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Research Article

Investigation of Learning Experiences of Primary School Students with Mathematics Learning Disability with Authentic Activities

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Abstract –This study aimed to examine the primary school children learning experiences with mathematics learning difficulties in authentic contexts. Eight primary school students with mathematics difficulties participated in the research as multiple case studies. Research data were obtained with three different data collection methods. These were determined as semi-structured interviews (before and after observation), in-class observation and document review. At the end, as the result of the data collection process, which lasted for a total of five months, the students' opinions showed that; Mathematics teaching supported by authentic activities brought along features such as familiar problems, well-defined tasks, cognitive support, authentic assessment and reflection. In addition, it was seen from the student data who participated in all of the authentic tasks that; Students who participated in authentic tasks with their peers, teachers, or parents had higher completion rates.

Key words: Mathematics learning disability, authentic context, case study, constructivism, primary school student

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Introduction

Mathematics, spread out of academic context, can be used in daily life (Jansen et al., 2016; McCloskey, 2007; Reyna & Brainerd, 2007; Ojose, 2011), business life (Cohen Kadosh et al., 2013; Geary, 2011), emotional well-being (Cohen Kadosh et al., 2007) is even an essential skill at the point of adaptation to social life. This skill is a composite discipline that includes areas such as arithmetic, statistics, algebra, and geometry. Each of these areas requires

developing different individual skills, such as understanding numbers and mathematical concepts and procedures (Aunola et al., 2004). Especially in mathematics and science, many students believe that in order to achieve success, innate talent, and even brilliance are required instead of perseverance, promising approaches, support from others, and learning over time (Hong & Lin Siegler, 2012). Mathematical performance depends on specific domain skills that also require the simultaneous development of general cognitive domain abilities. Disruption of these areas can determine a cascading effect on mathematics learning. A universal difficulty or poor performance in learning mathematics is on the agenda. The low mathematics performance experienced by students in the mathematics learning process can be explained by cognitive and neuropsychological profiles, low language skills, lack of prerequisite knowledge and skills for mathematics learning, and learning difficulties or disabilities (Krajewski & Schneider, 2009; Simms et al., 2013; De Smedt et al., 2013; Sharma, 2020).

Learning difficulties in mathematics have different forms, such as difficulty on acquiring learning procedures, basic conceptual processes, or both. A child with a diagnosis of mathematics learning disabilities exhibits a wide range of poor performance profiles related to basic numerical processing, counting, transcoding, arithmetic skills,and word problems (Butterworth, 2008; Kaufmann & von Aster, 2012). Similarly, there are difficulties in learning mathematics, such as delay in learning numbers, confusion in the digits of numbers, difficulty in solving problems, understanding the mathematical language, and forgetting the basic concepts of mathematics (Courtade et al., 2015). The mathematical difficulty is addressed as "dyscalculia" in the international literature and diagnostic guidelines. Geary (2011) emphasized that competencies in each mathematics area are based on different conceptual and procedural processes supported by different cognitive abilities. While the prefix "dys" in Greek means "bad", which forms the term dyscalculia, "calculia", that is, "calcculare" in Latin, means counting (Khing, 2016). This indicates that dyscalculia means counting badly, but it seems more complex. The initial definition of dyscalculia was made by Kosc (1974) as "a difficulty in mathematics as a result of impairment in certain parts of the brain related to mathematical cognition, but without an overall difficulty in cognitive function". It is used synonymously with a mathematics learning disability or arithmetic learning disability (Soares & Patel, 2015). It is used to describe specific difficulties related to mathematics as dyscalculia and difficulty in acquiring basic concepts that support the ability to perform mathematical procedures, not a lack of intelligence (Glynis, 2013), and this difficulty is neurologically based (Kucian & Von Aster, 2015; Wadlington & Wadlington, 2008). This is a learning disability, and dyscalculia affects

an individual's mathematical learning process and behavior in this process. It is claimed that the frequency of appearance in school-age children is between six-eight percent (Sharma, 2020). Dyscalculia is a difficulty with numbers, but it should be considered a deeper problem than just being bad at mathematics (Hornigold, 2015).

Furthermore, environmental factors such as low participation, inappropriate teaching style, lack of practice, poor curriculum and low standard of the subject create much more difficulty in learning mathematics during education (Sharma, 2020). It was known that learning difficulties are caused by certain reasons such as physical, educational, emotional or environmental factors and can be improved with effective educational interventions. Individuals with learning disabilities may not be mentally retarded; learning problems are likely the result of inadequate instructional design in curriculum materials (Carnine et al., 1997). A mathematical difficulty refers to poor mathematics achievement in children, which is hypothesized by an innate weakness in mathematical cognition. It is caused by ranging from poor teaching to environmental factors, but cannot be attributed to socio-cultural or environmental factors (Soares et al., 2018). So, can children with dyscalculia be supported in their mathematics processes? Or is it impossible to recover from this difficulty or its effects? Different interventions have been proposed for these children. It is stated in the literature that different methods and techniques are effective and applicable for these children (Shalev, 2004). Interventions adapted to learning needs and pace are effective (Moeller et al., 2012). Children with dyscalculia also benefit from structured, hierarchical designs and frequent and continuous repetition (Butterworth & Laurillard, 2010; Fuchs et al., 2005).

Authentic context in learning environments

Authentic learning describes as various teaching and learning techniques that integrate what students learn in school with real-world problems, issues, and related practices (Lombardi, 2007). If learning is natural, students can directly connect their learning materials and experiences and engage with real learning problems. Learning takes place in the real world, where learners adapt the learning content to the context in which they find themselves (Hwang et al., 2018, 2019). Students take an active role in authentic learning that adopts the constructivist approach (Shadiev et al., 2016; Tobias & Dufy, 2009). Authentic learning exposes students to real-world situations through various interactive and engaging learning activities (Lombardi, 2007). Students can think about a problem from different perspectives, evaluate, share, and create new meanings and solutions (Hsiao, 2004). In authentic learning, the most appropriate learning experience is created for students, and this approach environment

supports students in developing competencies applicable to various aspects of their lives (Gulikers et al., 2005). In authentic learning, the student determines a meaningful learning goal. In addition, the student forms his thoughts about new information, obtains new information in depth, discusses concepts, acquires information learning strategy, and presents and discusses information (Glatthorn, 1999). Authentic learning allows students to explore, explain, discuss, and construct concepts in a meaningful way and participate in real-life problems in the context of real-world problems relevant to their daily lives (Donovan et al., 1999). Authentic learning is learning the cognitive processes and culture of the professional environment by participating in real-life activities and tasks faced by an adult/expert (Woolley & Jarvis, 2007).

Authentic learning is seen as a response to the traditionally non-contextualized nature of learning or alternative teaching method (Meyers & Nulty, 2009). Real-life experiences increase students' motivation (Casaley, 2004, p.12). Even students' professional skills can be supported with authentic learning, which is related to the student's real life and keeps the student active in the learning process (Gulikers et al., 2005; Reeves et al., 2002). In authentic learning, the student constantly interacts with the world, reanalyzing and interpreting what they have learned (Lave & Wenger, 1991). When the activities used in authentic learning are examined, they should be divided into sub-tasks, well-defined, complex, supported by resources, connected with the real world, developed in cooperation, and provided skills and experiences (Borthwick et al., 2007). Renzulli (1997) listed the characteristics of real-life problems that can be used in the authentic learning process: Supporting personal responsibility and cognitive awareness, having multiple solutions, containing complex goals, reflecting beliefs and values, encouraging cooperation, supporting activities, and facilitating interdisciplinary relations. In this way, exploration and discussion become continuous (Donovan et al., 1999), real-life complexity is transferred to the classroom (Cholewinski, 2009), and it encourages a focus on social and political issues outside of school (Borthwick et al., 2007). Authentic learning has the potential to teach any content that can be associated with real life.

Authentic learning is the focus of this research, because authentic learning supports mathematics skills (Dolapçıoğlu & Doğanay, 2022; Ozkan & Kılıçoğlu, 2021; Uzunboylu et al., 2020; Wardani et al., 2021) and it is an effective approach that can be used in different groups, especially in need of special education (Jobling & Moni, 2004; Kang et al., 2022; Lichtinger & Kaplan, 2015). At this point, it would be beneficial to benefit from authentic learning to support the mathematics learning of students with reading difficulties. The motivation of this study was how the mathematics skills of children with mathematics learning

difficulties changed in authentic contexts. The study was designed around the following research questions: (1) What are the views of children with mathematics learning difficulties about authentic learning activities? (2) How do students with mathematics learning difficulties complete the tasks?

Method

A qualitative exploratory multiple case study approach was chosen to examine the learning experiences of primary school students with mathematics difficulties in authentic contexts (Yin, 2014). This study examined the situation in multiple cases and established contextualized experiences and systematic analysis procedures (Yin, 2014). In particular, case studies conducted within the framework of qualitative methodology are very suitable for examining practices and beliefs (Olafson et al., 2015). In this study, the case was defined as the experiences and beliefs of students with mathematics learning disability in authentic learning activities.

Study group

A qualitative exploratory multiple case study approach was chosen to examine the learning experiences of primary school students with mathematics difficulties in authentic contexts (Yin, 2014 Eight elementary school students with mathematics difficulties participated in this study. It is known that the sample size is sufficient for the multiple case study. Stake (2013) stated that less than four or more than fifteen situations may create limitations in similar case studies. Participants were reported under different names (Table 1).

Table 1 Participants demographic information

Student	Gender	Age	Ethnicity	Diagnosis
Ata	Male	9 years 3 months	Turkish	Special learning disability(SLD)
Burak	Male	9 years 7 months		
Sefa	Male	10 years 1 month		
Mehmet	Male	9 years 5 months		
Bahadır	Male	9 years 3 months		
Seda	Female	9 years 8 months		
Meliha	Female	9 years 9 months		
Fatma	Female	9 years 4 months		

In order to identify students, the student's family provides report information from the rehabilitation center which will be obtained after the diagnosis process in child psychiatry. The

student who receives a SLD report, in which area he has problems in reading, mathematics or writing that indicated. Students receive support training in special education counseling centers according to the situation specified in their reports. All students participating in the study were diagnosed with SLD and additionally stated in their reports that they had problems in the field of "mathematics".

Measures and procedures

The data of this study were obtained from three different data collection methods. These were determined as semi-structured interviews (before and after observation), classroom observation, and document analysis. Data were collected over five months in 2022.

Each student studied between 2-4 hours per week, with minimum of 40 and a maximum of 80 hours each student. A total of 22 activities were studied with each student. Together with the researcher and four special education instructors, these activities were created. The exercises included various forms of interaction where the student, peer, instructor, or parent complemented the mathematics in a way that was relevant to everyday life. Four of the activities were done alone, four with a peer, six with teachers and peers, and eight with parents. 22 activities were completed by each pupil, and the activity files were converted to digital. To guarantee that ethical and methodological standards were upheld, a different protocol was used for each method. Eight students were the subjects of a total of 16 interviews, all of which were performed in accordance with the pre- and post-observation interview protocols. By looking at studies in the literature on the design of the learning process with an authentic setting, the interview questions were developed. Pre-observation interview questions focused on how students could use authentic context activities in the lesson, and then pre-observation interviews lasted an average of 24 minutes. Post-observation interviews focused on students' participation in authentic activities, learning experiences, interaction, desire, and performance features. Post-observation interviews lasted an average of 42 minutes. After the draft of the observation questions was prepared by the researcher, it was checked by an academician in the special education and a special education teacher teaching in the field of SLD. Some revisions were made after the controls result. A total of nine hours and 36 minutes of classroom observation was made by a different researcher using the Classroom Observation Protocol to verify and complete the individual student interview data. The observation protocol covered the period from the beginning of the lesson in the classroom to the end. All interactions in the process were recorded. The elements, such as the teacher's content, presentation style, student activity, and out-of-class tasks were reported in detail in accordance with the protocol. Finally, 23

documents were requested from teachers, including lesson and unit plans, in-class activities and explanations, and student works that were considered descriptive of participants' experiences in the learning process. These documents were requested in order to verify whether the students did a similar study on mathematics, whether they had a different learning disability that would affect the results of the study, and to verify that the teacher worked with each student on similar content. In addition, the activity documents of the students in the application process were among these documents. Moreover, the documents were reviewed with two special education teachers independent of the study process. Scoring documents for students' activities in the lesson, students' notebooks, and activity sheets were examined in detail. Observation and documents were used to obtain data on students' completion of authentic tasks. Interview data were used to obtain students' views on authentic tasks.

Data analysis

Student interviews were recorded and written down. Using the fixed comparison technique, the researcher and two other researchers examined the transcribed data. (Strauss & Corbin, 1998). Additionally, analyses of the data within and between cases were carried out. (Yin, 2014). Individual interviews with participants were transcribed. The study used two data visualization approaches Miles et al. proposed (2014). Different representations of the findings were achieved through charts and tables. The flow chart of the analysis process can be examined as follows (Figure 1).

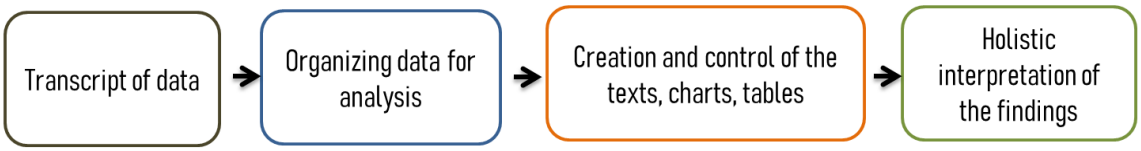

Figure 1 Flowchart of the analysis process

In this context, the activities are related to the real world; the activities are well defined, the activities include complex and continuous tasks, the activities support multiple perspectives, the activities are open to cooperation, allow students to reflect on their values, include/support an interdisciplinary perspective, include authentic evaluation, and multiple perspectives.

Coding

Inductive (Miles et al., 2014) and deductive (Miles et al., 2014) coding were used to answer the research questions. Inductive coding included two main processes: first coding (first loop) and pattern coding (second loop). First, the author reviewed the qualitative data provided by the participants. Once a consensus was made, these were further discussed, contrasted, and

refined with a researcher not affiliated with the study but skilled in qualitative work. When a complete understanding was achieved, the author coded all the data that had been verified by the coding researcher. Finally, a third researcher, independent of the study, coded the data from the author. For deductive coding, while performing classroom observations, Reeves et al. (2002) and Herrington et al. (2006) suggested that authentic learning environment features were examined and used as a framework for observations. Items were created to include possible outcomes. Deductive coding was carried out separately by the author and an independent researcher. Independent ratings showed a perfect fit.

Reliability

The Lincoln and Guba (1985) parameters used in the study's qualitative research were followed in terms of reliability standards. Reliability was accomplished using a variety of techniques, including method triangulation (Denzin, 1978), which was used to assess the consistency of the conclusions among information gathered from individual student interviews, classroom observations, and document analysis. Member controls and reference adequacy were included at different points in the analysis process (Lincoln & Guba, 1985). In the deductive coding phase, credibility was ensured through inter-interpretive reliability (Using Miles and Huberman formula (Reliability = consensus /(consensus disagreement)= 98%).

Findings and Discussions

Interviews with students were analyzed with thematic analysis protocol and themes, and sub-themes and codes were obtained. These themes were identified as associating with familiar problems, well-defined activities, scaffolding, authentic assessment, and reflection.

The views under the theme of associating with familiar problems briefly explained the experience of that real life to teach a knowledge that can be used in real life. It has been determined that there is a need for activities in the context of the real world and based on real problems.

Some excerpts from student opinions under this theme:

> *"If I see a problem with a situation I live in, I start to find solutions more quickly, and maybe I can produce more solutions. Cause I know that problem and maybe I know the solution too."(S.3)*

The opinions within the scope of the well-defined activities theme briefly explained the necessity of well-defined elements such as time, content, tasks and evaluation, and the necessity of long-term activities instead of short-term activities.

Some excerpts from student opinions under this theme:

> *"Homework is sometimes not done in ten minutes. Even so, I forget. I would like to think about it when I go home and come to class the next day."(S.7)*

The scaffolding theme briefly explained the teacher's and peer's support for the student. The teacher should be a coach in the process and manage a cooperative learning process. Instead of being an authority, the teacher should be an expert who guides the student through the process of completing the tasks. Students can seek the opinions of this expert whenever they want. The teacher should assist in processes such as information research and structuring in the task process. He should also be a model in long-term performance tasks and provide social support.

Some excerpts from student opinions under this theme:

> *"The teacher should not give the correct answer when I cannot. Alternatively, leave me alone when I ask for help. Sometimes I need to ask him something."(S.1)*

The authentic assessment and reflection theme explained the feedback that should be given to the student's sharing after structuring the knowledge. Learning is both a process and a product. Students should be allowed to explain their thinking process. Many different measurement tools need to be included.

Some excerpts from student opinions under this theme:

> *"Sometimes writing a poem about numbers or calculating the ingredients for the cake and seeing the result can be a good test."(S.2)*

As a result of the analysis of classroom observation data, it was noted that authentic activities for the content of mathematics teaching were used. However, the lack of implementation in the whole process is striking. The observed activities were analyzed and reported within the scope of the observation form. The activities were related to real-world problems rather than classroom-based activities. Moreover, most importantly, it was presented to the student in the most abstract way possible. The researcher found that clearly defined tasks were a standout quality. The teacher had already planned out the name, purpose, parameters, primary task, and subtasks for the exercise. The tasks were not finished during that lesson's allotted time. It was postponed until the following lesson or even two weeks so that it could be finished in that session. Because the student occasionally kept track of how many fruits he consumed each week and recorded his feelings as he consumed them. Such tasks can be viewed as a major time and intellectual resource investment. Not all attendees to the activities were students. Sometimes the mother and I would bake a cake, and other times we would calculate

the amount in a different way. In this way, all information related to the task could be accessed. Collaboration was always at the forefront of events.

It was determined that students' completion rate was higher when authentic tasks were done with peer-teacher-parent interaction. A total of 22 missions were completed during the observation period. Students completed 4 of these tasks individually, 4 with peers only, 6 with their peers and teachers, and 8 with their parents. The percentage of completing the tasks as a percentage reached 20% for the tasks they defined individually, 70% when they were completed only with their peers, 100% when they were completed with their peers and teachers, and 90% when they completed them with their parents.

Moreover, in general, the tasks are completed in content dominated by society's rules. The activities needed to be interdisciplinary, although not all. In this way, students had the opportunity to think about the content in different roles and complete the task. The context of the tasks evaluated the contents. Each authentic product created by the students was presented and shared, and its relationship with the task was reported. Finally, the activities did not demand products from students in a standard homework format. Instead, it offered a range that allowed for multiple solutions. Within the scope of the document analysis, 23 documents were requested from the teachers, including lesson and unit plans, in-class activities and explanations, and student works that were considered descriptive of the participant's experiences in the learning process. Moreover, the documents were reviewed with two special education teachers independent of the study process. It was written in their reports that all eight students were diagnosed with SLD and "mathematical difficulties." Although the students had no problems in reading and writing, they had difficulties learning the mathematics content. When the lesson and unit plans, in-class activities, and explanations were examined, it was remarkable that the contents were rich in authentic tasks. The association of mathematics course contents with different course contents for these students also stood out in their activity plans. When the notebooks and performance records of the students were examined, it was determined that the tasks were suitable for the activities and were completed by each student. In addition, it was seen that there was no standard product range and the results of the missions varied.

Conclusions and Suggestions

In this study, the experiences of students with mathematics learning difficulties in authentic activities were examined. The data of this study were obtained from three different data collection methods. These were determined as semi-structured interviews (before and after observation), classroom observation, and document analysis. Data were collected over five

months in 2022. To guarantee that ethical and methodological standards were upheld, a different protocol was used for each method. The interview queries centered on the ways in which the lesson's authentic context activities could be used by the students. With the help of a thematic analysis procedure, themes, sub-themes, and codes, student interviews were examined. These themes were found to be connected to well-defined tasks, scaffolding, well-known problems, reflection, and authentic evaluation. The analysis of classroom observation data revealed that authentic activities connected to actual problems were used to teach mathematics material rather than classroom-based exercises. The researcher was drawn to the clearly defined tasks as a standout quality. The tasks were' not finished during that lesson's allotted time. Not all students were the well-defined activities attracted the attention of the researcher as an outstanding feature. The activities were not completed within that lesson period. Students were not the only responders at the events. Collaboration was always at the forefront of events. Moreover, generally, the tasks are completed in content dominated by society's rules. The activities needed to be interdisciplinary, although not all. Students could think about the content in different roles and complete the task. The context of the tasks evaluated the contents. Finally, A normal homework format was not required of the students as a result of the activities. Instead, it provided a spectrum that permitted a number of options. Within the context of document analysis, it was astounding to see how many real-world duties were included in the lesson and unit plans, in-class activities, and explanations. The activity plans also stuck out because they linked activities to various course topics. The tasks were found to be appropriate for the activities and finished by every student after the notebooks and performance records of the students were reviewed. In addition, it was seen that there was no standard product range and the results of the missions varied. It has been determined that students are more successful in authentic learning processes, especially when they interact. This result was supported by many studies in the literature. Mathematics achievement increased with any scaffolding support (Cai et al., 2022; Ihechukwu, 2020; Valencia-Vallejo et al.,2018, 2019) Additionally, this finding can be supported by the increase in participation in learning content when it is supported by relevant, authentic, and fun activities (Baştürk & Alver, 2019; Gürdoğan & Aslan, 2016). It is also known that such activities support learning performance and improve the learning experience (Akça et al., 2012; Çelebi & Aydın, 2019; Gürdoğan & Aslan, 2016; Safuan & Soh, 2013). Supporting students' learning processes with real learning problems and scenarios is still important. Students taking an active role in the classroom, student participation, cooperation, and interdisciplinary activities are necessary for an effective and productive learning process (Hamurcu et al., 2016; Hockings et al., 2015; Karabulut et al., 2016; Kern et

al., 2018; Westberg & Leppien, 2018). By providing real-world experiences to students, a positive change in their intellectual capacity can be created (Church et al., 2013).

The study has several suggestions for supporting the mathematics learning processes of students with mathematics learning difficulties in authentic contexts. According to our study, students with learning disabilities in mathematics benefitted from engaging in authentic activities. Therefore, current curricula, activities, and policies must include and promote ideas, principles, and definitions in this direction in addition to supporting the learning process. In this manner, students who require this type of special education will both be supported in the short and long terms in their academic and social lives. It is essential to share concrete lists of authentic learning activities and set an example for each practitioner. In addition to supporting academic achievement, the study also showed active participation in the learning process, continuity of participation, and increased interaction. It has been revealed that authentic learning activities have an important place in the education processes of these students. Applications for integrating both authentic context and technology are also critical in the activity planning of teachers within the scope of in-service training. For this, pedagogical approaches should be in focus. The technological support of learning environments will expand the range of activities. Future studies can supplement and extend quantitative and qualitative data using qualitative and quantitative methodologies, working more longitudinally and with more students. There may be several chances to investigate real-world solutions to mathematics learning difficulties by fusing them with technology. More specifically, it is possible to assess the impact of real activities on the various skills of students who struggle with mathematics. It is possible to assess the efficacy of genuine context for kids in various special education categories.

Limitations

It is clear that the study presents important findings. However, the study has some limitations. The first of these limitations is related to the method of the study. Since the study is a case study, it is not suitable for generalization. Although the generalizability of the study is low, it is transferable. The results of the study are valid only for primary school students who have mathematical disabilities and need special education. This can also limit results, as students all live in the same country and culture. Based on these findings, future studies may try to focus on the experiences of a wider audience in different ways. Finally, the study data was obtained from observations, interviews and documents. It can also refer to different data sources in the examination of similar phenomena for future studies.

Compliance with Ethical Standards

Disclosure of potential conflicts of interest

No conflict of interest.

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None.

CRediT author statement

The study was single authored and the whole process was carried out by the corresponding author.

Research involving Human Participants and/or Animals

The study involves human participants. Ethics committee permission was obtained from Fırat University, Social and Human Sciences Research Ethics Committee.

Öğrenme Güçlüğü Olan İlkokul Öğrencilerinin Otantik Etkinliklerle Öğrenme Deneyimlerinin İncelenmesi

Özet:

Bu çalışma, matematik öğrenme güçlüğü çeken ilkokul çocuklarının otantik bağlamlarda öğrenme deneyimlerini incelemeyi amaçlamıştır. Çoklu durum çalışması olarak yürütülen araştırmaya matematik güçlüğü çeken sekiz ilkokul öğrencisi katılmıştır. Araştırma verileri üç farklı veri toplama yöntemiyle elde edilmiştir. Bunlar yarı yapılandırılmış görüşmeler (gözlem öncesi ve sonrası), sınıf içi gözlem ve doküman incelemesi olarak belirlenmiştir. Toplam beş ay süren veri toplama süreci sonunda, öğrenci görüşleri göstermiştir ki; otantik etkinliklerle desteklenen matematik öğretim, tanıdık problemler, iyi tanımlanmış görevler, bilişsel destek, otantik değerlendirme ve yansıtma gibi özellikleri beraberinde getirmiştir. Ayrıca otantik görevlerin tamamına katılan öğrenci verilerinden görülmüştür ki; otantik görevlere akran, öğretmen ya da ebeveyni ile birlikte katılan öğrenciler daha yüksek tamamlama oranına ulaşmışlardır.

Anahtar kelimeler: Matematik öğrenme güçlüğü, otantik bağlam, vaka çalışması, yapılandırmacılık, ilkokul öğrencisi.

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