Counseling Psychology, 47, 485–497. https://psycnet.apa. org/doi/10.1037/0022-0167.47.4.485

Claiborn, C. D, Etringer, B. D., & Hillerbrand, E. T. (1995). Influence processes in supervision. Counselor Education and Supervision, 35(1), 43-53. doi: 10.1002/j.1556-6978.1995.tb00208.x

Cook, R. M., & Welfare, L. E. (2018). Examining predictors of counselor-intraining intentional nondisclosure. *Counselor Education and Supervision*, *57*(3), 211-226. doi: 10.1002/ceas.12111

Council for Accreditation of Counseling and Related Educational Programs (2024). CACREP Standards. https://www.cacrep.org/wp-content/uploads/2023/06/2024-Standards-Combined-Version-6.27.23.pdf

Crockett, S., & Hays, D. G. (2015). The influence of supervisor multicultural competence on the supervisory working alliance, supervisee counseling self-efficacy, and supervisee satisfaction with supervision: A mediation model. *Counselor Education and Supervision*, *54*(4), 258-273. doi: 10.1002/ceas.12025

Daniels, J. A., & Larson, L. M. (2001). The impact of performance feedback on counseling self-efficacy and counselor anxiety. *Counselor Education and Supervision*, 41(2), 120–130. doi:10.1002/j.1556-6978.2001.tb01276.x

Denizli, S. (2010). Danışanların algıladıkları terapötik çalışma uyumu ve oturum etkisi düzeylerinin bazı değişkenlere göre yordanması: Ege Üniversitesi örneği. Yayınlanmamış Doktora Tezi, Ege Üniversitesi, İzmir.

Dickson, J. M., Moberly, N. J., Marshall, Y., & Reilly, J. (2011). Attachment style and its relationship to working alliance in the supervision of British clinical psychology trainees. *Clinical Psychology & Psychotherapy*, *18*(4), 322-330. doi: 10.1002/cpp.715

Ellis, M. V. (2001). Harmful supervision, a cause for alarm: Commentary on Nelson & Friedlander (2001) and Gray et al. (2001). *Journal of Counseling Psychology*, 48, 401-406. doi:10.1037/0022-0167.48.4.401

Ellis, M. V., Hutman, H., & Chapin, J. (2015). Reducing supervisee anxiety: Effects of a role induction intervention for clinical supervision. *Journal of Counseling Psychology*, 62(4), 608. doi: 10.1037/cou0000099

Erbaş, M. M, Koç, İ., & Esen, E. (2019). Psikolojik danışman adaylarının süpervizyon sürecine ilişkin görüşlerinin incelenmesi: Manisa Celal Bayar Üniversitesi örneği. *Mehmet Akif Ersoy Üniversitesi Eğitim Fakültesi Dergisi*, (53), 183-205. doi: 10.21764/maeuefd.607215

Fickling, M. J., Borders, L. D., Mobley, K. A., & Wester, K. (2017). Most and least helpful events in three supervision modalities. *Counselor Education and Supervision*, *56*(4), *289–304*. doi:10.1002/ceas.12086

Fleming, J., & Benedek, T. F. (1964). Supervision. A method of teaching psychoanalysis. *The Psychoanalytic Quarterly*, 33, 71–96. doi: 10.1080/21674086.1964.11926302

Foster, J. T., Heinen, A. D., Lichtenberg, J. W., & Gomez, A. D. (2006). Supervisor attachment as a predictor of developmental ratings of supervisees. American Journal of Psychological Research, 2, 28–39.

Frawley-O'Dea, M. G., & Sarnat, J. E. (2001). The supervisory relationship: A contemporary psychodynamic approach. Guilford Press.

Freeman, E. M. (1985). The importance of feedback in clinical supervision: Implications for direct practice. The Clinical Supervisor, 3(1), 5-26.

Friedlander, M. L., & Ward L. G. (1984). Development and validation of the Supervisory Styles Inventory, Journal of Counseling Psychology, 4, 541-557. doi: 10.1037/0022-0167.31.4.541

Friedlander, M. L., Keller, K. E., Peca-Baker, T. A., & Olk, M. E. (1986). Effects of role conflict on counselor trainees' self-statements, anxiety level, and performance. Journal of Counseling Psychology, 33(1), 73. doi: 10.1037/0022-0167.33.1.73

Gerstenblith, J. A., Kline, K. V., Hill, C. E., & Kivlighan, D. M. (2022). The triadic effect: Associations among the supervisory working alliance, therapeutic working alliance, and therapy session evaluation. Journal of Counseling Psychology, 69(2), 199-210. doi: 10.1037/cou0000567

Gibson, A. S. (2017). Supervisee nondisclosure: Is it predicted by the supervisory working alliance, collaborative supervision, and relational behavior? (UMI No. 10599637). Unpublished doctoral dissertation.

Gnilka, P., Chang, C., & Dew, B. J. (2012). The relationship between supervisee stress, coping resources, the working alliance, and the supervisory working alliance. Journal of Counseling & Development, 90, 63-70. doi: 10.1111/j.1556-6676.2012.00009.x

Hess, S.A., Knox, S., Schultz, J. M., Hill, C. E., Sloan, L., Brandt, S., ... & Hoffman, M. A. (2008). Predoctoral interns' nondisclosure supervision. *Psychotherapy* 400-411. doi: Research, 18(4), in 10.1080/10503300701697505

Hess Holden, C. (2019). Predictors of supervisee self-disclosure within the supervisory relationship. Journal of Counseling Research and Practice, 4(1), 5.

Hoffman, M. A., Hill, C. E., Holmes, S. E., & Freitas, G. F. (2005). Supervisor perspective on the process and outcome of giving easy, difficult, or no feedback to supervisees. Journal of Counseling Psychology, 52(1), 3.

Horrocks, S. & Smaby, MH. (2006). The supervisory relationship: Its impact on trainee personal and skills development. Compelling perspectives on counselling: VISTAS, 173, 176.

Hutman, H. (2015). Supervisee nondisclosure: Do supervisors' multicultural competence and the supervisory working alliance matter?(UMI No. 3736285). (Doctoral dissertation), https://search.proquest.com/docview/1752396026?accountid=1575

Karpenko, V. & Gidycz, CA. (2012). The supervisory relationship and the process of evaluation: Recommendations for supervisors. *The Clinical Supervisor*, *31*(2), 138-158. doi: 10.1080/07325223.2013.730014

Kennard, B. D., Stewart, S. M., & Gluck, M. R. (1987). The supervision relationship: Variables contributing to positive versus negative experiences. *Professional Psychology: Research and Practice*, *18*(2), 172. doi: 10.1037/0735-7028.18.2.172

Ladany, N. & Friedlander, ML. (1995). The relationship between the supervisory working alliance and trainees' experience of role conflict and role ambiguity. *Counselor Education and Supervision*, *34*(3), 220-231. doi: 10.1002/j.1556-6978.1995.tb00244.x

Ladany, N. & Lehrman-Waterman, DE. (1999). The content and frequency of supervisor self-disclosures and their relationship to supervisor style and the supervisory working alliance. *Counselor Education and Supervision*, 38(3), 143-160. doi: 10.1002/j.1556-6978.1999.tb00567.x

Ladany, N., Hill, C. E., Corbett, M. M., & Nutt, E. A. (1996). Nature, extent, and importance of what psychotherapy trainees do not disclose to their supervisors. *Journal of Counseling Psychology*, 43(1), 10. doi: 10.1037/0022-0167.43.1.10

Ladany, N., Lehrman-Waterman, D., Molinaro, M., & Wolgast, B. (1999). Psychotherapy supervisor ethical practices: Adherence to guidelines, the supervisory working alliance, and supervisee satisfaction. *The Counseling Psychologist*, *27*, 443–475. doi: .1177%2F0011000099273008

Ladany, N., Mori, Y., & Mehr, K. E. (2013). Effective and ineffective supervision. *The Counseling Psychologist*, 41(1), 28-47. https://doi.org/10.1177%2F0011000012442648

Ladany, N., ve Melincoff, D. S. (1999). The nature of counselor supervisor nondisclosure. *Counselor Education and Supervision*, 38, 161–176

Ladany, N., Walker, J. A. ve Melincoff, D. S. (2001). Supervisory style: Its relation to the supervisory working alliance and supervisor self-disclosure. *Counselor Education and Supervision*, 40(4), 263-275. doi: 10.1002/j.1556-6978.2001.tb01259.x

Lambert, M. & Ogles, B. (1997). The effectiveness of psychotherapy supervision. In E. C. Watkins Jr. (Ed.), Handbook of psychotherapy supervision (pp. 421-446). New York: Wiley

Li, C. (2019). The effects of supervisory style and supervisory working alliance on supervisee disclosure in supervision: A moderated mediation analysis (UMI No. 13856415). (Doctoral dissertation). https://search.proquest. com/docview/2247988289?accountid=1575

Marmarosh, CL, Nikityn, M., Moehringer, J., Ferraioli, L., Kahn, S., Cerkevich, A., & Reisch, E. (2013). Adult attachment, attachment to the supervisor, and the supervisory alliance: How they relate to novice therapists' perceived counseling self-efficacy. Psychotherapy, 50(2), 178. doi: 10.1037/ a0033028

McKibben, W. B., Borders, L. D., & Wahesh, E. (2019). Factors influencing supervisee perceptions of critical feedback validity. Counselor Education and Supervision, 58(4), 242-256.

Mehr, K. E., & Daltry, R. M. (2022). Supervisor self-disclosure, the supervisory alliance, and trainee willingness to disclose. Professional Psychology: Research and Practice, 53(3), 313-317. doi: 10.1037/pro0000424

Mehr, K. E, Ladany, N., & Caskie, G. I. L. (2010). Trainee nondisclosure in supervision: What are they not telling you? Counseling and Psychotherapy Research, 10(20), 103-113. doi: 10.1080/14733141003712301

Meydan, B. (2019). Facilitative and hindering factors regarding the supervisory relationship based on supervisors' and undergraduate supervisees'. Pegem Journal of Education and Instruction, 9(1), 171-208. doi: 10.14527/pegegog.2019.007

Meydan, B. (2020). Turkish first-time supervisees' disclosure and nondisclosure in clinical supervision. Qualitative Research in Education, 9(1), 1-31. doi: 10.17583/gre.2020.4304

Meydan, B. Türkiye'de Psikolojik Danışman Eğitiminde Etkili Süpervizör Geri Bildirimi ve Güçlendirilmesi: Bir Araştırma ve Geliştirme Projesi. Project Number: 121K877.

Meydan, B. & Denizli, S. (2018). Turkish Undergraduate Supervisees' Views Regarding Supervisory Relationship. Eurasian Journal of Educational Research, 74, 1-23.

Meydan, B., & Sağkal, A. S. (2022). Süpervizyon Çalışma Uyumu Envanteri Kısa Formu'nun (SÇUE-KF) Türkçeye uyarlanması: Geçerlik ve güvenirlik çalışması. Batı Anadolu Eğitim Bilimleri Dergisi, 13(2), 856-870.

Motley, V., Reese, M. K., & Campos, P. (2014). Evaluating corrective feedback self-efficacy changes among counselor educators and site supervisors. *Counselor Education and Supervision*, 53(1), 34–46. doi:10.1002/j.1556-6978.2014.00047.x

Muse-Burke, J. L., Ladany, N., & Deck, M. D. (2001). *The supervisory relationship*. In L. J. Bradley & N. Ladany (Eds.), *Counselor supervision: Principles, process, and practice* (p. 28–62). Brunner-Routledge.

Norcross, J. C., & Popper, L. M. (2017). Key principles. In *Supervision essentials for integrative psychotherapy*. (pp. 27-63). American Psychological Association. doi: 10.1037/15967-000

Ofek, A. (2013). *The supervisory alliance and trainee disclosure of clinically relevant events i supervision* (UMI No. 3565339). (Doctoral dissertation). https://search.proquest.com/docview/1413310577?accountid=1572

Pamukçu, B., Meydan, B., Koçyiğit Özyiğit, M., Pehlivan, Y., & Akkaya, M. S. (2023). Psikolojik danışman eğitiminde süpervizör geri bildirimi. *Anadolu Üniversitesi Eğitim Fakültesi Dergisi* (AUJEF), 7(1), 202-226.

Park, E. H., Ha, G., Lee, S., Lee, Y. Y., & Lee, S. M. (2019). Relationship between the supervisory working alliance and outcomes: A Meta-Analysis. *Journal of Counseling & Development*, 97(4), 437-446. doi:10.1002/jcad.12292

Patton, M. & Kivlighan, D. (1997). Relevance of the supervisory alliance to the counseling alliance and to treatment adherence in counselor training. *Journal of Counseling Psychology*, 44, 149-154. doi: 10.1037/0022-0167.44.1.108

Pearson, Q. M. (2000). Opportunities and challenges in the supervisory relationship: Implications for counselor supervision. *Journal of Mental Health Counseling*, 22(4).

Pistole, M. C. & Watkins, C. E. (1995). Attachment theory, counseling process, and supervision. *The Counseling Psychologist*, 23, 457–478. doi: 10.1177%2F0011000095233004

Powell, J. M. (2019). *Counseling student interns' attributes, supervisory working alliance, role ambiguity, and nondisclosure in clinical supervision* (UMI No. 22588065). (Doctoral dissertation). https://search.proquest.com/docview/2311757463?accountid=1572

Ramos-Sánchez, L., Esnil, E., Goodwin, A., Riggs, S., Touster, L. O., Wright, LK ..., & Rodolfa, E. (2002). Negative supervisory events: Effects on supervision and supervisory alliance. *Professional Psychology: Research and Practice*, *33*(2), 197.

Riggs, S. A. & Bretz, K. M. (2006). Attachment processes in the supervisory relationship: An exploratory investigation. Professional Psychology: Research and Practice, 37(5), 558. doi: 10.1037/0735-7028.37.5.558

Rogers, J. L., Luke, M., Gilbride, D. D., & Goodrich, K. M. (2019). Supervisee attachment, cognitive distortions, and difficulty with corrective feedback. Counselor Education and Supervision, 58(1), 18-32.

Rønnestad, M. H. & Skovholt, T. M. (1993). Supervision of beginning and advanced graduate students of counseling and psychotherapy. Journal of Counseling & Development, 71(4), 396-405. doi: 10.1002/j.1556-6676.1993. tb02655.x

Rønnestad, M. H. & Skovholt, T. M. (2003). The journey of the counselor and therapist: Research findings and perspectives on professional development. Journal of Career Development, 30(1), 5-44.

Safran, J. D. & Muran, J. C. (2000). Resolving therapeutic alliance ruptures: Diversity and integration. Journal of Clinical Psychology: In Session: Psychotherapy in Practice, 56, 233–243.

Safran, J. D., Muran, J. C., Stevens, C., & Rothman, M. (2008). A relational approach to supervision: Addressing ruptures in the alliance. In C. A. Falender & E. P. Shafranske (Eds.). Casebook for clinical supervision: A competency based approach (pp. 137-157). American Psychological Association.

Sarıkaya, Y. (2017). Süpervizör rolleri, tarzları ve süpervizyon terapötik ittifakının psikolojik danışma öz yeterliği ile ilişkisi. Yayımlanmamış doktora tezi, Gaziosmanpaşa Üniversitesi, Tokat.

Satıcı, B. (2014). Psikolojik danışman adaylarının psikolojik danışma öz-yeterlik algılarının mizah tarzları ve süpervizyon yaşantıları açısından incelenmesi. Yayımlanmamış Yüksek Lisans Tezi, Anadolu Üniversitesi, Eskişehir.

Skovholt, T. M. & Rønnestad, M. H. (2003). The hope and promise of career life-span counselor and therapist development. Journal of Career Development, 30(1), 1-3.

Sohn, N. H. (2009). Effects of self-enhancement bias on perception of supervisory feedback in counseling. Psychological Reports, doi:10.2466/ pr0.105.f.1269-1280

Son, E. J., Ellis, M. V., & Yoo, S.K. (2007). The relations among supervisory working alliance, role difficulties, and supervision satisfaction: A crosscultural comparison. Korean Journal of Psychology, 26, 161-162.

Stoltenberg, C. D. & McNeill, B. W. (2010). *IDM supervision: An integrative developmental model for supervising counselors and therapists.* Routledge.

Strong, S. R. (1968). Counseling: An interpersonal influence process. *Journal of Counseling Psychology, 15*, 215–224 doi: 10.1037/h0020229

Sumerel, M. B. & Borders, L. D. (1996). Addressing personal issues in supervision: Impact of counselors' experience level on various aspects of the supervisory relationship. *Counselor Education and Supervision*, *35*, 268-286.

Bennett, C. (2008). The interface of attachment, transference, and countertransference: Implications for the clinical supervisory relationship. *Smith College Studies in Social Work*, 78(2-3), 301-320. doi: 10.1080/00377310802114635

Tangen, J. L. & Borders, D. (2016). The supervisory relationship: A conceptual and psychometric review of measures. *Counselor Education and Supervision*, 55(3), 159-181. doi: 10.1002/ceas.12043

Watkins, C. E. (2021). Rupture and rupture repair in clinical supervision: some thoughts and steps along the way. *The Clinical Supervisor*, 40(2), 321-344.

Watkins, C. E. (2014). The supervisory alliance: A half century of theory, practice, and research in critical perspective. *American Journal of Psychotherapy*, 68(1), 19-55.

Watkins, C. E., Hook, C., Ramaeker, J. N., & Ramos, M.J. (2016). Repairing the ruptured supervisory alliance: Humility as a foundational virtue in clinical supervision. *The Clinical Supervisor*, *35*(1), 22-41. doi: 10.1080/07325223.2015.1127190

Watkins, C. E. (2013). The supervisory alliance as quintessential integrative variable. *Journal of Contemporary Psychotherapy*, 44(3), 151-161.

Webb, A. & Wheeler, S. (1998). How honest do counsellors dare to be in the supervisory relationship?: An exploratory study. *British Journal of Guidance and Counselling*, 26(4), 509-524. doi: 10.1080/03069889808253860

White, V. E. & Queener, J. (2003). Supervisor and supervisee attachments and social provisions related to the supervisory working alliance. *Counselor Education and Supervision*, 42, 203–218. doi: 10.1002/j.1556-6978.2003. tb01812.x

Worthington, E. L. & Roehlke, H. J. (1979). Effective supervision as perceived by beginning counselors-in-training. *Journal of Counseling Psychology*, 26(1), 64.

Worthington, E. L. & Stern, A. (1985). Effects of supervisor and supervisee degree level and gender on the supervisory relationship. Journal of Counseling Psychology, 32(2), 252. doi: 10.1037/0022-0167.32.2.252

Yourman, D. B. (2003). Trainee disclosure in psychotherapy supervision: The impact of shame. Journal of Clinical Psychology, 59(5), 601-609. doi: 10.1002/jclp.10162

# CHAPTER V

# AN OVERVIEW OF EARLY CHILDHOOD EDUCATION AND IMMERSIVE MEDIA APPLICATIONS

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#### 1. Introduction

The earlychildhood period is the period that covers the first six years of childhood and is the period of rapid growth and development. In this period, environmental factors play a very important role in paving the way for the child to realize their own potential and be productive. What and how much the child can learn, how much he can discover, and how fast he can learn is related to the supportive effect of the environment. Earlychildhood education, on the other hand, provides this support to children by taking into account their individual differences, children's interests, needs and environmental opportunities. The experiences that children have in their early lives are of great importance for them to grow and develop in a healthy way and to develop positive attitudes towards learning. Qualified and rich environmental stimuli given in preschool education have a positive effect on early life experiences. Earlychildhood education has an important place for the multi-faceted development of the child in this period, which starts from the moment the child is born and covers the first six years of his life, and has a great role in shaping his future life (MEB, 2013), (Vural & Kocabaş, 2016).

Earlychildhood education is considered as the beginning of primary education and it is known that it has positive contributions to the development of the child with the effect of environmental stimuli. It is seen that the behaviors, competencies and knowledge acquired during this period *shape the "personality, attitude, habits, beliefs and value judgments" of the* child in his future life.

An effective earlychildhood education needs an environment where children are supported in terms of physical, social, emotional, mental and life skills (Gecu-Parmaksız & Delialioğlu, 2020). This period is the period when brain development is experienced most intensely and rapidly, which forms a strong basis for the cognitive, language, motor, social and emotional development of the child. In the earlychildhood period, children grow very fast and rapid competencies in developmental areas enable the child to realize his own potential and become a productive individual. The rapidly developing brain is most vulnerable to environmental influences during this period. The stimuli around the child determine the child's development, motivation to learn, how much he can explore and what he can learn and at what speed. This situation is closely related to how supportive the environment is and what opportunities are offered to the child. Having early life experiences in an environment rich in stimuli determines the attitudes that the child will develop towards school, learning and his own skills, and affects school success. The more rich the environment is in stimuli, the faster the child develops and learns (Başaran et al., 2022; MEB, 2013). For this reason, in this critical period of development, the fact that the educational support offered for children to develop healthily is conscious and qualified, and that this support consists of rich stimulated content for children to reveal their own potential and provide high-level benefits, has an undeniable effect in this critical period of development (Soylu, 2019).

#### 2. Immersive Media

The fact that technological developments advancing rapidly in the 21st century affect all areas of life is important in enriching educational content and increasing the quality of education. It would be an injustice to the development opportunities of children who have grown up with technology since the first years of childhood to force them into traditional educational environments. At this point, there abound some studies during the transition from ICT research to immersive media studies (Kabadayı, 2001; Kabadayı, 2002; Kabadayı, 2005; Kabadayı, 2006a; Kabadayı, 2006b; Demir & Kabadayı, 2008; Kabadayı, 2019; Kabadayı & Doğan Kirişçigil, 2021). Considering the developmental areas in earlychildhood education as a whole and "at this point, the concept of technology, which is thought to appeal to more than one sense, can also be used in preschool activity processes as a rich material (Başaran et al., 2022). According to Hazneci (2019), while developing technologies affect our lives intensely, they also affect the field of education, revealing concepts such as

interaction, experience, interactive learning, learning experience, gamification and digitalization, and also presenting new trends and concepts in the field of education in order to appeal to the visual individuals of the digital world.

The ongoing changes throughout human history have made technology and its rapid development a part of our lives and have included it in educational environments along with scientific research (Künüçen & Samur, 2021). "In the 21st century, where there is a rapid change and transformation in all areas of life, the skills that individuals to be trained should have differed" and as a result, a transformation and renewal has started in education (Kardeş, 2020). With the developing technology, it will be an injustice to the development of children born in the lap of technology from birth to imprison them in traditional educational environments. With the consideration of development areas as a whole, it is inevitable that these innovations, which appeal to more than one sense, take their place in education as rich materials (Başaran et al., 2022). Within the framework of these developments, we come across immersive media as a new technological concept.

Pan et al., (2021) argued that the recently famous immersive media technologies bring new dynamics to the classroom environment, provide educators with more pedagogical activities, and offer children a more interactive way to access learning content by bringing the physical and virtual worlds together. The dictionary meaning of immersive as a word is "spiral, encompassing, surrounding, enveloping, immersive, intensely influencing, taking away the viewer" (Tureng Turkish English Dictionary, 2022) and it has been explain that "appearing to surround the viewer, the player, so that they feel completely involved in something" (Cambridge Dictionary, 2022). According to Ertürk and Reynolds (2020) immersive media can be understood as "any technology that blends computer-generated content with the physical environment, creating a sense of immersion and stimulating the human senses through interactive multimedia".

Augmented Reality (AR) and Virtual Reality (SG) technologies constitute the pillars of immersive media, which includes all immersive digital media products in terms of scope. Extended Reality (XR), another technology that supports both augmented and virtual reality as software and hardware, also takes its place in immersive media. The framework technology that surrounds this world, which creates a strong sense of coexistence and encompasses each other, appears as Metaverse. In order to make sense of all reality technologies more clearly, it is necessary to mention Metaverse technology.

Extended Reality (XR) = VR, AR, MR

Figure 1: İmmersive Media

**Figure:** (Rosenberg, 2022)

## 3. Virtual Reality

The word virtual is defined in the sense of "hypothetical, hypothetical, which does not exist in reality but is imagined in the mind". Reality is; It refers to "all that is real, all of the things that exist". Virtual reality; It is a simulation model that evokes the feeling of reality in users, is created using computer technologies and allows interaction between users in a variable environment". Although this prepared environment, which creates a feeling very close to reality, resembles a simulation, it differs from it because it is not connected to a physical space. (Demirkaya & Sarpel, 2018) Virtual reality is defined as an immersive media experience that allows the user to interact with an existing or designed environment and feel as if they are in that environment (Künüçen & Samur, 2021). In another definition, Sobel, (2019) defined virtual reality as "a technology that offers a more inclusive experience that includes sensory outputs such as sound and image, or reflects the real world". Virtual reality provides users with the experience of interacting with three-dimensional objects created in the computer environment in a real environment in people's minds through technological tools (Türksoy & Karabulut, 2020). In these programmed and simulated environments, individuals can enter with the sense of sight by using visualization glasses, with the sense of touch by using tactile gloves, and with the sense of hearing by using headphones (Fernandez, 2017). While virtual reality technology is used in education, it provides first-hand experience outside of the dangers of the real world. In order to offer this, educators need to learn how to integrate three-dimensional technology into the curriculum and how to create an environment (Nachimuthu & Vijayakumari, 2009).

Virtual reality is a technology that enables three-dimensional objects and animated characters created in the digital environment to interact with these objects in the environment, as well as stimulating the feeling of being in real environments in the minds of individuals through technological tools. It takes its place in educational environments as one of the effective approaches that can be used to solve the problems caused by traditional teaching methods that are insufficient in the developing world (Çavaş et al., 2004).

"Virtual reality, which can be used effectively in all areas, is a computerbased, interactive multimedia technology. The sound, light and interaction features of virtual reality environments are customized in a situation that activates all sensory organs of the students. In short, it is a system in which the user can effectively control this simulation environment in a computergenerated three-dimensional simulation of a real-world situation through very special purpose devices that he wears on his body" (Kayabaşı, 2005).

# 4. Augmented Reality

Augmented reality is defined as a world where the real world and virtual objects are brought together (Gecu-Parmaksız & Delialioglu, 2019). Demirkaya and Sarpel, (2018) described augmented reality as "technology that enables real and virtual objects to interact simultaneously by adding virtual scenes on real objects, allowing users to view virtual and real content as if they were part of the same environments". One of the many definitions accepted in the literature is "a technology that combines the virtual world and the real world". Tablets, computers and smartphones are used as tools in the merging of these two technological worlds (Türksoy & Karabulut, 2020). Augmented reality applications directly or indirectly provide communication with an environment with augmented reality elements consisting of computer-based sensory inputs such as sound, graphics, video (Sala, 2021). In its simplest definition, augmented reality technology is "the combination of two- or three-dimensional virtual objects with the threedimensional real world and projected in real time" (Dhiyatmika et al., 2015). According to Sala (2021) Augmented Reality elements, are defined as a realworld environment with computer-generated sensory data. By Basaran et al., (2022), it is defined as follows: "It is a technology in which virtual objects are added to the real world, simultaneous interaction between the real world and virtual objects is provided, and this interaction is enriched with multimedia tools such as audio, video, graphics, location information".

In another definition, Redondo et al., (2020) refer to the virtual and real worlds as experiencing them together in a three-dimensional environment and real time. In addition to this, augmented reality is also explained to children as a natural environment provider that associates virtual stimuli with the real physical world (Gecu-Parmaksız & Delialioğlu, 2020). According to Tanrıverdi, (2022), the simultaneous use of this virtual environment and the real world is described as "a technology that takes digital or computer-generated information, whether audio, video, and touch, or tactile sensations, and combines them into a real-time environment."

The three main features of augmented reality are conveyed as follows; it combines real and virtual objects, provides real-time interaction, and realizes the accurate recording of three-dimensional virtual and real objects (Koutromanos et al., 2015).

To look at the distinction between virtual and augmented reality technology, which are similar to each other;

- "•In virtual reality, the user is completely detached from the reality of the existing physical space, while in augmented reality, the user witnesses that virtual units are added to the existing physical environment by preserving it,
- While augmented reality technology is presented through a transparent structure that includes a screen today, virtual reality glasses are presented with a completely closed structure, which only gives the user the screen image inside.
- While augmented reality technology aims to elevate the user's real-world experience by adding virtual images to the reality of the existing environment, virtual reality aims to completely immerse the user by detaching them from the current world experience and including them in a digitally produced virtual environment experience.
- While virtual reality glasses require a computer connection with powerful hardware, a physical space that can be scanned by graphics cards and sensors, they also bring risks such as going out of the area, loss of balance, and falling/crashing. Glasses used in augmented reality, on the other hand, combine digital 2D/3D images with real ambient images without requiring extra hardware, so the risk of falling/hitting is minimal" (Hazneci, 2019).

# 5. Extended Reality

The concept of extended reality is a technologically supported product of the concept of virtual and augmented reality. According to Shankar (2021), the term extended reality represents the intertwining of the real world and virtual objects in a computer-generated space. Künüçen and Samur, (2021) emphasize that extended reality technology contains all other immersive technologies under it and that it is less included in the literature on its use because it is a newer technology than others. In fact, with the production of systems that offer virtual and augmented reality together, the concept of extended reality has started to be used instead of the concepts of "virtual and augmented" reality. Instead of using these two expressions together, the concept of extended actuality is used, which is thought to have an inclusiveness suitable for systems and products that aim at both (Rosenberg, 2022).

Extended reality, which is an umbrella term covering virtual and augmented reality, represents the human-machine combination of real and virtual environment through developing computer technologies and hardware. For this reason, it contains the features of all the technologies it contains. Extended reality should be described as a concept that includes all technologies that currently exist and may emerge in the future (Batu and Kocaömer, 2023). The purpose of this new technology, called immersive media, is to mirror or merge the physical and digital worlds (Dobbs, 2023).

Extended reality can be defined as the interaction of real and virtual technologies through a human-machine interface or different hardware systems. At the same time, there is a "cross-relationship between the virtual and real environment in extended reality" (Chiang and Liu, 2023).

Sala, (2021) states that the use of this newly developed technology, which has been developed using 3D models, simulations, physical, virtual and immersive environments, has increased with the effect of the pandemic, and that there are research on how science, technology, engineering, art and mathematics learning is supported by this technology. Augmented reality technologies incorporate an interdisciplinary technology design to increase students' knowledge, skills, and experience (Chiang and Liu, 2023).

#### 6. Metaverse

Metaverse, which has been a concept that has been emphasized a lot in recent years, is thought of as the latest stage of technology, forcing us to make predictions about what awaits humanity in the future (Batu and Kocaömer, 2023). The concept of Metaverse consists of the combination of the words "Meta" and "Universe", and although the Turkish equivalent is not clear, the word "beyond

the universe" is proposed. Metaverse refers to an immersive digital environment where an individual interacts with avatars in a virtual environment, enabling activities similar to those in the real world. While Metaverse is called the next stage of the internet by most experts, it has entered our lives as an element that attracts attention by society (Göçen, 2022). At this point, to talk in a little more detail about the concept of Metaverse, which includes all immersive media elements, "The term Metaverse has suddenly become popular by becoming insane, largely due to Facebook's change of name to Meta and its promotion of support for the language. The metaverse is an in persistent and immersive simulated world experienced in first person by large groups of concurrent users who share a strong sense of mutual existence. It can be completely virtual and self-sufficient (a virtual metaverse), or it can exist as layers of virtual content superimposed on top of the real world (an augmented metaverse)" (Rosenberg, 2022). According to Batu and Kocaömer (2023), "Metaverse can be said to be a virtual world with sub-digital categories under the concepts of scope, content, technical structure and social space. This world appears as the future of the internet, which includes parallel universes, in other words, cyberspace". In terms of the elements it contains, as can be seen from the image, it reveals technological worlds consisting of combinations with different virtual structures (Göçen, 2022).







Figure 2: Augmented Reality, Virtual Reality, Extended Reality

The concept of Metaverse, which is still in development today, will show itself in more areas than it can be predicted. Individuals will be able to interact in online worlds such as meetings, trips, shopping, working environments, and meetings. Individuals in the real world will be able to participate in these interactions in the metaverse with avatars that they assign to them, which are digital reflections (Batu and Kocaömer, 2023), (Ağgül et al., 2023). It is possible to see the combination of virtual and augmented reality, which are real world and immersive media elements, more clearly in the table below.

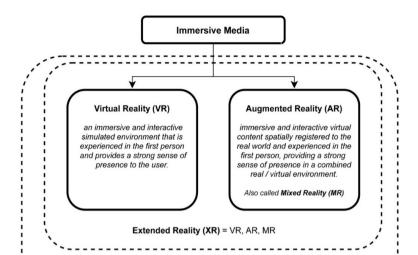


Figure 3: Immersive Media & Metaverse Figure: (Rosenberg, 2022)

Metaverse a persistent and immersive simulated world (VR or AR) that is experienced in the first person by large groups of simultaneous users who share a strong sense of mutual presence.

## 7. Immersive Media and Early Childhood Education

It is seen that technology, which affects the lives of the 21st century, also affects the educational environment. This technology, which is developing at a dizzying speed, has forced various changes in education along with many other fields. In particular, the adventure of distance education, which proceeds simultaneously with the pandemic, has emerged as a quality service for students and teachers, regardless of time and place, thanks to computer-aided programs and equipment (Ağgül et al, 2023). As a result of these developments, the inclusion of immersive media applications in educational environments has become a necessity rather than a necessity. Especially when children, who develop in the "hypermedia" environment of the century and are the visual individuals of the digital world, are considered, it is necessary to present concepts such as "interaction, experience, digitalization, interactive learning, learning experience, gamification" in educational environments (Hazneci, 2019). At this point, the use of immersive media in education is of great importance. Its effects can be listed as follows;

- -Providing motivation to learn,
- Changing traditional teaching methods,
- -Offering individualized instruction,
- -Providing a blended, collaborative, active, exploratory-based and error-free learning environment (Aydogdu & Kelpšiene, 2021; Ertürk & Reynolds, 2020; Huang vd., 2016; Redondo et al., 2020).

In real and virtual environments designed according to the interests and needs of learning individuals, many learning can be supported with the help of different technological equipment. Many learning experiences such as simulations, portable laboratories, virtual trips allow educational environments to be shaped technologically. In addition, the "change in the affective state of the learners will be detected instantly and measures will be taken accordingly" (Ağgül et al, 2023). Kızılkaya et al. (2021) emphasize that virtual, augmented and extended reality, which has entered our lives with the rapidly developing metaverse world, can change education standards, and new and individualized educational environments can provide more motivation and better learning results regardless of time and place.

Although it is possible to use immersive media applications at all levels of education, the use of these new technologies in preschool education is still very new. For this reason, the number of studies remains very limited. The findings encountered in some of the research carried out are; the use of immersive media practices in early childhood education is to support the child's early literacy, language development, artistic, music and spatial skills (Aydogdu & Kelpšiene, 2021). In addition, it is observed that it increases the motivation to learn while supporting creativity and collaborative learning. By including fun in learning environments, it ensures that information is easier to learn and memorable. It allows them to use all their senses while providing first-hand experience in educational environments. It eliminates the risks in learning environments with unreal virtual objects (Neumann vd., 2022). According to Han et al. (2015) the benefits of using immersive media include the opportunity for children to experience virtual content in the real world, to perceive complex objects and situations in three dimensions, and to provide a smooth transition from ordinary presentation to active exploration in the transfer of information. In particular, the most important positive effect of the use of immersive media applications in preschool education is that it supports equality of opportunity in education, which is also included in the Preschool Education Program (MEB, 2013).

In the education system, which is open to technology and development, Augmented Reality technology is the most useful immersive media element in early childhood education. Supporting learning environments in a holistic way (visual, auditory, kinesthetic) will provide interactive and effective learning. The miniaturization of technological devices into wearables interacts more with augmented reality in physical environments, causing simultaneous change of the classroom and pedagogy (Göçen, 2022; Hopper, 2019).

The use of augmented reality technology in educational applications brings some advantages. Among these benefits are the dissemination of innovative and interactive teaching methods, helping to comprehend the content and characteristics of the subject, and the absence of "real" errors in learning environments (Sala, 2021). Augmented reality "provides an important benefit, especially in the concretization of abstract concepts, the inclusion of events and situations that are difficult to carry to the classroom, and the visualization of concepts and increasing the sense of reality in learning (Başaran et al., 2022).

Augmented reality applications, which are more powerful and useful than traditional teaching, increase interest and curiosity in learning in children (Tuli & Mantri, 2021). In addition to these, augmented reality applications provide many benefits such as individualized education planning according to individual needs and preferences (Dede, 2005), providing an effective and interactive learning environment (Huang et al., 2016), increasing learning motivation and facilitating the recall of learned content (Aydogdu & Kelpšiene, 2021), encouraging creativity and imagination, encouraging cooperation and gaining experiences that cannot be obtained first-hand in the real world (Yuen et al., 2011). In addition, while augmented reality technology offers a spiral learning environment, it also offers the instructor a smooth transition from the presentation part of the information to the active experience part (Han et al., 2015). According to Düzyol et al., (2022) the use of augmented reality applications in the early childhood education period makes learning more permanent, fun and intriguing, while supporting the perceptions of the real world and virtual environment with creativity and imagination. In addition, "augmented reality learning environments that appeal to more than one sense organ with multimedia elements such as pictures, text, sound, 3D objects, animations, videos, simulations and offer rich interaction also help the formation of permanent learning by enabling the student to actively participate in the process and supporting learning by doing and experiencing" (Çevik et al., 2017).

Augmented reality applications, which are one of the elements of the digital world developing with the technology of the 21st century, contribute to "raising individuals who question, think, produce new products with what they question, constantly improve themselves, have high creative thinking power, solve problems, have technology literacy, and can express themselves" and "the active use of applied science by teachers providing early childhood education in order to achieve success in today's world" (Güneş, 2021).

Although children and teachers have positive attitudes to the use of augmented reality technology in early childhood education, a study conducted by Elmas et al., (2020) found that the use of these applications increases the "anxiety about using a new technology" of early childhood teachers of children who are introduced to technology as soon as they are born, and it is revealed that preschool teachers who provide data in the research have difficulties in using augmented reality technology has been placed (Pan et al., 2021). In another study, it was revealed that "teachers should have teacher competencies for the use of technology in order to use technology effectively in the classroom" (Demir & Bozkurt, 2011). In a study limited to pre-school teachers working in public schools within the Ministry of National Education; It has been found that teachers want to use technology in organizing their learning environments, as the seniority year of the participants increases, their concerns about the use of technology increase and they do not feel sufficient for the use of these technologies (Güneş, 2021). It does not seem possible for the current teachers to benefit from this application due to the fact that digital literacy courses have started to be taught as a pilot application in some universities in Turkey (Sezgin & Karabacak, 2020).

With the selection of the right time and technological materials in education, children can be offered opportunities to learn by doing and experiencing, and at the same time, children's participation in activities is supported. Augmented reality technology is one of the technologies that support children's creative and critical thinking skills in appropriate ways. Due to abstract concepts that have not yet been developed, the use of semi-virtual, that is, augmented reality in education instead of a completely virtual environment provides more effective learning and active participation in children. It also encourages children to learn collaboratively by interacting. It supports the development of self-confidence, their ability to take on their own responsibilities and the development of problem-solving skills in the preschool period. In the studies conducted in the literature, it is concluded that augmented reality technologies used in the preschool period

provide high motivation among children, support the collaborative learning process, attract attention and active participation, and increase the desire to learn and the level of success (Koç, 2020; Kuzgun, 2019).

The contributions of augmented reality technology to education are an undeniable fact, as can be seen in the figure 4.

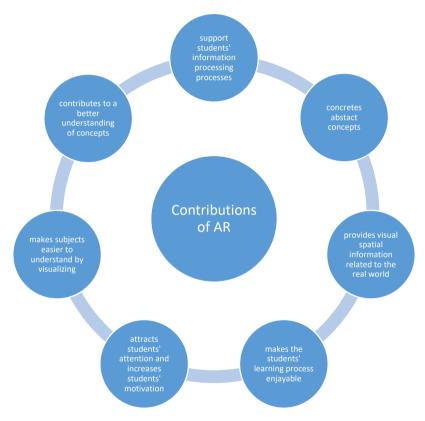


Figure 4: Contributions of Augmented reality

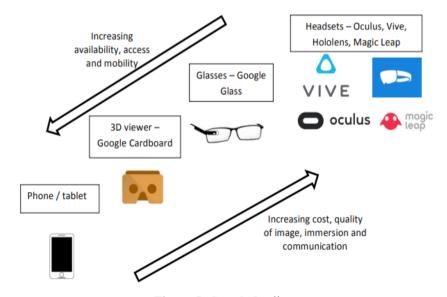
Figure: (Kuzgun, 2019)

Although augmented and virtual reality applications have positive effects in the educational environment, some situations limit these effects. These are:

- Technology disease, in other words signs of discomfort after the use of intermediary vehicles,
- The cost of intermediary tools, the fact that they are not suitable for the physical structure of children and require extra safety measures during use,
  - Teachers' inadequate digital skills,

- Insufficient pedagogical knowledge of application developers,
- Usage and access restrictions (Aydogdu & Kelpšiene, 2021; Han vd., 2015; Neumann vd., 2022)

Although immersive media applications, which are among the new century technologies, are a concept that is well known to those who are interested in computers and software, it is not yet a technology known in all its dimensions for all educators (Ağgül et al, 2023). Ertürk and Reynolds talk about some of the problems encountered when incorporating immersive media applications into educational environments in their research published in 2020. They report the inadequacy of the teacher in using digital technologies and the pedagogical inadequacy of the applications. Koutromanos et al., (2015) draw attention to the shortcomings of practices in the areas of curriculum, assessment, expert development, and teacher preparation. Since the costs of the intermediary tools used together with these increase in direct proportion to their scope, the usage area narrows. As can be seen in the image, the inclusion of new technologies in education is limited by cost (Holley & Hobbs, 2019). However, "one of the main problems experienced in the integration of technology and education for all countries of the world is the rapid development of technology, the introduction of educators to the opportunities of technology late or often without intensive preparation" is not seen as an insurmountable problem (Göçen, 2022).



**Figure 5:** Cost & Quality **Figure:** (Holley & Hobbs, 2019)

#### 8. Conclusion

The preschool period is a period that covers the first six years of life and has a great share in shaping future life, and it is observed that development is multifaceted and depends on individual differences. In this period, supporting development and learning with a rich stimulus environment increases the speed of development and learning. The speed at which the child can learn what and how much is associated with a conscious and qualified, high-level beneficial and supportive environment. With the advancing technology in the 21st century, children born in the lap of technology need to transform traditional educational environments and support them with rich content from technology that can appeal to more than one sense. "Immersive Media", which is the innovation of the developing digital world, has also emerged as a supporter of a rich content learning environment.

Immersive media is defined as a multimedia tool that offers an interactive experience to the user by combining computer-based content with the physical world. The foundations of immersive media, which includes all immersive media products in terms of scope, are virtual reality, augmented reality and extended reality. Virtual reality is defined as the placement of virtual objects created in digital environments in virtual environments created in digital environments and the user's experience through technological wearable devices. Augmented reality, on the other hand, is explained as a multimedia technology that combines the real world and virtual objects created in the digital environment. The broader technology surrounding these two reality technologies is Extended Reality. This innovation represents the interaction of the real and virtual worlds with computer technologies and different hardware. The new technology Metaverse, which has been emphasized a lot in recent years, includes parallel virtual worlds with digital subcategories. The inclusion of these technologies, which are developing in an incalculable way, in educational environments has become a necessity rather than a need. Among the many positive effects of the use of immersive media elements that offer an interactive learning experience in educational environments, minimizing risks and perceiving complex situations in three dimensions stand out.

In preschool education environments that are open to development and innovation, it would be more appropriate to choose augmented reality technology, which is more usable than others, for children whose abstract thinking skills have not yet been fully developed. The positive effects of the use of augmented reality applications in education are; It can be shown that it provides motivation, supports active participation, visualizes the subject, embodies abstract concepts, associates spatial information with the real world, supports creative thinking and makes the learning process enjoyable.

In addition to the positive effects of the use of immersive media applications in educational environments, there are also some negativities and limitations. These negativities and limitations include technology addiction that may develop, the high cost of intermediary tools and their incompatibility with the physical structure, usage and access restrictions, insufficient digital skills of teachers and insufficient pedagogical knowledge of developers. In light of this information, what can be done to support and disseminate the use of Immersive Media applications will be to ensure that teachers have the competence to apply Immersive Media applications and to deliver this equipment to all schools by the state in order to support all our children to have equal access in education.

#### References

Ağgül, E., Yalçın, S. A., & Yalçın, P. (2023). Öğretmen Adaylarının Metaverse ve Web 3.0 Kavramı Hakkındaki Görüşleri. *Uluslararası Anadolu Sosyal Bilimler Dergisi*, 7(2), 292-307.

Aydoğdu, F., & Kelpšiene, M. (2021). Uses of Augmented Reality in Preschool Education. *International Technology and Education Journal*, 5(1), 11-20.

Başaran, M., Nacar, E., Aksay, G., Tüfekçi, H., & Vural, Ö. F. (2022). Artırılmış Gerçeklik (AG) Uygulamalarının Okul Öncesi Dönemde Uygulanabilirliğine İlişkin Öğretmen Görüşleri. *Mehmet Akif Ersoy Üniversitesi Eğitim Fakültesi Dergisi*, 62, 135-157. https://doi.org/10.21764/maeuefd.917745

Batu, M., & Kocaömer, C. (2023). Metaverse Nedir? Literatür Art Alanı Bağlamında Yeni Bir Tanım Önerisi. Selçuk Üniversitesi Sosyal Bilimler Enstitüsü Dergisi (51), 92-112. https://doi.org/10.52642/susbed.1277793

Cambridge Dictionary. (2022, Nov, 22). *İmmersive*. Cambridge University Press. (t.y.).

Chiang, Y. C., & Liu, S. C. (2023). The Effects of Extended Reality Technologies in STEM Education on Students' Learning Response and Performance. *Journal of Baltic Science Education*, 22(4), 568-578.

Çavaş, B., Huyugüzel Çavaş, P., & Taşkin Can, B. (2004). Eğitimde Sanal Gerçeklik. *The Turkish Online Journal of Educational Technology-TOJET*, *3*(4), 110-116.

Çevik, G., Yılmaz, M. R., Göktaş, Y., & Gülcü, A. (2017). Okul Öncesi Dönemde Artırılmış Gerçeklikle İngilizce Kelime Öğrenme. *Journal of Instructional Technologies & Teacher Education*, 6(2), 50-57.

Demir, S., & Bozkurt, A. (2011). Primary Mathematics Teachers' Views about Their Competencies Concerning the Integration of Technology. *Elementary Education Online*, 10(3), 850-860. http://ilkogretim-online.org.tr

Demir, N., & Kabadayı, A. (2008). Erken yaşta renk kavramının kazandırılmasın bilgisayar destekli ve geleneksel öğretim yöntemlerinin karşılaştırılması. Uluslararası İnsan Bilimleri Dergisi, 5(1), 1-18.

Demirkaya, H., & Sarpel, E. (2018). Eğitim Ve Geliştirme Uygulamalarında Yeni Nesil Bilişim Teknolojilerinden Sanal Gerçeklik, Bulut Bilişim Ve Yapay Zeka. *Dergi Karadeniz*, 40, 231-245. https://doi.org/10.17498/kdeniz.460145

Dobbs, T. (2023). The extended reality professor: an interview with Professor Jagtar Dhanda. *The Bulletin of the Royal College of Surgeons of England*, 105(8), 408-409.

Dhiyatmika, D. G. W., Putra, K. G. D., &; Mndenni, N. M. I. M. (2015). Augmented Reality Magic Book Animal Recognition App for Kindergarten Students. *Computer Ejection*, 6(2), 120-127.

Düzyol, E., Yıldırım, G., & Özyılmaz, G. (2022). Investigation of the Effect of Augmented Reality Application on Preschool Children's Knowledge of Space. *Journal of Educational Technology and Online Learning*, *5*(1), 190-203. https://doi.org/10.31681/jetol.976885

Elmas, R., Kahriman-Pamuk, D., & Pamuk, S. (2020). Artırılmış Gerçeklik ve Fen Etkinlikleri: Okul Öncesi Öğretmen ve Öğretmen Adaylarının Görüşleri. *Yüzüncü Yıl Üniversitesi Eğitim Fakültesi Dergisi*, *17*(1), 671-699. https://doi.org/10.33711/yyuefd.710054

Ertürk, E., & Reynolds, G.-B. (2020). The Expanding Role Of Immersive Media In Education. *International Conference e-Learning*, 191-194.

Fernandez, M. (2017). Augmented-Virtual Reality: How to improve education systems. *Higher Learning Research Communications*, 7(1), 1. https://doi.org/10.18870/hlrc.v7i1.373

Gecu-Parmaksiz, Z., & Delialioglu, O. (2019). Augmented reality-based virtual manipulatives versus physical manipulatives for teaching geometric shapes to preschool children. *British Journal of Educational Technology*, *50*(6), 3376-3390. https://doi.org/10.1111/bjet.12740

Gecu-Parmaksiz, Z., & Delialioğlu, Ö. (2020). The effect of augmented reality activities on improving preschool children's spatial skills. *Interactive* 

*Learning Environments*, 28(7), 876-889. https://doi.org/10.1080/10494820.201 8.1546747

Göçen, A. (2022). Eğitimbağlamındametaverse. *Uluslararası Batı Karadeniz Sosyal ve Beşeri Bilimler Dergisi*, *6*(1), 98-122. https://doi.org/10.46452/baksoder.1124844

Güneş, Z. (2021). Okul Öncesi Öğretmenlerinin Epistemolojik İnançları İle Teknolojik Yeterliklerinin İncelenmesi. Uludağ Üniversitesi

Han, J., Jo, M., Hyun, E., & So, H. jeong. (2015). Examining young children's perception toward augmented reality-infused dramatic play. *Educational Technology Research and Development*, *63*(3), 455-474. https://doi.org/10.1007/s11423-015-9374-9

Hazneci, Ö. U. (2019). Güncel Artırılmış Gerçeklik Uygulamalarının Eğitim Alanında Kullanımı Üzerine Bir İnceleme. *Ondokuz Mayıs Üniversitesi Uluslararası 100.Yıl Eğitim Sempozyumu*, 499-508. https://orcid.org/0000-0003-3832-9023

Holley, D., & Hobbs, M. (2019). Augmented Reality For Education. In *Encyclopedia of Educational Innovation*.

Huang, Y., Li, H., & Fong, R. (2016). Using Augmented Reality in early art education: a case study in Hong Kong kindergarten. *Early Child Development and Care*, *186*(6), 879-894. https://doi.org/10.1080/03004430.2015.1067888

Kabadayı, A. (2001). İlköğretim öğrencilere yabancı dil öğretiminde teknolojik araçların daha etkin biçimde kullanılması yöntemleri ve öneriler. Language Journal, 100, 40-50.

Kabadayı, A. (2002). Bebeğin, duyumotor, dil ve zihinsel gelişiminde çevre ve yetişkinin rolü ve önemi. Selçuk Üniversitesi Sosyal Bilimler Enstitüsü Dergisi, (8), 215-234.

Kabadayı, A. (2005). A suggested computer-based model for using Nasreddin Hodja's anecdotes in preschool education. Journal of Human Sciences, 2(2).

Kabadayı (2006a) Analysing the types of TV programmes viewed by children from different socio-economic strata based on their self-report in the Turkish context, Educational Media International, 43:2, 147-164, DOI: 10.1080/09523980600641189

Kabadayı, A. (2006b). Analyzing pre-school student teachers' and their cooperating teachers' attitudes towards the use of educational technology. Turkish Online Journal of Educational Technology-TOJET, 5(4), 3-10.

Kabadayı, A. (2019). Contributions of the Fairy Tales to the Children on the Basis of the Teachers" Views. American Journal of Education and Learning, 4(2): 222-233

Kabadayı, A., & Doğan Kirişçigil, F. (2021). Comparison of the humanistic a technological (e-book) methods in teaching the fairy tales to the preschoolers. International Journal of Quality in Education, 5(1), 76-91.

Kayabaşı, Y. (2005). Sanal Gerçeklik Ve Eğitim Amaçlı Kullanılması. The Turkish Online Journal of Educational Technology – TOJET, 4(3), 151-158.

Kizilkaya, B., Zhao, G., Sambo, Y. A., Li, L., & Imran, M. A. (2021). 5G-enabled education 4.0: Enabling technologies, challenges, and solutions. IEEE Access, 9, 166962-166969.

Koç, S. (2020). Okul Öncesi Dönemde Artırılmış Gerçeklik Teknolojisi Kullanımının İncelenmesi. Tasarım Enformatiği, 2(2), 59-64.

Koutromanos, G., Sofos, A., & Avraamidou, L. (2015). The use of augmented reality games in education: a review of the literature. Educational Media International, 52(4), 253-271. https://doi.org/10.1080/09523987.2015.1 125988

Kuzgun, H. (2019). Artırılmış gerçeklik okul öncesi. Afyon Kocatepe Üniversitesi.

Künüçen, H. H., & Samur, S. (2021). Dijital Çağın Gerçeklikleri: Sanal, Artırılmış, Karma ve Genişletilmiş Gerçeklikler Üzerine Bir Değerlendirme. Yeni Medya, 202(11), 38-62. https://doi.org/10.34189/ymd.2021.11.003

MEB. (2013). Okul Öncesi Eğitim Programı. Meb Basımevi.

Nachimuthu, K., & Vijayakumari, G. (2009). Vırtual Reality Enhanced Instructional Learning. Journal of Educational Technology, 6(1), 1-5.

Neumann, M. M., Keioskie, M. K., Patterson, D., & Neumann, D. L. (2022). Virtual, Augmented, and Mixed Reality: Benefits and Barriers for Early Childhood Education. Childhood Education, 98(4), 68-79. https://doi.org/10.10 80/00094056.2022.2108298

Pan, Z., López, M. F., Li, C., & Liu, M. (2021). Introducing augmented reality in early childhood literacy learning. Research in Learning Technology, 29, 1-21. https://doi.org/10.25304/rlt.v29.2539

Redondo, B., Cózar-Gutiérrez, R., González-Calero, J. A., & Sánchez Ruiz, R. (2020). Integration of Augmented Reality in the Teaching of English as a Foreign Language in Early Childhood Education. Early Childhood Education Journal, 48(2), 147-155. https://doi.org/10.1007/s10643-019-00999-5

Rosenberg, L. (2022, Kasım 6). VR vs AR vs MR vs XR: What's the difference? VR vs AR vs MR vs XR: What's the difference? -Big Think.

Sala, N. (2021). Chaos and Complexity Letters Extended Reality In Education. *Chaos and Complexity Letters*, 15(2-3), 225-240.

Sezgin, A. A., & Karabacak, Z. İ. (2020). Yükseköğretimde Dijital Dönüşüm ve Dijital Okuryazarlık Dersine Yönelik Betimsel Bir Analiz. *Anadolu Üniversitesi İletişim Bilimleri Fakültesi Uluslararası Hakemli Dergisi*, 28(1), 17-30.

Shankar, P. R. (2021). Extended reality in educating the next generation of health professionals. *Education in Medicine Journal*, *13*(1), 87-91.

Sobel, K. (2019). Immersive Media and Child Development: Synthesis of a cross-sectoral meeting on virtual, augmented, and mixed reality and young children. *The Joan Ganz Cooney Center at Sesame Workshop*.

Soylu, M. S. (2019). Artırılmış Gerçeklik Uygulamalarına Yönelik Eğitim Programının Okul Öncesi Öğretmen Adaylarının Tutum ve Görüşlerine Etkisi. Pamukkale Üniversitesi.

Tanrıverdi, B. (2022). Artırılmış Gerçeklik Teknolojisi ile Desteklenmiş Kitap Okumanın Okul Öncesi Dönemdeki Çocukların Dil Gelişimine Etkisi. Pamukkale Üniversitesieğitim Bilimleri Enstitüsü.

Tuli, N., & Mantri, A. (2021). Evaluating Usability of Mobile-Based Augmented Reality Learning Environments for Early Childhood. *International Journal of Human-Computer Interaction*, *37*(9), 815-827. https://doi.org/10.10 80/10447318.2020.1843888

Tureng Turkish English Dictionary. (2022, November 8). Immersive.

Türksoy, E., & Karabulut, R. (2020). Dijital Gerçeklik Teknolojilerinin Bilsemlerde Uygulanabilirliğine Yönelik Öğretmen Görüşleri. *Nevşehir Hacı Bektaş Veli Üniversitesi SBE Dergisi*, *10*(2), 436-452. https://doi.org/10.30783/nevsosbilen.657167

Vural, D. E., & Kocabaş, A. (2016). Okul Öncesi Eğitim ve Aile Katılımı. *Elektronik Sosyal Bilimler Dergisi*, *15*(59), 1174-1185. https://doi.org/10.17755/esosder.64697.

Xi, N., Chen, J., Gama, F., Riar, M., & Hamari, J. (2023). The challenges of entering the metaverse: An experiment on the effect of extended reality on workload. *Information Systems Frontiers*, 25(2), 659-680.

Yuen, S. C.-Y., Yaoyuneyong, G., & Johnson, E. (2011). Augmented Reality: An Overview and Five Directions for AR in Education. *Journal of Educational Technology Development and Exchange*, *4*(1), 119-140. https://doi.org/10.18785/jetde.0401.10`

# CHAPTER VI

# 21ST CENTURY SKILLS IN TEACHER TRAINING

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#### 1. Introduction

1st-century skills" refer to a set of abilities that individuals living in the modern age should possess and continuously enhance to meet the requirements of the contemporary world. These skills encompass the competencies that individuals need to function effectively and proficiently. Various institutions and organizations have conducted various studies and initiatives in this regard. The most well-known of these efforts is the P21 (Partnership for 21st Century Learning) organization, which convened business leaders, education leaders, and policymakers in the United States in 2002. P21 aims to prepare individuals to meet the demands of the 21st century effectively (P21, 2021).

The 21st-century education approach aims to bring out an individual's capacity and abilities, focusing more on imparting skills and competencies rather than knowledge. It shifts away from the old paradigm where success was measured through standardized tests and education was seen primarily as preparation for a profession. Instead, the emphasis is now on projects undertaken, problem-solving skills, innovation and creativity, the number of patents obtained, and certifications achieved.

In the 21st century, schools are evolving from institutions where knowledge and skills are simply transferred to students into entities that shape society and contribute to societal development. Rather than delivering a fixed curriculum, the goal is to reveal and develop competencies and skills. Teachers

are expected to guide students rather than just imparting knowledge. There is a focus on increased parental involvement in schools and educational programs. Ultimately, the aim is for students to discover their potential, become active builders of knowledge, and evolve into lifelong learners (Çalık & Sezgin, 2005).

21st-century skills have emerged in the context of addressing what are termed "Big World Problems" or "Big E-Problems." These problems encompass five fundamental elements: education, economy, energy, environment, and equity. To address global challenges, the 21st Century Learning Partnership has developed the "3Rs X 7Cs" formula, which highlights 21st-century skills. The "3Rs" include Reading, wRiting, and aRithmetic. The "7Cs" represent the skills necessary for solving problems, including Critical thinking and problem solving, Communication, information and media literacy, Collaboration, teamwork and leadership, Creativity and innovation, Computing and ICT literacy, Career and learning self-reliance, and Cross-cultural understanding (Trilling & Fadel, 2009).

In the 21st century, it is crucial to instill skills such as collecting information from diverse sources, comprehending significant connections, fostering innovative ideas, gaining profound insights, and solving problems. Education should concentrate on converting knowledge into practical skills, empowering students to understand what, where, and how to locate and utilize information, as well as devising solutions to the issues they confront. Education is transitioning from merely transmitting knowledge to students to equipping them with the mastery and expertise needed to tackle real-world problems and global challenges. This educational approach advances from data to information, from knowledge to expertise, from marketing to services and products (Trilling & Fadel, 2009).

Teachers play a crucial role in integrating 21st-century skills into the modern education system and imparting these skills to students. Therefore, it is important for teachers to possess qualities such as influencing students, collaborating with colleagues, presenting creative ideas to society, and enhancing professional practices. A teacher who provides education in line with the conditions and requirements of the 21st century serves not only as a manager of the teaching-learning process but also as a guiding figure who contributes to students' adaptation to social life and significantly impacts their social development. In the past, the focus was on the teacher in education, and the teacher was placed at the center of the educational process. However, with technological advancements, it became evident that a student-centered

education system is more effective. Considering 21st-century skills, students are at the center of the educational process, determining their own educational goals, and teachers play a guiding role as students work toward achieving these goals. This transformation is shaping the education system (Soland, Hamilton & Stecher, 2013). In today's world, students desire to be more involved in social life and to be recognized as individuals. Considering students' aspirations to produce outcomes, their boundless curiosity, problem-solving abilities, and the solutions they offer, teachers are expected to provide guidance and direction. In this context, the importance and necessity of integrating 21st-century skills into both in-service and pre-service teacher education programs, as well as the examination of the reflections of these skills in pre-service teacher education programs and the assessment of the competence of teacher candidates in acquiring these skills, have been emphasized in various reports (P21 & AACTE, 2010). In this regard, investigating the implications of 21st-century skills in pre-service teacher education programs, assessing the readiness of teacher candidates in possessing these skills, and highlighting the current situation are essential steps towards integrating 21st-century skills into every level of the education system.

The pathway to nurturing individuals with the qualities demanded by the times lies in quality teacher education (Zhao, 2010). Therefore, both the education provided in universities (pre-service education) and the standards and education policies established by countries regarding teacher education programs are of great significance. This study examines how teacher education is conducted in different countries, to what extent 21st-century skills are reflected in teacher education, and the extent to which education policies incorporate 21st-century skills into teacher education. As part of the investigations, first, teacher education in Singapore, Estonia, Finland, and Japan, which are among the OECD countries and ranked highly in the PISA examination in 2018, will be examined. Following that, teacher education in Australia, New Zealand, and Canada, which have largely integrated 21st-century skills into primary, middle, and high school-level education programs, will be examined. Lastly, teacher programs in advanced European countries, including the United Kingdom, Germany and France, which have not ranked in the top 10 in recent PISA examinations, will be evaluated (OECD, 2018).

# 2. Teacher Training in Singapore

In Singapore, the National Institute of Education (NIE), affiliated with Nanyang Technological University, is responsible for the training of all teacher candidates (NTU, 2023). There are three different structures for teacher preparation programs in Singapore:

- 1. Bachelor of Arts or Bachelor of Science in Education (BA/BSc in Ed): This is a four-year program that offers a degree in various specializations, including General Primary, General Secondary, Chinese/Malay Primary, Chinese/Malay Secondary, Physical Education and Sports Primary, and Physical Education and Sports Secondary. These programs vary in terms of required courses and the duration of teaching practice and are assessed using an academic unit system similar to the European credit system.
- 2. Diploma in Education (Dip Ed): This is an alternative to the four-year bachelor's degree program and is a two-year program. Applicants are required to have GCE A-Level qualifications or a Polytechnic diploma. The diplomas awarded include diplomas for teaching general subjects in primary education, teaching Chinese, Malay, and Tamil languages in primary education, teaching Chinese in primary education, teaching Malay and Tamil languages in secondary education, teaching art and music in secondary education, teaching physical education, and teaching home economics. This program includes courses similar to the four-year Bachelor of Arts or Bachelor of Science in Education programs, except for subject-specific courses, and combines integrated and sequential models.
- 3. Postgraduate Diploma in Education (PGDE): This program is designed for candidates who already hold a bachelor's degree in a relevant field. It lasts for one year and focuses mainly on education sciences and program-specific courses. It follows a sequential model and is structured according to the academic unit system.

These programs provide different pathways for teacher candidates with varying educational backgrounds to become qualified educators in Singapore.

The teacher education system in Singapore adopts a high standard and student-centered approach. Singapore is renowned for its successful education system worldwide, and this success is attributed to the emphasis placed on teacher preparation and training:

• Teacher Education Programs: Individuals aspiring to become teachers in Singapore are required to enroll in teacher education programs. These programs are typically bachelor's or diploma programs in education offered by universities.

- Selective Admission: Admission to teacher education programs in Singapore is a competitive and selective process. Applicants' academic abilities, personality traits, and pedagogical potential are taken into consideration.
- Pedagogical Training: Teacher candidates undergo training to develop pedagogical skills. This includes student-centered teaching methods, classroom management, and student assessment techniques.
- Student Observations and Practicum: Teacher candidates engage in classroom observations and gain hands-on teaching experience with students. These practical experiences help teacher candidates improve them in-classroom skills.
- Continuous Professional Development: Teacher education in Singapore encompasses not only the initial stages but also continuous professional development throughout one's career. Teachers are encouraged to continually update their skills and knowledge to provide the best education to students.
- Teacher Values and Ethical Standards: Teachers in Singapore adhere to ethical standards and teacher values. This includes honesty, respect, fair behavior, and respecting student privacy.
- Integration of Technology: Teacher education in Singapore places importance on integrating technology. Teachers learn how to effectively use digital learning tools and aim to impart technology skills to their students.

The teacher education system in Singapore focuses on producing highly qualified educators and aims to enable teachers to deliver effective instruction. This system is part of Singapore's international educational success and strives to provide students with a high-quality education (NTU, 2023; TIMSS & PIRLS, 2015).

Teacher education and teaching practice in Singapore reflect an emphasis on 21st-century skills. The Singapore Ministry of Education encourages students to acquire 21st-century skills to be successful in the modern world and, therefore, expects teachers to impart these skills to their students. Among the 21st-century skills are critical thinking, communication, collaboration, creativity, problemsolving, digital literacy, and respect for cultural differences. In Singapore, teachers develop educational programs and teaching methods to help students acquire these skills. They promote critical thinking, enhance communication skills, provide opportunities for group projects and collaboration, and effectively integrate technology. Additionally, continuous professional development is essential for teachers in Singapore. This ongoing development process ensures that teachers keep their knowledge and practices regarding 21st-century skills up to date. In conclusion, teacher education and teaching practice in Singapore emphasize 21st-century skills and aim to help students acquire these skills. This approach contributes to the success of Singapore's education system on the international stage.

# 3. Teacher Training in Estonia

In Estonia, teacher education is conducted at universities, and they receive approximately 500 applications each year. Universities determine their own admission criteria. Applicants are evaluated based on their academic achievements in high school and their personal qualities, particularly their communication and collaboration skills. Evaluation methods such as group discussion activities are used. Teacher education consists of three stages: general studies, specialized studies, and education sciences, psychology, and didactic studies. General studies focus on the overall development of teachers and aim to provide them with cultural, communication, and social competencies. Specialized studies provide teacher candidates with education in their subject areas. Education sciences, psychology, and didactic studies aim to help teachers respond to changing educational needs, apply effective teaching methods in a multicultural environment, and enhance their classroom and group management skills. Different educational requirements exist for individuals who will work at different levels in the field of teaching. For example, preschool teachers receive undergraduate education, while primary school teachers, subject teachers, and special education teachers pursue postgraduate master's degrees. Vocational school teachers are required to have postgraduate education and several years of experience in the job market (Eurydice, 2018).

In Estonia, there are specific standards and guidelines related to the teaching profession. These standards and guidelines aim to ensure that teachers conduct their profession ethically and professionally and provide the best education to students. Some key features of teaching standards in Estonia include (Eisenschmidt, 2011):

- Professional Competence: Teachers are expected to effectively manage teaching and assessment processes and equip students with the necessary knowledge and skills.
- Student-Centered Instruction: Teachers design instruction that caters to the needs of students and accommodates different learning styles. They encourage active student participation.

- Assessment and Feedback: Teachers use various tools to monitor and assess students' progress. They provide regular feedback to students and use this feedback to enhance student achievement.
- Digital Literacy: In Estonia, teachers are required to develop the skills to use technology effectively. They integrate digital tools into instruction.
- Student Welfare and Safety: Teachers are responsible for ensuring the welfare and safety of students. This includes creating a healthy and supportive learning environment.
- Continuous Professional Development: Teachers engage in continuous professional development opportunities throughout their careers. This helps them keep their professional knowledge and skills up to date.

The teaching standards in Estonia aim to ensure that teachers practice their profession ethically, provide quality education, and support the continuous improvement of student outcomes. These standards are used to enhance the quality of education and help teachers be more effective in their profession.

Based on all this data, teacher education in Estonia adopts an approach focused on developing 21st-century skills and imparting these skills to students. These skills contribute to the success of both teachers and students in the modern world and ensure that the education system is prepared for the future.

# 4. Teacher Training in Finland

In Finland, teacher education has been provided by universities since 1973, with colleges offering programs since the 1990s. The Finnish Ministry of Education, along with government goals for teacher preparation and development, emphasizes various objectives:

- High-Quality Teacher Training: Ensuring the education of teachers is of high standards.
- Continuous Professional Development: Promoting ongoing education for teachers.
- Addressing Social and Health Issues: Preparing teachers to address social and health problems.
- Integration of Technology in Teaching Methods: Encouraging the use of technology in teaching.
- Continuous In-Service Training: Providing continuous in-service training for teachers.

In Finland, the program for preschool teachers is typically completed in three years and covers fundamental education and fieldwork, language and communication, and courses that equip students with essential skills for preschool age groups. Additionally, they take courses in English, Swedish, and Finnish speaking and writing, educational sociology, educational psychology, pedagogy, and courses on playing with children.

Elementary school teachers are required to complete a master's degree program, including education science and educational psychology at basic, intermediate, and advanced levels. They also specialize by taking one or two subjects from the elementary school curriculum. Practical teacher training constitutes 9% of their education. Applicants to elementary teacher education must pass a university entrance exam. The entrance exam for elementary teacher education consists of a written test, aptitude test, and an interview. Successful candidates in all three tests are admitted to elementary teacher education.

To become subject teachers for grades 7-9 in primary schools or secondary schools, a master's degree is mandatory. These subject teacher programs last 5-6 years and are offered in two formats: one where the subjects like biology, physics, history, and foreign languages are taught initially, followed by pedagogy courses, and the other where subject and pedagogy training are integrated. Completion of pedagogy training comprising 60 ECTS credits and a minimum of 240 ECTS credits is required.

In Finland, collaboration between universities and practice schools is integral to subject teacher education. To teach in vocational schools, candidates must hold a bachelor's degree in their field, have at least three years of professional experience, and then complete a 60 ECTS credit pedagogy program at a vocational teacher education institute. Special education teachers, responsible for teaching students with learning difficulties or disabilities, undergo 5-6 years of education, which includes 180 ECTS credits of pedagogy training. They work in primary and secondary schools catering to students with disabilities.

In summary, teacher education in Finland places a strong emphasis on high standards, continuous professional development, and addressing various educational needs, including special education and subject specialization, while incorporating practical training and research-driven approaches (OKM, 2023).

In Finland, the framework and standards used for teacher education and the teaching profession outline teachers' professional practice and ethical values. Some key framework elements for teacher education in Finland may include:

- 1. High-Qualified Teachers: Teacher selection in Finland is based on individuals with high qualifications. Teacher candidates' education, academic achievements, and pedagogical abilities are taken into consideration.
- 2. Student-Centered Education: Teaching in Finland is based on a student-centered approach. Individual student needs and learning styles are respected, and teachers aim to equip students with skills such as critical thinking, problem-solving, and collaboration.
- 3. Collaboration in Education: Teachers in Finland collaborate effectively with other teachers, school staff, and parents. This collaboration is essential for enhancing student success.
- 4. Continuous Professional Development: Teachers in Finland engage in continuous professional development throughout their careers. This allows teachers to keep their profession up-to-date and learn new pedagogical approaches.
- 5. Student Well-being and Equity: Teachers in Finland prioritize the physical, emotional, and social well-being of students. They adhere to principles of equity and justice and respect diversity.
- 6. Dialogue and Cooperation: Teachers maintain ongoing communication with other teachers and colleagues. Sharing knowledge and cooperation enable teachers to better serve students.
- 7. Teacher Values and Ethical Principles: Teachers in Finland adhere to professional ethical rules and values. This includes qualities like honesty, respect, fair conduct, and respecting student privacy.
- 8. Research and Innovation: Teachers in Finland are open to educational research and innovations in the field. They follow best practices to enhance student learning.

The teaching profession in Finland is shaped by high standards, a student-centered approach, and a focus on continuous development, following ethical values and principles (OKM, 2023).

In Finland, there is a strong emphasis on 21st-century skills within the context of teacher education and the teaching profession. Finland is known as

a country that continuously improves its education system, and as part of these developments, it places importance on 21st-century skill:

- Critical Thinking: Teachers in Finland strive to instill critical thinking skills in students. Students learn how to analyze problems, evaluate different perspectives, and reach logical conclusions.
- Communication and Collaboration: Students are encouraged to develop communication and collaboration skills. Teachers teach students effective communication, teamwork, and collaboration abilities
- Digital Literacy: Finland places special importance on imparting digital literacy to students. Students have opportunities to use technology effectively, access information, and develop digital skills.
- Creativity and Problem Solving: Students are encouraged to enhance their creativity and problem-solving skills. Teachers support students in finding creative solutions to problems.
- Openness to Learning: In Finland, students are encouraged to be open to learning and to guide their learning processes. Students have the chance to recognize their own learning needs and choose personalized learning paths (Education Finland, 2023).

Finnish teachers use various teaching methods and pedagogical approaches to impart and enhance these skills in students. They integrate technology effectively to facilitate students' access to information and strengthen their critical thinking abilities. This approach has contributed to Finland's education system being internationally recognized for its success.

# 5. Teacher Training in Japan

In Japan, there are two important institutions regarding teacher training. These two institutions are general universities and accredited other higher education institutions. Universities regulate their own teacher training programs. Japan has established various legal regulations concerning the certificates required for individuals who will work as teachers in preschools, primary schools, middle schools, and high schools. The basic qualification required for preschool, primary, and middle school teachers is to have at least a 4-year bachelor's degree. The minimum qualification level for these fields is having a 2-year associate degree. To teach in high schools, having a master's degree is usually required, while a bachelor's degree is the minimum

qualification level. However, in general, having a master's degree is preferred for all these levels.

In Japan, there are two different methods for training general and vocational-technical teachers:

- > Teacher Training with a Bachelor's Degree at Universities (General Open System Rule): In this method, prospective teachers receive teacher training at different levels of education within the education faculties of universities. Individuals in Japan who aspire to become teachers can obtain a bachelor's degree through this method.
- > Teacher Training Based on Certification Competency (Licensing Principle): In this method, prospective teachers participate in specific training programs to obtain teacher certification. These certifications include:
  - General Teaching Certificate
  - Special Teaching Certificate
  - Temporary Teaching Certificate

The General Teaching Certificate is the most commonly pursued certification. To obtain this certificate, prospective teachers must first have a bachelor's degree in general or vocational-technical fields. Afterward, they participate in teacher training courses organized by universities or accredited institutions. Upon successful completion of these courses, students are awarded certificates by the Prefectural Boards of Education. This certificate grants individuals the authority to teach in all regions of Japan for a period of 10 years. Those aspiring to become teachers in Japan must meet the necessary certification requirements based on their intended educational levels. Additionally, these teachers must have completed credits in specific subjects and hold a master's degree in some cases. For instance, a teacher planning to teach at the high school level must possess a master's degree for advanced-level teaching, while a bachelor's degree is sufficient for the 1st level (NİER, 2020).

While teacher education programs in Japan have traditionally focused on conventional pedagogy and teaching methods, there has been a growing tendency in recent years to place more emphasis on 21st-century skills. Especially schools and educational institutions that follow international education trends have started integrating 21st-century skills into teacher education programs:

• Critical Thinking: Prospective teachers are taught how to impart critical thinking skills to students. This skill includes the ability for students to analyze problems, reach logical conclusions, and critically evaluate information.

- Communication and Collaboration: Teachers work on developing effective communication skills and the ability to foster collaboration among their students. Interpersonal collaboration and communication skills among students may be highlighted.
- Technology Integration: Teachers in Japan aim to equip students with digital literacy. They are educated about the effective use of technology in education.
- Creativity and Problem Solving: Teaching methods and activities are designed to nurture creative thinking and problem-solving skills in students.
- Respect for Cultural Diversity: Prospective teachers receive training in understanding, assessing, and showing respect for cultural diversity.

However, the degree of emphasis and implementation can vary from one program to another and from one educational institution to another. Some teacher education programs may take a more pronounced approach to 21st-century skills, while others may adopt a more traditional approach. Therefore, when choosing teacher education programs in Japan, it is important for students and prospective teachers to assess which skills they want to emphasize and which program best meets their needs. Additionally, the practice of the "lesson study" method in in-service teacher training is also an application aimed at enhancing teachers' 21st-century skills.

Lesson study, developed in Japan with the aim of improving teachers' educational practices and enhancing student achievement, is an educational approach (Back & Joubert, 2011). This method focuses on teachers collaborating to improve the processes of lesson planning, implementation, and evaluation. The key features of lesson study include:

- Group Work: Lesson study involves a group of teachers coming together to design, implement, and then examine the effectiveness of a specific lesson. These groups often consist of teachers from the same school or those teaching the same subject.
- Planning Phase: Teachers begin by identifying students' goals and needs. They then design how to plan a lesson to improve student achievement.
- Lesson Implementation: One teacher delivers the designed lesson in the classroom. Other group members observe and take notes on student reactions.
- Review and Evaluation: After the lesson is implemented, group members assess the effectiveness of the lesson and student achievement. During this phase, they analyze how successful the lesson was and what students understood.

- Feedback and Improvement: Group members share their findings and identify any issues or opportunities for improvement. They make recommendations to enhance the lesson's effectiveness.
- Redesign and Lesson Development: Based on the feedback received, changes are made to the lesson design and implementation. The lesson is then re-implemented, and this process continues.

Lesson study aims to facilitate the improvement of teaching practices and boost student learning outcomes by focusing on these components of lesson planning and implementation. Lesson study is an educational approach developed in Japan with the primary goal of helping teachers improve their teaching practices and enhance student achievement. It involves teachers working collaboratively in groups to plan, implement, and evaluate lessons. This process fosters critical thinking skills among teachers, promotes strong collaboration and communication among educators, encourages the effective integration of technology in education, stimulates creativity and problemsolving skills, and enhances teachers' understanding and appreciation of student diversity and cultural differences. This method is widely used not only in Japan but also in many other countries as it contains valuable elements for developing 21st-century skills (Back & Joubert, 2011).

### 6. Teacher Training in Australia

Teacher education in Australia is divided into three levels corresponding to different school stages: early childhood, primary (elementary), and secondary (middle and high school). Therefore, individuals who aspire to become teachers must first decide which age group of students they want to work with. Universities in Australia aim to provide students with early exposure to real classroom environments to help them determine if teaching is a suitable career path. It's worth noting that there are no standardized entrance exams conducted by universities for teacher education programs in Australia. Instead, academic performance is typically used as the main criterion for selecting teacher education candidates.

In Australia, teachers are generally trained through three different pathways:

• Bachelor's Degree in Education (3 or 4 years): These programs provide students with a foundational understanding of the teaching profession and prepare graduates to become teachers.

- Double Degree Program (4 or 5 years): These programs combine teacher education with another field of study, such as a Bachelor of Science or Bachelor of Arts, allowing students to earn two bachelor's degrees.
- Postgraduate Teaching Degree (1 or 2 years): Individuals who hold a bachelor's degree in a field other than education can pursue a postgraduate teaching degree to become qualified teachers.

These various pathways accommodate individuals with different educational backgrounds and experiences, allowing them to choose the most suitable route for becoming a teacher based on their preferences and career goals.

AITSL (Australian Institute for Teaching and School Leadership) is an organization established in 2010 with the aim of providing national leadership to federal, state, and regional governments in promoting the professionalism of teaching and school leadership in Australia. AITSL has several key responsibilities (AITSL, 2023):

- Developing and Maintaining National Professional Standards: AITSL creates and maintains national professional standards for teaching and school leadership. These standards outline expectations and professional development goals for teachers and school leaders.
- Promoting High-Quality Professional Development: AITSL encourages the provision of high-quality professional development opportunities for teachers and school leaders. This support helps educators continuously improve themselves and stay updated with current knowledge.
- National Oversight of Teacher Education Accreditation: AITSL oversees and guides the accreditation and monitoring processes of teacher education programs. This ensures that prospective teachers have the necessary knowledge and skills to excel in the classroom.

The National Professional Standards for Teachers in Australia focus on three main areas and four career stages:

Three Main Areas:

- > Professional Knowledge: The theoretical knowledge and subjects that teachers should possess.
- ➤ Professional Practice: How teachers effectively teach and guide students in the classroom.

> Professional Engagement: Teachers' ability to contribute to the school community, students, and colleagues.

# Four Career Stages;

- > Graduate: The stage for novice teachers with basic requirements.
- > Proficient: Teachers who have the required experience for full accreditation.
  - ➤ Highly Accomplished: Teachers with higher-level skills and knowledge.
  - Lead: Teachers who are effective in leadership roles within schools.

The National Professional Standards, as determined by AITSL (Australian Institute for Teaching and School Leadership), are as follows:

- 1. Know the Students and How They Learn: This standard encompasses teachers' abilities to understand individual student needs, consider learning styles, and accommodate different requirements. Evaluating students' strengths and weaknesses and adapting the learning process accordingly is essential.
- 2. Plan for and Implement Effective Teaching and Learning: This standard evaluates teachers' capabilities in preparing lesson plans, setting learning objectives, and implementing effective teaching strategies to achieve those objectives. Monitoring student progress and adjusting teaching approaches when necessary are also part of this standard.
- 3. Create and Maintain Supportive and Safe Learning Environments: This standard focuses on teachers' skills in providing students with a safe and supportive learning environment. Creating a classroom atmosphere that meets students' emotional and social needs is a primary objective.
- 4. Assess, Provide Feedback, and Report on Student Learning: This standard assesses teachers' abilities to evaluate student performance, provide feedback, and regularly report on student progress. This helps students understand their strengths and weaknesses and supports their improvement.
- 5. Engage in Professional Learning: This standard evaluates teachers' abilities to continuously engage in professional development opportunities and collaborate with colleagues. It is important for teachers to continually update themselves and learn from their peers.

For each career stage (Graduate, Proficient, Highly Accomplished, Leader), these standards provide detailed descriptions of the expected performance levels and skills for teachers at that stage. These standards guide teachers in advancing their careers and directing their professional development (AITSL, 2023).

Teacher education in Australia is guided by the National Professional Standards established by AITSL (Australian Institute for Teaching and School Leadership). These standards are designed to support teachers' professional development, provide better education to students, and promote 21st-century skills. AITSL offers guidance to teachers on understanding their students better, using effective teaching strategies, and creating safe and supportive learning environments. It also assists teachers in assessing student learning, providing feedback, and participating in professional development opportunities. These standards serve as a fundamental guide for teachers to advance in their careers and deliver better education to students. Additionally, they oversee the accreditation and monitoring processes of teacher education programs, ensuring that teacher candidates acquire the necessary knowledge and skills to succeed in the classroom. In summary, teacher education in Australia is shaped by the standards set by AITSL and emphasizes the importance of professional development and 21st-century skills to enable teachers to provide better service to both students and society (AITSL, 2023).

# 7. Teacher Training in New Zealand

Teacher education programs in New Zealand are regulated by the New Zealand Teachers Council, which represents New Zealand teachers. In New Zealand, individuals aspiring to become teachers are not required to take a competitive national exam. To become a teacher in New Zealand, a person must first decide at which level they want to teach. In New Zealand, one must complete one of the initial teacher education programs to become a teacher. These programs vary in terms of full-time, part-time, and distance learning options, and the entry and attendance requirements may differ depending on the institution offering the program. Initial teacher education programs prepare students for a teaching career with a diverse curriculum that includes learning and pedagogical theory, professional studies, internship experiences, and cultural studies (Teaching Council, 2023).

The basic entry requirement for university in New Zealand is determined by the Qualifications Authority, where an individual must have completed at least

42 credits in three different subjects at Level 3 or above, 8 credits in English or a New Zealand language, and 14 credits in numerical subjects like mathematics or statistics. Students can complete the required 42 credits in various fields based on their chosen university majors. Additionally, universities may have their own additional exams or criteria (Teaching Council, 2023).

In New Zealand, the professional standards for teaching are outlined under the New Zealand Teachers' Code of Professional Responsibility. This code defines the professional behavior, ethical principles, and professional responsibilities of teachers and school leaders. Some key principles include:

- 1. Principles and Values: Teachers and school leaders should embrace fundamental principles and values such as respect, fairness, honesty, and professionalism.
- 2. Student-Centered Approach: Teachers should understand students' needs and different learning styles, guiding their education accordingly.
- 3. Continuous Learning and Development: Teachers and school leaders should commit to continuous self-improvement and staying up-to-date with current knowledge.
- 4. Collaboration with Peers: Teachers should collaborate with their colleagues, share experiences, and support each other's professional development.

In New Zealand, teacher education is conducted by universities and teacher training institutions with the aim of helping teacher candidates develop their teaching abilities. These programs are designed in accordance with the New Zealand Teachers' Code of Professional Responsibility and professional standards. In New Zealand, teachers become eligible to work as teachers in classrooms after completing postgraduate education programs and can teach in accordance with the New Zealand Teachers' Code of Professional Responsibility. This system in New Zealand encourages teachers and school leaders to provide education in alignment with professional standards, ethical rules, and professionalism expectations. It aims to provide better education to students in this way (Teaching Council, 2023).

The New Zealand Teachers' Code of Professional Responsibility emphasizes the importance of 21st-century skills and students' acquisition of these skills. Specifically, teachers are responsible for imparting 21st-century skills such as problem-solving, critical thinking, communication, collaboration, creativity, and digital literacy to students. While not explicitly highlighted, the general principles and professional responsibilities outlined in the code aim to contribute to students' development of these skills. 21st-century skills are crucial for staying competitive and functioning effectively in the modern world. Therefore, teachers are encouraged to use different learning experiences and pedagogical approaches to help students enhance these skills. These skills contribute to students' success in the future workforce and within society as a whole.

# 8. Teacher Training in Canada

In Canada, there are two different pathways to becoming a teacher: "concurrent programs" and "consecutive programs." In concurrent programs, teacher candidates simultaneously take academic subject courses and other education courses, which are either completed alongside a four-year undergraduate degree or offered in a one-year master's degree program. In consecutive programs, teacher candidates first complete their four-year education and then enroll in programs where they receive instruction in teaching subject areas, which typically last between two to four terms. While most provinces prefer consecutive programs, Quebec predominantly offers concurrent programs. Approximately twenty percent of teachers across the country hold a master's degree. While elementary school teachers are generally considered generalists, secondary school teachers are expected to specialize in at least two subject areas. Therefore, most programs that prepare elementary school teachers are concurrent, while programs for secondary school teachers tend to be consecutive. Another common practice in most provinces is that teachers are educated through in-situ training during their student and internship periods (CMEC, 2023).

Teacher education in Canada typically includes the following key elements:

- Academic Education: Teacher candidates take academic courses related to the subjects or learning areas they intend to teach. These courses often cover topics such as education, pedagogy, teaching methods, and child psychology.
- Classroom Experiences: Teacher candidates gain classroom experience by participating in school internships. These internships provide opportunities to interact with students, gain teaching experience, and develop classroom management skills.

- Teaching Practicum: Teacher candidates complete teaching practicums, where they gain practical teaching experience. These practicums involve teaching independently under the supervision of an experienced teacher.
- Professional Development: Teacher candidates participate in professional development opportunities related to the teaching profession. They continuously work to improve themselves in alignment with teaching standards (CMEC, 2023).

When looking at the teacher preparation system in the province of Ontario, it consists of three main components: 1) Content knowledge of the curriculum, 2) Pedagogical and instructional strategies knowledge, and 3) Content within the curriculum. Content knowledge includes current research on learning and teaching, Ontario-specific curriculum and planning, special education, equity, diversity, and assessment. Pedagogical and instructional strategies knowledge cover educational research, data analysis, using technology as an educational tool, inquiry-based research, data assessment, student observation, measurement, and evaluation of new teaching strategies, learning and teaching theories, methods, differentiated instruction, classroom management, organizational skills, child and adolescent development. Content within the curriculum encompasses mental health knowledge relevant to the school environment in Ontario, the standards set by the Ontario College of Teachers for teaching profession practice, ethical requirements for the teaching profession, and Ontario's education laws and regulations (OCT, 2023).

The standards of practice for the teaching profession:

- 1. Dedication to Students and Learning: Teachers are devoted to their students, treating them fairly and respectfully while considering individual factors that affect learning. They aim to nurture students into responsible Canadian citizens.
- 2. Professional Knowledge: Educators strive to stay updated in their professional knowledge and understand its relevance to their teaching. They use their knowledge of student development, learning theories, curriculum, ethics, educational research, and relevant policies to make informed decisions in their practice.
- 3. Professional Practice: Teachers apply their professional knowledge and experience to enhance student learning. They employ suitable teaching methods, assessment strategies, and technology to address the needs of individual students

and learning communities. They continuously improve their teaching through inquiry, dialogue, and reflection.

- 4. Leadership in Learning Communities: Educators encourage and engage in the establishment of collaborative, safe, and supportive learning environments. They acknowledge their shared responsibilities and leadership roles in fostering student success. They uphold ethical standards within these learning communities.
- 5. Ongoing Professional Learning: Teachers understand the importance of ongoing professional development for effective teaching and student learning. Their practice and self-directed learning are guided by experience, research, collaboration, and knowledge (OCT, 2023).

In summary, teacher education in Canada provides opportunities for teacher candidates to integrate academic knowledge with teaching practices, helping them develop 21st-century skills such as critical thinking, problem-solving, and communication. Classroom experiences and internships enhance teacher candidates' abilities to interact with students and adapt to different learning styles while gaining essential skills in classroom management and student observation. Teaching practicums allow teacher candidates to gain independent teaching experience, contributing to the development of students' critical thinking, creativity, and digital literacy skills. Teacher education in Canada also promotes continuous professional development, emphasizing the importance of staying updated with current teaching methods to better guide students. Ultimately, teacher education in Canada aims to prepare teacher candidates in line with the requirements of the 21st century, with the goal of providing students with a better education and contributing to their future success.

# 9. Teacher Training in United Kingdom

The teacher training system in the United Kingdom is based on key educational institutions such as universities, colleges, and education colleges. These educational institutions prioritize the acquisition of pedagogical skills and teaching practice by teacher candidates. Teacher training models in the United Kingdom are generally carried out through two different approaches.

The first approach involves teacher candidates completing a 3 or 4-year undergraduate degree program. These undergraduate programs aim to provide the fundamental knowledge and skills necessary for preparing for the teaching profession.

The second approach primarily emphasizes school-based training. In this model, teacher candidates engage in teaching practice before obtaining an undergraduate degree. After gaining teaching experience, teachers must meet the qualifications set by the National College for Teaching and Leadership. Postgraduate education may be required, especially for those aspiring to teach in specialized fields such as mathematics and science. However, these qualifications may not be necessary for Free Schools and certain academies. Teachers in Free Schools are referred to as "teaching staff" and often collaborate with educators who focus more on experiential teaching. In conclusion, the teacher training system in the United Kingdom encompasses various approaches and requirements, all aimed at ensuring that teachers are well-prepared and qualified for their profession (CEDEFOP, 2019).

Teacher education programs in the United Kingdom typically include the following key elements:

- Educational Psychology and Child Development: Teachers are trained in educational psychology and child development to understand students' developmental needs and learning processes.
- Teaching Methods: Teacher candidates learn effective teaching methods, including classroom instruction planning, interactive teaching strategies, and student-centered teaching techniques.
- Classroom Management: Teachers develop classroom discipline management and student behavior guidance skills.
- Curriculum Planning: Teachers acquire knowledge in curriculum planning, student assessment, and monitoring student progress.
- Professional Internship: Teacher candidates undergo professional internships in schools to gain real classroom experience, providing an opportunity to apply theoretical knowledge in practice.

Teacher education programs in the United Kingdom aim to help teachers enhance their professional skills and effectively educate students. These programs collaborate between education departments and schools to offer a wide range of education to teacher candidates.

In the United Kingdom, teacher standards are known as "Teachers' Standards," and they encompass eight core principles:

- 1. High Expectations for Students: Teachers should have high expectations for students to maximize their potential.
- 2. Knowledge, Skills, and Understanding: Teachers must effectively convey subject content, skills, and understanding to students.
- 3. Planning: Teachers should plan their lessons well and use appropriate resources to support student learning.
- 4. Adapting to Students: Teachers should understand and adapt to the individual needs and differences of students in their teaching.
- 5. Monitoring Student Progress: Teachers should regularly monitor students' progress and intervene when necessary.
- 6. Effective Classroom Management: Teachers should possess effective classroom management skills to maintain classroom discipline and create a positive learning environment.
- 7. Collaboration and Communication: Teachers should engage in effective communication and collaboration with parents, students, and other educational stakeholders.
- 8. Professional Development: Teachers should actively seek ongoing professional development opportunities and keep their professional knowledge and skills up-to-date.

These standards guide and assess the performance of teachers in the UK, ensuring they provide quality education and support for their students while maintaining their own professional growth. These standards typically require teachers to understand students' learning needs and plan instruction accordingly. This may include equipping students with the skills to cope with the challenges they will encounter in the modern world. Additionally, teachers are expected to possess skills such as effective use of technology, promoting critical thinking among students, and collaborating effectively (Eurydice, 2023).

While the United Kingdom's teacher standards may not explicitly state "21st-century skills," they encourage teachers to focus on students' individual needs, recognize different learning styles, and provide students with diverse learning experiences. This can contribute to students acquiring 21st-century skills.

In summary, the teacher standards in the United Kingdom, while not explicitly stating 21st-century skills, support teachers in helping students acquire and enhance these skills. These skills are crucial for students to thrive as successful individuals in the modern world.

# 10. Teacher Training in Germany

In Germany, after the Abitur examination (which is taken at the end of the second stage of secondary education) and successfully passing it, students can begin the initial phase of teacher education at the university. The number of students admitted to teacher education programs is not regulated based on the demand for teachers but rather limited according to the needs of universities or relevant faculties. All teachers in Germany, from primary school to the second stage of secondary education, receive their education at the university level. After completing their teacher education programs, teacher candidates must pass the first state examination (I. Staatsexamen), which is conducted by the state examination office in each federal state, to be eligible for teaching positions. Candidates who pass the subject knowledge exams become student teachers and start their two-year training period. During this period, candidates are required to attend seminars organized by in-service training centers in their respective regions. They also independently teach classes under the supervision of a mentor teacher and participate in various activities. At the end of this period, candidates who are deemed successful go on to take the second state examination (II. Staatsexamen), which assesses their teaching profession knowledge. Those who pass the second state examination are appointed as regular teachers and can teach until they retire. Teachers in Germany are not subject to any mandatory professional development or quality control assessments throughout their careers (Eurydice, 2023).

In Germany, the teaching profession and teacher education programs are regulated at the level of federal states (Bundesland), and each state establishes its own standards. Therefore, there is no general national standard for teaching in Germany, but each state has its own teacher training programs and standards. Each state shapes teacher education and the training of teachers according to its own educational policies and needs (Blömeke, König & Felbrich, 2009).

Teacher education programs in Germany aim to equip prospective teachers with 21st-century skills such as critical thinking, problem-solving, communication, collaboration, and technology usage. While there may not be a unified national standard for teaching, the emphasis in Germany's teacher education standards and programs is on ensuring that teachers are competent in pedagogical knowledge, teaching methods, and classroom management. These skills enable teachers to effectively deliver instruction and provide guidance to students tailored to their individual needs.

# 11. Teacher Training in France

In France, the teacher training system is overseen by the Ministry of National Education and the Higher Education and Research Institution. The institutions responsible for teacher training include universities, teacher training institutes affiliated with universities, schools of education, teacher training colleges, and private teacher training centers (UNESCO-UNEVOC, 2015).

In France, the teacher education system consists of two stages: a general undergraduate education and a subsequent teacher training program. The undergraduate program lasts for three years, followed by a two-year teacher training program. For those who want to become vocational and technical education teachers, applicants are required to have one of the following qualifications CEDEFOP, 2022):

- Technical bachelor's degree (bachelor's + 2 years) + 3 years of professional experience in the field,
- Technical bachelor's degree + 5 years of professional experience in the field,
  - Vocational diploma + 8 years of professional experience in the field.

In France, teacher education programs include a specific process for entering the teaching profession. Those who aspire to become teachers in France must complete a particular process to receive teacher training and be appointed as teachers. The main components of teacher education programs in France are as follows:

- Bachelor's Degree (Licence): Prospective teachers obtain a bachelor's degree related to the field in which they intend to teach. This degree serves as the foundational requirement for entry into teacher education. Those planning to become teachers can choose to teach at the elementary school, middle school, or high school levels.
- Teacher Education (Master MEEF): After obtaining their bachelor's degrees, prospective teachers enroll in a teacher education program known as "Master Métiers de l'Enseignement, de l'Éducation et de la Formation" (MEEF). Teacher education programs aim to provide students with pedagogical knowledge, classroom management skills, student assessment, and teaching

abilities. Additionally, students gain expertise in their chosen teaching field based on the level they plan to teach.

- Internship and Teaching Practice: As part of teacher education programs, prospective teachers undergo internships. These internships provide real classroom experience and opportunities to practice teaching. Students typically complete their teaching internships in actual classrooms.
- National Exam (CRPE): For those aspiring to become elementary school teachers, passing the "Concours de Recrutement de Professeurs des Écoles" (CRPE), a national examination, is required. This exam assesses teaching skills and abilities.
- Appointment and Certification: After completing their teacher education, prospective teachers are appointed and receive certification as teachers. The appointment and certification process may vary depending on the level at which prospective teachers plan to teach.

Teacher education programs in France aim to help teachers develop their professional skills and effectively deliver instruction to students. These programs provide training not only in teaching competencies but also in pedagogical approaches, classroom management, and addressing student needs. In France, teacher education programs emphasize ethical behavior and professional responsibilities, encouraging teachers to acquire the skills necessary to provide the best education to their students.

The French Ministry of National Education establishes standards for the evaluation and management of teacher education programs and teacher competencies. In particular, teacher education programs should be designed and implemented in accordance with the requirements of the teaching profession. While teacher standards and teacher education programs in France do not typically directly emphasize 21st-century skills, these standards aim to enable teachers to effectively instruct students, enhance students' academic achievements, and maintain discipline in the classroom. However, given the critical importance of 21st-century skills for students to succeed in the modern world, it is important for teachers to develop and impart these skills to their students. Teacher education programs focus on fundamental areas such as pedagogical knowledge, classroom management, student assessment, and adapting to student needs. These programs also include instructional strategies aimed at imparting 21st-century skills to students.

#### 12. Conclusions

Each country's education system is unique due to cultural, social, and legal differences, and teacher education also reflects these variations. The countries examined offer different approaches and emphases for teachers to develop their abilities and professionalism. Therefore, each country's teacher education system is shaped to align with its own educational goals and needs. When comparing the teacher education systems of countries:

- Teacher Education Process: In every country, the teacher education process consists of similar fundamental stages: obtaining a bachelor's degree, participating in a teacher education program, completing practical internships, and obtaining a teaching certificate. However, the durations and contents of these stages may vary from one country to another.
- Teaching Fields: In each country, there are different teaching fields and specializations for those who want to teach at the primary school, middle school, or high school levels. Teaching fields are determined based on the age and learning needs of students.
- Practical Internships: As part of teacher education programs, practical internships allow teacher candidates to gain real classroom experience. These internships provide students with the opportunity to practice teaching.
- Certification and Standards: Each country establishes specific certification requirements and standards for obtaining a teaching certificate and being appointed as a teacher. These standards ensure that teachers acquire competence in areas such as pedagogical knowledge, classroom management, student assessment, and ethical behavior.
- Continuous Professional Development: The teaching profession requires continuous development. The countries examined provide various opportunities for teachers to maintain their professional development. This helps teachers stay current with pedagogical approaches and provide the best education to their students.
- 21st-Century Skills: Some countries appear to have integrated 21st-century skills into their teacher education programs. These skills aim to impart critical thinking, problem-solving, communication, collaboration, and information technology literacy to students.

Teacher education and the teaching profession are fundamental pillars of every country's education system and are crucial for providing high-quality education to students. In this context, it is essential for teachers to maintain their continuous professional development. This allows teachers to stay updated on current pedagogical approaches, technologies, and research, enabling them to provide the best education to their students. It is important for every country to support teachers in this regard.

Furthermore, 21st-century skills are of critical importance for students to succeed in the modern world. Teacher education programs should emphasize these skills and teach teachers strategies for imparting them to their students. In conclusion, teacher education plays a critical role in enhancing education quality in every country and providing students with the best education. Additionally, supporting teachers' professional development and updating education standards can make the teaching profession more effective. Therefore, continuous improvements in teacher education and the teaching profession are of great importance.

#### References

AITSL (2023). Teacher standards. https://www.aitsl.edu.au/

Back, J. & Joubert, M. (2011). Lesson study as a process for professional development: working with teachers to effect significant and changes in practice. Proceedings of 7th Congress of the European Society for Research in Mathematics Education, Rzeszow, Poland, February, 2559-2568.

Blömeke, S., König, J., & Felbrich, A. (2009). Middleschooleducation in Germany. In S. B. Mertens, V. A. Anfara, Jr., and K. Roney (Eds.), An internationallook at educatingyoungadolescents (pp. 255-286). Charlotte, NC: Information Age Publishing.

Çalık, T. & Sezgin, F. (2005). Küreselleşme, Bilgi Toplumu ve Eğitim. Gazi Üniversitesi Kastamonu Eğitim Dergisi, 13(1), 55-66.

CEDEFOP, (2019). Developments in vocational education and training policy https://www.cedefop.europa.eu/en/country-reports/developments-vocational-education-and-training-policy-2015-19-uk-northern-ireland

CEDEFOP, (2022). Teachers and trainers in a changing world: France, https://www.cedefop.europa.eu/en/country-reports/teachers-and-trainerschanging-world-france

CMEC (2023). Council of Ministers of Education. https://www.cmec.ca/ en/

Education Finland (2023). https://www.educationfinland.fi/

Eisenschmidt, E. (2011). Teacher education in Estonia. European dimensions of teacher education – Similarities and differences (pp. (pp. 115–132). Ljubljana: University of Ljubljana.

Eurydice (2023). National Education System. https://eurydice.eacea.ec.europa.eu/national-education-systems/germany/overview

MEXT, (2023). Ministry of Education Culture, Sports, Science and Technology, Teacher Training and Certificate System. https://www.mext.go.jp/en/

NİER (2020). National Institute for Educational Policy Research, https://www.nier.go.jp/

NTU, (2023). National Institute of Education (NIE) https://www.ntu.edu.sg/nie

OCT (2023). Ontario College of Teachers. https://www.oct.ca/about-the-college/council

OECD, (2018). PISA 2018 results. https://www.oecd.org/pisa/publications/pisa-2018-results.htm

OKM (2023). https://okm.fi/etusivu

P21 & AACTE (2010). 21st century knowledge and skills in educator preparation. https://files.eric.ed.gov/fulltext/ED519336.pdf

P21 (2021). Partnership for 21st Century Skillscore Content Integration. https://www.battelleforkids.org/networks/p21

Soland, J., Hamilton, L. S., & Stecher, B. M. (2013). Measuring 21st century competencies: Guidance for educators. The Asian Society. CA: RAND Corporation.

Teaching Council (2023). Teaching Council of New Zealand. https://teachingcouncil.nz/

TIMSS & PIRLS (2015). Encyclopedia https://timssandpirls.bc.edu/timss2015/encyclopedia/

Trilling, B. & Fadel, C. (2009). 21st Century Skills; Learning for Life in Our Times. Jossey-Bass Company Press.

UNESCO-UNEVOC (2015). World TVET database France. Compiled by: UNESCO UNEVOC International Centre for Technical and Vocational Education and Training.

Zhao, Y. (2010). Preparing globally competent teachers: A new imperative for teacher education. Journal of Teacher Education, 61(5), 422-431.

# CHAPTER VII

# SPORTS FOR INDIVIDUALS WITH SPECIAL NEEDS

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#### 1. Introduction

bsolutely, individuals with special needs exhibit substantial variations in their individual development, interests, needs, and educational capacities compared to their peers. The nature of these needs and characteristics varies based on the specific type of requirement. Sports hold a vital and incredibly advantageous position in the lives of individuals with special needs. Engaging in sports activities designed specifically for their requirements can bring about a remarkably positive influence, addressing diverse developmental facets, encouraging social integration, boosting physical health, and cultivating personal abilities within a nurturing setting. For these individuals, the importance of sports is not limited to physical health only, it also has great emotional, social and psychological effects. The insights from Kürkçü, Sevindi, Gökhan and Akçakoyun (2010) highlight the multifaceted role of sports across all phases of life. Participation in sports, starting from early childhood and persisting across one's lifetime, not only fosters the enhancement of physical and motor abilities but also notably influences mental well-being. In addition to personal advantages, sports hold a crucial position in societal, cultural, and economic progress. They facilitate the shaping of one's character and individuality, assisting in adjusting to surroundings by nurturing the gain of expertise, capabilities, and aptitudes, while also fostering unity, concord, and tranquility within communities. Moreover, sports serve as a platform to enhance individual resilience on the international stage, promoting fair competition within established frameworks and rules (Erkal, 1982).

# 2. Sports in Individuals with Special Needs

Sports and movement training provides many benefits for every child, such as energy expenditure, pure entertainment, coordination development and group work. These benefits also extend to children with special needs. Early initiation into movement training provides a wide array of emotional, physical, cognitive, and social advantages for nearly every person (Albayrak & Eliöz, 2023). Sports hold a pivotal position in the rehabilitation of individuals with special needs, nurturing the advancement of diverse skills and attributes. Through sports, individuals with special needs enhance their balance, confidence, muscle control, mobility, and coordination abilities. Beyond physical improvements, sports serve as a platform where both healthy and disabled individuals can interact socially, learning valuable life values such as teamwork, cooperation, and mutual support. Furthermore, involvement in sports provides psychological assistance, assisting in identity formation and the pursuit of individual autonomy. It triggers various emotions such as discipline, competition, and camaraderie, thereby substantially contributing to the comprehensive growth and welfare of individuals with special needs (Ergun & Baltacı, 2006). While doing sports is important for everyone, it also has a special importance for individuals with special needs. Engaging in sports activities can significantly enhance the social, emotional, and psychological expression of individuals with special needs within their community. (İlhan, 2008). Sports provides great support not only for mobility for individuals with special needs, but also for adaptation to social life, personal development and building self-confidence. Sports and physical activities act as therapeutic and rejuvenating instruments, aiding in the mental, physical, emotional, and social growth of individuals with special needs (Prime Ministry General Directorate of Family and Social Research [BASAGM], 2007). The psychological needs and motivations of individuals with special needs significantly influence their participation in sports activities. Engaging in sports can assist these individuals in managing feelings of inadequacy and coping with various psychological challenges they might face (Çınarlı & Ersöz, 2010).

The beneficial effects of sports observed in healthy individuals are even more pronounced in individuals with special needs. Physical activity and sports hold immense significance for this demographic, significantly reducing health issues and associated costs. (Philips, 2009). Sports have a vital role in facilitating the involvement of individuals with special needs in physical activities, assisting their integration into social spheres while nurturing personal growth and enhancing

self-assurance. Acting as forms of rehabilitation and therapy, physical activity and sports bear immense importance in the psychological, physical, emotional, and social advancement of individuals with special needs (Çevik & Kabasakal, 2013). Sports activities and exercises tailored for individuals with special needs create valuable opportunities for social interaction. These activities serve as a platform for social engagement, facilitating connections, fostering friendships, and promoting inclusivity within their communities. Sports supports social harmony by enabling disabled individuals to adapt to their social environment and to feel dynamic and strong both spiritually and physically (İlhan, 2008).

The participation of individuals with special needs in physical activities acts as a catalyst, directing society's focus towards their abilities and obstacles. This participation plays a pivotal role in altering negative perceptions and behaviors toward people with disabilities. Sports activities contribute significantly to the learning process of cooperation, sharing, and fostering interpersonal relationships within society for individuals with special needs (BASAGM, 2007). Engaging in sports among individuals with special needs significantly influences the processes of integration and rehabilitation (Gür, 2001). The objectives of sports for individuals with special needs encompass fulfilling their requirements for physical activity, a balanced lifestyle, a sense of achievement, personal fulfillment, and adjustment within the social sphere (Yetim, 2014). Moreover, engaging in sports enhances the self-confidence of individuals with special needs and promotes more consistent interactions within their environment (İlhan, 2010).

These activities not only improve the quality of life for individuals with special needs but also nurture a social setting that fosters their growth as athletes. Engaging in sports throughout their lives is recommended for individuals with special needs to aid in their adaptation to life's various challenges and to foster continuous growth and development (BASAGM, 2007). Doing sports for individuals with special needs has positive effects not only on their own lives, but also on their families, business environments and the society they live in. For these individuals, sports increases interpersonal communication, supports initiative and harmony, encourages planned work and training, increases the joy of life, connects them to life and improves their self-confidence (Gür, 2001).

Individuals with special needs can successfully perform many sports branches that healthy people do (İnal, Donuk, Güngördü, Kaya, Kesler & Kırandı, 2007). Participation in sports activities helps individuals with special needs grasp the fundamentals of cooperation, sharing, and social interaction within the framework of societal relationships (Ergun & Baltacı, 2006). Involving individuals with special needs in sports and encouraging their participation opens a path that supports their adaptation to social life (Konar & Pepe, 2003). The significance of sports and recreational activities for individuals with special needs is highlighted due to their numerous advantages. Engaging in these activities holds immense importance, particularly in enhancing athletic abilities, uncovering inherent sporting talents, nurturing personal and social skills, and shaping individuals who can make meaningful contributions to society (Aktekin, Bayazıt, Çolak, & Çolak, 2014).

The benefits of sports for individuals with special needs are continuously expanding. Engaging in sports activities offers physical and psychosocial advantages, enhancing their quality of life and fostering greater social inclusion. These activities can bolster mental health, well-being, friendships, and social connections (Tow, Gober, & Nelson, 2019). Furthermore, it's noted that sports have a positive impact on the self-esteem, perception of self-efficacy, quality of life, and mental well-being of athletes with special needs. They also play a positive role in their adjustment to the social environment (Blauwet & Willick, 2012). Additionally, in order to encourage the active participation of students with special needs in physical education and sports classes, teaching methodologies, equipment, and learning environments ought to be adapted to accommodate the diverse needs of every student. These individuals should receive support in their pursuit of involvement in various physical activities beyond regular school hours, fostering inclusive participation and encouraging them to share similar roles and experiences with their typically developing peers in these activities (Orhan, Uzunçayır & İlhan, 2021).

Individuals with special needs may experience different levels of motor and sensory deficits, epilepsy, mental disorders, learning and attention difficulties, and musculoskeletal system abnormalities. These deficits can lead to limitations in motor control, balance, posture, strength, and endurance and may reduce participation in the treatment process. Deprivation of physical and social activities can encourage a shift to a less active lifestyle and increase the risk of obesity (Tow, Gober, & Nelson, 2019). Individuals with physical disabilities feel the importance of competitive sports and recreational activities more because they are less active. A sedentary lifestyle can increase the risk of obesity, lack of self-confidence and even disease in this group. Hence, it holds immense significance to promote the involvement of individuals with physical disabilities in both national and international activities (Wilson & Clayton, 2010). Special

tools, methods and special programs are required to meet the developmental needs of individuals with special needs and to benefit from educational services. Meeting these needs fully is crucial to ensure the participation and integration of individuals with special needs into life (Koparan, 2003).

Sports and physical activity covers important areas such as improvement in general health, improvement of cognitive health, weight control, strengthening of bone health, improvement of psychological and emotional health, development of social skills, increase of motor skills, strengthening of self-confidence. Additionally, there might be a decreased risk of certain illnesses like diabetes or high blood pressure. Engaging in enjoyable activities with peers during movement training allows individuals to spend time together and reap these advantages (Albayrak & Eliöz, 2023). Physical education and sports play crucial roles in fostering equal opportunities, complete participation, independence, and self-reliance for individuals with special needs in social settings. However, to attain the desired impact, it's essential to employ methods and techniques that are suitably tailored to the specific type and level of individuals with special needs (Yılmaz & Yetim, 2019). Physical Education activities planned for children in need of special education support development in psychomotor, affective and cognitive areas. It must be of good quality. Because effective development in these areas will contribute to the realization of the determined long-term goals (Koparan, 2003). Sports and movement education provides both cognitive, physical and social benefits for all children (Albayrak & Eliöz, 2023).

#### 3. Conclusion

Examining the relevant literature regarding individuals with special needs, their characteristics, sports, physical activity, and sports tailored for this group highlights the significance of sports in their lives. It's evident that sports hold immense importance for individuals with special needs, both physically and psychologically. Participation in sports helps improve muscle strength, flexibility, balance, and coordination skills in individuals with special needs. Furthermore, it plays a role in elevating their self-confidence, self-esteem, social abilities, and overall life quality, supporting their integration and enthusiastic involvement in society. Viewed as therapy, entertainment, and a fundamental right for individuals with special needs, sports should not be undervalued. Providing suitable sports opportunities tailored to their needs is essential. Providing sports activities that cater to individual needs and incorporate tailored adaptations according to the specific type of disability is essential when offering sports opportunities for individuals with special needs.

#### References

Aktekin E, Bayazıt B, Çolak S., & Çolak T, (2014). Eğitilebilir zihinsel engelli çocukların el becerilerinin gelişimine, kapalı alan aktivitelerinin etkisi. *Akademik Sosyal Araştırmalar Dergisi, 2(2)*: 469-477

Albayrak, Ö., & Eliöz, M. (2023). Spor yapma alışkanlığının özel gereksinimli çocukların kognitif becerilerine etkisi. *Ondokuz Mayis University Journal of Education Faculty*, 42(1), 1-32.

BASAGM, (2007). Ortopedik özürlüler, Aile Eğitim Rehberi, Ankara.

Blauwet, C., & Willick, S. E. (2012). The Paralympic Movement: using sports to promote health, disability rights, and social integration for athletes with disabilities. Pm&r, 4(11), 851-856.

Çevik, O., & Kabasakal, K. (2013). Spor etkinliklerinin, engelli bireylerin toplumsal uyumuna ve sporla sosyalleşmelerine etkisinin incelenmesi. *International Journal of Social and Economic Sciences* 3(2),74-83.

Çınarlı, S. & Ersöz, G. (2010). Engellilere yönelik spor hizmetlerinin gelişimi açısından sponsorluk ve vergisel düzenlemelere ilişkin öneriler. Süleyman Demirel Üniversitesi Sosyal Bilimler Enstitüsü Dergisi, 2(12), 141-156.

Ergun, N., & Baltacı, G. (2006). Spor *yaralanmalarında fizyoterapi ve rehabilitasyon prensipleri*. Ankara: Hacettepe Üniversitesi Fizik Tedavi ve Rehabilitasyon Yüksekokulu Yayınları.

Erkal, M. (1982). Sosyolojik açıdan spor. Ankara.

Gür A, (2001). Özürlülerin sosyal yaşama uyum süreçlerinde sportif etkinliklerin rolü. Başbakanlık Özürlüler İdaresi Başkanlığı, Ankara, Başbakanlık Basımevi.

İbiş S, Gökdemir K., & İri R, (2004). 12-14 yaş grubu futbol yaz okuluna katılan ve katılmayan çocukların bazı fiziksel ve fizyolojik parametrelerinin incelenmesi. *Kastamonu Eğitim Dergisi*, *12(1)*, 285-292.

İlhan, L. (2008). Eğitilebilir zihinsel engelli çocuklarda beden eğitimi ve sporun sosyalleşme düzeylerine etkisi. *Kastamonu Eğitim Dergisi*, *16*, 315-324.

İlhan, L. (2010). Hareketsiz yaşamlar kültürü ve beraberinde getirdikleri. *Verimlilik dergisi*, (3), 195-210.

İnal, S, Akdur H, Donuk B, Güngördü O, Kaya B, Kesler A, & Kırandı Ö, (2007). Zihinsel engelli çocuklara spor eğitimi ile bedensel sağlığın kazandırılması. Engellilerde Sanat ve Spor Sempozyumu-I. Hacettepe Üniversitesi, Ankara.

Konar, N., & Pepe, K. (2003). Rehabilitasyon-engelliler sporu ve paralimpikler, İstanbul Üniversitesi Spor Bilimleri Dergisi, 11(3), 162-166

Koparan, S. (2003). Özel ihtiyaçları olan çocuklarda spor. Uludağ Üniversitesi Eğitim Fakültesi Dergisi, 17(1), 14.

Kürkçü, R., Sevindi, T., Gökhan, İ., & Akçakoyun, F, (2010). Badminton sporunun çocuklarda vücut yapısına etkisi. Turkish Kick Boxing Federation Journal of Sport Science, 2(2) 34-41.

Orhan, B. E., Uzunçayır, D., & İlhan, L. (2021). Kaynaştırma eğitimi sürecinde beden eğitimi ve spor öğretmenlerinin karşılaştıkları sorunlara ilişkin görüş ve önerileri. Aksaray University Journal of Sport and Health Researches, 2(1), 28-49.

Özsoy, Y., Özyürek, M., & Eripek, S. (2002). Özel eğitime muhtaç çocuklar özel eğitime giriş. Ankara: Karatepe Yayınları.

Phillips, S.M. (2009). Physiologic and molecular bases of muscle hypertrophy and atrophy: impact of resistance exercise on human skeletal muscle (protein and exercise dose effects). Appl. Physiol. Nutr. Metab, 34(3), 403-10.

Tow, S., Gober, J., & Nelson, M. R. (2020). Adaptive sports, arts, recreation, and community engagement. Physical Medicine and Rehabilitation Clinics, 31(1), 143-158.

Wilson, P. E., & Clayton, G. H. (2010). Sports and disability. Physical *Medicine and Rehabilitation, 2(3), 46-54.* 

Yetim, A. (2014) Engelliler Sporuna Sosyolojik Yaklaşım. II. Uluslararası Engellilerde Beden Eğitimi ve Spor Kongresi Bildiri Özetleri Kitabı. Batman.

Yılmaz, A., & Yetim, G. (2019). Türkiye'de spor bilimleri alanında özel gereksinimi olan bireylere yönelik yapılan çalışmaların incelenmesi. Spor Bilimleri, 9.





