

Received: December 20, 2015

Revision received: March 27, 2017

Accepted: May 09, 2017

OnlineFirst: August 21, 2017

Copyright © 2017 EDAM

[www.estp.com.tr](http://www.estp.com.tr)

DOI 10.12738/estp.2017.5.0424 • October 2017 • 17(5) • 1547–1572

Research Article

# The Training Program for Individualized Education Programs (IEPs): Its Effect on How Inclusive Education Teachers Perceive their Competencies in Devising IEPs\*

Ş. Şenay İlik<sup>1</sup>  
Necmettin Erbakan University

Hakan Sarı<sup>2</sup>  
Necmettin Erbakan University

## Abstract

In order for inclusive education teachers to create a high quality environment, to recognize which individuals require special education, and to implement the principles of inclusive education, these teachers need to be able to use methods and techniques related to the program's content. In addition, student-performance evaluations need to happen and IEPs must be prepared, implemented, and evaluated by IEP teams. After examining the literature, however, teachers are observed to have insufficient knowledge about how to prepare IEPs. This study aims to reveal the effect that the IEP training program has on how inclusive education teachers perceive their IEP competencies for the development process. In line with this aim, answers to the two following questions have been sought: (a) What are inclusive classroom teachers' self-perceptions of their IEP competencies, and (b) Do inclusive classroom teachers' post-test scores from the IEP Competence Scale show a significant difference based on whether or not they had attended the In-Service IEP Development Training Program? This study, being a mixed-methods design, makes use of both qualitative and quantitative methods. During the qualitative phase of the study, interviews have been conducted with 24 classroom teachers, whereas during the quantitative phase, an experimental study has been conducted over one control and one experimental group, each containing 19 teachers. As a result of the semi-structured interviews conducted in the present study, teachers are found to have shortcomings in almost every stage of the IEP development process, whereas a significant difference in favor of the experimental group was found upon examining both groups' post-test scores following the in-service IEP training program.

## Keywords

Individual education program (IEP) • Teacher competency • Inclusion • Educational program development • Special education • Children with special needs

\* This study makes use of the Teacher IEP Competence Scale, developed in İlik's (2015) doctoral dissertation.

1 **Correspondence to:** Ş. Şenay İlik, Faculty of Ahmet Keleşoğlu Education, Necmettin Erbakan University, Konya 42090 Turkey. Email: [senayilik@gmail.com](mailto:senayilik@gmail.com)

2 Faculty of Ahmet Keleşoğlu Education, Necmettin Erbakan University, Konya 42090 Turkey. Email: [hakansari@gmail.com](mailto:hakansari@gmail.com)

**Citation:** İlik, Ş. Ş., & Sarı, H. (2017). The training program for individualized education programs (IEPs): Its effect on how inclusive education teachers perceive their competencies in devising IEPs. *Educational Sciences: Theory & Practice*, 17, 1547–1572. <http://dx.doi.org/10.12738/estp.2017.5.0424>

When considering education as a social system, students, teachers, educational programs, educational professionals, administrators, and physical and financial resources constitute this system's most important elements. For this reason, the quality of education is for the most part directly proportional to the quality of teachers (Sapsağlam, 2009). Turkey's National Education Fundamental Law No. 1,739 from 1973 describes teaching as a combination of general culture's private sphere and pedagogical formations. As such, the state's basic expectation from its teachers has been expressed as, "Teachers are responsible for performing their duties in compliance with the objectives and fundamental principles of the Turkish Ministry of National Education," (Çelikten, Şanal, & Yeni, 2005, p. 2, 210).

Turkey's Ministry of National Education (2002) defines teacher competency as the ability to create suitable opportunities and possibilities conducive for teaching others or for their learning the knowledge, skills, and behaviors related to a specific field. In other words, teacher competency refers to the professional knowledge, skills, values, and behaviors necessary for teachers to perform their duties as educators in their specific field (Zumwalt, 1988, p. 204). In the United States, teacher certification, similar to teacher competency, has been defined by the National Board for Professional Teaching Standards. In order to form a standard for professional qualifications in Europe, the Vocational Qualifications Authority came into force through Law No. 5,544 in 2006. In Turkey, the Ministry of National Education (MoNE) has conducted a large number of studies on professional teaching competencies (Taşpınar, 2010, p. 6). As part of the Primary Education Support Project of 2006, studies were conducted that endeavored to prepare a fundamental professional development manual aimed at improving teachers' competencies by defining the general competencies of not only the teaching profession but also the private sector. As part of the section on Teacher Competencies in Turkey's National Education Improvement Project, the present study aims to build mutual understanding on related concepts and terms by examining not only all studies previously prepared by the Council of Higher Education (CoHE), MoNE, the Teacher Training and Education General Directorate, and the Federal Department of Educational Research and Improvement (all Turkish institutions), but also documents on competency from five other countries (England, the US, Seychelles Island, Australia, and Ireland) as prepared by the project's secretariat. As a result of this seminal research, the teaching profession's general competencies have been decided to be best defined as main competencies, sub-competencies falling under the main competencies, and performance indicators belonging to these sub-competencies; also, teacher competencies will include not just knowledge but also skills and attitudes (MoNE, 2006).

Teachers find themselves face-to-face with a variety of different students in their classrooms, each with different needs, interests, skills, and backgrounds. A teacher's

positive attitude is an important factor in integrating each student in the class (Christle & Yell, 2010). From the perspective of educational quality, in addition to having a positive attitude, teachers should be able to adapt the classroom's physical environment as well as their program and teaching methods to the differing needs of their students; on the other hand and from the perspective of effectively using classroom management techniques, they should have the necessary knowledge and physical skills to effectively manage the class (Kargin, 2004). Not only should teachers be aware that students with different qualities have the right to receive an education suited to their needs, they should also keep this in mind while organizing the teaching and learning process (MoNE, 2006). Teachers should not only be conscious of their responsibilities toward students with special needs, their legal liabilities, and what interventional and evaluative techniques are available for them to use, they should also be able to develop their individual instructional plans in such a way so as to reduce shortcomings as much as possible (MoNE, 2006). As such and in order for children with special needs to be successfully included, teachers are expected to have certain qualities themselves, the main ones being: (a) involved in a program development team and in works aimed at improving and evaluating the program, (b) the ability to develop and implement suggestions in such a way that is beneficial to children with special needs while taking into account their individual qualities, (c) interacting with and consulting the families of children with special needs when necessary, (d) individualizing instruction according to the developmental qualities of children with special needs, and (e) creating equal opportunities for all students in class, including children with special needs (Batu, 2003).

In order to accommodate students with special needs in class and to ensure they can receive an education based on their own performance levels, individualized education programs (IEPs) are written out for each individual's own special educational needs. IEPs are special education programs developed by educational institutions or by a team connected to an educational organization to address the specific needs of individuals with special needs, the teachers, and the parents (Fiscus & Mandell, 2002; Sari & İlik, 2014). In the *Special Education Services By-Law (2012)*, IEPs are described as a special education program containing the supportive educational services to be provided to individuals prepared in line with the objectives sought to be achieved in regard to the developmental qualities of individuals with special needs, their educational performance, and their specific needs. This program constitutes the very core of the special education process and guarantees the right to a suitable education for children with special needs. The *Special Education Services By-Law* states that, while an IEP must be completed for every child with special needs at the beginning of the academic year, an IEP may be prepared and implemented as needed in cases where a student is found to be outside the norms during the instructional period. Being evaluated at least once a year, every IEP should specify whether or not

changes to the child's development program are needed. These evaluations, along with regular observations, can prevent a child from being subject to following the same program throughout one's entire academic life (Kosko & Wilkins, 2009).

An IEP is developed by a team composed of people who not only have knowledge about the student and instructional program but who are also able to implement the adaptations that the student requires. Every person on the team must have proper knowledge and experience in order to help design the best educational program possible for the student. Although not every member of the team can have all the necessary information concerning how to prepare an IEP in some cases, every member does need to contribute to IEP development in proportion to one's knowledge and experience (Fish, 2008). For example, a student's guidance teacher generally offers views and opinions about the psychological tests administered to the student. In addition to this, the special education teacher shares knowledge and experiences concerning the program implemented in class regarding what the student is capable of doing in various academic fields. An IEP prepared this way supports the student's development at the highest level possible, and all teachers who participate in the process can follow it more beneficially (Clark, 2000).

Not only do teachers undoubtedly have one of the most influential roles in the development, implementation, and evaluation of an IEP, they are also among the most effective in terms of whether an education is sufficiently addressing students' needs (Arivett, Rust, Brissie, & Dansby, 2007; Erden, 1998). Teachers interact with the student, design the program, apply it, use tools, and perform both assessments and evaluations. Teachers also have a very important function in specifying, developing, and evaluating behaviors for the student (Gözütok, 1991). Clearly defining teachers' duties in the IEP developmental process, Decree Law No. 573 (MoNE, 1997) holds that it is incumbent upon teachers to prepare new goals based on the individual's development and to implement educational programs. If more than one teacher is assigned to a child with special needs during the educational process, all teachers who contribute to the child's education are expected to share their thoughts and recommendations with each other by participating in meetings related to the child's educational performance. In addition to this, teachers are to attend regular IEP team meetings and share information related to the child's development and performance with the other team members (MoNE, 1997).

Because teachers constitute the primary element in an education system, harmony between the teacher, student, and educational program results in effective education and facilitates the degree to which educational objectives are realized. When a teacher does not realize any one element at its desired level, the educational process is directly affected. For this reason, having teachers be properly placed in the education system (either before

beginning their service or during it) is of great importance (Darling-Hammond, 2003; MoNE, 2002). As such, teachers must be able to do the following: (a) construct a high-quality in-class environment, (b) recognize individuals who require special education, (c) apply the principles of inclusive education, (d) use methods and techniques related to the program's contents, (e) assess student performance, (f) prepare and implement programs for students with special needs, and (g) appropriately evaluate these programs' criteria.

Studies found as a result of a literature scan on IEPs were seen to evaluate the qualities of IEPs (Christle & Yell, 2010) as well as describe opinions related to the IEP preparation process (Küçükler, Kargın, & Akçamete, 2002; Tike, 2007) of both teachers (Çuhadar, 2006; Johns, Crowley, & Guetzloe, 2002; Lee-Tarver, 2006; Lytle & Bordin, 2001; Nizamoğlu, 2006; Okta, 2008; Yıkılmış & Bahar, 2002) and employees working in the Guidance Research Center. One should note that the Guidance Research Center holds an important place in the special needs education process in Turkey. When examining the results of these studies, the following reasons for teachers' shortcoming in preparing IEPs are a lack of knowledge (Çuhadar, 2006; Okta, 2008), a lack of time (Johns et al., 2002), and not having received sufficient training regarding preparing IEPs (Küçükler et al., 2002; Lee-Tarver, 2006; Lytle & Bordin, 2001; Yıkılmış & Bahar, 2002). Also, Camadan's (2012) study on the self-efficacy of classroom teachers and pre-service classroom teachers not only found that pre-service teachers perceive themselves as more qualified to prepare IEPs compared to teachers, but also that those teachers who had received in-service training perceive themselves as more qualified to prepare IEPs compared to those who had not.

Upon examining the research findings in the literature, although a large number of studies found that teachers do not have proper qualifications for developing IEPs, no comprehensive in-service training program was found that had been designed with the aim to eliminate these shortcomings. Because IEPs constitute the main element of special education and inclusive education, and such a limited number of related studies have been conducted on IEPs, the fact that our study focuses on developing and implementing an in-service IEP development training program makes it highly important.

The general aim of this study is to evaluate its effect on the perception of teachers employed as inclusive education teachers who make use of IEPs towards their own competences in relation to IEPs. In line with this aim, answers to the following questions were sought.

- 1) How do inclusive classroom teachers perceive their own IEP competencies?
- 2) Is there a meaningful difference in teachers' post-test scores on the Teacher IEP Competence Scale among inclusive classroom teachers based on whether or not they had attended the In-Service IEP Development Training Program?

## Methodology

### Research Model

This study, being mixed-methods in nature, uses both qualitative and quantitative research designs and has been conducted in two stages in order to reveal the effect of the In-Service IEP Development Training Program on how inclusive classroom teachers perceive their competencies regarding IEPs. [Green, Krayder, and Mayer \(2005\)](#) define the mixed-methods approach in social sciences as the purposeful use of two or more analyses or data-collection methods in the same study. While data obtained using quantitative techniques enable researchers to obtain data for a wider number of participants, data collected using qualitative techniques (observations, interviews, etc.) enable researchers to conduct a more thorough examination of the research topic ([Green et al., 2005](#)).

The first stage uses a qualitative descriptive design to determine teachers' opinions about both their educational needs and the preparation of the program's design. Semi-structured interviews have been conducted to collect data because they follow a preplanned interview protocol and provide more systematic and comparable data ([Büyüköztürk, 2012](#)). In the second stage, a quantitative pre-test/post-test experimental and control group design was used to implement and evaluate the program. Pre-test/post-test control-group models offer two advantages. The first is that measurements made on the same experimental subject under different procedural conditions display a high correlation in many studies. The second advantage is that fewer experimental subjects are needed and less effort is expended by using the same subjects throughout the entire process. Related to this second advantage is the possibility of working with homogenous groups, which helps reveal the real effects of experimental procedures ([Büyüköztürk, 2012](#)) because the specific quantitative method used in this study has been selected for use due to the belief of being better suited for revealing how IEP education affects inclusive classroom teachers perceptions related to their IEP competencies.

### Study Group

During the first stage of the study, qualitative data has been collected using semi-structured voluntary interviews with 24 inclusive classroom teachers employed in primary schools connected to the Konya branch of MoNE during the 2013-2014 academic year. The teachers participating in the interviews have been selected using the non-random purposive sampling method. The most important advantage that purposive sampling offers is in terms of information; it provides the possibility to thoroughly examine the research topic in question by selecting from a wide variety of cases ([Büyüköztürk, 2012](#)). As such, the sample group includes 24 teachers, of whom 16 (63.3%) are female and eight (33.3%) are male. Of all the teachers, three

(12.5%) have taken a course on IEPs while 21 (87.5%) have not. All of the teachers who participated in the interviews have had at least one inclusive student, either prior to or at the time of the study.

The second stage of the study took place during the 2013-2014 academic year with inclusive classroom teachers who work in primary schools connected to the Konya branch of MoNE. During this stage, teachers were selected using random sampling. One experimental group and one control group were formed, and each group was composed of 25 teachers who had volunteered to participate in the experimental study. Participants were randomly assigned to either the experimental or control group. However, six teachers decided to opt out of the study on their own without providing any reason. As such, because the teachers who had decided to opt out of the study were not included, analysis was performed over a total of 19 teachers in both the experimental and control groups. As for the teachers' demographics from each group, the experimental group is composed of 10 (52.6%) females and nine (47.3%) males, whereas the control group is composed of 11 (57.8%) females and eight (42.1%) males. In regard to level of education, 16 (84.2%) have bachelor's degrees and three (15.7%) have master's degrees in the experimental group, whereas 14 (73.6%) have bachelor's degrees and five (26.3%) have master's degrees in the control group.

### **Data Collection Tools**

Information regarding the tools used to collect data in the study has been provided below.

**Teacher Opinion Form.** An interview form was developed for conducting interviews with the teachers. During the form's development, studies conducted in this specific area were first examined, which led to the creation of a rough draft composed of three main questions and containing items related to the development, implementation, and follow-up of IEPs. During the second phase, 15 questions were composed that reflect the content of the three main questions based on the information contained in the literature. During the third stage, the form was submitted to three experts in qualitative research for their opinions and feedback. Based on their opinions and feedback, the way items are expressed was revised and five items were removed. The revised form was then resent to the same experts. During the fourth stage, the form was brought to its final form after implementing experts' comments based on their observations of the pilot study with three main questions and ten reflection questions. In the fifth stage, three teachers were asked questions from the interview form as part of the pilot study; based on the opinions of these teachers, revisions were made to items that were not understood. In the sixth stage, the interview questions were then resent to three experts in qualitative research for examination in order to render items understandable that were misunderstood from the pilot study, thus

bringing the semi-structured interview into its final form. Through these interviews, the research seeks to analyze the current state of affairs by asking teachers what they did and felt were in need of in regard to the development, implementation, and evaluation of IEPs.

During the data collection process, teachers are first asked whether or not they wanted to be interviewed. Careful attention was taken during the interviews to create and maintain a relationship of trust between the researcher and teachers. The researcher collected data through one-on-one semi-structured interviews conducted over a one-week period in the same institutions where the teachers are employed. Each interview lasted from 25 to 40 minutes. At the beginning of the interview, each teacher was informed about its aim to learn what they do in regard to developing, implementing, and evaluating IEPs; what they feel they are in need of; and what kind of methods they follow. Interviews were recorded using a voice recorder, and these recordings were then transcribed immediately following the interviews.

**Teacher IEP Competence Scale.** In this study, the Teacher IEP Competence Scale, comprised of four factors, has been used to determine how teachers perceive their IEP-related competencies (İlik, 2015). Exploratory factor analysis, confirmatory factor analysis, and reliability and validity findings were obtained during its development. Cronbach's alpha for the entire scale is .98; for the IEP Preplanning dimension, .93; for the IEP Preparation Phase dimension, .96; for the Family Involvement in the IEP Process dimension, .93; and for the Implementation and Evaluation dimension, .97. The explained variance for the entire scale is .65; for IEP Preplanning, .64; for the IEP Preparation Phase, .74; for the Family Involvement in IEP, .67; and for Implementation and Evaluation, .81. The scale is composed of a total of 38 five-point Likert-type items using the following expressions: Very Competent, Competent, Partially Competent, Incompetent, and Very Incompetent. Scores for the scale are evaluated based on participants' scores for the entire scale. The maximum and minimum obtainable scores are 190 and 38, respectively. Higher scores indicate a teacher with a higher level of perceived IEP competence.

The researcher implemented the Teacher IEP Competence Scale at the beginning and end of the experimental study on both the experimental and control groups during the same week.

### **The Experimental Group's IEP Training Program**

The IEP Training Program was developed based on the Taba-Tyler Model. The Taba-Tyler Model, also known as the Rational Planning Model, was developed using the shared aspects of Taba and Tyler's models (Demirel, 2005). The first step, according to the Taba-Tyler Model, is to diagnose needs, then formulate objectives,

select and organize content, select and organize learning experiences, and evaluate. The In-Service IEP Development Training Program includes a total of seven stages. Diagnosis needs to happen in two stages. During the first stage, qualitative data was obtained from 24 teachers employed in 10 schools in order to determine classroom teachers' opinions regarding their IEP educational needs. During the second stage, the Teacher IEP Competence Scale was used to determine teachers' actual educational needs. The Needs-Analysis Survey was distributed to a total of 180 inclusive classroom teachers. While selecting objectives, opinions were sought from five field experts. Taking into account the IEP training that was to be prepared for inclusion applications, other IEP training programs were examined, and the researcher listed the related objectives. While selecting content according to the program's goals, the opinions of five field experts were again sought. Objectives were created by taking the experts' opinions into account, and the researcher listed the related subjects. During the learning and learning-experiences preparation stage, a booklet containing the program's curriculum was prepared based on the experts' opinions and teachers' needs. Course content and the educational materials to be used during the program were designed in accordance with the full-learning model, and learning activities were organized using relational teaching methods.

The In-Service IEP Development Training Program, developed by the researcher, was intended for implementation during four daily sittings over a six-day period, and great care was taken to implement the program during participants' free time without causing delays to other activities. Before realizing the In-Service IEP Development Training Program, the Teacher IEP Competence Scale was distributed to the teachers in the experimental and control groups as a pre-test. Following the scale's implementation, the experimental group moved on to the educational training program. The primary author performed the In-Service IEP Development Training Program from September 1-12, 2014. During the training program, emphasis was given to activities that deal with how specific topics are supposed to be applied, instead of focusing on the topics' theoretical dimensions. In addition, group activities devised and implemented model situations related to the topic in question. Care was taken to create a classroom environment so that participants were able to voice, discuss, and find solutions to their questions. Participants were also given the opportunity to gain detailed information about the program and the specific topic in question through the *IEP Development In-Service Training Program Handbook*, as well as materials developed by the researcher. Course notes and ancillary resources were provided to the teachers upon request. After the program's completion, teachers belonging to the experiment and control groups then completed the post-test.

## Examples of Activities

Examples of some of the activities implemented during this study are provided below.

**Activity 1: Becoming acquainted with the characteristics of students for inclusion.** The researcher began an in-class discussion by asking about students with special needs and what kind of characteristics they might have. The teachers discussed how they could benefit special needs students who have these characteristics during instruction. The conclusions reached were written on the blackboard. Teachers learned beneficial information as a result of the discussions they had from the videos and visuals presented during the class-procedures portion of the program. A model classroom student was examined against a student with special needs. At the end of the class, conclusions were reached by asking the same questions that had been asked at the beginning, and the class's effect on classroom discussions was brought up.

**Activity 2: IEP pre-planning.** Each teacher was asked to complete a form on such topics as what are IEPs; their goals, benefits, and advantages; and who is responsible for preparing them. Afterwards, the ideas formulated were shared with the entire class. During the classroom procedures portion, questions were explained through modeling, presentations, and active teaching. The teachers were asked to complete the same form at the end of the class that they had previously completed in order to determine what they had learned as a result.

**Activity 3: preparing an IEP.** The teachers were divided into groups at the beginning of class. Sample IEP forms containing the information of a student for inclusion were distributed for the groups to examine. The teachers worked in groups and were asked to take notes on their observations of the form. The required sections found on an IEP and their reasons for being there were then explained to the class. After completing their observations on the sample form, each group was asked to prepare an IEP for a sample student who is participating in inclusive education. Through the participants' joint efforts, a sample IEP for this student was devised and displayed on the chalkboard based on the information attained during group work. The IEP forms prepared by teachers were evaluated all together, and conclusions were shared at the end of class. The groups were asked to provide a report for an inclusive student attending their class and to prepare an IEP for that student, which was to be examined in the following class.

**Activity 4: Family involvement in IEP planning.** After beginning the class with a model situation to illustrate the importance of family involvement, the topic presented in the model situation was discussed as an entire class, and both the importance and types of family involvement that can occur were explained to the class. This class explained the importance of family in Turkish culture, what kind of shock families experience upon learning that their child has special needs, how they can overcome this shock and stress, which special education services families can benefit from

while dealing with these problems, and how families can participate in education. The advantages that this type of participation offers to the family itself, to the student, to experts, and to classroom teachers were also defined. In addition to this, family involvement in the IEP process was explained through practical activities.

**Activity 5: IEP evaluation activity.** The IEPs for students in the teachers own classes that had been prepared during the previous activity were examined, and each IEP was observed to have been prepared with great care. The teachers were informed that the evaluation process of IEPs was just as important as the planning process and use of practical examples. They were also informed about what kind of methods they should use during evaluation and how often evaluations should take place. Teachers were asked to evaluate the IEPs they had prepared in light of this information and discuss their conclusions with the rest of the class.

### **Data Analysis**

A qualitative descriptive analysis has been used to analyze the qualitative data obtained. After completing the interviews with the participants, the researcher transcribed the interviews verbatim from the voice recordings. After transcribing the interviews, each one was evaluated individually.

SPSS 18.0 for Windows was used to analyze the study's quantitative data. While deciding which analysis method to use to analyze this data, the decision was made that data show the number assigned to each participant, the homogeneity, and the normal distribution. A parametric, statistical, independent samples *t*-test was used to compare the relationship between the groups' pre- and post-test scores to analyze which data fit these conditions.

### **Findings**

This section presents both the study's qualitative and quantitative findings.

#### **Findings Related to the First Sub-Problem**

This section presents the interviewed teachers' opinions on the development and evaluation of IEPs.

**Teachers' opinions on obtaining necessary information about students included in the IEP development process.** Nearly half the teachers interviewed ( $n = 10, 41.5\%$ ) stated not having experienced any problems obtaining information about students as they had performed the necessary research on obtaining information. However, they also mentioned that the information they did receive did not reflect students' actual situation. Below is a comment from one teacher that reflects this situation.

Even though it's rare for me to get such information, when I look at the child's state and the reports sent to us, I often observe that most of my students are very different than what is stated in the report. Sometimes the student's situation is more serious than stated in the report, whereas other times it can be less serious than reported. (Teacher 20)

A portion of teachers interviewed ( $n = 10$ , 41.6%) stated having had experienced problems obtaining information about students and being unable to obtain this information either from the administration or from students' families. Most teachers stated that normal students were already at different levels and adding a student with special needs added further difficulty. Teachers cited a number of reasons as to why they were unable to obtain students' information, stating that because every shortcoming needs to be addressed according to its own particularities, they are unable to decide just which arrangements need to be made in the classroom.

Because I'm never able to get information about the student, I've had to struggle with the guidance teacher, and I've told the principal that I want to get this information. To date, three of my students have been inclusive students, and although I knew nothing about the kinds of shortcomings they have or what their needs are, I have only been able to help them as much as I can based on my own previous experiences. If I had better knowledge about the students, I think I would have been a better help to them. (Teacher 3)

Although some teachers ( $n = 4$ , 16.6%) were able to obtain information about the evaluation process for the students that had been sent to them for evaluation, most were not even aware that a student with special needs had been placed in their classroom as an inclusive student. Some teachers linked this shortcoming in getting information or performing evaluations to not having been trained on this specific issue. Below is a comment by one of the teachers that reflects this situation.

We experience difficulties. I mean, we weren't fully taught this information at the university, nor do we have a sound base. We only have information from what we've seen or heard from other classes. Throughout my entire professional life, I have never had a single IEP student. This is the first year I've had to deal with this situation, and being I have more than one such student all of a sudden, I'm really having problems. (Teacher 11)

Once we receive the feedback about a student we'd interacted with whom we sent for inclusion, and once we analyze this information, we've learned that yes, we've been issued this student for inclusion for whatever reason. But, we don't receive feedback about the stage they're in. Feedback originates from us because we sent [the student for evaluation]. (Teacher 6)

### **Teachers' opinions on team collaboration during the IEP development process.**

Nearly half the teachers interviewed ( $n = 13$ , 54.1%) stated not having experienced any problems with the IEP coming together. These teachers expressed that they had met together at regular intervals, stating that, as it had been necessary for other

students in the class and therefore other parents to participate in team collaboration, they sometimes needed them to participate in meetings and share their ideas. Teachers believed that acting this way led to inclusive education being implemented more effectively. Some teachers did voice the concern that although each party had completed the work that was necessary for them, they did not communicate with each other supportively. Below is a comment by one of the teachers that reflects this.

The IEP team comes together, and we talk about inclusive students. I think something must be done to improve these meetings. Everyone does as much as they can to help the inclusive student, but they don't find common ground or talk in a way to improve our recommendations at these meetings. I think if the meetings were more held more constructively in this direction, more consistent improvements would be witnessed. (Teacher 14)

Nearly half the teachers interviewed ( $n = 11$ , 45.8%) stated experiencing no significant problems with the IEP team coming together for meetings. Among the most critical problems mentioned are the inability to find a suitable time to meet, teachers having too many classes, and teachers' lack of knowledge about the issue. Teachers stated that although the team actually existed on paper, they never came together for meetings. Some teachers stated that the most important person participating on the team was the family guidance teacher, and that they met from time to time. Yet, experts who play a critical role in the child's development such as the psychologist do not participate in the process. Based on the teachers' statements, beyond the classroom and guidance teachers' own personal efforts, IEP team meetings are not considered to be realized as they should.

There is a team, but unfortunately it's only on paper. To date, not a single IEP meeting has been conducted. I think nobody is aware that we even need to have an IEP meeting. (Teacher 15)

**Teachers' opinions on students' performance levels in the IEP development process.** A large majority of the interviewed teachers ( $n = 18$ , 75%) stated that the performance areas supporting IEPs were not defined in writing. Those who had defined performance areas, however, stated benefitting the most from observations. Teachers stated not making use of written sources while defining performance areas due to class overcrowding and not having sufficient time. Below is a comment from one teacher that reflects this.

Most of the time, I can't take advantage of my experiences because the class is too crowded and I don't have time to spare for this child. If I were to spare time during class, I feel I would be imposing on the rights of the other students. (Teacher 11)

Some teachers ( $n = 6$ , 25%) stated not receiving education regarding the kinds of resources they could use while identifying performance levels and that the guidance teacher did the performance checks. Some teachers asserted only identifying performance levels with the guidance teacher when sending a student to the guidance research center

for evaluation. Teachers' shortcomings in defining performance areas affect the entire IEP process, causing the IEP to exist only on paper with unclear goals and without reflecting the student's real situation. Below is a comment from one teacher on this situation.

To be honest, I'm a classroom teacher and what I am supposed to do is defined in the curriculum every year. For that reason, I don't know what kind of course I am supposed to follow while defining performance areas for these children. Thankfully, I get help from the guidance teacher, and we define the student's performance. (Teacher 10)

**Teachers' opinions on defining long- and short-term goals in the IEP development process.** Most of the interviewed teachers ( $n = 16$ , 66.6%) stated not seeking the help of others while defining the student's goals. Moreover, a large majority of these also mentioned not being required to do so. Based on the teachers' comments, the goals that they defined for students were different from those stated in official documents, indicating that teachers considered information related to students' IEP goals only as a formality. Teachers also stated that another problem they experienced when writing goals that differed than the class's level was that students did not accept goals appropriate to their level, wanting instead to be their teacher's friend.

I tell the student, "I'm giving you this much time to finish. Take your time with it." However, the student finishes it quickly and comes straight to me, saying that he wants to do the same thing as his friends and wants a star from me. I've started just giving him stars and sending him back as a way to keep him busy. However, this bothers me. (Teacher 12)

A few of the interviewed teachers ( $n = 8$ , 33.3%) stated having defined long-term goals in coordination with the guidance teacher, which were then transferred to the IEP. One teacher stated that importance must be given to the reporting process because time should not be wasted appraising the student every single time.

We complete the objectives for these students very easily. I don't experience any problems. I think that long-term goals should relate to socialization, not to the problems experienced or to being mistreated. As for short-term goals, I set a goal that is behind the other students. (Teacher 9)

**Teachers' opinions on defining support services in the IEP process.** The vast majority of interviewed teachers ( $n = 20$ , 83.3%) stated that while they had had no problems in defining support services, they had experienced problems benefitting from support services. The most frequently cited problem is families' objections to their child receiving support services. Every teacher stated that as it was absolutely necessary to provide support services, families needed to receive informative education. Below is a comment from one of the teachers on this situation.

Let me say that if the family's financial situation is good, support is provided. Namely, the family can send their child to psychiatric or special education. Other families accept nothing. It's important

that the family accept support services. I mean that, yes, although the family sends the child [to receive support services], they don't really accept it. Most of the time, they don't accept that the child needs a different type of education, that this requires exerting special efforts, or that the child should participate in certain activities. We face problems in this area. (Teacher 24)

Some teachers ( $n = 4$ , 16.6%) stated being able to define support services for the students in their classroom and having made use of a variety of services, including the special education support room, family education, and special education support during specific days of the week. Below is a comment from one teacher that reflects this situation.

I just started working at the school. When I compare this school with my previous one in terms of support, the administrators, families, and teachers are more aware here. I don't know if it's a result of this school being located in the metropolitan area, but the students here benefit more from the support services in a greater variety of ways; this improves the quality of my work. (Teacher 18)

**Teachers' opinions on family involvement in the IEP development process.** Some of the interviewed teachers ( $n = 3$ , 12.5%) stated being able to receive support from families, mentioning that such families were few in number. They also stated that not being able to receive support when it came to homework and the child's development.

I have two students with special needs in my inclusive classroom who I know go to the institution from time to time. Even though I have these two students, I don't experience too many problems. I think the biggest reason is because of the support the family provides. The children of supportive families are non-combative and develop at their own pace. (Teacher 4)

More than half of the interviewed teachers ( $n = 13$ , 54.1%) had the opinion that if families were made more aware, other children would receive more attention from their families. Teachers who hold this opinion believe that it is necessary to educate families in order for them to participate more effectively in the process.

My student with special needs had serious behavioral problems at the beginning, and the biggest problem was encountering violence at home. We talked with the child's mother for some time about this. As she started to see improvement in her child, she began to get onboard. The child's mother began to follow up on and support her child as much as she knew how to and was able to. I informed this parent as a classroom teacher, and if expert individuals were to do so, I believe that it would most probably be beneficial for many of the children. (Teacher 2)

Some teachers ( $n = 5$ , 20.9%) stated that whether or not families understand their child's situation, they are still unconcerned about their child, seeing the child as a burden. The teachers mentioned that these families are usually problematic families. Below is a comment from one teacher on this situation.

The family sees the child not only as retarded and not knowing anything, but also as a nuisance and a burden. And so they don't really do much for their child. I mean, they say there's nothing or little to do. In reality this isn't true, and if they didn't think this way, really good things could come from it. Some sort of in-service training definitely needs to be given to these kinds of mothers, and fast. (Teacher 5)

### **Teachers' Opinions on the IEP Evaluation Process**

This section includes teachers' opinions regarding the IEP evaluation process.

**Teachers' opinions on semester and year-end evaluations for IEPs.** More than half the interviewed teachers ( $n = 15$ , 62.5%) stated the semester and year-end evaluations to be not only insufficient but also done merely as a formality, mentioning that the most important reason for this is because the goals and support services that are stated in the IEP do not correspond to reality. Another reason stated by teachers is that the IEP team does not meet together on a regular basis because the teachers and experts on the team are unable to find time to meet when everyone is available. The most important recommendation made by teachers regarding this issue is that as an IEP prepared without the participation of the classroom teacher is impossible to implement, the classroom teacher's comments are absolutely vital and need to be taken into account while preparing an IEP. Below is a comment from one teachers that reflects this situation.

It's necessary for classroom teacher's opinions to be taken into account while planning an IEP. I'm even for classroom teachers making up their own plans one-by-one. Like I said, their opinions should be taken one-by-one because no one knows the student better than the classroom teacher. Classroom teachers know the student best. I change the report given to us on the student when implementing it instead of following it to a "T". (Teacher 19)

A portion of the interviewed teachers ( $n = 9$ , 37.5%) stated being able to come together to evaluate IEPs. The interviews reveal that the IEPs are updated and problems related to goals and support services are included again on the IEP after the revision. Teachers stated that while efforts are generally made in this area, they offer recommendations for improvement. The most emphasized recommendation of teachers with this opinion is that there should be a special education teacher present in the school to clarify things for them. Another recommendation is there needs to be more highly qualified personnel offering correct solutions during the student's diagnosis evaluation process so as to minimally reduce any updates. One final recommendation by teachers is that books need to be published on the subject of inclusive classes and special-needs students. Below is a comment reflecting this situation.

Of course there's an annual review and update. We handle that. Some people do it, but we look at how appropriate it is for the child. It's not up to par because there's still no book about including

special needs students. No one has even thought about such a book for children. We have no publisher and nothing is being done about it. I mean there are thousands of such students and they're being thrown into teachers' classrooms. Whatever and how much teachers do is left to their own conscience, attention, and skills. (Teacher 14)

In addition to teachers' comments on this specific issue, more than half ( $n = 19$ , 79.16%) believe semester and year-end evaluations to be necessary. The reason teachers cite is that when a student's teacher changes, a report that does reflect reality may cause another teacher to make mistakes, leading to lost time and the process being unnecessarily elongated.

I make semester and year-end evaluations for my inclusive student, just like I do for my other students. However, as the goals stated in the IEP differ from my own goals, the evaluation's results are not written in any report. I definitely think this needs to be fixed because as this specific student is so different from the rest of the class, defining the student's level every single time is a serious waste of time. (Teacher 11)

**Teachers' opinions on students' overall development in the IEP evaluation process.** More than half the interviewed teachers ( $n = 15$ , 62.5%) stated that students with special needs were being evaluated at an appropriate level, but as the goals written in students' IEPs were non-instructive and level-inappropriate, evaluations could not be made in the reports. This means no official document details the arrangements made for students. Teachers stated that information related to students' evaluations are made to fit the report and, in other words, are made just as another formality. Below is one teacher's comment reflecting this situation.

We're working on making an appropriate evaluation for the student, as doing otherwise is pointless and doesn't really mean anything. When you distribute evaluations that are not level-appropriate for the child, parents start to react. The child's mother starts asking why you're giving different activities, assigning different homework, having them buy different books, or having their child do different work. When you explain things clearly to a parent so they can understand, that parent accepts what you say and starts to offer support. The biggest problem we face in this area is actually writing the student's developmental report. (Teacher 14)

A few of the interviewed teachers ( $n = 5$ , 21.5%) stated experiencing similar problems like when preparing different instructional activities. In other words, the student, student's family, and other students negatively perceive the arrangements being made for the special-needs student, causing the student a range of psychological and other problems. Teachers stated that for these reasons, they evaluate the inclusive student just as they do the other students, and simply give the inclusive student a passing grade. Teachers' comments reveal the need to revise future interventions for inclusive students. Below is one teacher's comment on this situation.

We already do semester evaluations, or we make it seem more like we do. We perform the evaluations, but when we do, everyone knows that we have problems reaching the stated goals. It's not even possible to be fully objective because when other students start realizing the student's differences, including how the student is evaluated, pressure starts to be placed on the child. (Teacher 16)

A few teachers ( $n = 4, 16.6\%$ ) stated not having experienced any negative issues with other teachers regarding evaluations, indicating that the student's IEP had been correctly prepared and that, for this reason, not only had evaluations been conducted at a level appropriate for the student, their results had also been transferred to the student's developmental reports. Below is one teacher's opinion reflecting this situation.

Our first aim for these children is for them to learn to read and write. Now, even though they may read very slowly, sounding out each word, they don't have problems reading. They do have small problems writing, though. Of course, they're not at the same level as the other students in their class. We're also working on teaching them how to add, subtract, multiply, and divide. We think it's enough for them to be able to do this, and we state this in the student's IEP. (Teacher 21)

### Findings Related to the Second Sub-Problem

The differences between the control and experimental groups' test results have been examined in order to determine the program's effect on how teachers perceive their IEP-related competencies. The pre- and post-test scores attained by the teachers of both groups were compared using an independent  $t$ -test, the results of which are presented in Table 1.

Table 1

*Independent t-Test Results on the Significance of Both Pre- and Post-Test Scores for the Control and Experimental Groups*

IEP Training	Group	Subject Number ( $n$ )	Arithmetic Mean ( $\bar{y}$ )	Standard Deviation ( $SD$ )	Degrees of Freedom ( $df$ )	$t$ Value	Level of Significance ( $p$ )
PRE-TEST	Experimental	19	3.13	.685	18	0.81	.936
	Control	19	3.12	.616			
POST-TEST	Experimental	19	4.60	.304	18	9.1	.000
	Control	19	3.09	.647			

\* Significant at a level of  $p < .05$ .

The pre-test results measuring how teachers perceive their IEP competencies in Table 1 reveal arithmetic means of 3.12 and 3.13 with standard deviations of .616 and .685 for the control and experimental groups, respectively. As seen in Table 1, when examining the results of the independent samples  $t$ -test for the control and experimental groups' pre-test scores, no statistically significant difference is found between groups' academic achievement ( $t(18) = .81, p > .05$ ). This finding indicates that the two groups had similar perceptions about their IEP-related competencies before participating in the IEP training program.

The post-test results measuring how teachers perceive their IEP competencies in Table 1 reveal arithmetic means of 3.09 and 4.60 with standard deviations of .647 and .304

for the control and experimental groups, respectively. When examining the control and experimental groups' post-test scores using an independent samples  $t$ -test, a significant difference was found in favor of the experimental group ( $t(18) = 9.1, p < .05$ ).

This finding illustrates that teachers in the experimental group, compared to teachers in the control group, feel more competent in developing, implementing, and evaluating IEPs after participating in the IEP training program. In conclusion, the In-Service IEP Development Training Program is found to be effective at increasing teachers' perceptions about their IEP-related competencies.

### Discussion

This study aims to reveal the effect that IEP development training provides inclusive classroom teachers over how they perceive their IEP-related competencies. In line with this aim, the obtained findings have been presented according to sub-problems and discussed by taking into consideration in this section the conclusions from other studies in the literature. As for the current study's aim, the first sub-problem attempts to determine what opinions teachers working in inclusive classrooms had in regard to IEPs whereas the second sub-problem seeks to discuss the findings in light of the related literature by soliciting answers to the following two questions: (a) How do inclusive classroom teachers perceive their IEP-related competencies? and (b) Does a meaningful difference exist among the inclusive classroom teachers' post-test scores on the Teacher IEP Competence Scale based on whether they attended the In-Service IEP Development Training Program?

Teachers' opinions regarding the steps of IEP development, implementation, and evaluation were sought in order to answer the study's first sub-problem. Regarding the first step in the IEP preparation process (obtaining information about students), one group of teachers stated being unable to get such information, whereas those who were able to obtain this information stated that it did not reflect reality. This state of affairs is believed to seriously and negatively affect not only the rest of the IEP preparation process but also the quality of IEP meetings. [Barrie and McDonald \(2002\)](#) stated that several important points need to be addressed before beginning IEP meetings. The first of their recommendations is that in order for those team members participating in IEP meetings to not only avoid wasting time and energy but also to be able to offer more realistic recommendations, they need to have detailed information about both the child and the child's family. In line with this, they also recommend that all preparations be completed before participating in IEP meetings. When seeking teachers' opinions regarding team collaboration during the IEP preparation process in the current study, teachers stated that no collaboration had occurred, citing as the main reasons behind this lack of collaboration that team members had been unable find a common time when they were free to meet and also that they did not have sufficient

knowledge about the process. Clark (2000) stated that in order to develop the most suitable educational program for a student, the student's developmental process being evaluated by all team members and all team members working in collaboration and supporting each other are vital. In order for an IEP to be successfully implemented, the factors that negatively affective group collaboration must be eliminated, and every member must fulfill his duties and responsibilities on time (Özyürek, 2005). When teachers were asked about defining students' current performance levels in the present study, they stated that written documents had not been used while defining performance areas, that their observations and experiences had defined students' performance areas, and that they generally had not transformed them into a written document. This shows that the current state of affairs is far from a true definition of student performance, and that the continuity of information is hindered by not being put into writing. Other studies have also revealed that teachers experience problems in defining students' performance levels and in putting them in writing (DeBettencourt & Howard, 2007; Werts, Culatta, & Tompkins, 2007).

Teachers in this study stated experiencing difficulties in defining support services during the IEP preparation process. This can be related to the finding of insufficient team collaboration during the IEP preparation process. The IEP states not only which support services should be provided to the student, but also when these services will be initiated, how long they will continue, and by whom and where they will be given (Nichcy, 2000). When teachers in this study were asked their opinions regarding family involvement during the IEP preparation process, they stated that the parents did not know their roles or responsibilities. However, as parents know their child very well, they were stated as being those best able to give information about their child's educational development needs as well as their personal strengths, interests, and needs (Avcıoğlu, 2011).

When asking teachers their opinions about the IEP follow-up and evaluation process in the present study, the majority stated that although they had used a variety of tools while evaluating the behavioral goals defined in IEPs, they did not have sufficient information in this specific area. How students' development is to be evaluated and which tools are to be used during evaluation need to be defined beforehand based on objective benchmarks in the IEP (DeBettencourt & Howard, 2007; Nichcy, 2000; Werts et al., 2007). In addition to these, in order to correctly evaluate short-term goals, benchmarks should be specified in a table prior to evaluation (Werts et al., 2007). In the same vein, providing in-service training programs that apply evaluation methods for teachers will facilitate teachers in observing their students' performance and tracking their progress.

Upon examining the findings related to the study's second sub-problem, the teachers who participated in the In-Service IEP Development Training Program

were found to view their knowledge of IEP-related issues better than those who had not participated in the training program. That teachers who participated see themselves as better qualified in IEP-related concepts and implementations indicates the importance of the in-service training program. Tike (2007) found in his study that teachers who participate in in-service training programs perceive themselves as more qualified to prepare IEPs. A similar study performed in this field by Küçüker et al. (2002) examined how employees working in the Guidance Research Center who had received in-service training perceive their own competencies regarding IEP development and family education, as well as their opinions concerning these two areas. The applied in-service training program realized during the current study has been found to effectively teach the necessary information and skills. Camadan's (2012) study on classroom teachers' self-efficacy levels found that in-service training programs affect how teachers perceive their own competence levels. Ruble, Dalrymple, and McGrew's (2010) study, which evaluated the educational programs given to teachers and families on developing IEPs for children with autism, found that the quality of IEPs significantly improved following the program. These findings are similar to those of the present study.

While implementing the in-service training program developed in this study, teachers in the experimental group were provided the opportunity to express what difficulties they had faced during their professional experiences. Furthermore, time was given to sample activities where teachers practiced preparing IEPs, model situations were devised and implemented, and both group and individual works were evaluated. Because participants had similar knowledge prior to the study, the study's conclusions can be evaluated more objectively, which leads to the provided training program provided being deemed effective for preparing IEPs. The study's first sub-problem examined the opinions of teachers working with inclusive students regarding IEPs, as well as their shortcomings and needs in regard to developing IEPs; a program was developed to eliminate these shortcomings. The fact that the program was designed in this manner is an important factor behind its effectiveness. As such, this type of in-service IEP development training program that addresses the specific needs of teachers is believed to be effective at alleviating difficulties teachers experience while preparing IEPs.

### **Conclusion and Recommendations**

This study examined inclusive classroom teachers' opinions concerning the IEP process, and the effect that the In-Service IEP Development Training Program has on how teachers perceive their competencies in developing IEPs. As a result, the following conclusions and recommendations have been made.

## Conclusions

Conclusions based on discussing the data obtained from the Teacher IEP Competence Scale following the realization of the In-Service IEP Development Training Program and based on teachers' opinions regarding their own IEP-related competencies are presented below.

1. Teachers employed in the ten schools included in this study (all located in the province of Konya, Turkey) were found to have not had any courses related to preparing IEPs.
2. While the vast majority of teachers stated being unable to obtain information about the student during the IEP development process, the remaining teachers stated that although they had been able to obtain such information, they believed that this information did not reflect reality.
3. IEP teams were not found to come together during the IEP preparation process.
4. A large majority of teachers interviewed were found to have benefited more from observations than from performance indicators while defining performance areas. Some of the teachers linked the problems they faced while identifying performance levels to the fact that they had not received any education on how to identify performance levels. Guidance teachers being those who identified students' performance levels and few teachers using the performance information included in the Guidance Research Center's report were also observed.
5. This study also found that teachers were not qualified to write IEP-related objectives nor did they know how to write objectives in a suitable IEP format.
6. The vast majority of teachers also stated experiencing problems not only in defining but also in providing support services. However, all teachers reached the mutual conclusion that support services definitely need to be provided.
7. Although family involvement in the IEP development process was lacking, those families whom teachers had provided information participated in the process.
8. Two conclusions were revealed as a result of evaluating inclusive students' development. While one group of teachers stated not having experienced any problems while evaluating students, another group was observed not to have had evaluated students' development due to their belief that performing a different evaluation would cause the child to be isolated from the rest of the class.
9. When examining teachers' perceptions about their IEP competencies, a significant difference was found to exist between the post-test scores obtained from the control and experimental groups in favor of the experimental group.

The study shows that, as a result of being supported by practical examples, the In-Service IEP Development Training Program is effective at increasing teachers' knowledge and skills in a number of important areas that had been lacking.

### **Recommendations**

Based on the findings of this study, this section includes recommendations for possible implementations in future research.

#### **Recommendations for possible implementations.**

1. Pre-service teachers can increase their experiences with IEPs by providing them the opportunity to work directly with children with special needs during their education. Practical IEP-related courses should be introduced into pre-service teachers' undergraduate programs.
2. Measures should be taken to facilitate access to special education students' information using the Internet.
3. Legal measures should be taken to ensure that IEP teams come together for meetings.
4. The definition and provision of high quality special education support services should be facilitated.
5. Written documents and training programs that facilitate the participation of families of special education students in the IEP process should be provided.
6. The families of normally developing students should be given written documents and training programs informing them about students with special needs.
7. IEP training should be provided not only to employees working in the IEP unit within the Guidance Research Center, but also to guidance teachers and other professionals.
8. IEP development training seminars facilitated by MoNE and universities should be prepared for all teachers employed in inclusive classes.

#### **Recommendations for future studies.**

1. Studies can be designed using larger sample sizes so as to increase the ability to generalize conclusions.
2. This study analyzed classroom teachers' opinions related to their IEP training, their experiences, and their knowledge on preparing and implementing IEPs. The same study can be repeated in future studies with teachers employed in different types of educational institutions and grade levels.

3. The same study can be repeated over students with special needs and their families in order to obtain data about their opinions and recommendations related to this subject.
4. The Teacher IEP Competence Scale can be used in future studies to examine the effects of IEP applications on pre-service teachers.

### References

- Arivett, D. L., Rust, J. O., Brissie, J. S., & Dansby, V. S. (2007). Special education teachers' perceptions of school psychologists in the context of individualized education program meetings. *Education, 127*(3), 378–388.
- Avcıoğlu, H. (2011). Zihin engelliler sınıf öğretmenlerinin Bireyselleştirilmiş Eğitim Programı (BEP) hazırlamaya ilişkin görüşleri [Mental handicapped class teachers' thoughts on preparing IEP (Individualized education program)]. *Ankara Üniversitesi Eğitim Bilimleri Fakültesi Özel Eğitim Dergisi, 12*(1), 39–53.
- Barrie, W., & McDonald, J. (2002). Administrative support for student-led individualized education programs. *Remedial and Special Education, 23*, 116–121.
- Batu, S. (2003). *Bireyselleştirilmiş eğitim programlarında ekip çalışmalarına yer verilmesi: Bireyselleştirilmiş eğitim programlarının geliştirilmesi* [Team work roles for individualised education programme: Developing individualised education programmes (pp. 31–44)]. Eskişehir, Turkey: Anadolu Üniversitesi Yayınları.
- Büyüköztürk, Ş. (2012). *Bilimsel araştırma yöntemleri* [Scientific research methods]. Ankara, Turkey: Pegem Yayıncılık.
- Camadan, F. (2012). Sınıf öğretmenlerin ve sınıf öğretmen adaylarının kaynaştırma eğitimine ve BEP hazırlamaya ilişkin öz yeterliklerinin belirlenmesi [Determining primary school teachers' and primary school pre-service teachers' self-efficacy beliefs towards integrated education and IEP preparation.]. *Electronic Journal of Social Sciences, 39*, 128–138.
- Çelikten, M., Şanal M., & Yeni, Y. (2005). *Öğretmenlik mesleği ve özellikleri* [Teaching profession and characteristics]. *Sosyal Bilimler Enstitüsü Dergisi, 19*, 207–237.
- Christle, C. A., & Yell, M. L. (2010). Individualized education programs: Legal requirements and research findings, *Exceptionality, 18*(3), 109–123.
- Clark, S. G. (2000). The IEP process as a tool for collaboration. *Teaching Exceptional Children, 33*(2), 56–66.
- Çuhadar, Y. (2006). *İlköğretim okulu 1-5. sınıflarda kaynaştırma eğitimine tabi olan öğrenciler için bireyselleştirilmiş eğitim programlarının hazırlanması, uygulanması, izlenmesi ve değerlendirilmesi ile ilgili olarak sınıf öğretmenleri ve yöneticilerin görüşlerinin belirlenmesi* [Determining the views of the form masters and the principals concerning the preparation, implementation, monitoring and evaluation of the iep for the students that are subject to coalescence education in classes 1-5 of elementary education] (Master's thesis, Zonguldak Kara Elmas University, Zonguldak, Turkey). Retrieved from <https://tez.yok.gov.tr/UlusalTezMerkezi/>
- Darling-Hammond, L. (2003). Keeping good teachers. *Educational Leadership, 60*, 6–14.
- DeBettencourt L. U., & Howard, L. A. (2007). *The effective special education teacher: A practical guide for success*. Upper Saddle River, NJ: Pearson Education.

- Demirel, Ö. (2005). *Öğretimde planlama ve değerlendirme öğretme sanatı* [Instructional planning and evaluation: The art of teaching]. Ankara, Turkey: Pegem Yayıncılık.
- Erden, M. (1998). *Eğitimde program değerlendirme* [Curriculum evaluation in education]. Ankara, Turkey: Anı Yayıncılık.
- Fiscus, E. D., & Mandell, C. J. (2002). *Bireyselleştirilmiş eğitim programlarının geliştirilmesi BEP* [Developing individualized education programs] (H. G. Şenel & E. Tekin, Trans.). İstanbul, Turkey: Seçkin Dağıtım.
- Fish, W. W. (2008). The IEP meeting perceptions of prents of students who receive special education services prenting shool failure. *Elternative Education for Children and Youth*, 53, 8–14.
- Gözütok, D. (1991). Öğretmenlerin ve öğrencilerin algılarına göre mesleki davranışlarının değerlendirilmesi [Evaluating the perceptions of teachers and students in terms of their professional behaviours]. *Ankara Üniversitesi Eğitim Bilimleri Fakültesi Dergisi*, 24(2), 405–409.
- Green, J. C., Krayder, H., & Mayer, E. (2005). Combining qualitative and quantitative methods in social inquiry. In B. Somekh & C. Lewin (Eds.), *Research methods in the social sciences* (pp. 275–282). London, UK: Sage.
- İlik, Ş. Ş. (2015). *Bireyselleştirilmiş eğitim programı eğitiminin, kaynaştırma öğretmenlerinin BEP yeterliliklerine etkisi* [The effect of individualized education program training on teachers' qualifications for IEP] (Doctoral dissertation, Necmettin Erbakan University, Konya, Turkey). Retrieved from <https://tez.yok.gov.tr/UlusalTezMerkezi/>
- Johns, B., Crowley, P., & Guetzloe, E. (2002). Planning the IEP for students with emotional and behavioral disorders. *Focus On Exceptional Children*, 34(9), 1–12.
- Kargın, T. (2004). Kaynaştırma: Tanımı, gelişimi ve ilkeleri [Mainstreaming: Definition, principles and its development]. *Özel Eğitim Dergisi*, 5(2),1–13.
- Kosko, K., & Wilkins, J. L. (2009). General educators in-service training and their self-perceived ability to adapt instruction for students with IEPs. *Teacher Training and Inclusion Journal*, 33(2), 1–10.
- Küçükler, S., Kargın, T., & Akçamete, G. (2002). Rehberlik ve araştırma merkezi elemanlarının özel eğitim hizmetleri yönetmeliğine ilişkin görüşlerinin ve yeterlilik algılarının geliştirilmesi (Improving the guidance and research centers personels' opinions and perceptions of self efficacy about the act of special education). *Educational Sciences and Practice*, 1(1), 101–113.
- Lee-Tarver, A. (2006). Are individualized education plans a good thing? Asurvey of teachers perceptions of the utility of IEPs in regular education settings. *Journal of Instrucnational Psychology*, 33(4), 263–272.
- Lytte, R., & Bordin, J. (2001). Enhancing the IEP team, strategies for parents and professionals. *Teaching Exceptional Children*, 33(5), 40–44.
- Millî Eğitim Bakanlığı. (1973). *1739 sayılı Millî Eğitim Temel Kanunu* [1739 numbered the National Education Basic Law]. Ankara, Turkey: Author.
- Millî Eğitim Bakanlığı. (1997). *573 sayılı Özel Eğitim Hakkında Kanun Hükmünde Kararname* [Law 573 About Special Education]. Ankara, Turkey: Özel Eğitim Rehberlik ve Danışma Hizmetleri Genel Müdürlüğü.
- Millî Eğitim Bakanlığı. (2002). *Öğretmen yeterlilikleri* [Teachers' competencies]. Ankara, Turkey: Author.

- Milli Eğitim Bakanlığı. (2006). *Öğretmen Yetiştirme ve Eğitimi Genel Müdürlüğü Temel Eğitime Destek Projesi, "Öğretmen Eğitimi Bileşeni", Öğretmenlik Mesleği Genel Yeterlikleri* [The General Directorate of Teacher Training and Education support to primary education project "teacher training Component", The General Competencies s for Teachers ]. Ankara, Turkey: Author.
- Nichcy, L. K. (2000). *A guide to the individualized education program*. Retrieved September 25, 2011 from [www.pluk.org/Pubs/Fed/OSERSiepguide\\_549k.pdf](http://www.pluk.org/Pubs/Fed/OSERSiepguide_549k.pdf)
- Nizamoğlu, N. (2006). *Sınıf öğretmenlerinin kaynaştırma uygulamalarındaki yeterliklerine ilişkin görüşleri* [The competencies of primary school teachers in integration practies] (Master's thesis, Abant İzzet Baysal University, Bolu, Turkey). Retrieved from <https://tez.yok.gov.tr/UlusalTezMerkezi/>
- Okta, D. A. (2008). *Kaynaştırma sınıflarına devam eden işitme engelli olan öğrencilere ve sınıf öğretmenlerine sağlanan özel eğitim hizmetlerinin belirlenmesi* [Determining special education services provided to hearing impaired students attending mainstream classes and their teachers] (Master's thesis, Anadolu University, Eskişehir, Turkey). Retrieved from <https://tez.yok.gov.tr/UlusalTezMerkezi/>
- Özel Eğitim Hizmetleri Yönetmeliği. 21.07.2012 tarih ve 28360 sayılı *Resmi Gazete*.
- Özyürek, M. (2005). *Bireyselleştirilmiş eğitim programı temelleri ve geliştirilmesi* [The basics of an individualized education programme and its development]. Ankara, Turkey: Kök Yayıncılık.
- Ruble, L. A., Dalrymple, N. J., & McGrew, J. H. (2010). The effects of consultation on individualized education program outcomes for young children with autism: The collaborative model for promoting competence and success. *Journal of Earley Intervention*, 32, 286–301.
- Sapsağlam, O. (2009). *Okul öncesi eğitim kurumlarında çalışan usta öğreticilerin öğretmenlik yeterliliklerinin çeşitli değişkenler açısından incelenmesi: Tokat ili örneği* [Analyzing the teaching proficiencies of assistant intructors working in pre-school institution from various aspects: Tokat sample] (Master's thesis, Selçuk University, Konya, Turkey). Retrieved from <https://tez.yok.gov.tr/UlusalTezMerkezi/>
- Sarı, H. & İlik, S (2014). *Bireyselleştirilmiş Eğitim Programı* [Individualized education program]. Ankara: Eğiten Yayıncılık.
- Taşpınar, M. (2010). *Kuramdan Uygulamaya Öğretim İlke ve Yöntemleri* [From theory to practice teaching principles and methods]. Ankara: Data Yayınları.
- Tike, L. (2007). *Sınıf öğretmenleri, rehber öğretmenler ve R.A.M. çalışanlarının bireyselleştirilmiş eğitim programları hazırlama sürecine ilişkin tutumları ve karşılıabilecekleri güçlüklerin belirlenmesi* [Identifying class teachers?, school psychologists?, and guidance and research center staff's attitudes towards the individualized education programs (IEP) preparation process and diffuculties they may face during the process] (Master's thesis, Ankara University, Ankara, Turkey). Retrieved from <https://tez.yok.gov.tr/UlusalTezMerkezi/>
- Werts, M. G., Culatta, R. A., & Tompkins, J. R. (2007). *Fundamentals of special education: What every teacher needs to know*. Upper Saddle River, N.J: Pearson/Merrill Prentice Hall.
- Yıkılmış, A., & Bahar, M. (2002). Kaynaştırma sınıflarında çalışan öğretmenlerin kaynaştırma becerilerini gerçekleştirme durumlarının saptanması [Defining the level of acquirements of inclusive practice skills of the teachers who work in the inclusive classrooms]. *Abant İzzet Baysal Üniversitesi Eğitim Fakültesi Dergisi*, 2(1), 85–95.
- Zumwalt, M. (1988). Teacher competency: When, what, where and why? *Contemporary Education*, 59(4), 204–207.