Resource Room Implementation in a Secondary School and On-the-Job Training of Teachers

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Abstract
Various studies conducted into mainstreaming implementations in preschool and primary school but implementations in light of data are rare in the secondary schools. To provide valuable insights to this gap in the literature, the present study was conducted to identify the requirements in resource room implementations in a secondary school and demonstrate the contributions of the actions produced to improve the needs that were determined. The research was conducted as an action research. 12 mainstreaming students in 5th, 6th, 7th and 8th grade, 20 field teachers, three counselors, researchers and field specialists took part in the study. Data were collected using qualitative methods; interviews, observation, researcher notes, and documents. The data were analyzed with descriptive and content analysis. The research findings are explained under the following headings: needs assessment, preparation/implementation of the action plan and assessment after implementation. Our findings revealed that teachers had limited knowledge of teaching methods and on the implementation of teaching; they had high expectations from the students and because of the intensive curriculum, time was an important problem for the teachers. To meet the identified needs, an action plan that included the organization of RR and the on-the-job training of the teachers was prepared. During the implementation phase, a cyclical process of innovation and changes were followed. Following the implementation, the teachers and counselors evaluated the on-the-job training as being different from traditional in-service training and as an innovative education process that increased teacher-student motivation and participation.

Keywords Resource room, mainstreaming, secondary school, on-the-job training, action research.

Introduction

Nowadays, what valid is that each student is at the equal level and equally important, necessitates the inclusive education implications that require students with special needs to continue their education in general education classes (UNESCO, 2017). While it is important to adopt this universal approach, it is more essential to be able to put this approach into practice. The principal center that should carry out this vital responsibility is the school. What is expected from schools is that schools should support the academic achievements of all students, including those with special needs and meet their requirements at the highest level (DeSimone & Parmar, 2006; McLeskey, Waldron, & Redd, 2014).

Today, when schools are the main focused, although the legal arrangements and expectations about mainstreaming implementations are clear, it is seen that students with special needs and the related actors continue to experience problems (Özaydın & Çolak, 2011; UNESCO, 2017; Yılmaz & Batu, 2016). The most influential people among these actors are the teachers. Teachers' positive or negative perceptions towards mainstreaming determine the quality of mainstreaming implementations (DeSimone & Parmar, 2006; Montgomery & Mirenda, 2014). The pre-service and in-service-training teachers receive, small class sizes, staff support, and reduced workloads are influential in teachers' positive perception of mainstreaming. Teachers are able to carry out successful mainstreaming implementations with the support provided by school administrators (Karge, McClure, & Patton, 1995; McLeskey et al., 2014; Montgomery & Mirenda, 2014). Because of the students with social-emotional problems, sensory sensitivities and learning differences in today's classes, there is an increase in teachers' need of knowledge, the need for time and support staff. If these services are not provided, the achievement success in the implementation of mainstreaming is considered to be unrealistic (Batu, 2000; DeSimone & Parmar, 2006; Katz, 2013; Özaydın & Çolak, 2011).

Although there are many studies in the literature on preschool and primary school mainstreaming implementations, little research conducted on mainstreaming implementations in secondary schools (but see DeSimone & Parmar, 2006; Mackey, 2014; Watson, Gable, & Morin, 2016). For many students who pass from primary school to secondary school, much is new and different, such as having a different teacher for each lesson, an increased number of lessons, content-based instruction, and joint assessment and exams. While in primary schools there is a flexible program in which the basic skills are taught, in the secondary schools there are more intensive programs, focusing on academic success, for which advanced knowledge is provided on previously acquired knowledge (Mackey, 2014; Santoli, Sachs, Romey, & McClurg, 2008). The processes of adjustment to secondary school and the academic achievement of students with special needs vary from one student to another because of students' previous learning levels, learning differences, attention and motivation levels and emotional and behavioral problems. It is seen that the teachers of branch/field lessons in secondary school classes do not adequately equip students with special needs (DeSimone & Parmar, 2006). There are many studies that showed that subject teachers do not even have the time to get to know students individually because of the limited number of course hours and the intensive programs teachers need to complete (DeSimone & Parmar, 2006; Mackey, 2014; Mastropieri et al., 2006). In the literature, it is also emphasized that the expectations of teachers from secondary school students are higher. Teachers expect their students to understand what they read, to have gained written expression (Santangelo, 2014; Walker, Shippen, Alberto, Houchins, & Cihak, 2005) and problem-solving abilities (DeSimone & Parmar, 2006; Watson et al., 2016), as well as being responsible for their own learning and to have independent study habits.

Special needs students placed in secondary schools are mostly those with learning disabilities, mild mental retardation, behavioral and emotional disorders, communication disorders and attention deficit/hyperactivity disorder (Aron & Loprest, 2012; Wagner, Newman, Cameto, & Levine, 2006). These students often have difficulties in simple reading skills, fluency in reading, reading comprehension, written expression, problem-solving and listening skills due to the learning disability, low tolerance, attention problems and lack of motivation and it could, thus, put most of the students behind their peers (Mastropieri, Scruggs, & Graetz, 2003; Messinger-Willman & Marino, 2010). The academic failure of students with special needs in secondary school programs also brings the anxiety of returning to special education classes, together with losing the chance and opportunities of a general education (Mastropieri et al., 2006). Since the responsibility of the students with special needs in general education classes is in the hands of general education teachers, studies report that with teachers' supportive and encouraging attitudes will increase students' motivations, the classroom atmosphere will be positively affected. Thus, this will be effective to boost students' academic achievements (Boyer & Mainzer, 2003; Hodgson, Lazarus, & Thurlow 2011; Usher, 2009).

In Turkey, although there is not any national report on the quality of mainstreaming implementations in the secondary schools, the *Support Education Services,* which are expected to carry out *mainstreaming implementations,* are defined as providing expert personnel, tools and equipment, training and consultancy services for individual students with *special needs, their families, teachers and school staff*. At the same time, it is also proposed that schools should meet these needs through local resources (MEB, 2008). Although legal provisions guarantee the right for education for every individual with special needs, some problems are encountered in schools during the implementation of certain requirements and the local resources that should address their resolution are unable to meet these needs (MEB, 2010; TOHUM/ERG, 2011a; TOHUM/ERG, 2011b). As a result, the resource room

education services that reach general education teachers in mainstreaming schools in the country are limited to central or local in-service-training seminars and mobile teaching implementation and resource room services that are provided for the students with special needs. In the following section, the implementation of the Resource Room (hereafter RR), on which MEB has focused in recent years (MEB, 2016), has been examined in light of international and national field literature to enhance mainstreaming implementations.

RR is a setting and implementation wherein students with special needs, as well as especially talented students, are provided with special educational support by providing appropriate tools and educational materials to ensure that students make the most of the general education services (Mackey, 2014; McNamara, 1989; MEB, 2008; 2012). There are studies conducted in the international field literature which showed that resource rooms were more widespread and made more positive contributions to student achievement in the 1970s and 1980s (Leinhardt & Pallay, 1982; Rea, Mclaughlin, & Walther-Thomass, 2002). In the subsequent years, with the adoption of the principle of the least restrictive educational settings for placing the students with special needs in an educational setting, resource room implementation has gradually decreased (Leinhardt & Pallay, 1982). This decline is ascribed to the reasons that co-ordination between general education programs and RR programs could not be provided, and the criticisms that general education teachers considered the RR as an opportunity to declass a student with special needs (Batu, 2000; Rea et al., 2002). Because students with special needs have not been able to reach the desired academic achievement levels in general education classes in recent years, educators and researchers have expressed the need to benefit from RR implementation (Akay, Uzuner, & Girgin, 2014; Al-Zoubi & Bani Abdel Rahman, 2016; Myers, 2016; Watson, 2017).

In RR implementation, students are separated from the general education classroom in certain lessons and receive educational support in individual or small groups in line with the objectives set out in the Individualized Education Programs (IEP) (McNamara, 1989; Watson, 2017). In RRs, counseling, teaching, and evaluation services are provided for students. Among these services, deficits relating to the lessons and students' homework are completed, repetitions and exercises are carried out, and also study techniques and social skills are taught (McNamara, 1989; Rea et al., 2002). A special education teacher should provide RR training (Batu, 2000; McNamara, 1989). RR teachers, the general education teachers and the students, working in co-operation in line with IEP are important for the success of mainstreaming implementations; however, the problem is that special education teachers are few in number, which frequently comes to the fore in the literature as well as in Turkey (Billingsley, 2004; CEC, 2009). This problem, which has long been reported, arises from several factors, such as the low pay of special education teachers, demanding working conditions, the excessive number of students and attrition rates (Billingsley, 2004; Dewey et al., 2017; McLeskey, Tyler, & Flippin, 2004). While the criticisms of RR in the 1980s are program- and teacher-oriented, the more recent research findings show student-oriented criticisms. RR is preferred by certain students to obtain additional help, to have more entertaining activities, simpler studies, a quiet setting and to be freed from the tedium of general education class (Ünay, 2015; Vaughn & Klingner, 1998). Researchers have associated students' perceptions of RR as settings where entertaining and easy studies are conducted, but effective training is lacking. Considering students' preference for a quiet setting, relevant research reported that if the general education classes are turned into more tranquil learning settings, their preference for RR as an alternative could be avoided (Vaughn & Klingner, 1998).

The legal regulation related to RR in Turkey is being carried out under the scope of Special Education Services Regulation (MEB, 2012) and Generalization of Educational Implementations through Mainstreaming (MEB, 2008). When Operation Procedures and

Principles of the Resource Room, published on the MEB web page, is examined, opening a Resource Room in schools and institutions where students with special needs study is obligatory. Also, special education teachers, classroom teachers, and subject teachers provided that they are primarily the teachers of the school, and special education teachers working for the Counseling and Research Center for Educational Evaluation (RAM) or teachers in other schools and institutions will be assigned to RR training (MEB, 2016). Considering that Turkey has a paucity of special education teachers, it would not be realistic to expect that special education teachers will be appointed for the mainstreaming implementations in the near future. When studies on RR implementations in mainstreaming schools in the national literature are reviewed, it is apparent that a limited number of research has been conducted (Akay et al., 2014; Talas et al., 2016; Ünay, 2015). These research studies have been carried out using quantitative (Ünay, 2015), qualitative (Akay et al., 2014) and mixed methodology (Talas et al., 2016). The studies can be briefly explained, as follows:

Ünay (2015) examined experimentally the influence of the mathematics lessons on the mainstreamed students in the elementary school RR on the mathematics lessons they received in the general education class. The teaching given to 8 students in the experimental group was confined to multiplication. When the success of the students in the multiplication process was evaluated with the *Basic Multiplication Processing Measurement Tool*, the mathematics teaching was given to the mainstreaming students in the RR, significantly increased the mathematical achievement of the students when compared with the control group in the general education class. In an action research study, Akay et al. (2014) described the teaching problems experienced in the RR by three students with hearing impairments, who attended the 4th grade of elementary education at the Anatolian University Education and Research Center for Hearing Impaired Children (İÇEM) and the solution proposals. In the RR, a teacher who is a graduate of hearing impaired teaching taught one-hour lessons to the students on different days in Turkish, Mathematics, Social Sciences, Science and Technology. Researchers revealed that the problems encountered: movement of students to the RR, the difference between the general education and support education programs, the difficulties arising from the individual differences of the students, the difficulty of the Turkish texts and the general education teachers not being open to cooperation. Despite the problems, students made improvements in academic, social and communication skills. In the research carried out by Talas et al. (2016), the current status of RRs in 24 schools (primary school, secondary school, elementary education and high school) in Tokat was determined, and 24 teachers' qualifications and attitudes working in these rooms were investigated. Both quantitative and qualitative data were collected Their findings showed that there were not any RRs in some schools, some of the schools had a shortage of materials and equipment, the majority of the teachers working in the RRs were subject teachers, and the education provided was inadequate and discontinuous.

Opening an RR is now obligatory (MEB, 2016) in the schools where mainstreaming implementations are carried out in Turkey, and this will be an efficient opportunity if it is performed in cooperation with universities, provincial administrators, local administrations, school administrators, counselors and general education teachers. However, considering that the responsibility for students with special needs is largely dependent on general education teachers, there is a necessity for job-embedded new in-service-training models, such as on-the-job training and consultancy services (Dekeyser, Van Rijn, & Jansen, 2005; Schepis, Reid, Ownbey, & Parsons, 2001; Yılmaz & Batu, 2014).

The on-the-job learning approach is an implementation that does not lose its validity in teacher education. The initiative to increase the number of hours for school experience in the education faculty stems from the view that the implementations that will be performed by the

candidate teachers under the guidance of an experienced teacher will provide unique learning opportunities for prospective teachers (Yıldırım, 2011). It is known that the on-the-job training approach is used in teacher training as well as for the in-service training of teachers, medical personnel, vocational and technical staff. On-the-job training is based on learning new knowledge, skills, practices and technologies that are needed by an individual having a profession, without departing from the work setting, under the guidance of an experienced specialist, by undertaking the duties assigned by him/her, experimenting and observing the practices of the expert (Dekeyser et al., 2005). Özdemir (2003) describes the term on-the-job training as any learning activity that the individual acquires after he/she starts work and is oriented to the aim of developing their career prospects. It has been observed that the teachers who benefited from training based on repetitions and rehearsals, needed good implementation examples (Horn, 2005), wanted practical training in real settings of the mainstreaming classes and that they wanted the preparation of visual training tools from good implementation examples because their own implementations could not be followed and no feedback was given (Özaydın & Çolak, 2011). Therefore, it is emphasized that since the problems seen in the mainstreaming implementations are experienced in the schools that are the centers of implementation, the training to be given to the administrators and teachers should be more focused on practice rather than theory, and that organizing this training in schools, even in a class setting, would be more effective than making the organization outside. An on-the-job training approach should be used in teacher training in special education and mainstreaming implementations, and there is a need for further research (Özaydın, Tekin-İftar, & Kaner, 2008; Schepis et al., 2001; Vuran & Olçay Gül, 2012; Yıldırım, 2011). In this context, the present study, which is about meeting the needs of the subject teachers giving resource room education to mainstreamed students in a secondary school, in a real setting with on-the-job training, will make valuable contributions to the literature.

Yıldırım (2011) highlighted "the need for teachers who question the 21st century teaching and learning needs, accept the presence of the problems, approach the problems with a researcher's eye and know that the potential to close the gap between research and practice." He argued that the solution is not always in the program or the upper levels of the management but is in the implementation itself, and through saying the person who can make the best decision concerning this is the teacher himself/herself, Yıldırım (2011) pointed the power of the teacher. This study was initiated when counselors who were experiencing the problems encountered in the implementation of RR in a secondary school and were in search of solutions contacted the researchers. The collaboration of practitioners and researchers, who were in search of solutions to RR implementations, has been effective in conducting this study as an action research.

The main aim of this research is to improve the education provided in an RR to the secondary school students with special needs. We should note that school counselors mainstreamed students and the subject teachers who teach them are the practitioners. The following questions are asked in the scope of our research:

a) What are the opinions of the practitioners regarding the RR implementation process?
b) What are the opinions of the practitioners on the improvement of RR implementations?
c) What are the opinions of the teachers about the on-the-job training they received in RR implementation?

Methods

Model

In this study, an action research model was used following a request for help from the counselors of a secondary school with mainstreaming implementation about RR implementations, and to examine the real atmosphere during the mainstreaming implementation and to find solutions for the needs that were revealed together with the experiences of the researchers in the area of mainstreaming (Kayhan, 2016; Özaydın & Çolak, 2011). The action research process demonstrates a cyclical feature that ensures the understanding of the problem, producing solution options and assessing the results by applying the most appropriate solution (Çolak, 2007; Uzuner, 2005; Yıldırım & Şimşek, 2013).

Participants

The research was conducted in a secondary school affiliated to MEB in Gaziantep province in the Southeastern Anatolia. The school has seven hours of lessons per day between 8:20 and 14:40. Each lesson takes 40 minutes. In the research process, the assembly hall in the school, an RR where no lessons were being carried out were used for focus group interviews, and the counselor room on the administration floor (2nd floor), where the RR lessons were carried out, was used.

The participants in the research were identified using typical situation sampling from purposive sampling methods. The selection of purposive sampling is a suitable method for obtaining small scaled but in-depth data (Tashakkori & Teddlie, 1998). Twelve mainstreamed students in grades 5, 6, 7 and 8 participated in the research. Twelve subject teachers took part in the identification of the requirements phase of the research, of these five volunteer teachers participated in the process of implementing the action plan and assessing the implementation. Other practitioners were the three school counselors, the researchers and field experts. The participants were identified on a voluntary basis, and letter/number codes were used instead of their actual names.

Students

There were a total of 16 students with special education needs in the school; six of whom were 5th grade, five were 6th grade; two were 7th grade, and three were 8th grade. The chronological age range of the students varied from 11 to 15 years. The counselors indicated that a student identified as gifted in the 8^{th} grade and two students with physical disabilities in the 5th and 6th grades did not benefit from RR education. A student in the 7th grade with emotional and behavioral disabilities was not included in the study due to frequent absenteeism. Six of the 12 students who participated in the study had a specific learning disability, and the other six had mild intellectual disabilities. Of five female students, four had learning disabilities, and one had mild intellectual disabilities. Two of the male students had learning disabilities, and five had mild intellectual disabilities. Students are placed in the school with full-time mainstreamed education report. It is not known whether or not they received special education support outside the school. Students are given the code names like S1, S2, S3, S4, [...] S11, S12.

Branch teachers and counselors

Four of the branch teachers taught science, three taught mathematics, five taught Turkish, four taught social sciences, and four taught English. Three of the teachers were male, and the rest were female. When the teachers' ages were examined, four were between the ages of 26 and 35, nine were between the ages of 36 and 45, and seven were between the ages of

46 and 52. All the teachers had at least one year of mainstreaming implementation experience, and their RR experience ranged from one to four years. The professional experience of thirteen teachers was 16 years and longer. The experience of seven teachers was between 5 and 15 years. Only two teachers were previously trained in mainstreaming. 19 teachers reported that they had not volunteered to work in the RRs, although one teacher had volunteered. When replying to the question, how do you obtain information on mainstreamed students? 14 teachers answered: "from the counselors"; two teachers: "through in-service training" and four teachers: "by making my own investigations". Teachers are given the code names like T1, T2, T3, T4, [...] T19, T20. Among the participating teachers, five teachers who voluntarily participated in the development and implementation of the action plan are Turkish teachers T2, T3, Mathematics teacher T11 and Science teachers T16 and T17. The three school counselors were female and had between 5 and 15 years' experience. The counselors are given the code names as C1, C2 and C3.

Researchers and their roles

The nature of action research requires researchers to cooperate and interact with the practitioners (Yıldırım & Şimşek, 2013). The researchers in the study were two faculty members and two research assistants, working in the special education department of a foundation university. The first researcher had 26 years professional experience as a teacher for 17 years and a faculty member for nine years. She published studies on mainstreaming implementations (Özaydın & Çolak, 2011; Özaydın et al., 2008). One of the studies was conducted using a semi-structured interview technique (Özaydın & Çolak, 2011). The first two researchers undertook a course in *Qualitative Research Methods in Special Education* at a doctoral level. The second researcher used qualitative research methods in his doctoral study (Kayhan, 2016). The experience periods of the third and fourth researchers in the special education department are two years and four years, respectively. They have had training in MAXQDA Qualitative Data Analysis. When the researchers' background is examined, the researchers are experienced in mainstreaming implementations oriented to students with special needs at both private and public schools and in qualitative research methods, data collection, analysis, and interpretation. Due to the curriculum, one of the first two researchers participated in all phases of the research together with the 3rd and 4th researcher. The researchers fulfilled the semi-participant observer, director, active participant/practitioner, facilitator and assistant investigator roles, in line with the nature of action research. For the researchers, the codes R1, R2, R3 and R4 are used in line with the author sequence of the present research. At least two, and from time to time all the researchers were present at all three phases of the research.

Experts

In the preparation process and the implementation process of the research action plan, a faculty member with a doctorate in the field of Classroom Teaching and two faculty members, whose doctorate studies in Turkish and Science Education fields were ongoing, were consulted on the preparation of on-the-job training given to the teachers. The occupational experience of the experts is 12, 8, and 10 years, respectively. The three experts received MAXQDA Qualitative Data Analysis training. Furthermore, the opinions of a Measurement and Evaluation expert were obtained on the collection, analysis, and interpretation of the data. The researchers were assisted by the Special Education Club students at the Special Education Department, in the preparation of sample materials, RR class guidelines and program materials.

Data collection/analysis

The data were collected by the researchers, who participated in the spring semester of the 2016-2017 educational year between the dates of February 14 to May 26, 2017 using qualitative methods under the following headings: a) Interview, b) observation, c) researcher's notes and d) documents. The data collection process and data analysis were carried out simultaneously in the all phases of the study. Needs assessment for the first phase, data collection was realized with focus group interviews (semi-structured), observations, researcher' notes and documents. In the second phase (i.e., the action/implementation plan development process), data were collected using individual interviews (semi-structured), observations, and the examination of researcher notes, and documents. For the last phase, teachers' views regarding on-the-job training were recorded using the structured interview method. The analysis of the data obtained by the semi-structured interviews (focus group and individual interviews) was realized using content analysis, according to the following stages: a) coding the data, b) finding the themes, c) the arrangement and organization of the data according to codes and themes, and d) accessing results and interpretations from the findings. Other data collection tools used in the research comprised of the observation record form, field expert opinion form, researcher evaluation checklist, researcher notes, and documents, which were analyzed descriptively. A descriptive analysis was performed by grouping the data collection tools under the themes created within the context of their objectives (Yıldırım & Şimşek, 2013). The data collection methods and tools are explained in the following section.

Interviews

In this research, three focus group interviews and 10 individual interviews were realized using structured and semi-structured interviews. During the phase for the determination of RR needs, semi-structured focus group interviews (Bogdan & Biklen, 2007; Yıldırım & Şimşek, 2013) were organized on the days (35 minutes, 35 minutes and 50 minutes, respectively) determined by 20 field teachers, three counselors, and 12 mainstreamed students. The interviewers asked the interview questions prepared for the focus group interviews in an established order, and the researchers served as the moderators. In the focus group, the discussions carried out with the teachers and counselors; the educational evaluation and placement process of the students, the effect of the lessons given in the RR on the students with special needs, the problems experienced, the expectations and the solution suggestions, were obtained. In the interview conducted with mainstreamed students, such issues as the lessons they were taught in the RR, how the lessons were handled, the situations they wanted and did not want to change, their expectations, and their suggestions for solutions, were ascertained. A voice recorder was used during the interviews. The individual interviews were held with the five teachers who participated in the implementation phase. New data were collected for the action plan, by interviewing each teacher about the curricular and extracurricular interests of the students, their needs, the problems they had encountered, and what kind of support would meet their needs. The data were used to confirm the needs identified in the first phase and to formulate an action plan. The researchers recorded individual interviews, took notes in line with the preferences of the teachers. After the implementation, the data were collected using individual structured interviews (Yıldırım & Şimşek, 2013). Teachers were asked about the strengths and weaknesses of the on-the-job training, as well as the aspects they wanted to improve or change. The duration of the interviews varied from 15 to 25 minutes.

Observations

The researchers participated in weekly RR classes on Wednesday and Friday of the Turkish, Science and Mathematics teachers and made observations as semi-participant observers for two consecutive weeks. During the phase for determining the needs, 240 minutes of observation was performed over 10 lessons. During the development and implementation of the action plan phase, a researcher made observations as the active participant and another researcher in the observer role. To collect qualitative data during the observations, the observations were made following the *Observation Registration Form,* prepared using the *Directive on the MEB, Planned Execution of Education and Training Studies* (MEB, 2005). With the observation form, the physical environment, the implementation process (method, efficacy, material, and scale/evaluation) and teacher-student interaction were evaluated, and the qualitative data were obtained by taking notes on the context. The three field experts were consulted, and their positive opinions were taken to check how suitable the form was for the purpose. A *Researcher Assessment Control List* was prepared to record the feedback, suggestions, and help directed to the teacher by the researcher who participated in the implementation, and the feedback presented during one lesson period were recorded by both researchers. The two researchers compared the recorded quantitative data, and the participant researcher determined to what extent it could be used for the implementation of each teacher.

Researchers' notes

The researchers also had the opportunity to interview the practitioners, in a conversational way, as they had been at the school more frequently, during observations at conferences, the RR organization and the implementation process. Yıldırım and Şimşek (2013) described conversation-style interviewing as an approach that helped the researcher collect the necessary and sufficient information about the different aspects of the research problem in the natural stream of interaction for observation purposes. After the informal interviews, the researchers took care to ensure that their notes were free from interpretation and descriptive by corroborating their notes with each other.

Documents

In action research studies, different kinds of documents could be the source of data (Yıldırım & Şimşek, 2013). In this research, official correspondence, previously and recently edited RR photographs, the information form responses of students, photocopies are taken from student notebooks, the IEP plan examples of teachers, the instructional plans of teachers, photographs of prepared materials and activities and the RR material requirement list were examined as documents. In addition, researchers also made use of the Mainstreaming Circular (MEB, 2008), Special Education Services Regulation (MEB, 2012), Directive on the Planned Implementation of Education and Training Studies (MEB, 2005) to prepare the data for the identification of requirements, for implementation and post-implementation, to compare and utilize them.

Co-planning and reflecting/reflection meetings

In the implementation phase, reflection meetings were held at the end of each lesson, in which the teacher and researcher shared their views on the implementation of teaching plan, implementation process, student motivation and participation and on the implementation of the on-the-job training. Then, co-planning meetings were held where the views on the teaching plan for the following week and the things to do during the implementation process, were shared.

Validity and Reliability of Data

Alongside internal/external validity and internal/external reliability concepts, which increase the quality of quantitative researches, in the qualitative researches, it is seen that the concepts of credibility/transferability and dependability/conformability respectively are preferred (Pandey & Patnaik, 2014; Yıldırım & Şimşek, 2013). For this purpose, some precautions were taken in the study to prevent problems that may pose a threat to the concepts of credibility/transferability and dependability/conformability. These precautions are as follows: The researchers spent at least two days a week at the school for about 3.5 months to assess the identification of requirements, to assess the developing/implementing action plan, and post the implementation. Data sources were diversified by interviewing mainstreamed students, teachers and counselors; using different methods in the interview, observation, and document analysis, as well as multiple data collection sources. The problems experienced during the RR implementation in a secondary school were described in detail, in their reality, as the result of the identification of participants by typical situation sampling, as one of the purposeful sampling methods. The phases of forming data collection tools, data gathering, and analysis were shared with a measurement and evaluation expert, and his opinions were taken. In addition, researchers also obtained the views of field experts during the development/implementation phase of the action plan. Data, data analyses, and documents collected during the research process, were reported in detail and filed (Pandey & Patnaik, 2014; Yıldırım & Şimşek, 2013). As a result, this study attempted to provide validity and reliability in light of the literature relating to the qualitative research.

Implementation

The action plan developed in this study was structured using need determination results. First, the themes/sub-themes attained during the process of determining the needs were reviewed to prepare an action plan. Secondly, individual interviews were held with the teachers with whom the implementations were to be conducted, and new data were obtained on the students receiving resource room education, about their interests, needs, the problems they experienced in the classes and the kind of support that would meet their needs. The themes realized through the analysis of the data were determined as *student, teacher, and RR*. Strong aspects of the student theme are determined to be visual materials, their interest in current events, such as music, TV programs, and the use of reinforcement. Weak aspects of the student theme were detected as difficulties in the observance of rules, doing homework, difficulty in learning and participating in lessons. Strong aspects of teacher theme were determined to be professional experience, counselor support, and repetition method, whereas the weak aspects are determined as in not preparing lesson plans, inadequacy in using teaching methods and teaching, high expectations from students and time problems. Since there is no RR, which is the last theme, it was decided to the meet teacher-student needs. The action plan developed by the researchers within the context of the detected new themes and sub-themes by resource scanning and interviewing the field experts, were as follows: regulation of RR, teacher training, and specialist and material support in RR courses. The scope of the action plan was shared with the counselors and teachers, and information on the method of implementation was given: expert support would be given by the researcher during the RR lessons, preparations of the material would be facilitated, feedback would be given during the implementations, there would be a model when necessary, and this implementation would be considered as on-the-job training. With the teachers'/teacher's acceptance of the on-the-job training approach, the researchers began to make preparations for its implementation. Since the RR classes of Turkish, Science and Mathematics teachers, which were on Wednesdays (T2, T16, T3) and Fridays (T11, T17) were suitable for the programs of the researchers, these lessons were determined as the lessons in which to carry out the on-the-job

training. The commencement dates of the action plan were 12-14.04.2017 end dates were 31.05.2017-2.6.2017 and a total of eight weeks was planned, but the implementation could not be started because of the April science festivals, end-of-the year preparations, April 23 National Sovereignty and Children's Day and the transition exam for secondary to high school. Eventually, the implementation of the action plan was realized with 13 practice classes; the regulation of the RR was carried out between April 7 - May 26, 2017, and implementation of on-the-job training for teachers was performed between 3-26 May 2017. A classroom in the school with appropriate facilities was designated as an RR class; however, because the classroom was previously used for a different purpose, the contents were due to be moved, and the on-the-job training of the teachers was instead conducted in the counselors' room, as the delivery of the hardware items for RR was delayed. The first step of the on-the-job training practice was decided to be *teacher training* and the second step *feedback and setting examples* to the teachers during class. The teacher training content comprised the following subjects: learning difficulties and learning characteristics of students with mild intellectual disabilities, the reasons for their problem behaviors, the use of classroom guidelines and the break and the process of preparing and implementing a lesson plan (Dekeyser et al., 2005; UNICEF, 2014). At the training session, the new role of the researcher during the class was disclosed as the active participant.

Results

In this section, the findings are elucidated in three parts. The needs assessment in RR practices, the process of development and implementation of the action plan and the post-implementation assessment. Each part is enriched with direct quotations on the themes and sub-themes were reported.

The needs identified in RR practices

The six salient themes found during the identification process of the requirements, which was the initial stage of the research, are grouped as lack of RR, perception of RR, learning and behavioral characteristics of mainstreamed students, identification and training process experiences of families, the teachers teaching in RR, conducting RR practices and recommendations for RR implementations.

Lack of RR

"The classroom said to be the RR, is on the 3rd floor of the school, on the same corridor as the 7th Grade classrooms. There is no sign or writing on the door of the classroom. There are two large meeting tables and four or five chairs in the classroom. There is no writing board, class materials, equipment or teaching materials." (R2, Researcher's notes). The counselors said that the physical conditions of this classroom were not suitable, there was noise because of the classrooms on the floor, and the door could have been opened at any time during the class. Thus, the students and teachers used the rooms of the deputy principal and counselors and occasionally the teachers' room, which was quieter as a resource room. The majority of teachers emphasized that because there is not any specific place for RR and the lack of educational equipment are a disadvantage regarding student motivation and time not being used efficiently. T7's highlighted how the scape for RR is significant:*" Space is important, and it is imperative that the space is for the children. Students do not know the time of their own class; they do not know what time it will be."*

Perception of RR

It was observed that all the students named the RR lessons as "special lessons." Quotations from our participants articulate the process of explaining the RR practice to the students and families. For example, S4 stated: *"We do the special lesson by ourselves, only*

me and the teacher." C1 reported that: *"The students did not want to come here at the beginning of the year; I had a hard time persuading some of them. I explained it by calling it a special class. Now they come. The parents also are pleased when their grades change."* The students stated that they needed the special lessons as they complemented their shortcomings, they had a better understanding of the subjects concerning the class, and they were preparing for the transition exam from primary to secondary school. The majority of the RR students (n=10 Students) explained their satisfaction with their high marks scored in the general exams of the classes or the exams held in the RR, the one-on-one attention of teachers, and the rewards given by the teachers. They also explained that the setting was tranquil and quiet in comparison to their lessons in the classroom. A student stated that their exam grades had risen and that they had received a certificate of achievement. S12 explained their contentment, *"For example, we were never able to receive a certificate of achievement or merit, yet here we received it, you know."* S4 mentioned about the presents: *"They give us presents, yes, X teacher gives me candy. XX teacher bought me a wrap."* Two students stated that they were very fed up with the RR because of the difficulty of the math class and the large amount of homework.

The different learning and behavioral characteristics of the mainstreamed students

The different learning and behavioral characteristics of the students are represented in two sub-themes as their strong and weak points. It was determined that among the strengths of the students was their interest in visual and colorful materials and current events (such as music, TV programs. Also, the use of reinforcement is effective on their learning processes and to increase their motivation. It was determined that teachers often used food rewards, such as tea, candy. S11 said: "Ali teacher was teaching us pronouns, he asked a question from the last lesson, and I answered it correctly. And also had tea." The findings showed that students' weak points were experiencing difficulties in complying with classroom and school rules, coming to class without doing their homework assignments, their inadequate past schooling background for middle school, learning difficulties and the presence of students who did not participate in class. It was reported that a 7th grade student, S11, who started school three years late, at the age of 15, because of spinal surgery, was hurting his friends when he was frustrated because he was both older and physically stronger than his classmates. Concerning student S4, it was discovered that he was hurting his friends during recreation periods by pushing them and that he brought sharp objects with him, inappropriate for school, during the first semester. Despite the fact that the students had the same diagnosis, it was reported that they demonstrated individual differences, especially the lack of motivation, affecting the RR classes, as well as their academic achievements, negatively. T5 indicated the loss of motivation of the student, saying: *"No matter how much I try to motivate him, on two days running he faces me without doing his homework."* C1 said: *"S8 gets bored easily, he wants to talk with someone. Of course, this is not possible when we're one-on-one. Then he doesn't pay close attention."* It was confirmed that all the students were receiving support education for mathematics and Turkish, the 7th and 8th grade students also received assistance in physical sciences, social studies and English lessons. The findings revealed that in the RR classes, the students were taught the skills that should have been acquired in elementary schools, such as reading-writing, reading comprehension, and the four basic math functions. The teachers indicated that it would not be possible for the students to succeed in secondary school classes without having gained the skills that they lacked from their previous education level. For example, T11 reported: *"I have been teaching this subject for two weeks, I have gone over this so many times, but he has not learned. Now you tell me what to do!"* R3 shared his opinion regarding an example on the 6th-grade student's notebook: *"I photocopied*

the homework page dated 8.3.2017 of the Turkish notebook. I was able to guess it was a poem. But I could not read the words" (17.3.2017, R3, Researcher's notes).

Identification and training process experiences of families

The counselors reported that the teachers were ready to cooperate with the families of the mainstreamed students or with the families of other students with whom they were experiencing problems but that some families failed to cooperate and that even if the student was diagnosed in primary school, the families were trying to hide it. It was indicated that the parents only became aware of the practice when the counselors persuaded them and their children received RR support, and they saw the change in their grades. C2 said: *"Yes, legal support and physical displays always make things easier. Such as grades."* C1 stated that families have delayed or even never initiated the diagnostic process because of their negative experiences in the medical or educational diagnosis process, such as the situation of the students they meet and the anxiety of being directed to special education schools. C1: *"I directed the family to the counseling and research center for educational evaluation, the student took some tests, in the meantime the family returned upon seeing the students in the practice school, rejecting the mainstreaming report. The student did not receive any resource room education for one year because he had no report. They came back at the beginning of this year and, on seeing the progress of the other students, wanted to continue."*

Teachers teaching in the RR

Two sub-themes were identified concerning the strong and weak points of the teachers, under the themes of RR teachers. Among the strengths of teachers were their professional experience, their contact with the students and receiving support from the counselors. Experienced teachers who were well acquainted with the mainstreamed students were more successful in RR practices. S8 reported that it was appropriate for a teacher not to enter the class of a student they did not know: "The approach of Ali teacher is a bit more like a friend. Also, our teacher teaches amazingly." Counselor C1 exemplified the efficient nature of their colleague. One student said the teacher taught amazingly: "Students are very fond of teacher Ali: an experienced teacher. Our teacher is very calm and what's more, has excellent communication with the students. At the same time, this teacher is patient. There, the students are successful, and they try to be good in the class of their beloved teacher." It was seen that the teachers received support from the school counselors regarding the problems they experienced with mainstreamed students. The counselor explained that a teacher was thinking that they were not being successful with a special needs student and shared this concern with the counselor and wanted to know what to do. T5: "I have been working on this subject for a month now, I have gone over this so many times, but he has not learned. I asked the counselor what you would do. I want to understand if this problem occurs because of me or the child." The teachers' weaknesses were identified which included not preparing lesson plans for the RR lessons, trying to adapt education according to the needs and the interests of the students during the class, their expectations from students being low and experiencing time problems for RR class preparations. It was observed that the teachers frequently recap during RR lessons. T7 explained that recapping many times is not effective in the success of the student: *"No matter how many times I recap, he/she still comes without holding a pen. We're still doing addition and subtraction. We are progressing very slowly. On top of it all, he/she wants to take the transition from primary to secondary education exam."* The expectations of success for the special needs students were determined to be low apart from two female students. The teachers of the Turkish classes stated that they were working on reading and writing, reading comprehension, and science and mathematics teachers stated that they were

revising the topics they taught in class, doing addition - subtraction and four-operation problems.

Conducting RR practices and recommendations

Under the theme of conducting the RR practices, the sub-themes, RR program, teachers' lesson load, shortcomings in teamwork and monitoring studies were obtained. C1 explained the preparation of the RR program schedule as follows: *"The deputy principal is doing the planning. When the timetable for the students' classes is determined, it is imperative that the needs of the student, the needs of the school and the teachers' timetables are all taken into consideration. After these are established and officially approved, the rest will work."* It was observed that the lesson load of the teachers in the school, which has approximately 2000 students, was intense and the 15 hours per week the RR education the mainstreamed students were entitled to, could not be facilitated by the counselors as one-on-one learning had proven to be more successful. C2 explained this situation: *"If the teachers' 30 teaching hours are filled up, we cannot assign any support teaching to him/her. Only teachers who do not fill their lesson load are assigned support education duties. The resulting time shortage means that not all the students can be given sufficient lessons. Then, we can only provide the student with whatever they most need."* The counselors stated that the teachers could prepare and hold separate exams in accordance with the IEP of the students. However, Turkish teacher T4 said: *"They get very low marks as we hold their exams jointly. Should we hold their exams separately?"* This finding showed that he/she was not informed on the separate exams for the mainstreamed student. It was observed that monitoring and evaluation study on the implementation process of the classes, where like other students at the school, the achievements of the RR teacher and the student were assessed with the transition from primary to secondary education exam scores, was not carried out. R3 evaluated the exam achievement of the student by remarking: *"In the Turkish class our S12 student made two mistakes in 25 questions*."

Recommendations made for improving RR practices are related to continuity in education, use of advanced technologies/organization of RR, teamwork, expanding practice areas of teacher candidates and safety precautions. For example, T9 shared his/her recommendation: *"Teaching for mainstreamed students should even be continued during summer, if continuity in education is not maintained, it is very difficult for these students to succeed."* The English and Science teachers reported that the smart board practice had an influence to increase the attention and motivation of the student. T2 on the organization of RR stated that: *"When the only room is large, the student is distracted, and the process becomes more difficult. It would be good if it was like the partitions in the libraries"* and shared this recommendation. Teachers voiced that it was now imperative that all prospective teachers in education faculties were given education and practice opportunities on mainstreaming and RR. T13, who mentioned worrying about the issue of safety, mentioned the necessity for safety measures to be taken into account due to the problem behavior of the students: *"There should be cameras at the school. Some students are aggressive and dangerous. I am anxious and leave the door open. But some are really nice."* The counselors stated that it was mandatory to install an RR because there were 16 students in need of special education at the school but that they did not know what to do to meet the needs of both gifted students and students with disabilities in the same room. C1 discussed their needs: *"We do not know how to prepare the RR. As it will also be used for gifted students, we are researching for the best way possible. If only there were an example model that we could take into consideration. We really need your opinions on this issue*."

Development and Implementation Process of the Action Plan

In this part of the study, the process for developing and implementing an action plan based on fulfilling the needs determined for the implementation of RR is explained. The researchers prepared an action plan by sharing their solution-oriented recommendations with field experts, teachers and counselors and giving them the opportunity to suggest their opinions within the context of the themes identified during the process of identification of the requirements.

The action plan includes organization of RR, teacher training and the practice of the action plan. By sharing the context of the action plan with counselors and teachers with regards on how to conduct practices, the researcher (R1) commented that the on-the-job training approach was the most appropriate solution for the students' lessons to proceed without any disruption and enabling teacher training. It is noted that on-the-job training will be conducted on Wednesdays and Fridays, when teachers give RR lessons, by providing individual training in the topics they require, by helping them prepare materials, models during the practices, and by giving feedback during the practices. With the acceptance of the on-the-job training approach by teachers, the researchers have begun to make preparations for its implementation.

The practice of the action plan was conducted in two phases and synchronously: a) organization of RR April 7 - May 26, 2017, b) the teacher training was carried out as on-the-job training during RR classes with 13 practice classes between the dates May 3 - 26, 2017.

Organization of RR

It was decided that a room having the proposed features of the relevant circular (MEB, 2008), on the ground floor of an additional building incorporated to the school would be organized as the RR (7.4.2017- Researcher's notes). The RR was created by confirming the list of requirements, the relevant circular, the literature review and the researcher's notes. With the dedication of a permanent room for RR and the purchase of equipment, such as student and teacher lockers, tables, chairs, bookcases, and materials; reference books, a wall clock, colored sticky notes, pens, and school supplies, it is considered that some of the needs will be met. Financial support from the Rectorate of Hasan Kalyoncu University has accelerated this process (10.4.2017-Official letter), as the determined materials will also be used during the teachers' on-the-job training practice; however, since the delivery of the ordered equipment was delayed, the on-the-job training was carried out in the counselor's room where the support education lessons are conducted. The purchased materials were placed in the counselor's room. With the RR classroom guidelines prepared by the students of the special education club, the students can be enabled to attend class timely and with no missing tools, and the RR program panel allows the school administration to announce changes in classes to teachers and students quicker.

The on-the-job teacher training practiced during RR classes and teacher training:

The first step of the on-the-job training was conducted between May 3-5, 2017, each Wednesday and Friday, by two researchers providing one-on-one training to the Turkish, mathematics and science teachers. The researcher completed the training as verbal explanations and modeling by utilizing the materials and references he prepared. The duration of the training lasted approximately 40 minutes. In order to enable the teachers to reach congruence in their teaching practices, a teaching plan to be followed during class was

prepared and given to the teachers. The teaching plan consisted of a sharing classroom guidelines with the students, describing the subject and the target behaviors to be taught to the student, putting into practice the teaching, the use of the symbol reinforcement chart, and the assessment and evaluation process. After the teacher training, the first step of the on-the-job training, the first co-planning meeting, was held for the following week's class. The researcher noted the subject assignments each teacher would prepare and indicated that the teachers should prepare their teaching plans and arrive 15 minutes before the class, to discuss their preparations and to answer their questions. A teacher (T16) stated that he/she could not always come 15 minutes early because he/she was on duty, so the researcher went to the floor where the teacher was on duty to discuss his/her preparations. During these discussions, the teachers' lesson plans were examined, and positive feedback was given when the lesson contents, achievements and activity relations, material and assessment-evaluation tools were prepared according to the needs of the students and recommendations were made where it was deemed to be necessary. In the first week, it was observed that T16 prepared a detailed teaching plan, taught lessons over photocopies describing the states of matter and formed short-answer and gap-filling transaction questions. Within three weeks, science teachers T16 and T17 taught the state of matter, the granular structure of the matter, erosion and groundwater; and the mathematics teacher T11 had explained the lesson by solving problems on geometric objects, addition-subtraction and single-operation problems. Turkish teachers T2 and T3 carried out text analysis, finding "missing" words, using these in sentences, and oral/silent reading. T17 modeled force by applying force to the toy car she brought, then thinking that the student did not show any interest, urged the student to use his/her arm to model the application of force once again. During the third week, T11 encouraged the students to touch the empty pillboxes and plastic boxes he/she brought on the subject of prisms and described the rectangular prisms, cube, and cylinder. T16 made use of the newly acquired resources by encouraging student participation in various subjects, such as landforms, volcanic formations and earthquakes. It was observed that about the subjects of their lessons the teachers provided the students with examples from their daily lives and used these as cues. The material prepared by the researcher and observed during class met the needs of the students. For example, it was explained that as the student could not stay focused on the text themed "Earthquake" he/she was reading, a reading frame was made and placed on the text that was being read to the teacher, to ensure that the student concentrates only on that section. In the Turkish class, it is suggested that colored pencils and sticky notes were used to mark the words for which the student did not know the meaning. Having properly conducted the five steps of the teaching plan the teachers' classes were approved with feedback provided by the researcher. In the second practice week, T3 and T11 stated that they were not used to having researchers in class and as a result, no teacher would accept this. When asked for their suggestions, they stated that it would not be a problem for them anymore because the practice would be concluded in one week, however when considering the teachers in general, they believed that this practice would not be approved. The final classes were held on Wednesday and Friday, May 24-26, 2017, and the practice process was completed. At the end of 40-minute class, the researcher held a reflection meeting, in which the teachers were asked to answer two questions: "Could you evaluate the contribution of the practice process to you and your students?" and "What do you suggest for the next class to make it more effective?" At these meetings, the researcher, like the teacher, shared his views with the teacher. The duration of these meetings ranged from 5 to 10 minutes. Although 10 reflection meetings could have been held, in the last week of the practice no reflection meeting was held, and the

average duration of meetings held with each teacher lasted 25 minutes on average. After the reflection meetings, a co-planning meeting was held to determine the method with regard to the content of the next class, what kind of arrangements could be made for the material and evaluation questions, and what kind of materials they requested from the researcher. The planning meetings varied from 5 to 15 minutes, and a total of 15 meetings were held at the end of the second week of practice. The average duration of the planning meetings with each teacher was 35 minutes on average. In the implementation process, the teacher-student practice process and the researcher behavior were recorded using the Observation Registration Form and Researcher Behavior Checklist.

Post-Implementation Process

In the final class of the practices, teachers and counselors were asked about the strong and weak points of the on-the-job training and the aspects they would like to improve or change. Concerning strong aspects, all the teachers reported that the training was different from in-service training and increased attendance, that the timely feedback provided them with the opportunity to self-correct, that the materials prepared were very effective in student motivation and that working with experienced researchers reassured them. Turkish teacher T2 reported his/her opinion of on-the-job training: "*I think this is the practice of innovative education. I learned while teaching*." The teachers stated that the smiley face table prepared to give reinforcement attracted the attention of the students and increased motivation. T16 also stated that by letting a student, who had demonstrated appropriate behavior or had given the correct answer, draw the smiley face could also be useful in adjusting the students' behavior. With regard to weak aspects, all the teachers mentioned that preparations before the lessons took time and that they needed additional time for these. T11 mentioned the time problem experienced and his/her suggestion on the subject: "*I can carry out lesson preparations if a class or time, such as preparation time in proportion to the classes held, is provided to teachers who hold RR classes. Otherwise, it's very difficult*." T3 and T11 commented that no teacher would want to have a second or even a third person in the classroom constantly. They voiced that although there are good sides of this situation, the teachers are unaccustomed to it; however, for researchers to participate in their classes periodically would enable them to test themselves and give them the opportunity to learn. To develop the practice of on-the-job training, the teachers asked the teacher training to be continuous just as the education they give to the mainstreamed students and to be conducted in varied ways, such as through films, videos and model practices. They also pointed out that it is more beneficial for RR and mainstreamed students to have a special education expert they can consult, regarding mainstreamed students, present at the school. In addition, C1 explained that the second semester, during which the research was carried out, was not a suitable period for teacher training because of various ceremonies and special days, and added that preparing a model RR lesson video might be beneficial for teachers who did not have any training. The RR was launched on May 26, 2017 with the participation of school management, teachers, and students. From the participating students attending the launch, while examining the RR S4 said: "*Thank you very much. Thank you. Everything is very nice. What more can we expect?*" expressing his/her gratitude. Science teachers T16, T17 and mathematics teacher T11 expressed that they really liked the resources purchased and that the educational puzzles, tangrams and tools available in the break corner, created for the students with attention / motivation problems, would be very effective.

Discussion

The findings are discussed in light of the literature and parallel with the data collection process in three parts: needs identified in RR practices, development and implementation of the action plan to improve the identified needs and evaluations of the on-the-job training of the teachers.

The needs identified in RR practices

In our globalizing world, education systems influence each other and good examples are modeled and implemented by integrating with the conditions of the country. Naturally, these practices may vary from country to country. For example, in the report by UNESCO (2017), to enable all learners to enjoy the equal right of education by popularizing inclusive education, suggestions are given to countries on this issue. Also, in inclusive education, it was emphasized that all support for students requiring special needs education should be provided in the classroom. However, it is also stated that the needs of every child requiring special needs education in an inclusive education environment, which varies from country to country, cannot be met in the classroom (UNESCO, 2017). Relevant literature report that a group of educators and researchers prefer to use the RR service because every student with special needs do not reach the desired academic achievement levels in general education classes (Akay et al., 2014; Al-Zoubi & Bani Abdel Rahman, 2016; Myers, 2016; Watson, 2017).

As the physical conditions of the room identified as RR in this research were not appropriate, we observed that the support teaching was carried out in the rooms of the counselors or deputy principals. Similar to this research finding, there are other studies conducted in Turkey confirming the lack of RRs or that their physical conditions did not include appropriate features, and materials and equipment were lacking in some schools (see Akay et al., 2014; Talas et al., 2016). The lack of an RR has caused students to forget which room they were supposed to attend and to be late for class. Considering that the classes last approximately 40 minutes, it is hard to say that the class would be adequate for a student arriving late. Nevertheless, the students reported that they were satisfied with the education they received since the rooms of the deputy principals and counselors were quiet and tranquil. On the other hand, in the mainstreaming circular, schools are expected to undertake the task of preparing the RR and suggested that RR should be regulated using local resources (MEB, 2008). Due to the presence of 16 students requiring special education in the school, it was observed that the counselors were on a quest to organize the RR and that they were unable to receive a positive response from a few institutions they applied for their materials and equipment. While it is certainly not correct to generalize this finding, it is understood that this secondary school is not able to provide the funds as suggested in the circular. The relevant circular should include suggestions and alternatives in this regard. The findings also showed that the counselors required a sample model for both the gifted students and the students with special needs to benefit from the RR practices, which is considered a necessity for the Directorate General for Special Education and Guidance Services to share the good examples so that schools can benefit by taking these models. Another finding was that the students call the RR practice "special lessons." Counselors acknowledged that they explained this situation as "special lessons" because the families and students did not want to attend the RR. This finding suggests that this situation may arise because it is misunderstood by other students and families; therefore it is essential to inform families about the RR practice at parent meetings. Another finding was that the majority of the mainstreamed students did not have the basic skills that should be acquired at primary schools, such as reading-writing and four-operation math problems. A similar finding was reported by Mastropieri et al. (2003). Their findings showed that the vast majority of secondary school students with learning disabilities

had reading skills of 4th and 5th-grade levels. Also, the majority of the students could not understand clues in a text, cannot distinguish important information, and cannot produce abstract relations outside the context of the reading texts. Thus, Students are more likely to be faced with frustration, low motivation and a sense of failure when confronted with tasks they have difficulty in understanding, and that the students experiencing such negativities have higher rates of school drop-out, unemployment, and delinquency than their peers who have no disabilities (Messinger-Willman & Marino, 2010). In this research, we learned that in the first semester, a student brought a sharp object to school and another student who started school late because of health problems showed aggressive behaviors toward his peers. Findings indicated that a teacher was experiencing security concerns due to the behaviors of these students and suggests a camera to be installed in RR. The counselors stated that these students' behaviors had been observed in the first semester of the school year but were no longer experienced; however, the teacher who reported these concerns was still reporting this situation as a problem in the last days of the second semester (26.5.2017, Researcher's notes), which suggests that the risk was ongoing. Regarding learning with mainstreaming students, the parents of the students in the risk group were unable to provide adequate support for their children, due to socio-cultural deficiencies. If social-behavioral support is not provided for these children in the school setting, they will inevitably encounter major problems in the future. Also, the adolescence period, one of the most rapid development periods, coinciding with this educational stage, suggests that social and behavioral support is needed for students as much as academic skills. Bearing in mind that there are 400-500 students under the responsibility of each counselor in this study, we recommend appointing a school psychologist, a special education advisor, or a special education teacher, in such a mainstreaming secondary school.

That the findings showed that the teachers at the school were not volunteering for RR applications but only one teacher was willing to volunteer as a participant in the RR practice, and this finding is consistent with the previous studies (Montgomery & Mirenda, 2014). Relevant published studies show that according to the subject teachers, because of students' social, academic and behavioral problems, there is a need for additional time and also the burden of bringing new skills to their mainstreamed students make to meet the needs of these students in general education classes very difficult (Montgomery & Mirenda, 2014).

Santoli et al. (2008) found out that the vast majority of teachers believed that it would not be possible to educate students with behavioral disabilities and intellectual disabilities in general education classes and that the students did not have the skills to succeed in general education lessons. This study also revealed that some students were still doing exercises in reading-writing, reading comprehension, addition, subtraction, and four-operation problems and that the teachers had low expectations for these students attending secondary school without acquiring the basic academic skills that should have been acquired at primary school. The teachers expected only two female students to succeed, and their learning level was already better than those of the others, and also they had the support of their families. In this context, we believe that providing more intensive resource room services to mainstreamed students within the scope of the primary school could be a positive contribution to the secondary school achievement.

Development and implementation of the action plan

The actors that are most influential in today's mainstreaming practices are general education teachers. In the mainstreaming practices, the only support available to teachers is central and local in-service training (Özaydın & Çolak, 2011). Published studies report that in the short training courses, general information can be transferred to the participants, but

practices, such as teaching methods, cannot be acquired by teachers. The teachers prefer training to be conducted in school settings (Dekeyser et al., 2005), and practical examples prepared from real life should be included in the training (Özaydın & Çolak, 2011). The insufficient number of special education teachers is a problem frequently coming to the fore in the international literature (Billingsley, 2004; McLeskey et al., 2014). Dekeyser et al. (2005) stated that on-the-job training is a practice that will become widespread, for solving the problems arise from the shortage of teachers, especially in primary and secondary schools. Turkish, mathematics and science lessons are difficult lessons for many students in secondary school programs. These lessons are the three most intensive regarding lesson hours in secondary school programs. To succeed in these lessons often proves to be difficult for many students. It has been observed that the resource room education given to special needs students at primary school level is an important indicator for student success during further stages of their education. In this study, RR teachers were given on-the-job training. The majority of the mainstreamed students receive support in all three of these lessons. It is believed that the fact that five teachers volunteered for the on-the-job training is due to their desire to help these students to learn their lessons, which are perceived as difficult, and their wish to improve themselves. Similar to the findings of this research, it is noteworthy that the studies conducted at secondary schools implementing mainstreaming are mostly related to mathematics, science and language teachers, the mainstreaming support lessons of which are considered difficult to learn (DeSimone & Parmar, 2006; Mastropieri et al., 2003; Mastropieri et al., 2006). Teachers experienced difficulties in preparing materials during their on-the-job training and arriving prepared for the proposed plan. They said that these lesson preparations took more time than teaching (Katz, 2013). It has been observed that the teachers gave the students examples from their daily lives about the subjects of their lessons and used these as cues, by associating them with current events. It is understood that four of the teachers had 16 years or longer experience in the profession and are influential in making the teaching interesting for the student and in presenting the appropriate cues. The fact that the science teacher was a model to the student regarding the lesson on force, that the mathematics teacher, by bringing two boxes, introduced rectangles and cube prisms to the students in the prisms lesson, by touching the prisms, and the word bingo prepared by the Turkish teacher, proved that the teachers are successful in material and methodical adaptations. The teachers had not received any training on special education and RR. T2 and T16 stated that they made use of Internet resources with their own efforts and developed through their own capabilities.

Assessments of the on-the-job training of the teachers

Teachers reported that on-the-job training is a practice that differs from the in-service training courses they have previously received, making them more active, ensuring immediate correction opportunities with cues and feedback supplied and providing the confidence of working with experienced researchers. The teachers' views on the on-the-job training were similar to the research suggestions highlighted in the literature (DeSimone & Parmar, 2006; Mastropieri et al., 2006). Also, since responsibility for students with special needs in mainstreaming schools are largely dependent on their teachers, it appears that job embedded new in-service-training models, such as on-the-job training, counseling services for general education teachers, are included in the suggestions of the studies (Schepis et al., 2001; Yılmaz & Batu, 2014). Teachers stated that the prepared materials are very effective for students' motivation.

About the weaknesses of on-the-job training practice, the teachers reported that lesson preparation takes time and that they were not accustomed to having another person in the classroom. All the teachers had a consensus that they needed more time for preparation. Findings showed that teachers had difficulties with the time and needed additional time. Katz

(2013) found that the most important help for high school teachers receiving training support with UDL training in their inclusive education suggestions was "more time and cooperation with other teachers."

Two teachers in this study stated that no teacher would want to have a second or even a third person constantly in the classroom. Teachers expressed that there are good aspects to this situation and they were unaccustomed to it, and the researchers participating in the classes of the teachers periodically would enable them to self-evaluate. Since on-the-job training in Turkey is provided in large groups, thus, many teachers could benefit from it, and it is based on sharing general knowledge, the on-the-job training being one-on-one demonstrates that it will take time for the teachers to get accustomed to these new training practices.

To develop the practice of on-the-job training, the teachers asked that the teacher training be continuous, just as the education, they give to the mainstreamed students and to be conducted in varied ways, such as through films, videos and model practices. Also, school counselors stated that the second semester when the research was conducted, was not a suitable period for teacher training due to ceremonies and special days, and recommended that the period when the schools open as suitable and preparing a model RR lesson video might be beneficial for teachers who did not undergo any training. The researchers carried out planning in line with these recommendations at the beginning of the new academic year.

As a result, branch teachers provided the RR practices in the secondary school where the research was conducted. The majority of teachers were not trained in mainstreaming and RR practices and they received support from school counselors. The RR was created with the support of the university with which the researchers are affiliated. It was seen that the teachers considered the on-the-job training as an effective practice but needed additional time for preparation. The findings showed that the teachers prefer to have on-the-job training in RR at the beginning of the school year, at specific intervals, by receiving information and feedback from a teacher or mentor experienced in special education.

Suggestions

The information, material examples, reinforcement and feedback shared with teachers for on-the-job training practice are topics that should be investigated to determine to what extent they are effective on teaching practices and student learning outcomes. To ensure that on-the-job training practice is sustainable, an examination of the effectiveness of teachers experienced in the implementation of mainstreaming, and in RR on-the-job training is another important issue to investigate.

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