

From the Editor...

Dear Readers,

We are with you again with the Ankara University Faculty of Educational Sciences Journal of Special Education's last issue, September 2022, Volume 23, Issue 3. As always has been, I would like to thank here those who contributed as our authors, reviewers, readers, our Academic Advisory Board, and our Editorial Board. I would like to indicate that as the Editorial Board, we put forth the effort to move our journal to a higher level both quantitatively and qualitatively in the forthcoming process.

In this issue of our Journal, there are six research and four review articles. I would like to briefly introduce them to our readers. The first research article in the current issue includes a study of *Özer AKGÜN* and *Oğuz GÜRSEL* namely "*Effectiveness of Teaching Functional Mathematical Skills to Students with Developmental Disability via Direct Instruction Method.*" The purpose of this study was to examine the effectiveness of teaching functional mathematical skills (telling time to the half hour, telling the total amount of the same coins and telling/reading the fractions) to students with developmental disability via direct instruction method. Multiple probe design with probe conditions across behaviors, a type of single-subject research design, was used in the research. The study was conducted with three students with developmental disability at the age of 9-10. The dependent variable was the ability to express the functional mathematical skills. The independent variable of the study was the direct instruction method. Research findings showed that the direct instruction method was effective in teaching students with developmental disability how to tell time to the half hour, the total amount of the same coins and the fractions which were among the functional mathematical skills. It was observed that the students were able to maintain their functional mathematical skills and generalize this skill with different tools 5, 7 and 12 days following the end of the instruction. The performances of all the participant students significantly increased in the baseline phase probe sessions held before the education and in the daily probe and collective probe sessions conducted after the sessions with respect to the functional mathematical skills. It was recommended that families with children with developmental disabilities, classroom teachers and special education teachers use the direct instruction method in teaching functional mathematics skills.

The second study namely "*Comparison of Live Modeling and Video Modeling on Teaching Symbolic Plays to Children with Autism Spectrum Disorder in Small Groups*" was conducted by *Nuray ÖNCÜL* and *İlknur ÇİFCİ-TEKİNARSLAN*. The purpose of this study was to compare the effectiveness and efficiency of live modeling and video modeling on teaching symbolic plays to children with autism spectrum disorder in small groups. This study employed an adaptive alternating treatments design. The independent variables were live video modeling and video modeling presented in small group instruction. Also, the dependent variables were the symbolic play behaviors of acting as a waiter and as a barber. The research findings demonstrated that both live modeling and video modeling presented in small group instruction were effective in acquisition, maintenance, and generalization of symbolic plays of children with autism spectrum disorder. Video modeling was more effective than live modeling for acquisition; live modeling was more effective than video modeling for maintenance; and there was no difference between the methods for generalization. Although it is known that children with ASD have impairments especially in playing symbolic play, it was planned to teach two games in the research, and the program was taught to learn with a video modeling and a live modeling program to teach small group instruction. Learning how to play the symbolic play of the vehicle with the autism spectrum disorder through a search in the process in question serves the purpose of the research.

The third research article in this issue is authored by *Canan SOLA-ÖZGÜÇ* and *Damla ALTIN* namely "*Teaching Block-Based Coding to a Student with Autism Spectrum Disorder*". The aim of this study was to review the process of teaching coding to a student with autism spectrum disorder (ASD) and to examine that student's educational gains, problems encountered during process, and suggestions for solutions. The research was designed as a case study and involved a three-month instruction process, during which the instruction sessions were prepared via the explicit instruction method of coding skills for a 10-year-old boy with autism spectrum disorder. Further, the contributions of this study were analyzed through the data obtained via content analysis method with the NVivo 10 program. The findings indicated that the participant demonstrated significant gains as a result of the coding teaching process. He successfully completed the first and second levels in the Code.org platform by reducing the level of help given under the researcher's supervision. The participant completed the last two lessons of his second level without any help and became independent in coding skills. The gains increased the participant's motivation; he further stated that he wanted to make coding his future profession. The participant not only gained skills in programming, but he also learned new skills, e.g., finding the document he saved on a computer, taking a screenshot, and printing something out. According to the literature, programming teaching not only contributes to career planning in the field of engineering, but these skills can also be used in daily life or will be needed in other professions. It was emphasized that individuals with ASD should not only use technology as consumers, but also should be productive individuals in the field of technology by developing their computational thinking skills.

Halil ÖZTÜRK, Volkan ŞAHİN and Sezgin VURAN authored the fourth research article namely “*First Encounter with Children with Special Needs and Education Experience of Special Education Teacher Candidates.*” The study aimed to bring together families of children with special needs (SN) and different needs and special education teacher candidates who wanted to join the practice in the early period within the framework of voluntariness, to ensure that the support needs of families and the practice needs of teacher candidates were met simultaneously, and to reveal the experiences of families and teacher candidates at the end of the process. The phenomenology design, one of the qualitative research methods, was used in the study. Four families of a child with SN and four teacher candidates participated in the study. The data obtained from semi-structured interviews and researcher diaries were analyzed thematically. The experience in the process revealed that in the eyes of families, teacher candidates were transformed from the position of an elder brother and sister to a teacher. Teacher candidates also indicated that they started to see themselves as a teacher over time. It was observed that both parties obtained acquisitions without bearing any additional burden in the voluntary education process, in which stakeholders in special education are brought together in line with their needs. It was thought that it would be beneficial to increase the practice intensity in the special education teaching program with processes similar to the voluntary education process.

The fifth article which was conducted by *Samed YENİOĞLU, Kübra SAYAR and Nevin GÜNER-YILDIZ* is namely “*Teaching the Skills of Solving Shopping Problems and Generalizing to Daily Life to Students with Learning Disabilities.*” In this study, the effectiveness of education given by using direct instruction on the ability of students with learning difficulties in general education schools to acquire the ability to solve mathematical problems consisting of transactions used in shopping and to use this skill while shopping in daily life was examined. This research was designed according to the multiple probe design with probe conditions across participants. Participants of the research consist of three male students between the ages of 10-12 who continue their education through inclusion in public schools in Eskisehir and receive support from a special education and rehabilitation center. In the study, the participants were taught the ability to solve mathematical problems consisting of operations used while shopping with direct instruction method, and the level of using the skills learned by the participants while shopping in a market was evaluated. According to the findings obtained as a result of the research, the participant students gained the ability to solve problems involving the processes used in shopping and were able to generalize this skill to their daily lives by using them in grocery shopping. It was suggested that the findings of the study are consistent with the results of the studies in the literature that examine the teaching of mathematics skills to students with special needs.

The sixth research article namely “*Teaching Academic Skills to Children with Autism During Small Group Instruction with Typically Developing Peers*” was authored by *Serap DOĞAN and Arzu ÖZEN*. In this study, pre-school aged children with autism were taught to answer verbally to five different questions about professions through the constant time delay procedure when presented in heterogeneous small group instruction in inclusive settings. The study also aimed to investigate skill maintenance, generalization and observational learning. Also it was observed that what kind of social interaction behaviors that children with autism learned from their peers without disabilities during the teaching of the targeted skills. The participants of the study were three preschool children with autism and six of their peers without disabilities. Multiple probe design with probe trials across subjects was used in the study. Results showed that all participants learned target skills, generalized them across different settings and materials, and maintained the acquired skills one, two and four weeks after the study. Observational learning data showed that children with autism learned at least some of their peers’ target professions and social behaviors. Social comparison showed that the children with autism reached the same level of the performance with their peers. Social validity data collected from parents and teachers were positive in general. The constant time delay procedure presented in a small group arrangement was found to be effective in teaching to answer verbally five different questions about professions. It was thought that observational learning data are derived from target skills and student characteristics.

The article namely “*Language and Communication Features of Childhood-Onset Schizophrenia and Autism Spectrum Disorders: A Literature Review*” that was authored by *Tuğçe ÇABUK, Şevket ÖZDEMİR, and Gökhan TÖRET*, is the first review article of this issue. Schizophrenia (SZ) and autism spectrum disorders (ASD) both have life-long and negative impacts on the individuals. In contrast to ASD, SZ occurs “rarely” in childhood (before the age of 13) which is called childhood-onset schizophrenia (COS). Although COS and ASD have distinct pathologies, they exhibit common characteristics since they were described first. One of the most important commonalities is overlapping language and communication features. Till now, it is known that there is no integrative model related to the mutual language characteristics and underlying neurogenetic factors covering both of these disorders. Therefore, this literature review aimed to reveal previous research reporting both diverging and converging language issues with regards to these populations. The information presented in this review also aimed to help special education professionals about noticing the children who might present the features of COS. For this aim, firstly, the historical backgrounds of the disorders were given. Later, the language and communication features of COS and ASD including the overlapping characteristics were presented in light of previous research.

Studies showed that pragmatic limitations could be observed within both populations. Atypical language characteristics such as echolalia and self-talk could also be mutually observed. A need for future studies exploring the morphological and semantic levels of COS and ASD was emphasized. Furthermore, it was proposed that retrospective and prospective studies could be designed with a large sample. It was suggested that the connection between language and pretend play or executive functions could be examined.

The second review article in this issue with the title of “*Eye Tracking Technique from Past to Present in Reading Research*” was authored by *Esmehan ÖZER* and *Selda ÖZDEMİR*. In this study, the developmental process of eye tracking technique from the past to the present was examined through reviewing the literature analyzing reading skills with the use of eye tracking technique. Within this perspective, information was given about the first years of reading skills with eye tracking technique, years when studying reading skill with eye tracking technique stopped due to behavioral approach, years when studying reading skill with eye tracking technique started to rise again and the rapid progress of eye tracking scientifically and technologically in the 2000s. In addition, information on eye-tracking studies to examine the reading skills of individuals with special needs in the field of special education was presented. Beginning from the first report of the saccade to the widespread use of the eye tracking technique that is seen today, the developmental stages of the technique and its importance in examining cognitive processes of readers were explained in the current study. Thus, it was expected that the nature of reading skills would be understood in depth and reflections of reading difficulties on diagnosis and evaluation procedures will guide researchers.

“*Classroom Management: Significance in Inclusive Education, Current Problems and Proposed Solutions*” is the third review article, and it is authored by *Nevin GÜNER-YILDIZ*, *Hasan KÖSE*, and *Esra AKIN*. It is a known fact that teachers’ knowledge and use of effective classroom management (CM) strategies has a positive impact on their professional achievement and their students’ learning outcomes. Effective strategies that teachers can use are presented in various scientific studies. However, these strategies are not used sufficiently in practice for various reasons, and therefore, in many classrooms, controlling students’ problem behavior, focusing students on activities, and maintaining effective education is not yet a task that teachers achieved adequately. Besides, educational settings become more inclusive day by day and increased student diversity add to the complexity of problems encountered in CM. In the light of literature, this study aimed to identify the problems encountered about CM by today’s teachers along with the causes of these problems and to present tools that can be used to solve these problems. With this purpose, the study examined the content of the “2023 Education Vision” prepared by the Ministry of National Education (MoNE) of Turkey as a short-term guide to solve the problems in the system of education in regards to classroom management. The study also presents some recommendations to policymakers about the changes planned in teacher training and professional development programs to solve problems related to CM.

The fourth and the last review article of this issue was authored by *Çiğdem TÜRKER-YILDIRIM* entitled “*A Systematic Review of Studies Conducted in Turkey on Science Teaching to Students with Intellectual Disabilities*.” In order for the learning-teaching process of students with intellectual disabilities to be carried out effectively, different interventions should be used in line with their individual differences, developmental characteristics and educational needs. This study aimed to examine the studies conducted in Turkey on science teaching to students with intellectual disabilities. In this research conducted using document analysis, Google Scholar, Higher Education Council National Thesis Centre, and the Scientific and Technological Research Council of Turkey National Academic Network and Information Centre databases were reviewed and 17 studies that met the criteria were examined. The majority of the studies employed direct instruction method and was provided through technology-supported teaching interventions. In addition, in most of the studies, it was found that as students acquired science concepts, knowledge and skills, their competence and success for the science course increased as well, and the studies carried out had a positive influence on their interests in and attitudes towards the science class. The findings obtained from the studies included in the research show that science concepts, knowledge and skills are acquired by students with intellectual disabilities. In this direction, it was seen that students with intellectual disability, whose learning speeds are slower than their typically developing peers, performed an effective learning-teaching process with the interventions carried out in line with their individual differences, developmental characteristics and educational needs.

I would like to kindly thank once again my colleagues for their vigorous efforts who are working with me on the Editorial Board for our journal to be published timely and to increase the quality. I would like to thank our dear readers, authors, and reviewers for their support and contributions once again and I would like to kindly request you to continue your support and contributions during the ongoing process. I wish to be with you again in the upcoming issue which will be published in December, 2022...

Prof. Hatice BAKKALOĞLU