

The Effectiveness of Pilot In-Service Training Program Developed on Inclusive Practices for Preschool Teachers*

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Article History

Submitted: 05.03.2019

Accepted: 15.05.2019

Published Online: 30.06.2019

Key Words

Pre-School Education

Inclusive Education

In-Service Training

Teacher Efficacy In Inclusive Education

Teacher Attitudes In Inclusive
Education



DOI: 10.9761/JASSS8018

Abstract

Preschool education is the first formal education process that supports the physical, affective, psychomotor, self-care and cognitive development of children. Children's participation in preschool education should be supported, as pre-school education provides children with the opportunity to learn during this critical period of rapid development of children. Pre-school education is prepared in line with the needs of all children, including children with special needs, by providing equal opportunities in education and preparing them for primary school. Children with special needs should be encouraged to be involved in pre-school education process through inclusive education. The aim of this research is to develop a pilot in-service training program for inclusive practices by taking the opinions and suggestions of pre-school teachers and examine the effect of the program on teachers' efficacy and attitudes towards inclusive education. 15 pre-school teachers participated in the study on a voluntary basis. A mixed method with exploratory sequential design was used in the research. The research data were collected with the needs analysis form, the information form, the teacher efficacy for inclusion scale, the attitude scale for inclusion, the open-ended questions form and the focus group interview form. The quantitative data were analyzed by arithmetic mean and paired t-test. The answers to the open-ended questions were presented with content analysis and the responses obtained from the focus group interview were given as they were in order to exactly reflect the views of the teachers in the qualitative data. In conclusion, in-service training, has provided an increase in the arithmetic mean of efficacy and attitude of teachers. Moreover, the teachers participating in the training expressed their positive opinions. Though teachers generally feel competent in inclusive education, they stated that they need training for inclusive education. It was concluded that support education services, classroom size, trainings for teachers and cooperation with other people involved in inclusive education are effective in the teacher's attitude.

Reference Information / Atıf Bilgisi

Özsrkıntı, D. and Akay, C. (2019). The Effectiveness of Pilot In-Service Training Program Developed on Inclusive Practices for Preschool Teachers. *Jass Studies- The Journal of Academic Social Science Studies*, Number: 75, Summer, p.17-33.

* This research is a summary of a master thesis written by Didem Özsrkıntı and supervised by Cenk Akay in Mersin University, Turkey.

Okulöncesi Öğretmenleri İçin Kaynaştırma Uygulamalarına Yönelik Geliştirilen Pilot Hizmet-içi Eğitimin Etkililiğinin İncelenmesi

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Makale Geçmişi

Geliş: 15.03.2018
Kabul: 15.05.2019
On-line Yayın: 30.06.2019

Anahtar Kelimeler

Okul Öncesi Eğitim
Kaynaştırma Eğitimi
Hizmet İçi Eğitim
Kaynaştırma Eğitiminde Öğretmen
Yeterliliği
Kaynaştırma Eğitiminde Öğretmen
Tutumları

Öz

Okul öncesi eğitim çocukların fiziksel, duyuşsal, psikomotor, özbakım ve bilişsel gelişimini destekleyen ilk formal eğitim sürecidir. Çocukların gelişimlerinin çok hızlı olduđu bu kritik dönemde okul öncesi eğitim çocuklara öğrenme fırsatı sağladığı için çocukların okul öncesi eğitime katılımı desteklenmelidir. Okul öncesi eğitim özel gereksinimli çocuklar dâhil tüm çocukların ihtiyaçları doğrultusunda hazırlanarak eğitimde fırsat eşitliği sağlayıp, onları ilkokula hazırlamayı hedefler. Özel ihtiyaçları olan çocuklar, kaynaştırma eğitimi yoluyla okul öncesi eğitim sürecine katılmaya teşvik edilmelidir. Bu araştırmanın amacı, okul öncesi öğretmenlerinin görüş ve önerilerini alarak kaynaştırma uygulamaları için bir pilot hizmet içi eğitim programı geliştirmek ve programın öğretmenlerin kaynaştırma eğitimine yönelik etkinliği ve tutumları üzerindeki etkisini incelemektir. Araştırma verileri, ihtiyaç analizi formu, bilgi formu, kaynaştırma öğretmen yeterlilik ölçeği, kaynaştırmaya ilişkin tutum ölçeği, açık uçlu sorular formu ve odak grup görüşme formu ile toplanmıştır. Nicel veriler, aritmetik ortalama, ilişkili gruplarda t testi ile analiz edilirken nitel verilerden açık uçlu sorulara verilen cevaplar içerik analizi ile odak grup görüşmesinden elde edilen cevaplar ise öğretmen görüşlerini olduđu gibi yansıtmak amacıyla toplandıđı şekilde sunulmuştur. Sonuç olarak, hizmet içi eğitim, öğretmenlerin etkinlik ve tutumlarının aritmetik ortalamalarında bir artış sağlamıştır. Ayrıca, eğitime katılan öğretmenler olumlu görüşlerini ifade etmişlerdir. Öğretmenler kaynaştırma eğitiminde kendilerini genel olarak yeterli hissetseler de eğitime ihtiyaç duydukları yönünde görüş bildirmişler. Öğretmen tutumunda ise sağlanan destek eğitim hizmetleri, sınıf mevcudu, öğretmenlere düzenlenen eğitimler ve kaynaştırma eğitiminde rol alan diđer kişilerle işbirliğinin etkili olduđu sonucuna varılmıştır.



Introduction

Every child is born with a particular genetic structure; however, environmental stimuli support children's development. In this respect, pre-school education supports the development of children, allowing children to be together with their peers by offering varying activities. The literature as to the pre-school education presents various definitions which can be explained as systematic education process supporting the development of children (cognitive, psychomotor, self-care, social emotional, dynamic and language development) from birth to primary school (Phillips, 2017; Çerezci, 2015; Yıldırım 2008; Ministry Of National Education[MONE], 2013). Providing children with the necessary learning opportunities within these critical periods may contribute to the children (Senemoğlu, 2013). All children, including the ones with special needs, should be encouraged to attend pre-school education. Pre-school education aims to offer equal opportunities for all children to learn and get prepared for primary school by also regarding the needs of children with special needs. Equality of opportunity in education is one of the fundamental factors of contemporary and democratic education (Dikici, Hoş and Abbak, 2011). Inclusive education is also an important factor that ensures equal opportunity.

It is of significance that individuals with special needs should be placed in the appropriate educational environment as early as possible so that they can use their potential at the maximum level (Ersoy and Avcı, 2001). That's why inclusive education is to be supported in all educational levels. While there are many factors in the success of inclusive education, the teachers can be said to be one of the most important factors (Leung, Leung, Leung and Karnilowicz, 2018). If teachers is equipped with particular characteristics, it can be stated that the most important factor can be considered to be completed in order to perform inclusive practices. Moreover, teacher's recognition about inclusive education is essential for good practice (Sanagi, 2016). In addition, the teachers have quite critical roles in the stage of observing the early symptoms of learning difficulties (Tercan ve Bıçakçı, 2018).

It has been revealed in the studies conducted that the teachers have negative attitudes towards inclusive education, which stems from their lack of knowledge on how to present education and support services to individuals with special needs (Gök and Erbaş, 2011; Orhan, 2010; Temel, 2000). However, achieving inclusive education is an ongoing challenge in many Western countries (Pijl, 2010). It is estimated that teacher's success in education will increase if he feels proficient in his profession (Demirtaş, Cömert and Özer, 2011; Doğan and Esen Çoban, 2009). For this reason, it is of great importance that there should be a continuous support given to teachers about professional development for both qualified teachers and high-quality teaching (Seferoğlu, 2004). In addition, according to Silverman, Hong and Trepanier (2010), early childhood teachers support the idea of inclusion of children with disabilities within the general education early childhood classroom but teachers report they lack the necessary skills for adapting the curriculum to meet the special educational and social emotional needs of children with disabilities.

The teachers who are in charge of raising the quantity and quality of manpower required by the countries need to be provided with in-service training continuously in order to offer more efficient teaching at workplaces and employ more effective teaching methods in accordance with changing and developing conditions, and thus, they would be proficient in their profession (Ersoy, 1996). In his study, Orhan (2010) stated that teachers need in-service training programs for the problems they experienced in inclusive practices. In the study by Doğan and Tatık (2014), among in-service training needs of preschool teachers, the characteristics of children who need special education were found to be in the first place and early intervention programs to be the second while inclusive education is another subject on which they needed training program. According to Gargiulo, Sluder and Streitenberger (1997), a unified early childhood/early childhood special education teacher training model has the potential to

meet the growing need for well trained professionals and teachers trained in such a fashion will be well-suited to meet the challenges of the classroom in the next century. In their study, Altun and Uzuner (2016) stated that teachers do not have adequate pre-service or in-service training for specific learning difficulties.

It has been unable to see through literature review that there is a study examining the effects of an in-service training program of which content was determined by teachers on their attitudes and competences, and also investigating their opinions and suggestions for such an in-service training. Therefore, this study is considered to be quite original and contributing to the field. The purpose of the study is to develop the in-service training program by identifying the training subjects needed by teachers for inclusive practices in pre-school education and to examine the effects of this in-service training program on teachers' efficacy and attitudes, and to take their opinions and suggestions.

In line with this purpose, the sub-problems of the research are as follows.

1. What are the training subjects that teachers need for inclusive practices in preschool education?
2. To what extent has the in-service training program developed for inclusion in preschool education affected teachers' efficacy for inclusive practices?
3. To what extent has the in-service training program developed for inclusion in preschool education affect teachers' attitudes towards inclusive education?
4. What are the opinions and suggestions of teachers about the in-service training program developed for inclusive education in preschool education?
5. What are the results of the focus group interviews on the opinions and suggestions of the teachers regarding the inclusive practices in preschool education?

Methodology

Research Model and Design

Mixed method was used in this study. Creswell and Clark (2015) described mixed-method research as collecting and analyzing both qualitative and quantitative data, building a type of data on another by combining data, or embedding one in another and blending two data types.

In this study, the data were collected according to the exploratory sequential design, which is of the mixed method. In the exploratory sequential design, the researcher gives priority to the collection and examination of qualitative data and begins with them. Through the findings explored, the researcher initiates the second stage, which is quantitative research, and tests or extends the primary results. (Creswell & Clark, 2015). In this study, firstly the qualitative data were collected through the needs form given to the teachers and then the quantitative data on the effectiveness of the in-service training developed according to the needs were collected as one group pre-test/post-test experimental process.

Research Groups

As seen in Table 1, five different groups were formed in the study. 13 pre-school teachers working in the public preschool education institutions took part in the needs analysis part of the study. The research group attending the in-service training consists of 15 preschool teachers working in the public preschool education institutions. However, as one of the teachers did not attend the training on the last day, the pre-tests were applied to 15 teachers while the final tests were applied to 14 teachers. The open-ended questions form was applied to 15 pre-school teachers participating in in-service training, while the focus group interview was conducted with 5 pre-school teachers who participated in in-service training. All the groups were formed by convenience sampling.

Table 1. Number of research groups

Research group	N
Number of teachers being applied the needs analysis form	13
Number of teachers being applied pre-tests in in-service training	15
Number of teachers being applied post-tests in in-service training (One of the teachers did not take the post-test.)	14
Number of teachers being applied the open-ended questions form	15
Number of teachers in focus group interviews	5

The information about the teachers who participated in the in-service training developed for the inclusive practices in pre-school education is given in Table 2.

Table 2. Information on Teachers Participating in In-Service Training Program Developed for Inclusive Practices in Pre-school Education (N = 15)

f	%		f	%
Gender		Attendance in In-Service Training for Inclusion		
Female	13 87	Yes	9	60
Male	2 13	No	6	40
Age		Taking an Undergraduate Course for Inclusion		
21-30	4 26	Yes	12	80
31-40	10 67	No	3	20
Over 40	1 7	Number of Inclusive Students		
Year of experience		1-3	15	100
1-4	3 20	School Support for Inclusion		
5-10	7 47	Low	6	40
11-15	4 26	Medium	8	53
Over 15	1 7	High	1	7
Class Size		School Type		
15-25	10 66	Detached	12	80
26-35	5 34	Part of Primary School	3	20

13 (86.7%) of the 15 teachers who participated in the study are female and 2 (13.3%) are male teachers. There are 4 teachers (26.67%) within age group of 21-30 years, 10 teachers (66.66%) within 31-40, and one teacher over 40 (6.67%). The number of teachers who participated in the in-service trainings for pre-school inclusive practices beforehand is 9 (60%) while the ones who did not are 6 (40%). The number of teachers taking an undergraduate course for inclusion is 12 (80%) and the number of teachers who did not is 3 (20%). The number of teachers who have 1-3 inclusive students in their class is 15(100%). The number of teachers with a class size between 15-25 is 10 (66.67%), and the number of teachers with 25-35 is 5 (33.33%). The number of teachers receiving low school support is 6 (40%), while the number of teachers with medium school support is 8 (53.33%), and with high school support, 6 (6,67%). The number of teachers working in detached pre-schools is 11 (73.33%), while there are 3 (20%) teachers working in primary schools and 1(6.67%) teacher in practice kindergarten.

Data Collection Tools

The needs analysis form, personal information form, teacher efficacy for inclusion scale, attitude

scale for inclusion, the open-ended questions form, the focus group interview form were applied in the study. As the Needs Analysis Form, an open-ended questionnaire consisting of a question was formed in order to determine the issues that teachers need for the inclusive practices in pre-school education. The Personal Information Form was developed by the researchers with reference to the teacher efficacy for inclusion scale by Meral and Bilgiç (2012). Teacher Efficacy for Inclusion Scale was developed by Meral and Bilgiç (2012). The scale consists of 24 items. It is 5-point Likert type. While the Cronbach Alpha internal consistency coefficient of the scale was .94, it was calculated as .95 in this study. Attitude Scale for Inclusion was developed by Özbaba (2000). The scale consists of 30 items. It is 5-point Likert type and arranged as “strongly disagree, disagree, partly agree, agree and strongly agree”. While the Cronbach Alpha internal consistency coefficient of the scale was .92, it was calculated as .65 in this study. Open-ended questions form consists of 2 open-ended questions developed by the researchers to obtain the opinions and suggestions of the teachers about the in-service training program developed for inclusion in preschool education. Focus Group Interview Form was developed by the researchers. In order to determine the opinions of preschool teachers about Inclusion in Preschool Education and to take suggestions for effective application, it consists of 4 questions: a question about introducing the issue, a transition question, a main question and a final question. Expert opinions were taken for the content validity of the questions in the needs analysis, personal information, open-ended questions and focus group interview forms. Expert opinions were taken from 3 preschool teachers and 3 instructors, two of whom were from preschool teaching and one from curriculum and instruction department.

Data Collection Process and Ethic Rules

Permission for the study was taken from the Provincial Directorate of National Education and data were collected by the researchers themselves during the hours when teachers were available and voluntary. The Provincial Directorate of National Education took a decision that the data collection tools and the research process involved no ethical violations. Information was given to the teachers about the data collection tools and they were asked to give a realistic and candid answer to the questions. In-service training program for inclusion was developed to collect data with the data collection tools applied as pre-test and post-test before and after the in-service training program. Taba Model was used as a training model during the Development of In-Service Training. According to this model, needs were identified, objectives were determined, subjects were selected and organized, and learning-teaching process was prepared. In-service training program was finalized by using evaluation tools.

In-Service Training Program Design

The learner-centered design was preferred in this study as the needs of teachers were prioritized while developing in-service training program. It was revealed that each subject should be organized according to learner by the designer prioritizing the learner in Learner-Centered Design (Demirel, 2012). Taba model was employed as program development model. In this study, the needs of teachers were determined before the process was started and Taba model was favoured since the inductive approach was adopted. Taba program development model opted for an inductive approach, arguing the need to study on the subject by identifying the educational needs, rather than the traditional approaches that introduce the subject more detailed starting from the general characteristics. Taba model consists of seven steps (Ornstein and Hunkins, 2014; Doğanay, 2011; Oliva, 2005) as seen in Figure 1.

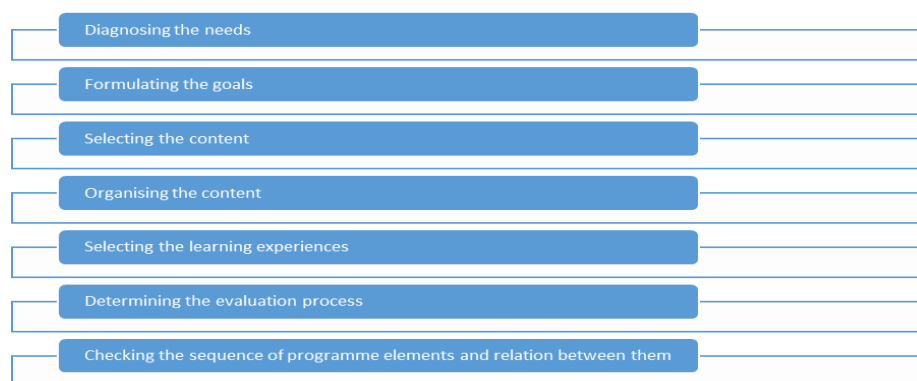


Figure 1. Curriculum Development Model (Oliva, 1988 as cited in Demirel, 2012)

Diagnosing Needs, Formulating Goals and Organizing Content

An open-ended questionnaire was created to determine the issues that teachers need for inclusive practices in preschool education and was applied to teachers. In the open-ended questions form, the following objectives and content headings were formed in line with the needs of the teachers. In this study, content organizing process was based on modular programming approach because the contents form a meaningful integrity within themselves and there is no prerequisite between the units.

Module 1 (Inclusive education in pre-primary education)

Main Aim: To be able to evaluate the inclusive students in planning their education.

Objective 1: To explain the significance of inclusive education in pre-school education

Objective 2: To be able to follow the legal regulations related to inclusive education in pre-school education

Objective 3: To be able to comprehend the collaboration works needed in inclusive education

Module 2 (Children in need of inclusive education in pre-school education)

General Aim: To be able to distinguish children with different disabilities in inclusive education.

Objective 1: To be able to recognize children with intellectual disabilities in inclusive education.

Objective 2: To be able to recognize children with hearing impairment.

Objective 3: To be able to recognize children with visual impairment.

Objective 4: To be able to recognize children with physical and chronic diseases.

Objective 5: To be able to recognize children with learning difficulties.

Objective 6: To be able to recognize children with emotional and behavioural disorders.

Objective 7: To be able to recognize children with autism.

Objective 8: To be able to recognize children with language and speech difficulties.

Objective 9: To be able to evaluate gifted children in inclusive education

Objective 10: To be able to evaluate children with attention deficit hyperactivity disorder.

Module 3 (Individualized education program in inclusion in pre-school education)

General Aim: To be able to prepare an individualized education program for children who are involved in inclusive education in preschool education.

Objective 1: To be able to comprehend information about individualized education program.

Objective 2: To be able to create activities according to different types of inclusion.

Objective 3: To be able to use teaching methods for inclusion students

Objective 4: To be able to use different techniques for inclusion students.

Objective 5: To be able to select materials suitable for the type of disability.

Objective 6: To be able to use the most appropriate evaluation methods according to disability types of the inclusive student.

Objective 7: To be able to communicate with people who will work in inclusive practices.

Organizing Learning Experiences and Evaluation

In the presentation of the theoretical information during the teaching process, expository teaching strategy was opted in accordance with the principle of economy. The direct instruction method, question-answer, sampling, and inverse sampling were employed in this process. In order to determine the problems experienced in inclusion education, their reasons and solution suggestions to them, the discovery learning strategy was involved. Sample cases were presented. At the end of the activity towards the attitudes and efficacy of the teachers who participated in the program, a placement evaluation was made. In this evaluation process, teachers were applied the efficacy and attitude scales before and after the program. In addition, opinions and suggestions as to the program itself and the implementation process were received from the teachers using the open-ended questions form developed by the researchers and the focus group interviews.

Quantitative Data Analysis

In order to determine which tests to be used in the analysis of quantitative data, normal distribution characteristics of 4 data sets were examined. As a result, it was decided to perform parametric tests. For the data obtained from 4 data sets in the quantitative data analysis, the distribution of normality distributions is given below.

Table 3 presents the results of the normality test for the data obtained from the pre-test efficacy scale applied prior to in-service training developed for pre-school teachers.

Table 3. Normality Test Results for The Data from Pre-test/Post-test of Efficacy and Attitude Scale for Inclusion

Scores	Shapiro-Wilk		
	Statistics	Df	p*
Score (Pre-test Efficacy, N=15)	.63	15	,000
Score (Post-test Efficacy, N=14)	.979	14	,971
Score (Pre-test Attitude, N=15)	.951	15	,536
Score (Post-test Attitude, N=14)	,934	14	,350

* p<0,05

It is seen in Table 3 that Shapiro-Wilk (N <30) was used to determine the normality distribution in the pre- and post-test datasets of attitude for inclusion and post-test of efficacy for inclusion, and it was accepted that the data showed normal distribution since it was p>0.05 in all three data sets. However, it was not possible to test the normality of data of efficacy pre-test with Shapiro-Wilk because efficacy pre-test value was p<0.05. Therefore, the kurtosis and skewness values were taken into account. In the study, it was calculated as 2,25 dividing the skewness value by the standard error and as 1,22 dividing the kurtosis value by the standard error. Considering the literature, Kline (2011) has stated that normality tests can be applied if the normal distribution has a skewness value of ± 3 and a kurtosis value of ± 10 (Zhang et al., 2014). As a result, the normality distribution was proven to be in all four data

sets. According to Winter (2013), should the researcher conduct research with an extremely small sample size ($N \leq 5$), the t-test can be applied, as long as the effect size is expected to be large. In other words, Winter states that a parametric test can be applied to a sample even when it is <5 , but the important thing is the expectation of the effect size being large.

Qualitative Data Analysis

Qualitative data obtained from the needs analysis and open-ended questions forms were assessed through content analysis. In the process of accessing the codes at the end of the content analysis, the coding reliability was examined by the Miles - Huberman formula. According to the Miles - Huberman coder reliability formula, the reliability percentage is obtained from the formula (Reliability Percentage = Agreement / (Total Agreement + Disagreement)) and at least 80% reliability is expected to be obtained (Miles and Huberman, 2016). Miles - Huberman coder reliability percentages are shown in Table 4.

Table 4. Miles - Huberman coder reliability percentages

Questions	Coder Reliability
The question in needs analysis form	96%
1 st question in open-ended questions form	80%
2 nd question in open-ended questions form	88%

What is important in reporting the data obtained from the focus group interview questions is not the numbers but what the participants say. Researchers should pay attention that the spoken language remains as it is when analyzing and reporting such data (Creswell, 1998 as cited in Çokluk, Yılmaz and Oğuz, 2011). The analysis of the focus group interview is the same as the statement of the participants because, in these studies, the participants' own expressions are significant despite the opinions of the group (Balci, 2015). Therefore, in the analysis of focus group interview questions, the participants' own sentences were given as they are.

Findings

The results of the first sub-problem of the study (What are the training subjects that teachers need for inclusive practices in pre-school education?) are given in Table 5.

Table 5. The Training Subjects that Teachers Need for Inclusive Practices (N=13)

Theme: The Training Subjects that Teachers Need for Inclusive Practices		f	%		
Codes					
Sub-themes	Theoretical Knowledge	Definition, Principles and Benefits of Inclusive Education	8 26		
		Developmental Features of Inclusive Students in the Preschool Period by Type of Disability	6 19		
		Preparing Activities for Inclusive Practices in Pre-School Education	6 19		
		Methods and Techniques Used in Inclusive Practices during Pre-School Education	5 16		
		Special Education in Preschool Period	3 10		
		Ways of Communication with Parents	3 10		
		Total	31 100		
		Codes			
		Practice	Creating Individualized Education Program	3 75	
			Practising with Inclusive Students	1 25	
Total	4 100				

As seen in Table 5, teachers (N=13) were classified under two themes, that is, theoretical knowledge and practice, with 35 codes. In the sub-theme of Theoretical Knowledge, “Definition, Principles and Benefits of Inclusive Education” was favoured by 8 teachers (25,80%), “Developmental Features of Inclusive Students in the Preschool Period by Type of Disability” by 6 teachers (19,32%), “Preparing Activities for Inclusive Practices in Pre-School Education” by 6 teachers (19,32%), “Methods and Techniques Used in Inclusive Practices during Pre-School Education” by 5 teachers (16,10%), “Special Education in Preschool Period” by 3 teachers (9,66%), and lastly, “Ways of Communication with Parents” by 3 teachers (9,66%). In the sub-theme of Practice, on the other hand, “Creating Individualized Education Program” was chosen by 3 teachers (75%) and “Practising with Inclusive Students” by 1 teacher (25%).

The findings for the second sub-problem of the study (To what extent has the in-service training program developed for inclusion in preschool education affected teachers' efficacy for inclusive practices?) are given in Table 6.

Table 6. Findings on the Efficacy Scores of Pre-School Teachers Before and After In-Service Training (N=14)

Test	N	\bar{X}	S	Sd	t	p*
Pre-test	14	88,36	13,43	13	-1,585	,0546
Post-test	14	96,43	11,56			

*p>0,05

The score of the teachers in the efficacy for inclusion scale was 88.36 before the in-service training; however, it moved up to 96.43 after the in-service training. It is seen that there is a liminal significant difference between the efficacy scores of the teachers for in-service training before and after the in-service training [t(13)=-1.585, p>.05]. Kul (2014) stated that, when the p-value is between 0.05<p<0.10, it has the significance tendency, which means it has a liminal significance.

The findings for the third sub-problem of the study (To what extent has the in-service training

program developed for inclusion in preschool education affected teachers' attitudes towards inclusive practices?) are given in Table 7.

Table 7. Findings on the Pre- and Post-Test Attitude Scores of Teachers for Inclusion (N=14)

Test	N	\bar{X}	S	Sd	t	p*
Pre-test	14	89,64	10,43	13	-1,157	,019
Post-test	14	93,43	15,52			

p* < 0,05

The score of the teachers in the attitude scale for inclusion was \bar{X} =89,64 before the in-service training; however, it moved up to \bar{X} =93,43 after the in-service training. As a result of paired samples t-test to see if there is a significant difference between the attitude scores of the teachers before and after the in-service training, a significant difference was found in favour of the post-test attitude scale [t(13)=-1.157, p<.05].

The fourth sub-problem of the study was formed as two sub-questions: to obtain the opinions of teachers on the in-service training program for inclusion in preschool education and to take their suggestions for the programs to be prepared in the future.

Findings on the opinions of preschool teachers about in-service training conducted are given in Table 8.

Table 8. Opinions of the Teachers about In-service Training (N=15)

Theme: Opinions of Teachers on the In-service Training Program for Inclusive Practices in Preschool Education (N=15)		f	%
Codes			
Sub-themes Professional Development	I acquired different information about inclusive education.	3	30
	There has been a positive effect on my behaviour.	2	20
	I compared my previous knowledge with the new.	2	20
	It was a training that raises awareness.	2	20
	I believed it would be beneficial.	1	10
	Total	10	100
Codes			
Program Development	It was a well-prepared training fitting its purpose.	4	57,14
	It could be more detailed.	1	14,28
	It could be longer.	1	14,28
	There could be live examples.	1	14,28
	Total	7	100

As shown in Table 8, the answers of the teachers are classified with 17 (%) codes under two themes. When the sub-themes are examined, in Professional Development sub-theme, the frequency of the "I acquired different information about inclusive education" code was found 3. The second sub-theme is Program Development. The code of "It was a well-prepared training fitting its purpose" was repeated for 4 times.

The findings on the teachers' suggestions about the in-service training programs to be prepared

in the future regarding the inclusive practices in pre-school education are shown in Table 9.

Table 9. Teachers' Suggestions for the In-service Trainings to be Prepared in the Future (N=15)

Theme: Teachers' Suggestions for the In-service Trainings to be Prepared in the Future (N=15)		
Codes	f	%
There may be practical training.	7	37
The length of the training can be prolonged.	2	11
There can be more videos.	2	11
Lectures had better not be preferred.	2	11
Participants may be active.	1	5
There can be live examples.	1	5
There may be special trainings for different disability groups.	1	5
There may be more detailed trainings.	1	5
It can also be held for parents.	1	5
It can be given to all teachers.	1	5
Total	19	100

As seen in Table 9, teachers' suggestions are classified with 19 codes. Considering these codes, the frequency of the "There may be practical training" code was 7.

The findings of the focus group interviews on the opinions and suggestions of the teachers about the inclusive practices in pre-school education are given as to the fifth sub-problem of the study. The teachers who took part in the Focus Group interview used a nickname. The research findings have been presented together with the teacher nicknames. In the fifth sub-problem of the study, the teachers' answers are presented to the questions 'What do you think about the positive and negative aspects of inclusive education in preschool education?', 'Do you think you are efficient enough in inclusive education in preschool education? What are your suggestions for increasing your efficacy?', 'What do you think of your attitudes for inclusive education in preschool education?', 'What are your positive and negative attitudes? If you have negative attitudes, what can be done to change your attitudes?' and 'What would you like to add in terms of inclusive education in preschool education?' The findings as to the teacher opinions on the question "What do you think about the positive and negative aspects of inclusive education in preschool education?" are analyzed under two headings: positive aspects of inclusive education and negativities experienced during inclusive education.

Teachers' opinions on the question "What are the positive aspects of inclusion practices in pre-school education?" are given as follows:

T. Magbet: Other children in the classroom notice that there are individuals who are mentally and physically different from themselves. It also positively influences the families of the inclusive students in psychological terms allowing them to be socialized.

T. Ada (Island): It helps the inclusive student get together with his friends. It facilitates the social acceptance of inclusive students. It enables the inclusive student to adapt to the society. Other students in the classroom also realize that there are different children other than themselves.

The answers to the question "What are the negativities experienced during inclusive practices in pre-school education?" are given below.

T. Magbet: I have the opinion that the inclusive students and other children will be affected negatively in big-size classes. While the adaptation process of inclusive student gets more difficult, there may also be an increase in behaviour problems in other children.

T. Thomas: The teacher may have difficulty in classroom management. The teacher may feel inadequate depending the disability group.

The answers to the questions "Do you think you are efficient enough in inclusive education in preschool education? What are your suggestions for increasing your efficacy?" are presented as follows:

T. Magbet: I am efficient in general. I believe that in-service trainings will change my perspective to increase my competence. I believe I need to read more resources

T. Ada (Island): I feel efficient in general but this efficacy can vary depending on the child's condition. I believe that I should train myself according to the disability of the child.

The opinions of teachers as to the questions "What do you think of your attitudes for inclusive education in preschool education? What are your positive and negative attitudes? If you have negative attitudes, what can be done to change your attitudes?" are presented below:

T. Magbet: I have a positive attitude about inclusion education. But I believe that the class size should be taken into consideration in inclusive education. I think that the guidance of students in Guidance and Research Centers should be done in line with the level of the inclusive student. I think it is necessary that there should be assistant teachers for each inclusive student.

T. Ada (Island): The teacher is afraid in this process as s/he feels anxious about such issues as "What is the level of the child's disability? Will the parents cooperate with the teacher? What can I do?" I think that teachers should not be able to live this process alone, and should be provided with support and cooperation. In addition, in-service trainings can be organized to increase the knowledge of teachers on these issues.

The answers to the question "What would you like to add in terms of inclusive education in preschool education?" are given as follows:

T. Magbet: I think the classroom teacher should decide how long the inclusive student will stay in the classroom. In the preschool education, the family of the inclusive student also needs to be trained.

T. Ada (Island): I am angry that teachers are left alone during this process. In order for the teacher to manage the process well, Guidance and Research Centers should give support. In addition, guidance teachers and special education teachers should be assigned in schools, as well.

T. Thomas: Guidance teachers do not give the required importance to pre-school education. I think the diagnostic process is very important. The teacher may not be able to convince the parents on this issue.

Discussion and Conclusion

Preschool teachers expressed their shortcomings, as a result of the needs analysis, in the process of implementation of inclusive education and decided on the training subjects in line with their experiences and expectations. Teachers stated in different studies, too, that they need training on inclusive education (Temel, 2000; Saraç and Çolak, 2012; Demir, 2014; Tuna, 2015). Such a need for training may stem from the disability level of inclusive student (mild, moderate, severe, or very severe) or teacher's feeling of inefficacy depending on type of disability.

The in-service training program made a liminal significant difference between the efficacy pre- and post-test scores of the teachers in the inclusive education and increased the arithmetic mean. Although the trainings generally contribute to the teacher efficacy, their degree of effect on the teachers' level of efficacy may vary according to the variables such as the duration and content of the trainings. In addition to the in-service training programs, special education course, which is a 2-credit must-course during undergraduate program of preschool teaching, can be increased and inclusive education course,

which is now an elective course, can be given as a compulsory course.

Besides this, the in-service training program made a significant difference between the attitude pre- and post-test scores of the teachers in the inclusive education and increased their arithmetic mean. Various researches have shown that teacher attitude has an important place in inclusive practices and different variables are effective in teacher attitudes (Temel, 2000; Sucuoğlu, 2004; Çulhaoğlu İmrak, 2009; Aker, 2014; Özdemir, 2010). Teacher attitude can be said to be one of the most important factors in inclusive education. The level of support provided to the teacher and the efficacy level of the teacher in inclusive education can be effective in shaping teacher attitude. In this respect, in-service trainings and providing necessary support may positively affect the attitudes of teachers.

When the opinions of teachers about in-service training for inclusive practices are examined in the fourth sub-problem of the study, it has been found out in terms of professional development that they have acquired different information about inclusive education, had a positive effect on their behaviour, been able to compare their old knowledge with the new, gained awareness, and believed teachers could help the inclusive students during inclusive education. When examining the suggestions of the teachers for the in-service trainings to be held in the future, it was suggested in terms of program development that there could be practical trainings, length of the trainings could be prolonged, videos could be given more, the lectures would not be preferred, the participants could be active, there could be live samples, there might be special trainings for different disability groups and there might be more detailed trainings.

In the fifth sub-problem of the study, the results of the focus group interviews for the opinions and suggestions of the teachers on the inclusive practices were discussed. In the focus group interview, when the teachers evaluated positive aspects of the inclusive education, they stated that the inclusive student got the right to be educated with their peers and it helped their adaptation to the society as well as contributing to their social and affective development, and making the child get prepared for primary school. They also added that pre-school education is important for the inclusive student since it is the first step in taking part in society and that it contributed to the socialization of their families.

Limitations

There are some limitations of this research. The most important limitation is that the number of teachers participating in the program was less than expected because the participation in the official in-service training course was based on voluntariness and it was held at the weekends. In addition, longitudinal studies should be conducted to inquire whether the learning outcomes have served the purpose in investigating the effectiveness of vocational programs and in-service training programs. This study examined the effect with the post-test data collected just after the application.

Implications for Practice and Future Research

In-service trainings on inclusive practices for preschool teachers could be increased.

1. Inclusive education course can be given among the compulsory courses in undergraduate program of pre-school education.
2. The number of credits of special education courses can be increased in pre-school teaching.
3. School practices in undergraduate program of preschool education may be preferred in the classrooms with inclusive students.
4. Teacher training (pre-service period) can cover school practices in private education institutions.
5. In addition to theoretical information, in-service trainings for inclusive education may include activities where active participation of the teachers can be provided.
6. The number of scientific resources and books for inclusion in preschool education institutions can be increased. Blog and databases can be established in which pre-school teachers can meet together

and the examples of plans and activities can be shared. Activity pools can be created for pre-school inclusive practices.

7. It can be ensured that the teachers who have inclusive students in their class can be provided guidance in the development, implementation, monitoring and evaluation stages of the Individualized Education Program by the guidance counsellor or special education teacher in the pre-school institutions.

8. School administrators, school staff and parents can be trained on inclusive education in pre-school period.

9. Since the determination of strengths and weaknesses of the individual in the preschool period is a very important factor in the social and educational life of the individuals, trainings can be organized for teachers and parents on the importance of the diagnosis process of children in this period.

Implications for Future Researches

1. In-service training program developed for inclusive practices in preschool education can be organized with the participation of more teachers in cooperation with the Ministry of National Education.

2. An efficacy scale can be developed to determine the efficacy levels of preschool teachers for inclusive practices.

3. An attitude scale can be developed to determine the attitudes of preschool teachers towards inclusive practices.

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