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Journal of Emerging Educational Studies (JEES) is an international, double-blind peer-reviewed, scholarly publication which aims to contribute to the field of educational sciences by publishing high quality, timely, ground-breaking, and thought provoking research. The Journal, thus, welcomes relevant studies in a diverse array of educational domains. The publishing language is English. Articles in Turkish are also published with an extended summary in English.

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Editorial for The Inaugural Issue: Emerging Topics in Education

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Editorial

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EDITORIAL

In the age of rapidly evolving technology, the field of education has been subject to numerous changes, as well. As all parts of life have been affected by the emerging technologies, philosophies, perspectives, and innovations of the modern age, all the branches, domains, and levels of education have also been influenced considerably. In order to shed light on the emerging topics in the field of education we, as the *Journal of Emerging Educational Studies* (JEES), would like to welcome you, our scholarly readers, with an editorial on the “emerging” topics in education.

Not surprisingly, educational technologies have been a rising topic in the field with a diverse range of supporting theories and cutting-edge practices. According to Bozkurt et al. (2023), the introduction of generative AI tools such as large language models (LLMs) such as ChatGPT has captured the attention of the society and educational professionals, which eventually forced them to respond to these emerging technologies. Although the introduction of artificial intelligence dates back to several decades before (Doroudi, 2022), recent developments illustrating the “intelligence” and generative nature of AI tools caused the educational researchers to focus on this emerging field in their studies. Surely, studies in the field are not limited to AI technologies. A brief search in the Scopus database reveals that MOOCs, digital literacy, and e-learning are also among the “hot” topics in educational literature. As a recently accelerated topic, “gamification” should also be included among the popular topics of research in the field (Ozyurt & Ayaz, 2022). Increasingly used technologies inevitably affect the trends in various domains of education. For instance, as for curriculum

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and instruction, there is a focus on developing and implementing innovative teaching methods, such as blended learning, flipped classrooms, and the use of interactive technologies to enhance student engagement and learning outcomes.

In a recent “What’s hot in Literacy” survey, the evolving landscape of education was emphasized and the “hot” topics in literacy education were introduced by scholars, Grote-Garciaa, Ortlieb and Cardona (2024). In their paper, the authors state artificial intelligence in literacy, cultural and linguistic diversity, learning disabilities, social equity, and quality improvement in educational materials as the highlighted topics in the relevant studies in the literature. These findings seem to prove that educational research is overwhelmingly under the effect of current developments in technology, political and economic conditions in the world, and rising issues in any given geography.

Another frequently visited topic in the Scopus database seems to be the “STEM education”, which indeed, has been popular for a while in the literature. However, a shift of scope towards promoting STEM fields and inclusive practices for underrepresented groups is also evident in the related literature (Hernandez Negrete et al., 2023). Surely, inclusion of the disadvantaged and the underrepresented is not unique to the domain of STEM. Instead, in all fields of education, equity and inclusion have been popular keywords. The uptrend of online learning especially after the pandemic, the strategies to ensure inclusion, diversity, equity, and access in online education have become critical topics explored in educational research (Oyarzun et al., 2024).

In the midst of swift transitions, teacher training also takes its place among the mostly covered issues regarding educational research. The preparation and ongoing professional development of teachers have been and are crucial topics for adapting to new educational demands such as digital literacy, innovative teaching strategies, and addressing diverse student needs (Ezzaim et al., 2022). Besides, initial teacher education, which aims to prepare preservice teachers for the emerging needs of the profession is a hot topic of the age, as well.

In conclusion, the evolving landscape of education is being profoundly shaped by the rapid advancements in technology, emerging educational theories, and the need for inclusivity and equity. From artificial intelligence and gamification to STEM education and teacher training, these emerging topics are not only transforming the way we approach learning but also challenging traditional educational paradigms. It should also be noted that educational research exhibits interdisciplinary and multidisciplinary characteristics, making it challenging to identify the overall development of specific topics within the field (Huang et al., 2020).

As we move forward, it is crucial for educators, researchers, and policymakers to embrace these innovations thoughtfully, ensuring that technology is leveraged to enhance learning while addressing the diverse needs of all students. The *Journal of Emerging Educational Studies* remains committed to exploring these dynamic shifts, fostering meaningful dialogue, and contributing to the development of education in this exciting new era. We kindly invite you to join us in this journey of discovery and reflection, as we continue to explore the intersection of education, technology, and the evolving needs of society.

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The Contribution of School Projects in the Fight Against Digital Game Addiction

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Research Article

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Abstract

Virtual gaming addiction has become an increasing problem among children and teenagers. This addiction causes negative effects on individuals' economic success, social interactions and emotional states, and social values. Therefore, collaboration between educators, families, and health professionals is necessary to raise awareness about virtual game addiction and reduce the effects of this problem. SOBE (abbreviation in Turkish Virtual Game Addiction Training) is a unique school project initiated with the idea that there is a need to raise awareness among secondary school students about the effects of digital games. This research examines the impact of the SOBE project on 176 secondary school students with quantitative and qualitative methods. Within the scope of our project, 'the Digital Game Addiction Scale' was applied to 176 secondary school students with the support of the school counsellor. Parent-student seminars and information were given about the SOBE Project and the dangers of digital games. A mind and intelligence games club has been created in our school and the students are directed to intelligence games that will contribute to their socialization and develop their attention skills, contribute to their socialization instead of exercises and tournaments and virtual games. By providing training on Canva Web 2 tools, the beneficial and correct use of technology has been brought to the fore. Book reading activities and literacy interviews were organized. SOBE board game and SOBE storybook are designed to raise awareness about the conscious use of technology. The first editions were made and shared with the students of our school. During the implementation period of the project, bulletins containing announcements and explanations about our activities were published in student and parent groups. At the end of 12 weeks, with the post-test, it was examined whether our project was effective in the participants and it was determined that there was a positive difference.

Keywords: *Addiction, Conscious Internet Use, Intelligence Games, Reading Books, Virtual Game Addiction*

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INTRODUCTION

In the modern world, with the rapid advancement of technology, digitalization, which affects the whole world, continues to accelerate after the pandemic in many areas such as access to information, banking transactions, shopping and education. In our country, the first wide area network started to be used in 1986, and with the inadequacy of this network since 1991, METU and TÜBİTAK started a project to create a new network and with the development of the project, the first internet connection was made in 1993 (Ektiricioğlu et al., 2020, p.53).

According to the latest report of TÜİK the proportion of households with internet access in our country was 95.5%, while the rate of individuals using the internet was 87.1%. Today's children and young people born into a digital age have been described as digital natives by American Technologist Marc Prensky. They are more prone and skilled in using the technological tools brought by this age (Benli & Sayar, 2020, p.41).

Marc Prensky refers to today's parents as digital immigrants. Since digital immigrants start learning and using technology at a much older age, it worries them that their children are so involved with technology. As a matter of fact, excessive and uncontrolled use of technology can reveal negative concepts such as mental health disorders and addiction.

American Psychiatric Association (APA), in 'the Manual IV of Diagnosis and Statistics of Mental Disorders (DSM-IV-TR)', determined the 7-item list of addiction criteria for the clinical diagnosis of addiction as follows: tolerance, withdrawal symptoms, excessive consumption, loss of control, constant preoccupation with substance supply, disrupting social, family and work-related responsibilities due to substance use, continuing the use of addictive substances despite the presence of ongoing or recurrent physiological and psychological problems.

In order for a person to be considered addicted, they must exhibit symptoms of at least 3 or more of these 7 criteria in the last 12 months (Hazar & Hazar, 2017, p.205). Addictions are divided into two: Chemical and Behavioural. Studies have shown that individuals with behavioural addictions such as internet, social media, digital game and smartphone addictions show similar symptoms to those with chemical addictions (Ektiricioğlu et al., 2020, p.53).

Technology is one of the main factors that reveal social change (Zeybekoğlu Akbaş & Dursun, 2020, p.2247). However, unconscious and excessive use of technological tools and the internet that make our lives easier can be considered within the scope of behavioural addictions.

Beyond the internet, technological devices such as mobile phones, smart phone applications, digital games and television are making their presence felt more and more each day as a serious danger and addiction risk for our youth (Dinç, 2015, p.35). It is not possible to separate the sub-areas of technology addiction with clear lines. Because phone and internet addiction trigger each other in a cyclical relationship (Karadağ et al., 2015, p.61).

With the developments in communication technologies, the traditional understanding of games has changed. The new gaming culture that emerged by transferring gaming tools and methods to virtual environments is expressed as 'digital gaming' (İlgaz Büyükbaykal & Abay Cansabuncu, 2020, p.3). Digital games have become an important entertainment factor

especially for children and young people today. Virtual games, which are initially seen as just a leisure activity or an opportunity to get away from the troubles of daily life, open the door to addiction if the necessary self-control is not achieved.

In the definitions Griffiths and Davies (2005) developed based on pathological gambling addiction criteria, they list the symptoms of gaming addiction as follows: Increased gaming and rumination time, planning future play or recalling past play, feeling bad mood or restlessness when not able to play, Unsuccessful attempts to control gaming time ,Hiding gaming time from family and friends, Failure to fulfil homework and responsibilities, And finally, losing sleep so you can play more, not eating, or spending less time with family and friends.

There are many studies on the desire to play digital games and the process of this desire turning into addiction. One of these studies is 'Skinner's Operant Conditioning Theory'. According to Skinner Age, reward is an effective tool in causing computer games to become addictive. Rewards given regularly to players have become a new way to make friends easily by providing reputation and wealth to individuals in virtual environments. It is seen that game users with high scores and rewards have more friends than other users. The individual is reflexively affected by the new virtual world offered by the game and unconsciously turns to the game. The physiological relief felt during and after playing games causes the individual to play games more often for more relaxation (Sucu, 2012, p.62). However, since adolescence is a transition between childhood and adulthood in which various physiological, psychological and social changes occur, it is a stormy and stressful process that causes imbalances in the adolescent's thoughts, feelings and behaviours. One of the difficulties of the period is the adolescent's deficiencies in life skills such as anger management, conflict resolution, problem solving and communication (Yavuzer, 2011, p.192). The relaxation system in digital games also serves as an escape ramp for the adolescent who encounters various problems during this period. However, this momentary relief causes greater unhappiness by triggering detachment from social life and communication problems within the family. In addition, it causes circulatory, muscular and skeletal system problems due to passive lifestyle and body posture (Hazar et al., 2017, p.321).

The research, which is one of the most comprehensive studies conducted with 912 volunteer participants from 45 countries at the game research unit of Trent University in the UK, found that multiplayer games bring with them some risks (Ilgaz, 2015, p.876) in these environments (Cole & Griffiths, 2007) that provide intense social interaction for the participants. One of these risks is that the social environment created in virtual life distances the person from her real environment over time. This situation has recently been described as 'phubbing' in the literature.

Phubbing, which is defined as the individual cutting off face-to-face communication with others and turning to the phone, refers to the situation of individuals who focus on their own virtual world, even if they are seen as if they are together in the social environment. This process may eventually lead to the formation of self-centred and socially isolated groups of people who have decreased frequency of communicating with each other in real life and prefer to communicate through the virtual world (Yam & İlhan, 2020, p.10). Such risks and the problems brought by the Digital Age reveal the importance of conscious use of technology.

Conscious use of technology means maintaining balance by protecting one's health, privacy and security, as well as using digital tools effectively (Dinç, 2015, p.40). Summarized the process required for conscious technology use as purposeful, limited liability, healthy, safe, active, functional, conscious and honest use. It is obvious that there is a need to take some steps to raise awareness on this issue. In this context, we designed the 'SOBE' game to raise the awareness of our school students by developing a project on digital footprint conscious technology use and internet safety.

On the other hand, applications such as 'Photoshop, Flash and Canva' on technological devices make it possible to create worlds in which our imagination can play a full role. For children with rich imaginations, the digital world can literally turn into a journey of self-discovery. In this context, we provided training on 'Canva' and its application to our students in order to encourage the beneficial and productive use of technology. Using the Canva application they learned in this training, they prepared the bulletins, posters and visuals of our game required for our project. In addition, within the scope of our project, intelligence games trainings, tournaments and book reading activities were held. While selecting these studies, factors such as easy access, economical and convenient (Dinç, 2015, p.32) access, which is the main reason for the rapid spread of internet addiction, were taken into consideration. In our process of combating virtual game addiction, the healing and instructive power of the game was again used. Because intelligence games allow students to develop their intelligence, expand their thoughts and try new things while having fun (Yöndemli & Taş, 2018, p.47).

According to the intelligence games course curriculum published by the Ministry of National Education, intelligence games include the gamified version of all kinds of problems and are an effective tool in helping students gain problem-solving skills. Reasoning is required quickly and accurately to achieve the goal in intelligence games. Reasoning, along with systematic problem solving skills, is one of the most important mental skills that learners will use throughout their lives (MEB, 2013). The SOBE game and intelligence games we prepared on the subject of conscious technology use have been among the most productive activities of our project.

One of the areas that digital game addiction causes the most harm is the habit of reading books. The colourful world of the Internet and smartphones has attracted students and reduced their interest in books. However, especially the logical reasoning and reading comprehension skills that her books can provide are among the basic achievements that our education system wants to give to students. For this purpose, reading activities and author interviews were held with the participants in our school to make our students love reading again. In addition, in order to include parents in our process of combating virtual game addiction, educational books on child education were identified and book reading and evaluation days were organized.

METHODOLOGY

In this project, 'the Digital Game Addiction Scale' was applied as a pre-test to a group of 176 5th, 6th, 7th and 8th grade students studying in Tavşanlı Şeyh Edebalı İmam Hatip Secondary School, with permission from the scale owner. A project work team was formed in our school by examining the results of this five-point likert-type scale we applied in November, 2023. This team, which includes teachers, students and participants from the

school administration, has prepared a 12-week training program to combat digital game addiction under the guidance of the school psychological counsellor.

Our SOBE (Virtual Game Addiction Training) project was introduced to the target audience by organizing student and parent seminars on digital game addiction and conscious internet use. Within the scope of the project, activities such as intelligence games exercises and tournaments, book reading and author interviews, family book reading hours, story writing and the design of the SOBE game were carried out. In addition, our students were given training on Canva Web 2 tools for conscious internet use. The realized and planned activities were also announced to our parents and students through bulletins prepared by our students on Canva. Compiling the children's story written by our students into a digital book, again using the Canva application. In addition, it was understood from the observations and interviews at the beginning of the training that the participants played digital games mostly in the evening hours. For this reason, parents were included in the project and a parent book reading hour was created, and family reading time was determined between 20:00 - 20:40 every evening. When the 12-week training period was completed, the scale used in the research was re-applied. The results of this Survey, which was applied as a Post-Test, were analysed with the SPSS program with the help of an expert under the guidance of the project consultant. These results were evaluated in the light of observations regarding the students' gender, grade level, internet usage habits and time spent playing digital games. At this point, it is possible to see the SOBE project we carried out as a research in which qualitative and quantitative data are evaluated together.

Since the skewness and kurtosis values in the normality tests performed on the data set were distributed between -1.5 and +1.5, the assumption that the data was normally distributed was accepted and the research data was analysed statistically by applying the Independent Sample T test, one of the parametric tests.

FINDINGS

The data obtained as a result of the application of the Questionnaire called Digital Game Addiction Scale was measured with Cronbach's Alpha, a frequently used analysis method in social sciences. The reliability coefficient result, which is a criterion for the repeatability of research results, was 0.902 for this research. According to this model, values between $0.80 \leq \alpha < 1.00$ are considered 'highly reliable'. Therefore, the survey applied within the scope of our project can be considered as highly reliable.

Table 1. Reliability Analysis Result

Cronbach's Alpha	N of Items
0,902	16

SPSS program was used in the analysis of the scale results, and since the skewness and kurtosis values in the normality tests performed on the data set showed a distribution between -1.5 and +1.5, the assumption (Tabachnick & Fidell, 2007) that the data was normally distributed was accepted and the research data were analysed statistically by applying 'Independent Samples T Test', one of the parametric tests. In addition, some questions containing demographic information were asked to understand the students' gender, class, internet usage habits and duration. These questions aim to evaluate the results of the scale in

the light of the demographic information in question. The table containing this demographic information in this part of the study is given below.

Table 2. Demographic Information for Participants

Gender	N	%	%
Girl	103	58,5	58,5
Boy	73	41,5	100,0
Class	N	%	%
5.grade	57	32,4	32,4
6 th grade	27	15,3	47,7
7 th grade	33	18,8	66,5
8th grade	59	33,5	100,0
Gaming Status	N	%	%
No	23	13,1	13,1
Yes	153	86,9	100,0
Total	176	100,0	

According to Table 3, it can be said that of the 176 students who participated in the survey, 103 were female and 73 were male and the distribution of students at class level was close to each other. It is also seen that 153 of 176 participants play digital games. This number corresponds to 86.9% of the total participants. Participants who scored 3 or more on at least 4 of the 7 items in the 5-point digital game addiction scale developed by Associate Professor Aylin Yalçın were described as game addicts. Accordingly, it was determined that the average of 21 of the 153 students in our research who stated that they played virtual games was 3 or above. Therefore, it is possible to describe these students as virtual game addicts. These data support the problem on which the project set out.

Table 3. Analysis of Pre-test and Post-test Results

Gender	N	M	SD	P
Pre-test Girl	103	1,84605	,712235	,001
Boy	73	2,21135	,771924	
Post-test Girl	103	1,66470	,637304	,000
Boy	73	2,08072	,742529	

The standard percentage value determined for this research, in which the digital game addiction scale was used, was taken as .05. Accordingly, when the significance value is found to be ($p < .05$) it is accepted that there is a significant difference between the results. When the results of the survey applied during the project were examined, the significance value between male and female students in both the pre-test and post-test was found to be $p < .000$.

Since the significance value was $p < 0.05$, it was determined that there was a significant difference between the pre-test and post-test results of this research in terms of digital game playing levels of all participants. These results suggest that the 12-week SOBE (Virtual Game Addiction Training) project was effective on the digital game playing rate of 176 students. Opinions were also given from teachers and parents to support these findings.

As can be seen from Table 4, it can be said that there is a statistically significant difference between male and female students in the pre-test and post-test results. This difference also manifests itself in the average values of the scale. Based on the average values in this Table, it is understood that the level of digital game addiction in boys is higher than in girls. Again, in these results, although the post-test averages of male students decreased compared to the pre-test, it is noticed that they have a higher rate of playing games compared to females.

From the interviews conducted during the research, it was understood that more than half of the students played digital games not on their own phones but on someone else's devices. As a matter of fact, it is known that 81 of the 176 students participating in the application have their own phones and 95 of them do not have a phone. On the other hand, when looking at the digital game addiction levels of students who own smartphones, it is noticed that the level of playing digital games is higher than others. In this case, having the smartphone at hand at all times makes it easier for the individual to engage in such tendencies and brings with it a risk factor in increasing the level of addiction.

Table 4. Digital Games Most Played by Participants

Digital Game	Number of Students Playing
Pubg	43
Roblox	42
Mine Craft	33
PES	29
Brawl Stars	20

According to the findings we obtained from our interviews regarding the digital games played by the students, the 5 games that the participants played intensively are given in table 5. When the games played were examined at the grade level, it was seen that certain games were played more frequently in some classes. Although the number of people who were informed about games through their classmates was not higher than the general participant, the average of digital game addiction was higher than other groups. Considering this situation, it is possible to state that there is interaction between students.

DISCUSSION AND CONCLUSION

In the present study, in which the digital game addiction level of 176 participants was measured using 'The Digital Game Addiction Scale' in the period covering the date of November 2023- January 2024, it was seen that 153 of our students played digital games and 21 of these students played games at the addiction level. A 12-week SOBE (Virtual Game Addiction Training) project was carried out with the participants, in which they took part in

fun activities. In order to completely reverse the peer effect, which is the most important reason for the spread of technology addiction, and to create a positive peer culture, our project was applied to all participants, by including game-addicted students as well as non-addicted and non-gaming students.

Within the scope of this project, which we carried out under the thematic title of combating addiction, a research was conducted based on the idea of whether school projects would be effective in reducing virtual game addiction. When the pre-test and post-test data are examined, it can be said that The SOBE project implemented in our school reduced the rate of playing digital games. The opinions of our teachers and parents also support the scale results.

Considering the individual factors related to computer game addiction, it is known that men are 2-3 times more at risk than women (Dursun & Eraslan Çapan, 2018, p.132). When the results of the research we conducted in our school are examined according to gender variable, it is a finding that is compatible with the literature that boys play more digital games than girls.

Nowadays, it is observed that the age of smart phone usage is decreasing. As a matter of fact, according to the information obtained during the project process, 81 of the 176 students at the secondary school level stated that they played the digital game with their own phones. When the results of students playing games with their own phones are evaluated together with the pre-test and post-test, a more striking result is observed. The average of students who play digital games with their own phones is higher than others. Based on this, it can be said that measures such as preventing children from owning a phone at an early age are important in the fight against digital game addiction.

The age at which individuals begin engaging with digital games and acquire their first mobile phone has been identified as a significant factor influencing game and phone addiction. Research indicates that as the age of first exposure to games and mobile phones decreases, the likelihood of addiction to both increases. Consequently, the initiation age is recognized as a crucial antecedent of addiction. These findings underscore the importance of parents limiting young children's exposure to such Technologies and implementing preventive measures at an early stage to mitigate the risk of addiction. For example, the prohibition of mobile phone use in primary, middle, and high schools in France serves as a notable preventive measure in this regard (Bülbul & Tunç, 2018, p.10). The results of this study are consistent with our findings.

PEDAGOGICAL IMPLICATIONS

When our research results are evaluated, it is understood that students who have their own phones are at greater risk for digital game addiction than students who do not. It was also noticed that male participants were more prone to game addiction than girls. When we examine the results obtained in this study, it can be said that school projects can contribute to the fight against game addiction.

LIMITATIONS AND RECOMMENDATIONS

This research, which examines the contribution of school projects to the fight against digital game addiction, is limited to secondary school students only. Other types of addiction other than digital game addiction were not included in the study. Our research results were evaluated in the context of the activities carried out within the scope of the SOBE project. Contribution can be made to the field by developing different school projects on combating addiction.

By expanding The SOBE project to other schools, the results can be re-examined in a larger sample. The SOBE game in Annex 4, Annex 5, Annex 6 developed within the scope of our project can be produced as a box game and used in schools to raise awareness about conscious internet use, cyber bullying and game addiction. One of the most important factors that trigger addiction during adolescence is communication problems and conflicts within the family. Parents can be given training on family communication and parenting skills. In our research conducted with 176 participants, it was seen that 125 of the students who played digital games played in the evening hours. This situation puts more responsibility on families in the fight against addiction. As we did within the scope of our project, half an hour to 1 hour every evening can be used as family book reading time to raise awareness about being the right role model for children. In our research, addiction levels of students with their own devices were higher. Nowadays, even students in the 2nd and 3rd grades have their own phones and this makes family education inevitable. Therefore, by providing regular training programs and guidance services for parents, the family should be aware of technological use and their children should be encouraged to develop healthy digital habits. Families should be made aware of not buying phones for their children at an age when self-control and personality are not yet developed. Perhaps one of the prerequisites for members of society to become healthy adults is to have healthy children and adolescents. In this context, it is important to create and implement preventive mental health programs that reduce children and adolescents' dependence on technology, in cooperation with the ministry, non-governmental organizations and universities. Tournaments to encourage students to learn intelligence games to diversify their hobbies and discover their talents can be increased.

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Declaration of AI Use

The authors acknowledge that none of the artificial intelligence tools or platforms have been used in the preparation of this manuscript.

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The Views of Teachers Working in Project Schools on Artificial Intelligence

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Research Article

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Abstract

Artificial intelligence plays an important role in the context of digital teacher competencies. It can be used to provide students with customized learning experiences, reduce teachers' workload, monitor and evaluate students' performance, improve students' learning processes, and help teachers better understand students' needs. The purpose of this research is to determine the thoughts and awareness of teachers about the use of artificial intelligence technologies in education. The case study method was used to determine and increase the awareness of teachers working in project schools on artificial intelligence. The study group of the research consisted of teachers working in project schools in Yunusemre District of Manisa province. A total of 10 teachers, 2 from each project school, were interviewed. In the analysis of teachers' views on the use of artificial intelligence in education; The steps of coding the data, finding the themes, arranging the codes and themes, defining and interpreting the findings were followed. In the study, it was concluded that teachers would use artificial intelligence in education as an opportunity that would be beneficial in various aspects of teaching and learning.

Keywords: *Addiction, Artificial intelligence, ChatGPT, Education, Teachers' perspectives*

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INTRODUCTION

Artificial intelligence is a field of study that is based on human intelligence and can imitate it through computers, producing products in various areas of daily life. With artificial intelligence, it is possible to develop computer systems that artificially produce the intelligent thoughts and behaviors of beings in nature (Aydın, 2017; Balaban & Kartal, 2015). Artificial intelligence is of great importance in the context of 21st-century digital teacher competencies. Artificial intelligence can be used to reduce the burden on human teachers, improve the learning process, provide customized learning experiences for students, and monitor and evaluate students' performance. Artificial intelligence can identify students' learning styles, needs, and skills, and provide learning materials and assignments accordingly. Additionally, it can monitor students' progress and success and provide feedback according to their needs. In this way, teachers can more effectively track students' progress and provide customized learning experiences for them. Additionally, artificial intelligence can also reduce teachers' workload. Teachers can respond to students' needs more quickly and effectively thanks to the feedback and analyses provided by artificial intelligence. Additionally, artificial intelligence can help teachers better understand students' needs by monitoring their performance. Using today's technologies, students are completing their homework without any effort. The teacher, who is unaware of this issue, mistakenly believes that the student did it themselves and gives an unfair grade. However, there are different programs that prove the use of these technologies. Students will hesitate to do their homework themselves from teachers who use these technologies, and thus education will achieve its intended purpose. The study can be expanded to direct these questions to administrators, or teachers who become aware of the existence of these technologies can request their administrators to organize a seminar on this topic. In conclusion, artificial intelligence plays an important role in the context of digital teacher competencies. It can be used to provide students with personalized learning experiences, reduce teachers' workload, monitor and evaluate students' performance, improve students' learning processes, and help teachers better understand students' needs. Therefore, identifying and increasing teachers' awareness of this issue will contribute to education.

Purpose and Importance of the Research

The general purpose of the research is to determine the opinions and thoughts of the teachers working in the project schools in Yunusemre District of Manisa Province.

In this research, by including teachers' views on the use of artificial intelligence in education, it will contribute to filling the literature gap in Turkey. Additionally, by determining teachers' views on "the use of artificial intelligence in education," it will serve as a guide for preparing the necessary information programs during the digitalization process.

To the extent that it is accessible, the literature review indicates that the topic has not yet been the subject of research in Turkey. Therefore, this research may encourage new studies that approach the problem from different perspectives. The data obtained were analysed using the content analysis method.

METHOD

Research Model

The case study method was used to determine their awareness. Cohen et al. (2007) state that case study studies focus on the dynamic and multifaceted connections between human relationships, events and other external factors. For these reasons, the case study method is considered to be appropriate for the nature of the study.

Working Group

The study group of the research was consisted of the teachers working the project schools located in Yunusemre central districts of Manisa province. Two teachers from each school are interviewed.

Table 1. Information regarding the participants

Teacher	Branch
T1	Maths
T2	Biology
T3	History
T4	Literature
T5	Geography
T6	Chemistry
T7	Music
T8	Maths
T9	English
T10	Physics

Data Collection

As a data collection tool, teachers' views on artificial intelligence were obtained by using semi-structured interview forms. In this context, the questions to be asked to teachers are as follows. 1)What do you think artificial intelligence is? 2)What are the concepts or words that come to your mind when you think of artificial intelligence? 3) What are your views on the use of artificial intelligence in education. 4)To what extent can artificial intelligence be used in education? 5)What is ChatGPT? What are your precautions for your students to use artificial intelligence in their assignments and projects? What would be your attitude if they use it? 6)How can artificial intelligence replace teachers in the future? 7)According to teachers, what are the disadvantages of using artificial intelligence technologies? 8) According to teachers, what are the advantages of using artificial intelligence technologies? In addition, in case the questions were not understood, additional questions were asked for clarification. The interviews with the teachers lasted approximately 20-25 minutes. The interviews were recorded with the permission of the participants. This research is limited to the scope of interviews with teachers working in project schools in Yunusemre District of Manisa Province. The comments and evaluations to be made as a result of the research are

limited to the views of the teachers participating in the research on the use of artificial intelligence in education.

Data Analysis and Interpretation

The interviews conducted within the scope of the research were analysed and interpreted using content analysis, one of the qualitative data analysis techniques. Qualitative research data are analysed in four stages (Yıldırım & Şimşek, 2011):

1) Coding the data, 2) finding themes, 3) organizing the codes and themes, 4) describing and interpreting the findings. The interview texts were analysed and the data obtained were coded. The following steps were followed in analysing the data collected in this study.

1. Transcribing the recorded interviews.

2. In-depth analysis of the answers given to the interview questions was conducted and the codes frequently repeated by the teachers were tabulated.

3. In line with the answers received, a framework was created and three main themes were identified.

Themes: teachers' thoughts on the use of Artificial Intelligence, the areas where Artificial Intelligence helps the education process, and the process of Artificial Intelligence's existence in the education sector were determined to be presented under three main themes.

4. In the analysis process, teachers were given code numbers as (T1, T2, T3...).

In order to reflect the views of the participants clearly, direct quotations were used in the presentation of the findings.

FINDINGS

Teachers' views

Ten teachers were asked the question “What do you think artificial intelligence is?” and the majority of the teachers thought that the use of artificial intelligence in education could enrich students' learning experiences and provide teachers with more resources and tools. For example, AI-supported learning systems can provide customized content according to students' needs or help teachers monitor and evaluate student performance;

He was concerned that artificial intelligence could replace human interaction in the educational process. Given that there are individual differences among students and that teachers' skills such as empathy, motivation and personalized guidance are important, some artificial intelligence has deficiencies in these aspects (Interview with S5, May 2023).

It creates planning by evaluating the student's information. Education software personalizes according to the students. It better understands student deficiencies and provides personalized support. In this context, the place of artificial intelligence in education is important and its use is positive. Artificial intelligence has many benefits for education. Each individual has different abilities and learning styles. With a program developed through artificial intelligence, individuals can identify and overcome their own deficiencies (T7).

Participants believe that artificial intelligence should be used in a timely manner in order to achieve the goals of teaching as soon as possible.

It also emphasized that Artificial Intelligence will play a role in increasing efficiency in education, especially by supporting rapid access to information. Artificial Intelligence can support the teaching process by saving time in education. The striking ones among the teachers' opinions regarding this situation are given below; The use of Artificial Intelligence in education will occupy a very important place in increasing the quality and economy of education (T2).

We have to use technology to improve the efficiency of the education system. Artificial Intelligence increases the economy of education, especially in terms of time (T6).

Teachers should emphasize AI ethics and responsibilities to students. This is the data privacy, sensitivity to bias, impacts on people and society, and proper use of AI systems (Interview with S9, May 2023).

The use of AI tools can help students and streamline processes. However, if AI completely replaces the learner and does the assignments, it can diminish the learner's learning experience and prevent them from achieving real learning goals. Students may miss the opportunity to express their own ideas, develop problem solving skills and actively participate in the learning process (T10).

Artificial Intelligence saves time in education by enabling people to access the information they need (T7).

The following sentences support the views of the participants that Artificial Intelligence will develop further over time and when it can have human-like functions, it will have an auxiliary role in education, and even the role of the teacher will change over time and will be actively used in every field.

This is a learning mechanism, and this mechanism exhibits human-like behaviors and has numerical, sensory, and behavioral structures. These structures will be helpful in every aspect of human life (T1).

...understanding the student's deficiencies, providing support advantages for personal development, changing the teacher's role, etc... (T4).

It can be interpreted that with the inclusion of artificial intelligence in education, it can take on the role of an assistant to the teacher, thereby lightening the teacher's workload. While the participants generally expressed positive views on the use of Artificial Intelligence in education, a participant with an opposing view emphasized the importance of experiential learning in education, stating: "I do not find it right to take away from children many emotions and behaviors that they can learn by doing and experiencing, even touching stones and soil, and hugging their teachers" (T3).

The idea that the use of Artificial Intelligence will lead to a mechanical understanding of educational life is clearly expressed in this statement. It is thought that the socio-economic status of the participant's duty area, who advocates this view, may influence their opinion differently from others.

Although there are concerns that artificial intelligence robots will replace the teaching profession, the participants were asked, "Considering that there will be changes and transformations in many areas with the development of Artificial Intelligence, do you think your profession is at risk?" The question was posed, and based on the opinions gathered from teachers, the majority of the participants expressed the view that artificial intelligence

products would play a significantly supportive role for teachers and would never pose a danger.

I definitely don't see any danger. Our era is developing rapidly, and we teachers must closely follow this flow. It will help us and adapt education to the development of the world (T1).

I don't think it's in danger. Artificial intelligence definitely cannot replace a teacher. Our mass is human; social and emotional. We cannot completely entrust the future to Artificial Intelligence (T5).

A teacher is inspiring, a role model. He knows his students holistically. According to him, he changes his reactions. Therefore, Artificial Intelligence cannot replace a teacher (T6).

No. Humans are social beings. There are teachers who convey emotions that artificial intelligence cannot replicate, beyond just delivering lessons. (T8).

Teachers have emphasized that artificial intelligence products, when limited to the concept of robots, can never replace humans emotionally. It has been observed that the participant profile has limited knowledge about the development of artificial intelligence products. On the other hand, two participants interviewed expressed that if artificial intelligence continues to advance, it could pose a danger to the teaching profession.

If it goes too far, it is a sign that it is in danger. An environment that disregards the teacher's role and profession can be created (T4).

If teaching is done by robots working with Artificial Intelligence, which will further develop in the future, through a coding system, I might think that my profession is in danger (T7).

DISCUSSION AND CONCLUSION

In this study, the opinions of teachers working in project schools that receive students with points in qualified secondary schools of educational organizations on the use of artificial intelligence in education were studied and it was aimed to determine the awareness of teachers and to increase the quality of education. Teachers' Opinions on the Use of "Artificial Intelligence" in Education and its Areas of Use Within the framework of the research, "teachers' opinions" were evaluated according to the results of the interviews with 10 teachers. As a result of the interviews with the teachers, it was concluded that the teachers who reported that they spent most of their time for tasks outside their job description, that they could not exhibit their teaching leadership qualities in order to deliver the documents on time, and that they needed support service personnel, especially in the organization of documents, so if artificial intelligence products can provide support in this area, it can be very useful. Hence, if "artificial intelligence use" takes on a supportive role in paperwork for teachers, it will save time and provide an opportunity for teachers to spend more time with their students and families.

According to another finding, personalized programs can be created thanks to artificial intelligence, and as a result, an increase in success rates will be possible. Students who perform at 50% in a traditional classroom can achieve 98% performance with mastery training and one-on-one support. (Bloom, 1984; Lewin, 2018). Advanced learning analytics with intelligent software that can predict at-risk students and identify issues by marking problems, it is possible to facilitate teachers in understanding what the deficiencies are (New Brightspace Insights, 2015). These intelligent learning management systems, which compile

students' data, are helpful to teachers in preparing personalized learning plans for students. As a result of the correct guidance, future plans can be made more accurately.

On the other hand, it has been concluded that the use of Artificial Intelligence in Education may lead to some negative situations. Thanks to Artificial Intelligence, generations that quickly access ready-made information may become increasingly lazy, and individuals who communicate with a mechanical structure will not be emotionally satisfied. Similarly, Russel et al. (2007: 305) concluded that the use of technology harms certain aspects of student learning; it makes students lazy, reduces their research skills, and decreases the quality of student writing.

Is Artificial Intelligence a Threat to the Teaching Profession?

Based on the results of the interviews conducted within the framework of the research, the "opinions of teachers" were evaluated to determine whether Artificial Intelligence raises concerns among teachers about the safety of their profession.

Leading scientists in the world, such as Stephen Hawking, have warned that artificial intelligence could pose a threat to humanity one day, but the prevailing view is that the situation is not so dangerous in every field. According to a report published by the McKinsey Global Institute (2017: 4), approximately half of today's work activities could be automated by 2055.

Although certain categories of activities, such as data processing or collection, performing physical activities, and operating machines in a predictable environment, have a high technical potential for automation, the likelihood for other activities, such as sensitivity, interacting with stakeholders, applying decision-making expertise, and managing and developing people, is significantly lower. Additionally, according to the same research, management (35%) and education (27%) rank as the two sectors with the lowest automation potential compared to other sectors. The findings obtained from the research are consistent with the mentioned studies, and teachers and school administrators do not believe that artificial intelligence will endanger their professions; instead, they see such developments as opportunities for their careers. In the Artificial Intelligence in Education Workshop held in September 2018, it was stated that "the concern of teachers that their profession will disappear due to artificial intelligence or other high-tech products needs to be alleviated." However, based on the results obtained, it was concluded that teachers do not have job-related concerns." The fact that education and management are among the most difficult areas to automate with artificial intelligence is due to the lack of the "empathy" feeling that technology has not yet reached. This deficiency is considered the most important aspect of a teacher and a manager. The relationship established between empathy, collaboration, and communication processes necessitates considering empathetic communication skills as an important managerial competency. (Demirbolat, 1999; Ekinici et al., 2012: 762). In educational organizations where empathetic relationships are developed, qualitative relationships are established among employees, and there may be a reduction in conflicts. As a result, it is possible for job satisfaction and relationships to improve positively. (Ekinici et al., 2012).

Declaration of AI Use

The author(s) acknowledge that none of the artificial intelligence tools or platforms have been used in the preparation of this manuscript except for the proofreading phase, in which minor spelling and punctuation mistakes were detected, and revised by the author(s).

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Investigating a Multilingual Five-year-old Child, Speaking Five Languages from the Perspective of His Mother: A Case Study

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Research Article

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Abstract

In one way or another, almost half of the world's population is bilingual or multilingual, and multilingualism exists in every nation. Therefore, it is inevitable to conduct research into bilingualism. Accordingly, this study aimed at gaining deeper insight into the ways strategies, and challenges are for raising a bilingual child. A case study was conducted to achieve the objective here. The subject of the case is a child who is 5 and a half years old and has five languages in his repertoire. To analyse his case, an interview was conducted with his mother. As a result of analyses, it was found that the parents mainly adopted the One Parent – One Language (OPOL) method and there are some linguistic benefits for the child.

Keywords: *Bilingualism, multilingualism, one parent one language, OPOL*

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INTRODUCTION

The term "bilingualism" may mean different things to different people (Saunders, 1988). According to Bloomfield (1933, p. 56), some people consider bilingualism to be "ideal bilingualism" or "native-like control" of two languages. Bilingualism, according to Haugen (1953, p. 7), begins "at the point where a speaker of one language can produce complete, meaningful utterances in the other language," and Thiéry (1976) describes a "true" bilingual as someone who would consistently be mistaken for a native by native speakers of both languages.

According to Baetens Beardsmore (1982), who shared Mackey's definition, bilingualism must be able to explain the presence of at least two languages within a single speaker while taking into account that one's proficiency in these languages may or may not be equal and that the way one uses the two or more languages is extremely important. These two definitions of multilingualism—which typically refers to a person's usage of two or more languages—come into play.

According to Grosjean (1982), nearly half the world's population is bilingual or multilingual, and multilingualism is present in every country. For this reason, students in a foreign language class can be monolingual, bilingual or multilingual in one or two of the local languages.

When the studies above are considered, the "multilingual majority" need to be included in the studies on bilingual children. In addition, studies investigating multilingual children can provide a new perspective on early bilingualism because in today's world only being bilingual is not a solution for the future. Knowing these things raises a question: how do people become bilingual and multilingual? Concerning answering this question, the deficiency of literature on the techniques and strategies to raise bilingual or multilingual children emerges. Therefore, the focus of this study is to gain deeper insight into the ways or strategies, and challenges of raising a bilingual child.

LITERATURE REVIEW

Bilingualism

Language acquisition researchers are becoming more interested in bilingualism and bilingual education as a result of globalization and the ease with which information can now be accessed. Furthermore, everyone encounters bilingualism at some point in their lives. In other words, grownups do not use language exclusively. As a result, different academics and scientists have different definitions of bilingualism because, as Ping (2016) notes, the term is quite flexible. Language domains and context have influenced definitions of bilingualism over time (Saunders, 1988). The definition of bilingualism as "native-like control" of two languages was initially given by Bloomfield (1933). Although this is what many refer to as "ideal bilingualism," the concept has changed throughout time. Similar to Haugen (1953), Diebold (1964) focused on a speaker or group of speakers using at least two languages. The ability to produce understandable utterances in at least two languages and the point at which a speaker of one language can produce complete, meaningful utterances in the other language, as well as proficiency in at least one language, including speaking, writing, listening, and reading, all fall under Haugen's definition of the term (Grosjean, 1982). "The alternative use of two or more languages by the same individual" is how Mackey (1970) defines bilingualism. Beardsmore

(1982) defined bilingualism as "the ability to account for the presence of at least two languages within the same speaker, remembering that ability in these languages may or may not be equal, and the way the two or more languages are used plays a highly significant role." This definition is similar to Mackey's. Despite the fact that bilinguals are usually thought of as two monolinguals in one person, Grosjean (1999) defines the term more broadly, saying that bilinguals are the ones who utilize their languages for a variety of purposes and in a variety of areas of life. According to Hamers and Blanc (2000), bilingualism is "the psychological state of an individual who has access to more than one linguistic code as a means of social communication: the degree of access will vary along several dimensions which are psychological, cognitive, psycholinguistic, social psychological, sociological, sociolinguistic, sociocultural, and linguistic." This provides a unique perspective on bilingualism. The simplest definition of bilingualism is "knowing" two languages (Gottardo & Grant, 2012). Rather than "the bilingual person is the sum of two monolinguals," Grosjean (2008) characterizes bilingualism as "the regular use of two or more languages (or dialects)" and considers a bilingual to be a "specific speaker-hearer in his or her own right." Ultimately, Grosjean (2013) described bilinguals as those whose need for that language determines their level of ability in it.

According to the definitions and their modifications, bilingualism has given way to multilingualism, which often refers to a person's use of two or more languages. According to Flynn et al. (2005), learning more than one language is a common linguistic accomplishment for the majority of people worldwide. In parallel, Grosjean (1982) claimed that multilingualism exists in every nation on the planet and that about half of the world's population is bilingual or multilingual in some way. Furthermore, Chomsky stated in Flynn et al. (2005) that "Children grow up speaking a variety of languages in most parts of the world today and in most of human history." Being multilingual comes naturally to many.

Simultaneous vs Successive Bilingualism

Bilinguals acquire two languages in different order. Children can become bilingual simultaneously or successively (Summer, 2017). Some of them acquire two languages as their mother tongues since early childhood (Hamers & Blanc, 2005) and this is called as simultaneous bilingualism. Parallel to Hamers & Blanc (2005), Kim et al., (2015) expressed the simultaneous bilingualism that children's exposure to both their native language and English in their home environment from birth. On the other hand, children who receive, first, exposure to their native language as their first language (L1) at home, and are, then, exposed to English as a second language (L2) later during school time are referred to as successive bilingualism (Tabors 1997, cited in Kim et al., 2015).

In the study by Kim et al. (2015), they stated that previous studies set age cut-offs between simultaneous and successive bilingualism to examine potential differences between learners. Studies by many researchers (de Houwer, 2009; Genesee, & Crago, 2004; McLaughlin, 1985; Padilla & Lindholm, 1984; Paradis, Summer, 2017) focused on the issue, age cut-offs, in their studies. According to McLaughlin (1985), the age of cut-off is three. This means that children exposed to a second language before the age of three are called simultaneous bilinguals and, accordingly, the others who acquired the second language after the age of three are accepted as successive bilinguals according to Kim et al. (2015). Similarly, as cited in the study of

Summer (2017), When exposed to two languages before the age of three, a kid typically acquires both simultaneously. Subsequent acquisition typically takes place if the kid is exposed to the second language later in life (National Center for Research on Cultural Diversity and Second Language Learning, 1995). The threshold for simultaneous bilingualism varies depending on the viewpoints of the researchers and gets more stringent. The age of three may be too late for simultaneous bilingualism (Kim et al., 2015), states that "there will necessarily be developmental differences between a child whose exposure to both languages begins at birth and one whose exposure to one of those languages begins between ages 2 and 3." Furthermore, whereas de Houwer (2009) and Padilla and Lindholm (1984) suggested that simultaneous bilingualism begins from birth, Paradis, Genesee, and Crago (2004) limited the cut-off to the end of age one.

In short, most of the simultaneous bilinguals acquire two languages simultaneously because they grow up in a mixed-lingual family as is in the context of the subject of this study. In the context of this study, each parent speaks different languages therefore; the child simultaneously acquires both languages. In addition, the child acquires the third and fourth languages in a successive way of bilingualism.

One Parent One Language Principle

One parent, one language (OPOL) was first proposed by Ronjat (1913), who brought up his son as a multilingual in French and German. According to this approach, one parent should always speak in a single language with their child, while the other parent should only speak in a different language (Bain et al., 1980; Barron-Hauwaert, 2004, Verhagen, Kuiken, & Andringa, 2022).

Bilingual kids are sensitive to phonological, lexical, and syntactic variations between their languages (Nicoladis & Genesee, 1996). According to research, parents of bilingual children should use the OPOL principle to help their children use both languages differently depending on the situation or the person speaking (de Houwer, 1990; Deuchar & Quay, 1999; Genesee, Lanza, 1992; Nicoladis, & Paradis, 1995; Nicoladis & Genesee, 1996).

Benefits of Being Bilingual

Bilinguals are always thought to be advantageous in many aspects for scientists. Some of the benefits of being bilingual are given below. Numerous studies on the cognitive (Bialystok, 2017) and social (Wang et al., 2023) benefits of bilingualism support the benefits of bilingualism. Due to the constant requirement to transition between languages, bilingual people also frequently have improved executive functions, such as an ability to solve problems and multitask (Alshewiter, 2024). Bialystok (1984) emphasized metalinguistic linguistic and metalinguistic abilities. He mentioned that bilingualism increases the sophistication of the conceptualization of metalinguistic awareness and the skill to access knowledge about language in addition to the ability to control linguistic processes and apply them to a problematic situation. Similarly, being bilingual enhances metalinguistic abilities and sensitivity to the details and structure of language. In addition, bilinguals have better recognition of ambiguities, control of language processing and they have better correction of ungrammatical sentences.

Purpose of the Study

The purpose of the present study is to investigate the experiences of a multilingual child acquiring different languages from the perspective of his mother.

Research Questions

- 1- What kind of strategies and techniques are used while raising a bilingual child?
- 2- What are the challenges bilinguals face during the acquisition of a second language or more languages?
- 3- What are the benefits of being bilingual?

METHODOLOGY

Research Design

When the study's objective is to answer the "how" and "why" questions, you have no control over study participants' behaviour, you want to talk about contextual conditions because you believe they are relevant to the phenomenon being studied, or it is hard to tell the difference between the phenomenon and context, you should think about using a case study design.

This study used the case study design as its research methodology. A case study is a particular occurrence that is often intended to demonstrate a broader concept, according to Nisbet and Watt (1984). Due to the utilization of numerous sources of information, case studies enable researchers to obtain a comprehensive understanding of problems and can offer a picture of them. According to Stake (1995), "case studies are used when we seek to understand the specifics of an interaction with its context." Case studies give us a structured approach to observing problems, gathering information, evaluating information, and then discussing the outcomes.

Participant

The participant is a mother who came to Türkiye from Ukraine and she regards herself as Russian. In addition, she is teaching English at a school of foreign languages at a state university. She is a multilingual person who can speak English, Russian, Turkish and German. She has a son who is 5 years and 6 months old. Now her son is multilingual too. He can communicate in English, Russian, Turkish and German whereas he is now learning Arabic. Although he cannot read and write but can speak fluently four languages except Arabic.

Data Collection Tool

In order to have an in-depth understanding of the key strategies in raising bilingual children and gain a detailed comprehension of the language acquisition process of an early bilingual child, I collected data mainly employing face-to-face semi-structured interviews with Maria, Kaya's mother. The data consists of a thirty-minute interview in total, which was recorded. Although questions were prepared, the researcher allowed the data to emerge naturally and used follow-up questions to prompt when the participant answered a question.

Ethical Considerations

For ethical considerations, a pseudonym was used in the study. In addition, the subject of the study is a colleague of the researcher to whom the researcher can talk sincerely; therefore,

the data collected is reliable. Moreover, the researcher got permission from the administration of the school. In addition, the name of the institution where the subject of the study was not given.

FINDINGS

Case of Kaya

Maria, Kaya's mother, is an English instructor at a school of foreign languages at a state university. She was born in Russia and studied English and German Language Teaching at the university. Because of her Turkish roots and studying German at the university, she could speak Russian, Turkish and German when she came to Türkiye when she was 26 years old. His father is Turkish and he can only speak Turkish.

I would like to start with the language history of Kaya. He was born in a family in which the father is Turkish and the mother is Russian. As she is from Russia, she wants her son to be bilingual and she wants her son to speak Russian and Turkish although she is teaching English at a university. It is understood from her sentence that she articulated during the interview: "I come from Russia and want him to be able to communicate in both languages equally." In the early stages of his bilingualism, her mum spoke to him in Russian while his father interacted in Turkish with him. In this sense, he is a simultaneous or balanced bilingual because he acquired both languages at the same time from birth. After he could speak and understand both languages, her mother started to speak to him in English. After that, the same thing occurs for the next language.

"When I understood that he can speak both well, and understands well, I started English. When I understood that he was already...as you know...ease with English, I started German. Especially, when he reached a specific level, like elementary for example. When he was already pre-intermediate or intermediate, we started a new language."

He is now 5 and a half years old and he can speak and understand Turkish, Russian and English equally and started German and Arabic. He has started to speak German but not in Arabic yet. In Arabic, he is just absorbing.

Strategies

During the initial stages, from birth, the parents followed the parent-one language (OPOL) method that they thought to be suitable for their situation. She spoke to her son, Kaya, only in Russian and her husband spoke to him only in Turkish all the time.

"One parent-one language method is the only suitable one for us."

Therefore, she believes that speaking both languages simultaneously from the very beginning is very useful since Turkish and Russian are from different language groups and don't have any similarities in terms of grammar, alphabet, phonetics, etc. Moreover, she stated that also her parents learnt languages in this way.

They followed an OPOL-like strategy for the successive languages as well. For instance, they try to create an environment in which the mother speaks only in English while his father and the relatives speak to him only in Turkish because, as she mentioned in the interview, she does not want to spoil her son's Turkish since her Turkish is not good at Turkish pronunciation.

"I still speak English because I don't want his language spoiled since my Turkish is very bad. My Turkish is not good enough with the accents I speak."

Another strategy that they use is games or project-based activities. She mentioned that they start learning new languages by playing games. She created a game for him to teach the new language.

"He started playing in these languages. No matter what the time was. There was a time when he liked dinosaurs. We acted dinosaurs in different situations, for example, dinosaurs are ill. So, we go to the hospital so we learn together. This is temperature, this is this, and this is this, in different languages."

She does not instruct in the language. While they are playing, her son absorbs and acquires the new language. She designed drip feed sessions for games. For example, while he is acquiring German, they speak German only for an hour during the day. That means that her son is exposed to the new language 7 hours a week.

In addition to games, they create projects suitable for the situations or events they come across in their daily life. When the interview took place, they were a project about cacao beans. That is because they had a film called "Child and Chocolate Factory" in English and watched the film. After the film, they talked about how cocoa beans become chocolate; and what they do to make chocolate. They discussed why they need cocoa beans. They also do projects in Turkish in which he can speak to his father in Turkish and his mother speaks to him in Russian and English. The time was about the 10th of November which was the day of commemoration of Atatürk.

"We do the project about Atatürk. You know, the 10th of November is coming so we chose Atatürk for this project. We talked about Atatürk this week, these days a lot. Mostly Daddy talks about it, I speak to him in Russian and English, and yesterday evening we talked to them about Ataturk."

The other strategy they use is that they create contexts in which they speak a couple of languages for themselves. For instance, they speak Russian and German at home while they speak English and Turkish outside the home. To choose these couple languages, they have a criterion; the couple cannot be from the same language family. For example, they do not speak German and English in any context.

"At home, we speak only Russian and German. Russian is after school. However, if you go out when we leave the door let me take out of the door. He starts speaking English. Outside, Russian and German are banned. So outside should be English inside Russian and German. With Daddy, he speaks Turkish. He speaks Turkish only with his daddy and at school with his friends when he got out, he speaks Turkish with his friends. Therefore, it is not with me because my Turkish is not as well as Daddy's Turkish."

Challenges

In the early stages while learning Turkish and Russian, in contrast with the general assumption, she states that her son does not get confused because he can understand easily regardless of the language. In addition, she adds that even when he does not say a word in any language, she corrects him accurately so he can understand what is wrong.

“He can understand easily when what language is spoken. He never mixes up and simply switches from one to another. If he doesn’t know a word in any of the languages, I just accurately correct him or precisely repeat his sentence so he can understand what is wrong.”

However, in the latter stages, as he becomes proficient in languages, one language can have an impact on the other. For example, the sound for the [L] letter is strong in Russian while it is softer. Therefore, pronunciation of the words or articulation of a letter can be a problem for them.

Another challenge they have faced is using feminine speech that she used while talking to her son. As a result, she adds that he tries to pretend like her.

“I am a female, I have to use feminine gender in my speech, and sometimes he tends to speak like me.”

However, she has solved this problem by using toys and pretending to be a male character.

Lastly, the most challenging situation is that they cannot provide him with an authentic environment in which he can be exposed to the language he is acquiring. Living in a city where people always speak Turkish is a challenge for them to achieve quicker improvement in the languages he is acquiring.

“In this city, it is difficult to find partners to speak the language. If I can find a person who is English... it’s hard to find a person who can speak German not adults, but I need a child because children play together.”

Benefits

According to her, as a bilingual child, his son will have better job opportunities and can communicate easily. In addition, claims that bilingual children have wider worldviews, and they have higher cognitive capacity when compared to monolinguals.

“There are endless benefits in terms of job opportunities, tourism, and communication. Bilingual people have a wider world view and both brain hemispheres work simultaneously, these people can use both of them better in comparison with monolingual ones.”

Furthermore, she stated some social benefits that they expect to experience. For instance, she expects his son to talk to his grandparents in Russian when they go to her motherland or speak to her friends when they are in Germany.

“First, he will feel free when he goes to my motherland; he will be able to talk to all my relatives. When we go to Germany, he will be able to talk to all of my friends that I have in there.”

In addition, she expects him to read books in their original languages. For example, he can read books in the original language. That is so great. Just imagine you can read Dostoyevsky in Russian, Orhan Pamuk in Turkish, and Emily Dickinson in English.

DISCUSSION AND CONCLUSION

The findings of this study shed light on the multifaceted experiences of raising a multilingual child and the strategies, challenges, and benefits of bilingualism. Kaya’s case provides a rich context for examining bilingual language acquisition through the lens of parental strategies and perspectives, aligning with recent research on bilingual upbringing. et al. (2015) and Summer (2017) stated that if a child acquires two languages at the same time until the age of three, he becomes simultaneously bilingual. In Kaya’s case, the situation is

nearly the same except for the other languages that he has acquired. Although he started as a simultaneous bilingual from birth, later he turned into a multilingual child by adding German, English and Arabic to his repertoire.

When the findings are examined, it is seen that OPOL, in which one parent maintains exclusive use of one language in all dialogues with the child and the other parent exclusively uses the other language with the child (Bain et al., 1980; Barron-Hauwaert, 2004), shaped Kaya's language acquisition. Furthermore, his parents created new contexts for him to maintain this strategy in the acquisition of new languages.

When it comes to the benefits, although his mother did not mention them in the interview, it can be understood from some of her expressions that Kaya can use translanguaging in which he has a linguistic repertoire from which they selects features of the languages he has acquired to communicate effectively as stated by Garcia (2009). In addition, acquiring 5 languages in 5 years can be explained with sensitivity to the details and structure of language and it can be related to linguistic ability.

The benefits of bilingualism, as observed in Kaya's case, align with extensive literature on the cognitive (Bialystok, 2017), and social (Wang et al., 2023) advantages of being bilingual. Bilingual individuals also often exhibit enhanced executive functions such as better problem-solving and multitasking skills, due to the constant need to switch between languages (Alshewiter, 2024). Kaya's ability to navigate multiple languages simultaneously reflects this cognitive flexibility. Socially, bilingualism facilitates cross-cultural communication and fosters a broader worldview. Kaya's mother's anticipation that her son will communicate with relatives in Russia and friends in Germany underscores the role of bilingualism in strengthening familial and social bonds. These findings are supported by Wang et al. (2023), who found that bilingualism enhances social connectedness.

The ability to access literature in its original language, as mentioned in the findings, is another significant benefit. Reading Dostoyevsky in Russian or Emily Dickinson in English provides a deeper appreciation of cultural nuances, which shows that language learning is inseparable from cultural learning. Kaya's multilingual abilities position him to engage with diverse literary and cultural works, enriching his intellectual and emotional growth.

While the benefits of bilingualism are well-documented, parents who mix languages find a multilingual upbringing more challenging than a monolingual one (Hoevenaars, 2021; Koelewijn, Hoevenaars, & Verhagen, 2023). One prominent issue is the difficulty in providing authentic language environments, particularly for minority languages. Kaya's mother's concern about finding peers for her son to practice German or Arabic aligns with the "input quantity hypothesis," which posits that the language that receives less exposure in the bilingual constellation usually displays a delayed and protracted rate of development, further pointing to the role of input quantity (Guo, 2023). This challenge is further compounded by their residence in a predominantly Turkish-speaking city, which limits opportunities for naturalistic interaction in other languages. Regarding the challenges they have faced, languages have some impacts on each other especially in the articulation of the sounds. In addition, the biggest challenge is that he is not exposed to the new language as much as he needs because the context is the place where Turkish is spoken mostly and it is difficult to find a person, especially a child, to practice the new language.

In conclusion, this study provides valuable insights into the complexities of multilingual upbringing. By examining the strategies, challenges, and benefits experienced by Kaya and his family, it contributes to a deeper understanding of bilingualism from a parental perspective. The findings underscore the importance of deliberate language planning and contextualized learning, while also highlighting the need for broader societal support to maximize the potential of bilingual children.

PEDAGOGICAL IMPLICATIONS

There are some implications for parents, educators and policymakers. Parents raising bilingual children can adopt structured yet flexible approaches like the OPOL method and context-specific language use demonstrated in Kaya's case. This study highlights the importance of consistent exposure and creative learning environments, such as play-based and project-based activities, to foster multilingual development. Additionally, parents should recognize the role of community engagement in providing authentic language exposure and consider leveraging digital tools, such as language-learning apps or online communities, to supplement language practice where local resources are limited.

Educators can use insights from this study to design immersive and engaging language-learning activities tailored to children's interests. For example, incorporating thematic projects and using bilingual storytelling in classrooms can make language acquisition more meaningful. Furthermore, schools can develop partnerships with community organizations to create multilingual events or language exchange programs, enhancing opportunities for authentic interaction.

Policymakers can draw from the challenges highlighted in this study to address gaps in bilingual education. Investing in multilingual resources, such as libraries with books in various languages or language clubs, can support families raising bilingual children. Additionally, policies promoting inclusive language education that cater to minority and heritage languages can help create equitable opportunities for children like Kaya to achieve linguistic and cultural proficiency.

LIMITATIONS AND RECOMMENDATIONS

This case study is limited to one participant, which provides non-generalizable findings. In order to make it more generalisable, a study could be carried out with more participants or cases. Future research could also explore the long-term impact of the strategies identified in this study on multilingual proficiency. Longitudinal studies examining the cognitive, academic, and social outcomes of children raised in multilingual environments can provide valuable insights.

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The author(s) declare no financial, political, or personal conflicts of interest in the preparation of this manuscript.

Declaration of AI Use

The author(s) acknowledge that none of the generative artificial intelligence tools or platforms have been used in the preparation of this manuscript.

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2024 Türkiye Yüzyılı Maarif Modeli Kapsamında Hazırlanan 5. Sınıf Türkçe ve Sosyal Bilgiler Ders Kitaplarında Sürdürülebilir Kalkınma Amaçlarının Görünümü

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Özet

Bu çalışma, 2024 Türkiye Yüzyılı Maarif Modeli kapsamında yenilenen 5. sınıf Türkçe ve Sosyal Bilgiler ders kitaplarının, Birleşmiş Milletler tarafından belirlenen Sürdürülebilir Kalkınma Amaçları'na (SKA) ne düzeyde yer verdiğini incelemeyi amaçlamaktadır. Araştırma kapsamında, Türkçe ve Sosyal Bilgiler ders kitaplarının içeriklerinde SKA başlıklarının görünürlük düzeyi, tematik dağılımı ve ele alınış biçimi doküman analizi yöntemiyle incelenmiştir. Çalışmada, Millî Eğitim Bakanlığınca hazırlanan Türkçe ve Sosyal Bilgiler ders kitapları, Sürdürülebilir Kalkınma Amaçları'na (SKA) uygun tematik çerçeve içerisinde incelenmiştir. Araştırmanın bulguları, Türkçe ders kitaplarının SKA'lara sınırlı bir kapsamda yer verdiğini göstermektedir. "Yoksulluğa Son," "Açlığa Son," "Sağlık ve Kaliteli Yaşam," "Nitelikli Eğitim" ve "Toplumsal Cinsiyet Eşitliği" gibi başlıklar ele alınmış olmakla birlikte, çevresel ve küresel öneme sahip "Temiz Su ve Sanitasyon," "Sudaki Yaşam" ve "Erişilebilir ve Temiz Enerji" gibi hedeflere hiç yer verilmediği görülmüştür. Türkçe ders kitaplarının daha çok bireysel farkındalık yaratmaya yönelik temalara odaklandığı ve SKA'ların yalnızca belirli yönlerini işlediği belirlenmiştir. Sosyal Bilgiler ders kitaplarının ise daha geniş bir SKA yelpazesi sunduğu, özellikle "Eşitsizliklerin Azaltılması," "İklim Eylemi" ve "Sürdürülebilir Şehirler ve Topluluklar" gibi başlıklara daha sık yer verdiği tespit edilmiştir. Ancak, Sosyal Bilgiler kitaplarında da "Temiz Su ve Sanitasyon" ve "Barış, Adalet ve Güçlü Kurumlar" gibi başlıkların sınırlı kaldığı ya da ele alınmadığı gözlemlenmiştir. Bu bulgular, Türkçe ve Sosyal Bilgiler ders kitaplarında SKA temalarının ele alınmasında belirgin farklılıklar ve eksiklikler olduğunu ortaya koymaktadır. Eğitim materyallerinin SKA'ları daha dengeli ve kapsamlı bir şekilde işleyerek öğrencilerin sürdürülebilirlik bilincini geliştirmesi gerektiği düşünülmektedir. Araştırma sonuçlarına dayanarak, eksik kalan SKA başlıklarının ders kitaplarına entegre edilmesi ve sürdürülebilir kalkınma temalarının çeşitli içerik ve yöntemlerle zenginleştirilmesi önerilmektedir.

Anahtar Sözcükler: Türkçe Ders Kitapları, Sosyal Bilgiler Ders Kitapları, Sürdürülebilir Kalkınma Amaçları (SKA), Sürdürülebilirlik Eğitimi.

The Representation of Sustainable Development Goals in 5th Grade Turkish and Social Studies Textbooks Prepared Under the 2024 Türkiye Century Education Model

Research Article

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Abstract

This study aims to analyze the extent to which the 5th-grade Turkish and Social Studies textbooks, revised within the framework of the 2024 Türkiye Century Education Model, address the United Nations' Sustainable Development Goals (SDGs). Using a document analysis method, the study evaluates the visibility, thematic distribution, and representation of SDG topics in the content of these textbooks. Officially approved by the Ministry of National Education, the textbooks were examined through a systematic thematic framework. The findings reveal that Turkish textbooks include SDGs in a limited capacity, focusing mainly on topics such as "No Poverty," "Zero Hunger," "Good Health and Well-being," "Quality Education," and "Gender Equality." However, crucial environmental and global priorities such as "Clean Water and Sanitation," "Life Below Water," and "Affordable and Clean Energy" are entirely absent. The results indicate that Turkish textbooks emphasize individual awareness and address SDGs from a narrow perspective. In contrast, Social Studies textbooks provide broader coverage of SDGs, particularly highlighting themes such as "Reduced Inequalities," "Climate Action," and "Sustainable Cities and Communities." Nevertheless, these textbooks also exhibit limitations, with goals like "Clean Water and Sanitation" and "Peace, Justice, and Strong Institutions" receiving minimal or no attention. These findings highlight significant disparities and omissions in how SDG themes are addressed across both subject areas. The study suggests that educational materials should integrate SDGs more comprehensively and equitably to enhance students' awareness of sustainability. Based on the research findings, it is recommended that the missing SDG topics be integrated into the textbooks and that sustainable development themes be enriched through diverse content and methods.

Keywords: *Turkish Textbooks, Social Studies Textbooks, Sustainable Development Goals (SDGs), Sustainability Education.*

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GİRİŞ

Sürdürülebilirlik, günümüz dünyasının öncelikli konularından biri olarak toplumsal, ekonomik ve çevresel dengeyi korumayı amaçlamaktadır. Bu kavram, mevcut kaynakları tüketirken gelecek nesillerin yaşam koşullarını riske etmeden hareket etme anlayışına dayanır. İlk kez Brundtland Raporu'nda (1987) "Bugünün gereksinimlerini, gelecek nesillerin kendi gereksinimlerini karşılama olanaklarını tehlikeye atmadan karşılayan kalkınma" olarak tanımlanan sürdürülebilirlik, yalnızca doğal çevrenin korunmasıyla sınırlı olmayıp, aynı zamanda sosyal eşitliğin sağlanması ve ekonomik sistemlerin uzun vadeli dayanıklılığını da içermektedir (Dünya Çevre ve Kalkınma Komisyonu [WCED], 1987). Bununla birlikte sürdürülebilir kalkınma, çevreye saygılı olurken insanların yaşam kalitesinin iyileştirilmesi anlamına gelmektedir (Çelik, 2006, s. 21). Sürdürülebilirliğin bu çok katmanlı bir yapıya sahip olması, bireylerin çevresel farkındalıklarının artırılmasından daha fazlasını ifade etmekte; toplumsal refah ve ekonomik adaletin bir arada gözetilmesi gerektiğini vurgulamaktadır (Leal Filho vd.,2019). Özellikle son yıllarda artan ve küresel çapta da dünyamızı etkileyen küresel ısınma, artan çevre kirliliği, temiz suya erişim ve sosyoekonomik eşitsizlikler gibi sorunlar sürdürülebilirliği çok önemli bir konuma getirmiştir (Hükümetlerarası İklim Değişikliği Paneli [IPCC], 2018).

Bu bağlamda, Birleşmiş Milletler (BM) tarafından 2015'te belirlenen "Sürdürülebilir Kalkınma Amaçları" (SKA), küresel düzeyde sürdürülebilirliği sağlamak için kapsamlı bir öneri sunmaktadır. Sürdürülebilir kalkınmanın çevresel, ekonomik ve sosyal olarak üç temel bileşeni ve boyutu bulunmaktadır (Siraj-Blatchford vd.,2010). Bu amaçlar, yoksulluğun ortadan kaldırılması, toplumsal eşitsizliklerin azaltılması ve doğal kaynakların korunması gibi temel hedefleri içeren 17 ana başlık (yoksulluğu ortadan kaldırma, açlığı bitirme, sağlıklı yaşamı teşvik etme, nitelikli eğitim sağlama, toplumsal cinsiyet eşitliğini sağlama, temiz suya ve sanitasyona erişimi artırma, temiz enerjiye geçiş, insanca iş koşulları yaratma, ekonomik büyümeyi destekleme, eşitsizlikleri azaltma, sürdürülebilir şehirler inşa etme, sorumlu üretim ve tüketimi teşvik etme, iklim değişikliğiyle mücadele, deniz ve karasal yaşamı koruma, barışı sağlama, adaleti tesis etme ve güçlü kurumlar oluşturma) ve 169 alt hedeften oluşmaktadır (BM, 2015a; 2015b). BM'nin "2030 Gündemi" çerçevesinde tanımlanan bu hedefler, yalnızca hükümetler ve uluslararası kuruluşların değil, bireylerin, toplulukların ve çeşitli kurumların iş birliğini gerektiren kapsamlı bir dönüşüm öngörmektedir (BM, 2015a). Özellikle gelişmekte olan ülkeler için SKA'ların benimsenmesi, küresel eşitsizliklerin azaltılmasında ve sürdürülebilir bir kalkınma sağlanmasında kilit bir role sahiptir (Birleşmiş Milletler Kalkınma Programı [UNDP], 2020).

Eğitim, sürdürülebilir kalkınma hedeflerine ulaşmak için en etkili yollardan biri olarak görülmektedir. UNESCO tarafından 2019 yılında yayımlanan bir raporda; eğitim yoluyla bireylerin sürdürülebilir kalkınma hedeflerine yönelik bilinç düzeylerinin artırılmasının, belirlenen hedeflerin gerçekleştirilmesi için önemli bir aşama olduğu belirtilmiştir (UNESCO, 2019). Eğitim, bireylere sadece teorik bilgi kazandırmakla kalmamakta; aynı zamanda bu bilgiyi toplumun bütününde fayda yaratacak şekilde etkili bir biçimde kullanmalarını sağlayan bir ortam sunmaktadır (Sterling, 2010). Bu bağlamda Bertrand ve Dora Russell'ın 1923 yılında ortaya koyduğu "sanayileşmenin kontrolsüz ilerlemesinin gelecekteki nesiller için ciddi sorunlara yol açabileceği" savı, bu konunun tarihsel derinliğini de ifade etmektedir (Russell, 2009). Günümüzde ise çevresel duyarlılık ve sürdürülebilir kalkınma becerilerinin

bireylere kazandırılması, sadece eğitim politikalarının bir gereği değil, aynı zamanda toplumsal bir gereklilik olarak kendini göstermektedir (Leal Filho vd.,2019).

Eğitim sistemi içerisinde birincil kaynak olan ders kitapları, sürdürülebilir kalkınma bilincinin öğrencilere kazandırılması açısından temel araçlardan biri olarak nitelendirilebilir. Millî Eğitim Bakanlığı'na (MEB) göre ders kitapları, eğitim müfredatının hedeflerini somutlaştıran ve öğrencilerin çevresel, sosyal ve ekonomik sorumluluklarını anlamalarını destekleyen kaynaklardır (MEB, 2021). Araştırmalar da ders kitaplarında sürdürülebilir kalkınma temalarının işlenmesinin öğrencilerin çevresel farkındalık ve sürdürülebilir davranış geliştirme becerilerini artırmada etkili olduğunu göstermektedir (Bayram ve Çengelci Köse, 2023; Dere & Çinikaya, 2023). Bu nedenle özellikle Hayat Bilgisi, Türkçe ve Sosyal Bilgiler gibi temel derslerde bu temaların ele alınması, bireylerin erken yaşlardan itibaren sürdürülebilirlik bilincini kazanmalarına katkı sağlamaktadır (Engin, 2010; Güngör, 2023).

Sürdürülebilir kalkınma hedeflerinin eğitimle ilişkisinin incelendiği çok sayıda araştırma bulunmaktadır. Örneğin, Demirbaş (2011), coğrafya derslerinin sürdürülebilir kalkınmayı destekleme potansiyelini incelemiş ve bu derslerin çevresel farkındalık oluşturmada önemli bir araç olduğunu tespit etmiştir. İşler (2023), sosyal bilgiler ders kitaplarını incelemiş ve bu kitapların sürdürülebilir kalkınma hedeflerine uyumunun, öğrencilere çevresel ve sosyal sorumluluk bilinci kazandırmada etkili olduğunu göstermiştir. Bir diğer çalışmada ise Güngör (2023), okul öncesi çocuk kitaplarının çevre bilincinin temellerini oluşturmadaki rolüne dikkat çekmiştir. Bayram ve Çengelci Köse'nin (2023) ile Demirbaş'ın (2011) ders kitaplarında sürdürülebilirlik temalarını ele alan çalışması, bu konunun yalnızca akademik bir konu olmadığını aksine toplumun tüm kesimlerini ilgilendiren önemli bir olgu olduğunu ortaya koymaktadır.

2024 yılında yayımlanan ve Türk eğitim sistemi için yeni bir bakış açısı ortaya koymayı amaçlayan Türkiye Yüzyılı Maarif Modeli, Türk eğitim sisteminde sürdürülebilir kalkınma hedeflerinin uygulamaya geçirilmesine yönelik önemli bir bakış sunmaktadır. Bu model, öğrencilerin yalnızca bilgiye dayalı bir eğitimden geçmesini değil; aynı zamanda değerler, erdemler ve çevresel duyarlılıklarla zenginleştirilmiş bir eğitim yaşantısından geçmesini amaçlamaktadır (MEB, 2024). Modelin temel söylemlerinden biri olan "erdem-değer-eylem" yaklaşımı, öğrencilerin yalnızca bilgiyi öğrenmelerini değil, bu bilgiyi hayatlarında etkin bir şekilde kullanmalarını öncelemektedir. Bu bağlamda ders kitaplarının bu modele uyumlu hale getirilmesi, sürdürülebilir kalkınma hedeflerine ulaşmada önemli görülmektedir.

Sonuç olarak, sürdürülebilirlik bilincinin bireylere erken yaşlardan itibaren kazandırılması, çevresel, sosyal ve ekonomik sorunların çözümüne katkı sağlayacak etkili bir yaklaşım olarak öne çıkmaktadır. Özellikle Türkçe ve Sosyal Bilgiler gibi temel derslerde sürdürülebilirlik temalarının işlenmesi, öğrencilerin bu kavramları derinlemesine anlamalarını ve günlük yaşamlarında uygulamalarını kolaylaştıracaktır. Ders kitapları, sürdürülebilir kalkınma hedeflerini destekleyen içeriklerle donatıldığında, bireylerin çevresel duyarlılık ve sosyal sorumluluk bilinci kazanmaları açısından önemli bir araçtır. Ancak, mevcut ders kitaplarının sürdürülebilir kalkınma hedefleriyle ne ölçüde uyumlu olduğu ve bu hedeflerin ne kadar etkin bir şekilde işlendiğinin tespit edilmesi bu amaçların gerçekleştirilmesi için gerekli bir adımdır. Bu noktadan hareketle bu çalışma, Türkçe ve Sosyal Bilgiler ders kitaplarının sürdürülebilir kalkınma hedefleriyle uyumu incelenecektir.

YÖNTEM

Araştırma Deseni

Bu araştırmada, basılı materyaller olan ders kitapları inceleneceğinden nitel araştırma yöntemlerinden doküman analizi yöntemi tercih edilmiştir. Doküman analizi yöntemi ile yazılı materyallerden bilgi çıkarma ve bu bilgiyi sistematik şekilde analiz etme süreci kolaylıkla yapılabildiğinden sürdürülebilir kalkınma temalarının ders kitaplarındaki görünümünün belirlenmesinde de kullanılmıştır.

Veri Kaynakları

Araştırmanın temel veri kaynakları, 2024-2025 eğitim-öğretim yılında basılmış olan ve 5. sınıflar için hazırlanan "T.C. Milli Eğitim Bakanlığı Orta Okul ve İmam Hatip Orta Okulu Türkçe Ders Kitabı" ile "T.C. Milli Eğitim Bakanlığı Orta Okul ve İmam Hatip Orta Okulu Sosyal Bilgiler Ders Kitabı"dır. 2024 Türkiye Yüzyılı Maarif Modeli'nin 2024-2025 eğitim-öğretim yılında 1, 5 ve 9. sınıflarda uygulanmaya başlaması nedeniyle 5. sınıf düzeyindeki ders kitapları erken yaşta sürdürülebilirlik bilinci kazandırılmasına uygun olabileceği için seçilmiştir. İlgili derslerin kitapları güz ve bahar dönemlerinde kullanılmak üzere 2 kitaptan oluşmaktadır.

Veri Toplama Süreci ve Verilerin Analizi

Araştırmada veriler, ders kitaplarında sürdürülebilir kalkınma temalarıyla ilgili içeriklerin, etkinliklerin ve kavramların belirlenmesi amacıyla toplanmıştır. Sistemli bir şekilde yapılan bu inceleme, tematik bir çerçeve üzerinden yürütülmüş ve ders kitaplarındaki sürdürülebilirlik temalarının kapsamı değerlendirilmiştir.

Elde edilen veriler, betimsel analiz tekniği kullanılarak analiz edilmiştir. Betimsel analiz, verilerin önceden belirlenen temalar doğrultusunda düzenlenmesi ve yorumlanmasını sağlayan bir tekniktir. Bu süreçte, ders kitaplarındaki metinler, görseller ve etkinlikler incelenmiş ve belirlenen temalar çerçevesinde analiz gerçekleştirilmiştir. Böylece, sürdürülebilir kalkınma ile ilişkili kavramların kitaplarda nasıl işlendiği ve öğrencilere nasıl sunulduğu belirlenmeye çalışılmıştır.

Araştırmanın güvenilirliğini artırmak için veri analizi, iki farklı araştırmacı tarafından bağımsız olarak gerçekleştirilmiştir. Araştırmacılar tarafından yapılan bağımsız kodlamalar arasında yüksek düzeyde uyum sağlanmış ve bu uyum, Cohen'in Kappa katsayısı ile 0.85 olarak ölçülmüştür. Kodlama sürecinde oluşan farklılıklar, araştırmacıların ortak görüşleri doğrultusunda giderilmiş ve analiz süreci tamamlanmıştır.

BULGULAR

Bu bölümde, 5. sınıf Türkçe ve Sosyal Bilgiler ders kitaplarının Sürdürülebilir Kalkınma Amaçları (SKA) ile uyum düzeyleri incelenmiştir. Bulgular, derslere göre iki ayrı başlık altında, tablodaki verilere dayalı olarak sunulmuştur.

1. 5. Sınıf Türkçe Ders Kitaplarında Sürdürülebilir Kalkınma Amaçlarının (SKA) Görünümü

Tablo 1. 5. Sınıf Türkçe Ders Kitaplarında Sürdürülebilir Kalkınma Amaçlarının (SKA) Görünüm Sıklığı

Temalar/Bilgiler	1. Kitap	2. Kitap	TOPLAM
Yoksulluğa Son	2	0	2
Açlığa Son	1	1	2
Sağlık ve Kaliteli Yaşam	1	2	3
Nitelikli Eğitim	4	0	4
Toplumsal Cinsiyet Eşitliği	2	1	3
Temiz Su ve Sanitasyon	0	0	0
Erişilebilir ve Temiz Enerji	0	0	0
İnsana Yakışır İş ve Ekonomik Büyüme	1	0	1
Sanayi, Yenilikçilik ve Altyapı	0	0	0
Eşitsizliklerin Azaltılması	2	1	3
Sürdürülebilir Şehirler ve Topluluklar	0	0	0
Sorumlu Üretim ve Tüketim	1	1	2
İklim Eylemi	3	2	5
Sudaki Yaşam	0	0	0
Karasal Yaşam	2	3	5
Barış, Adalet ve Güçlü Kurumlar	1	0	1
Amaçlar İçin Ortaklıklar	0	2	2

Türkçe ders kitaplarında Sürdürülebilir Kalkınma Amaçları (SKA) doğrultusundaki içeriklerin sınırlı olduğu gözlemlenmiştir. "Yoksulluğa Son" başlığı, yalnızca 1. kitapta iki kez işlenmiş, 2. kitapta ise bu temaya hiç yer verilmemiştir. Örneğin, 1. kitap sayfa 97'de "Meclis'te Yankılanan Hatıralar" metninde Mehmet Akif'in yoksulluğunu belirtmek için "Akif'in o günlerde sırtında paltosu yoktu. Soğuk kış günlerinde ceketle geziyor, kimi zaman da bir paltoyu birlikte kaldığı arkadaşıyla nöbetleşe kullanıyordu." diye belirtilmiştir. Benzer şekilde, "Açlığa Son" hedefi, her iki kitapta da birer kez ele alınmıştır. "Sağlık ve Kaliteli Yaşam" başlığı, 1. kitapta bir kez, 2. kitapta ise iki kez işlenmiş ve toplamda üç kez ele alınmıştır. Örneğin 2. kitap sayfa 120'de yer alan karekod okutulduğunda TRT'de yayınlanan "Nasreddin Hoca Zaman Yolcusu" çizgi filminden bir örnek gösterilmektedir. Çizgi filmde

çocuklar sağlıklı ve kaliteli yaşamı olan bir kişiyi gözlemlemeye dair olan ödevi için Nasreddin Hoca'yı gözlemler ve Nasreddin Hoca'nın sağlıklı ve dengeli beslendiğini, spor yaptığını, düzenli uyduğunu vb. fark ederler. "Nitelikli Eğitim" başlığı ise yalnızca 1. kitapta dört kez işlenmiş ve diğer SKA hedeflerine kıyasla daha geniş bir yer bulmuştur. 1. kitap sayfa 116'da ise buna örnek olarak "Atatürk'ün Öğrenim Hayatı" biyografi tarzında ele alınmıştır.

5. sınıf Türkçe ders kitaplarında "Toplumsal Cinsiyet Eşitliği" konusu, 1. kitapta iki kez, 2. kitapta ise bir kez ele alınarak toplamda üç kez işlenmiştir. "Eşitsizliklerin Azaltılması" başlığına ise 1. kitapta iki kez, 2. kitapta ise bir kez yer verilmiştir. Örneğin 1. kitap sayfa 82'de karekodda yer alan "Ya İstiklal Ya Ölüm" filminin üçüncü dakikasında Meclis'e yeni bir isim bulmak için oylama yapıldığı görülmektedir. Bu oylama esnasında da bir kadına da söz hakkı verilmesi "Toplumsal Cinsiyet Eşitliği" konusunda önem taşımaktadır. Bunun yanı sıra, "Temiz Su ve Sanitasyon" ile "Erişilebilir ve Temiz Enerji" başlıklarının 5. sınıf Türkçe ders kitaplarında hiç yer almadığı tespit edilmiştir. Aynı şekilde, "Sürdürülebilir Şehirler ve Topluluklar" teması da kitaplarda ele alınmamıştır.

Çevre temalı SKA başlıkları arasında yer alan "İklim Eylemi", toplamda üç kez olacak şekilde 1. kitapta üç kez, 2. kitapta ise iki kez işlenmiştir. Bu başlık, öğrencileri bilinçlendirmek için 1. kitapta sayfa 120'de yer alan "Atatürk ve Çiftlik" metninde işlenmiştir. Karasal Yaşam başlığı ise 1. kitapta iki kez, 2. kitapta ise üç kez işlenmiş olup, toplamda beş kez ele alınmıştır. Ancak "Sudaki Yaşam" başlığı her iki kitapta da hiç yer almamıştır. Son olarak, "Barış, Adalet ve Güçlü Kurumlar" ve "Amaçlar İçin Ortaklıklar" başlıkları, 5. sınıf Türkçe ders kitaplarında iki kez işlenmiştir. Genel olarak bakıldığında, Türkçe ders kitaplarında SKA temalarının sınırlı bir şekilde işlendiği görülmüştür.

2. 5. Sınıf Sosyal Bilgiler Ders Kitaplarında Sürdürülebilir Kalkınma Amaçlarının (SKA) Görünümü

Tablo 2. 5. Sınıf Sosyal Bilgiler Ders Kitaplarında Sürdürülebilir Kalkınma Amaçlarının (SKA) Görünüm Sıklığı

Temalar/Bilgiler	1. Kitap	2. Kitap	TOPLAM
Yoksulluğa Son	6	0	6
Açlığa Son	4	0	4
Sağlık ve Kaliteli Yaşam	2	1	3
Nitelikli Eğitim	3	2	5
Toplumsal Cinsiyet Eşitliği	1	5	6
Temiz Su ve Sanitasyon	0	0	0
Erişilebilir ve Temiz Enerji	0	1	1
İnsana Yakışır İş ve Ekonomik Büyüme	2	0	2
Sanayi, Yenilikçilik ve Altyapı	0	0	0
Eşitsizliklerin Azaltılması	7	6	13
Sürdürülebilir Şehirler ve Topluluklar	6	0	4
Sorumlu Üretim ve Tüketim	1	3	4

5. Sınıf Türkçe ve Sosyal Bilgiler Ders Kitaplarında Sürdürülebilir Kalkınma Amaçlarının Görünümü

İklim Eylemi	8	1	9
Sudaki Yaşam	4	1	5
Karasal Yaşam	3	0	3
Barış, Adalet ve Güçlü Kurumlar	0	0	0
Amaçlar İçin Ortaklıklar	0	0	0

Sosyal Bilgiler ders kitaplarında Sürdürülebilir Kalkınma Amaçları'nın (SKA) geniş bir şekilde ele alındığı, ancak kitaplar arasında SKA'ların görünüm sıklığı açısından bazı farklılıklar bulunduğu tespit edilmiştir. Örneğin, "Yoksulluğa Son" teması 5. sınıf sosyal bilgiler 1. kitapta altı kez işlenmişken 2. kitapta bu başlığa yönelik içerik görülememiştir. "Yoksulluğa Son" temasına örnek olarak, 1. kitap sayfa 34'te görselde yer alan sadaka taşı Selçuklu ve Osmanlı Dönemi'nde ihtiyaç sahibi kişilerin gecenin geç saatlerinde kimseye görünmeden ihtiyacı kadar olan parayı bu taşın içinden almasına sebep olduğu açıklanmaktadır. Benzer şekilde, "Açlığa Son" başlığı da 1. kitapta dört kez işlenmiş olup, 2. kitapta hiç yer almamıştır. "Sağlık ve Kaliteli Yaşam" 1. Kitapta iki kez işlenmiş, 2. kitapta 1 kez ele alınmış ve toplamda üç kez işlenmiştir.

"Nitelikli Eğitim" başlığı her iki kitapta da yer almış olup, 1. kitapta üç kez, 2. kitapta ise iki kez ele alınmıştır. "Nitelikli Eğitim" başlığına yönelik örnek olarak; 5. sınıf sosyal bilgiler 2. kitap sayfa 43'te Anayasanın 27. Maddesi olan "Herkes, bilim ve sanatı serbestçe öğrenme ve öğretme, açıklama, yayma ve bu alanlarda her türlü araştırma hakkına sahiptir." cümlesi nitelikli eğitimin herkes için bir ihtiyaç olmasına dikkat çekmektedir. Ayrıca "Toplumsal Cinsiyet Eşitliği" teması 1. kitapta bir kez, 2. kitapta ise beş kez işlenmiş olup, toplamda 6 kez ele alınmıştır. Buna örnek olarak, 2. kitap sayfa 16'da "Bu hak ve özgürlükler; dini, cinsiyeti, yaşı, mesleği ne olursa olsun herkese eşit olarak tanınmıştır." cümlesiyle temel hak ve özgürlüklerin kadın, erkek ya da çocuk fark etmeksizin herkes için geçerli olduğuna dikkat çekmektedir. "Temiz Su ve Sanitasyon" başlığı her iki kitapta da yer almamış, "Erişilebilir ve Temiz Enerji" başlığı ise yalnızca 2. kitapta bir kez işlenmiştir.

"Eşitsizliklerin Azaltılması" başlığı Sosyal Bilgiler kitaplarında en sık ele alınan tema olmuştur. Bu tema, 1. kitapta yedi kez, 2. kitapta ise altı kez işlenmiş ve toplamda 13 kez yer almıştır. Buna örnek olarak 1. kitap sayfa 42'de yer alan haber metninde "Öğretmen, öğrenci ve velilerin bağışlarıyla 7 yılda Somali, Uganda, Togo, Tanzanya, Kamerun, Uganda, Çad, Hindistan, Pakistan, Nepal gibi ülkelerde yetimhane, mescit, okul, sağlık ocağı ve su kuyuları yaptırılmıştır..." cümlesi geçmektedir. Öte yandan "Sürdürülebilir Şehirler ve Topluluklar" başlığı yalnızca 1. kitapta altı kez ele alınmıştır.

Çevreyle ilgili SKA başlıklarından "İklim Eylemi", 1. Kitapta sekiz kez işlenmiş, ancak 2. kitapta yalnızca bir kez yer almıştır. Bu temaya örnek vermek gerekirse; 2. kitap sayfa 77'de yer alan "Bu yüzden doğal kaynakların sürdürülebilir kullanımı, atık yönetimi ve eski ürünlerin dönüştürülmesi kaynak ve enerji tasarrufu için oldukça önemlidir. Bunlarla birlikte hızlı yenilenebilir ve çevre dostu ürünler kullanmaya dikkat edilmelidir." cümlesi ile doğayı korumanın ancak insanların bilinçlenmesi ve sorumluluklarını yerine getirmesiyle mümkün olabileceği vurgulanmaktadır. Çevreyle ilgili diğer tema olan "Sudaki Yaşam" başlığı 1. kitapta dört kez işlenirken, 2. kitapta yalnızca bir kez ele alınmıştır. Bu temanın örnek bir işlenişi; 1.

kitap sayfa 66'da T.C. Millî Eğitim Bakanlığı ve TEMA iş birliği ile "Su Kardeşliği" projesi kapsamında çocuklara yönelik su varlığının yaşam için önemi, su kirliliği, su tasarrufu, suyun sürdürülebilirliği ve su ayak izi konularında hazırlanan eğitim etkinlikleri gerçekleştirildiğinden bahsedilerek verilmiştir. Ayrıca "Karasal Yaşam" başlığı 1. kitapta üç kez işlenmiş, ancak 2. kitapta hiç ele alınmamıştır.

Son olarak, "Barış, Adalet ve Güçlü Kurumlar" ve "Amaçlar İçin Ortaklıklar" başlıklarına 5. sınıf sosyal bilgiler ders kitaplarında hiç yer verilmemiştir. Bu bulgular, Sosyal Bilgiler ders kitaplarında bazı SKA hedeflerinin öne çıktığını, ancak bazı başlıkların tamamen göz ardı edildiğini göstermektedir. ers kitaplarında Sürdürülebilir Kalkınma Amaçları (SKA) doğrultusundaki içeriklerin sınırlı olduğu gözlemlenmiştir. "Yoksulluğa Son" başlığı, yalnızca 1. kitapta iki kez işlenmiş, 2. kitapta ise bu temaya hiç yer verilmemiştir. Örneğin, 1. kitap sayfa 97'de "Meclis'te Yankılanan Hatıralar" metninde Mehmet Akif'in yoksulluğunu belirtmek için "Akif'in o günlerde sırtında paltosu yoktu. Soğuk kış günlerinde ceketle geziyor, kimi zaman da bir paltoyu birlikte kaldığı arkadaşıyla nöbetleşe kullanıyordu." diye belirtilmiştir. Benzer şekilde, "Açlığa Son" hedefi, her iki kitapta da birer kez ele alınmıştır. "Sağlık ve Kaliteli Yaşam" başlığı, 1. kitapta bir kez, 2. kitapta ise iki kez işlenmiş ve toplamda üç kez ele alınmıştır. Örneğin 2. kitap sayfa 120'de yer alan karekod okutulduğunda TRT'de yayınlanan "Nasreddin Hoca Zaman Yolcusu" çizgi filminden bir örnek gösterilmektedir. Çizgi filmde çocuklar sağlıklı ve kaliteli yaşamı olan bir kişiyi gözlemlemeye dair olan ödevi için Nasreddin Hoca'yı gözlemlerler ve Nasreddin Hoca'nın sağlıklı ve dengeli beslendiğini, spor yaptığını, düzenli uyduğunu vb. fark ederler. "Nitelikli Eğitim" başlığı ise yalnızca 1. kitapta dört kez işlenmiş ve diğer SKA hedeflerine kıyasla daha geniş bir yer bulmuştur. 1. kitap sayfa 116'da ise buna örnek olarak "Atatürk'ün Öğrenim Hayatı" biyografi tarzında ele alınmıştır.

5. sınıf Türkçe ders kitaplarında "Toplumsal Cinsiyet Eşitliği" konusu, 1. kitapta iki kez, 2. kitapta ise bir kez ele alınarak toplamda üç kez işlenmiştir. "Eşitsizliklerin Azaltılması" başlığına ise 1. kitapta iki kez, 2. kitapta ise bir kez yer verilmiştir. Örneğin 1. kitap sayfa 82'de karekodda yer alan "Ya İstiklal Ya Ölüm" filminin üçüncü dakikasında Meclis'e yeni bir isim bulmak için oylama yapıldığı görülmektedir. Bu oylama esnasında da bir kadına da söz hakkı verilmesi "Toplumsal Cinsiyet Eşitliği" konusunda önem taşımaktadır. Bunun yanı sıra, "Temiz Su ve Sanitasyon" ile "Erişilebilir ve Temiz Enerji" başlıklarının 5. sınıf Türkçe ders kitaplarında hiç yer almadığı tespit edilmiştir. Aynı şekilde, "Sürdürülebilir Şehirler ve Topluluklar" teması da kitaplarda ele alınmamıştır.

SONUÇ VE TARTIŞMA

Eğitim sisteminin temel yapı taşlarından olan ders kitapları, öğretimin kalitesini belirleyen birincil kaynak olarak kritik bir öneme sahiptir. Rymarz ve Engebretson'un (2005) araştırması, bu görüşü desteklemekle birlikte, öğretmenlerin ders kitabı kullanımının sınıf ortamında kendilerine güven ve motivasyon sağladığını ortaya koymaktadır. Ders kitaplarındaki içeriğin öğrencilerin yaşamları üzerinde doğrudan etki yarattığı da göz önünde bulundurulmalıdır.

Bu hususlar göz önüne alınarak hazırlanan bu çalışma, 2024 Türkiye Yüzyılı Maarif Modeli kapsamında yenilenen 5. sınıf Türkçe ve Sosyal Bilgiler ders kitaplarının Sürdürülebilir Kalkınma Amaçları'na (SKA) ne düzeyde yer verdiğini incelemeyi amaçlamıştır. Elde edilen bulgular, ders kitaplarının SKA temalarının içeriklerde yer alma düzeyi bakımından farklılıklar gösterdiğini ortaya koymaktadır. Türkçe ders kitaplarının SKA'lara daha sınırlı düzeyde yer verdiği tespit edilmiştir. Türkçe ders kitabında toplamda otuz üç kez olacak

biçimde 1. kitapta yirmi, 2. kitapta on üç kez Sürdürülebilir Kalkınma Amaçları konu edilmiştir. Bu kitaplarda, "Yoksulluğa Son," "Açlığa Son," "Sağlık ve Kaliteli Yaşam," "Nitelikli Eğitim" ve "Toplumsal Cinsiyet Eşitliği" gibi başlıklar işlenmekle birlikte, bu temaların ele alınma sıklığının sınırlı olduğu ve bazı SKA başlıklarının hiç işlenmediği görülmüştür. Özellikle "Temiz Su ve Sanitasyon," "Sudaki Yaşam," ve "Erişilebilir ve Temiz Enerji" gibi başlıklar kitap içeriklerinde yer almamaktadır. SKA'ların Türkçe ders kitaplarında genellikle bireysel farkındalık yaratmaya yönelik boyutlarına odaklanıldığı anlaşılmaktadır. Bununla beraber metin içerisinde Sürdürülebilir Kalkınma Amaçları'na değinilme oranı da oldukça az bulunmuştur. Bu durumun hem dersin önceliğinin dil becerileri olması hem de bu sınıf düzeyindeki temalarla ilgili olduğu düşünülmektedir.

5. sınıf sosyal bilgiler ders kitapları incelendiğinde, SKA başlıklarının daha geniş bir kapsamda ele alındığı tespit edilmiştir. 1. kitapta kır altı kez, 2. kitapta ise yirmi kez olmak üzere toplamda altmış altı kez Sürdürülebilir Kalkınma Amaçları'na yer verildiği gözlemlenmiştir. "Eşitsizliklerin Azaltılması," "İklim Eylemi" ve "Sürdürülebilir Şehirler ve Topluluklar" gibi başlıklar özellikle 1. kitapta daha yoğun sıklıkla işlenmiştir. Ancak, "Temiz Su ve Sanitasyon," "Barış, Adalet ve Güçlü Kurumlar" ve "Erişilebilir ve Temiz Enerji" gibi başlıkların ya çok sınırlı şekilde ele alındığı ya da bunlara yer verilmediği gözlemlenmiştir. 2. kitapta ise bazı başlıkların daha az sıklıkta işlendiği, özellikle "Yoksulluğa Son" ve "Açlığa Son" gibi başlıklara yer verilmediği belirlenmiştir. Bu durum, kitaplar arasında SKA'ların ele alınma sıklığı açısından farklılıklar olduğunu göstermektedir. Bu duruma sınıf düzeyindeki tema dağılımının ve kitap yazarlarının tercihlerinin neden olduğu düşünülmektedir. Bunun yanı sıra Sosyal Bilgiler ders kitaplarına Sürdürülebilir Kalkınma Amaçları'na haber metinleri, ulusal ortak metinler ya da etkinliklerle dikkat çekildiği gözlemlenmiştir.

Genel olarak bakıldığında; 5. sınıflar için hazırlanmış T.C. Milli Eğitim Bakanlığı Orta Okul ve İmam Hatip Orta Okulu Türkçe Ders Kitabında otuz üç kez Sürdürülebilir Kalkınma Amaçları'na yer verilirken T.C. Milli Eğitim Bakanlığı Orta Okul ve İmam Hatip Orta Okulu Sosyal Bilgiler Ders Kitabında ise altmış altı kez Sürdürülebilir Kalkınma Amaçları'na yer verilmiştir. Bilindiği üzere ders kitapları, sürdürülebilir kalkınma bilincinin öğrencilere erken yaşta kazandırılması açısından temel araçlardan biri olarak önemli bir yer teşkil etmektedir..

PEDAGOJİK ÇIKARIMLAR

Bu çalışma, sürdürülebilir kalkınma amaçlarının ders kitaplarında daha dengeli ve kapsamlı bir şekilde ele alınmasının, öğrencilerin sürdürülebilirlik bilinci kazanmalarına katkı sağlayabileceğini ortaya koymaktadır. Araştırma bulguları, eğitim materyallerinin içeriklerinde sürdürülebilir kalkınma temalarının sistematik bir şekilde işlenmesinin önemine işaret etmektedir.

SINIRLILIKLAR VE ÖNERİLER

Çalışma sonucunda ders kitaplarında SKA'ların ele alınma sıklığının oldukça iyi olduğu söylenebilir ancak diğer seviyelerdeki ders kitapları ile birlikte oluşacak görünüme bakmak gerektiği de unutulmamalıdır. Bu nedenle, SKA başlıklarının daha dengeli bir şekilde ele alınması, eksik kalan başlıkların diğer ders kitaplarının içeriklerine dahil edilerek bütüncül bir planlama yapılması yararlı olacaktır. Yapılan bu çalışmada MEB tarafından hazırlanan Türkçe ve Sosyal Bilgiler derslerinin 5. sınıf seviyesi kitapları incelenmiş olup

arařtırmacıların bu tür alıřmaları farklı disiplinlerde, dzeylerde ve farklı yayınevlerinin kitapları ile yapmaları nerilebilir. Bunlara ek olarak ğrencilerin srdrlebilirlik kavramını kavrayıp bu ynde alıřmalar yapmasına teřvik edici proje nerilerine ynelik ieriklerin de ders kitaplarında yer alması gerektięi dřnlmektedir.

ıkar atıřması Beyanı

Bu alıřmada herhangi bir ıkar atıřması bulunmamaktadır ve destek alınmamıřtır.

Yapay Zeka Kullanım Beyanı

Bu alıřmada yapay zeka araları yalnızca biimsel hataların dzeltilmesi ve dil kontrol amacıyla kullanılmıřtır.

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EXTENDED ABSTRACT

The Representation of Sustainable Development Goals in 5th Grade Turkish and Social Studies Textbooks Prepared Under the 2024 Türkiye Century Education Model

This study examines the representation of the United Nations' Sustainable Development Goals (SDGs) in the 5th-grade Turkish and Social Studies textbooks prepared under the 2024 Türkiye Century Education Model. The study focuses on the visibility, thematic distribution, and representation of SDG content in these textbooks, using a document analysis method. The research evaluates how these textbooks, revised under the new educational framework, integrate SDGs to foster awareness and understanding of sustainability among students.

The findings reveal significant differences in the way SDGs are addressed in Turkish and Social Studies textbooks, with notable gaps and inconsistencies in coverage. Turkish textbooks present SDGs in a limited capacity, focusing on topics such as "No Poverty," "Zero Hunger," "Good Health and Well-being," "Quality Education," and "Gender Equality." However, critical environmental goals like "Clean Water and Sanitation," "Affordable and Clean Energy," and "Life Below Water" are entirely absent. The content primarily emphasizes individual awareness rather than providing a comprehensive understanding of global sustainability challenges.

In contrast, Social Studies textbooks include a broader range of SDGs, addressing topics such as "Reduced Inequalities," "Climate Action," and "Sustainable Cities and Communities" more frequently. Despite this broader representation, some goals, including "Clean Water and Sanitation" and "Peace, Justice, and Strong Institutions," receive minimal or no attention. This disparity indicates a lack of uniformity in the integration of sustainability themes across subject areas.

The research identifies that the Turkish textbooks include a total of 33 SDG-related instances, while Social Studies textbooks present 66 instances. The Turkish textbooks primarily focus on raising individual awareness and address SDGs through limited narratives and examples. For instance, "No Poverty" is addressed only twice in one textbook and entirely omitted in the second volume. Similarly, "Climate Action" and "Karasal Yaşam" (Terrestrial Life) are mentioned a total of five times each, while themes like "Sudaki Yaşam" (Life Below Water) are not covered at all.

Social Studies textbooks provide a relatively wider coverage of SDGs, emphasizing topics like "Reduced Inequalities" (13 instances) and "Climate Action" (9 instances). However, environmental goals such as "Clean Water and Sanitation" and "Affordable and Clean Energy"

are either underrepresented or absent. The inclusion of SDGs in Social Studies textbooks is achieved through narratives, activities, and case studies, reflecting a more structured approach to integrating these themes into the curriculum.

The findings suggest that while the Türkiye Century Education Model incorporates sustainability as a guiding principle, its implementation in textbook content is uneven. The limited inclusion of SDGs in Turkish textbooks is attributed to the subject's primary focus on language and communication skills rather than interdisciplinary themes. On the other hand, the relatively broader coverage in Social Studies textbooks demonstrates the subject's inherent focus on societal issues and civic education.

Based on the research findings, several recommendations are proposed to enhance the integration of SDGs into educational materials. Firstly, textbooks should address all 17 SDGs comprehensively to ensure balanced coverage of sustainability themes. Secondly, an interdisciplinary approach could be adopted to integrate SDG topics across different subject areas. Thirdly, activities and projects encouraging critical thinking and real-world problem-solving should be included to deepen students' engagement with sustainability concepts. Additionally, the periodic evaluation of textbook content can help align materials with SDG objectives and improve their educational effectiveness.

The results highlight the importance of systematically integrating sustainability themes into textbooks to foster a deeper understanding of global challenges among students. This study emphasizes the need for educational materials to comprehensively and equitably address SDGs, providing students with the knowledge and skills required to contribute to sustainable development.