

The Effect of One Teach One Observe Model On Effective Teaching Skills of Classroom Teachers¹

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Abstract: The purpose of this study is to investigate effectiveness of one teach one observe model, one of co-teaching approaches, on planning of teaching, implementation and evaluation skills of inclusive classroom teachers. Three teachers who are experienced at least for five years, work in primary schools in Ankara, Turkey participated in the study conducted using *Between-Subjects Multiple Surveys Design*, one of the single-subject experimental designs. The data were recorded by determining the number of effective teaching behaviors of subjects and marking related scoring part on the Checklist for Effective Teaching Skills, analyzed visually and shown as graphics. It's been indicated that *One teach one observe model's* effective in improving effective teaching skills of inclusive classroom teachers, and the subjects maintain post-teaching learning outcomes related to planning of the teaching, implementation, and evaluation for the Turkish class 3 weeks and 10 days after the study was completed. It's been observed that the co-teaching approach contributes to inclusive classroom teachers for making educational regulations, preparing lesson plans using different methods and techniques.

Keywords: Co-Teaching, Effective Teaching Skills, Inclusive, One Teach One Observe Model, Primary Schools

Bir Öğretim Yapan Bir Gözlemci Modelinin Sınıf Öğretmenlerinin Etkili Öğretim Becerilerine Etkisi

Öz: Bu araştırmanın amacı, birlikte öğretim yaklaşımlarından bir öğretim yapan bir gözlemci modelinin kaynaştırma ortamlarındaki sınıf öğretmenlerinin etkili öğretim becerilerinden; öğretimi planlama, uygulama, değerlendirme becerilerindeki etkililiğinin incelenmesidir. Tek denekli deneysel desenlerden *Denekler Arası Çoklu Yoklama Deseni* kullanılarak gerçekleştirilen araştırmaya, Türkiye'de Ankara İlindeki ilkokullarda, kaynaştırma ortamlarında görev yapan, en az beş yıllık sınıf öğretmenliği deneyimine sahip üç öğretmen katılmıştır. Veriler deneklerin gerçekleştirdikleri etkili öğretim davranış sayısı belirlenip, Etkili Öğretim Becerileri Kontrol Listesindeki puanlama bölümüne işaret koyularak kayıt edilmiş, görsel olarak analiz edilmiş, grafik olarak gösterilmiştir. *Bir öğretim yapan bir gözlemci modelinin*, kaynaştırma ortamlarında görev yapan sınıf öğretmenlerinin etkili öğretim becerilerinin gelişiminin desteklenmesinde etkili olduğu, Türkçe dersi için birlikte öğretim yaklaşımına dayalı uygulama sürecindeki öğretimi planlama, uygulama, değerlendirme becerilerine yönelik öğretim sonu kazanımlarını, çalışma tamamlandıktan 3 hafta ve 10 gün sonra da sürdürdükleri belirlenmiştir. Birlikte öğretim uygulamalarının öğretimsel düzenleme yapma, farklı öğretim yöntem ve teknikleri kullanarak ders planı hazırlama açısından öğretmenlere katkı sağladığı gözlenmiştir.

Anahtar Sözcükler: Birlikte Öğretim, Etkili Öğretim Becerisi, Bütünleştirme, Bir Öğretim Yapan Bir Gözlemci Modeli, İlkokul.

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Receiving education based on the individual differences is a fundamental right for every individual. Including the students with special needs in the general education classrooms was started to be commonly applied with Decree Law no. 573 in 1997 and "Ministry of National Education Regulation" in 2000. When investigating the latest data regarding the formal education in Turkey; it has been seen that 1399 students in preschools, 81.380 in primary schools, 92.032 in secondary schools and 27.730 in secondary education attend the institutions affiliated to the Ministry of National Education which give inclusive education (Ministry of National Education, 2016). Thus, while there were 1399 students registered in the preschool period including inclusive education in 2016, this number was 2601 in 2018; the number of students in primary school was 81.380 in 2016 and 105.095 in 2018; the number of students registered in secondary school was 92.032 in 2016 and 108.753; and while the number of inclusive students in high schools was 27.730 in 2016, it increased to 41.318 in 2018 (Ministry of National Education, 2018). However, there has been some problems arising from the low numbers of the personnel who work in the special education field in inclusive environments, teachers' concern for not being able to teach the curriculum and not having sufficient information about the students with special needs.

Although the quality of inclusion integration practices in our country and world is related to numerous variables, it can be said that the titles such as teacher training, physical opportunities of the schools, interdisciplinary study and cooperation system, number of the personnel, curricula, materials, support services and family participation distinguish. Quality education practices provided with family participation especially in the early childhood period have a determining role in the quality and fair education of the children with special needs in the compulsory education period and following years. In this sense, it is thought to be necessary for the preschool, primary school and other teachers to gain appropriate information about the teaching methods and techniques in accordance with integration principle in the education of the children with special needs, to benefit from support services, to be supported in preparing teaching materials, planning, teaching practice and assessment and to conduct interdisciplinary studies by cooperating with their colleagues and other experts (European Commission, 2018; Ministry of National Education, 2018). The term "integration" was developed as a result of inclusive practices. Therefore, it has been known that it shares many philosophical goals of inclusive education (Melen, 2007: cited by Akçamete, 2009). In order to understand the transition period from inclusion to integration, it is necessary to explain the main differences between these two terms. Both inclusion and integration aims at providing equal opportunities for the students with special needs, however, it is stated in the literature that they have main differences in the answers to *Who Is Included?, What is included?, Where? and When?, How?, Why?* (Diken & Batu, 2010). Integration is applied to all students with or without special needs regardless of the learning characteristics, gender, family structure, cultural background. With this feature of integration, which includes all learners, it has been aimed to form educational environments, which are open to cooperation, take individual differences of the students into account and meet their needs. Another feature of the integration principle is the quality of the support services provided for the classroom teachers (Conderman & Bresnahan, 2007).

However, inclusion integration practices only mean placing the student in the general education environment. It is necessary to make quality education practices, to make monitoring and evaluation studies and to increase the quality of the services provided for the students and teachers (Sucuoğlu & Kargın, 2006). Thus, it is necessary to reduce the problems, to have effective teaching models and sustainable practices, holistic solutions which will provide quality education for everyone and are based on cooperation and teamwork in order to provide students with a better education.

Inclusive practices also affected the role and responsibilities of the teachers who teach in general education classes (Crawley, Hayden, Cade & Baker-Kroczycki, 2002). The teachers are expected to prepare materials appropriate for the content and the outcomes before the lessons and make educational regulations. However, it has been seen that the teachers have a serious lack of information and experience in how to perform these responsibilities and how to plan an effective teaching for the students with special needs (Akçamete, Kış & Gürgür, 2009; Cook & Friend, 1995; Gürgür & Uzuner, 2010). The effective teaching skills of the teachers

regarding the planning, implementation and assessment have been seen to relate to the learning levels of the students (Friend, 2008; Walther-Thomas, Bryant & Land, 1996). Thus, it is necessary to support the competency of the teachers regarding the structuring the classroom and performing the educational regulations (Mudick & Petch-Hogan, 1996; cited by Sucuoğlu, Ünsal & Özokçu, 2004).

Co-teaching practices are one of the ways of supporting classroom teachers. *Co-teaching* approach which consists of the features such as interaction, taking responsibilities for a mutual purpose is an approach in which the classroom teacher who work in general education environments and special education teacher cooperate in the same physical area, which consists of mutual planning of educational regulations, delivering of instruction and assessment stages, which contributes to the students' being taught in general education classes with their peers (Cook & Friend, 1995; Murawski & Lochner, 2011). The main difference of co-teaching from other cooperative approaches (collaboration and cooperative teaching) is that the classroom teacher is supported to be able to provide effective teaching and that it is a classroom-based approach. The teachers who apply co-teaching gain new experiences regarding new instructional techniques by forming a cooperation with the special education teacher (Dieker & Murawski, 2003).

The co-teaching models which draw attention with the cooperation based practice feature in the literature contribute to the students with normal development, counselors, families of the students with and without special needs, other experts as well as the students with special needs and classroom teachers. It has been stated that the occupational burnout of the classroom teachers who work in the groups in which the models based on this approach are applied has decreased, they developed a positive attitude about working with students with special needs, are willing to communicate and cooperate with their colleagues, share the responsibilities of teaching and gained skills for developing activities and adapting teaching practices (Cook & Friend, 1995; Wilson, 2005). Co-teaching can be performed by applying one or more of the six different teaching models together. The main purpose of all teaching models is to enable students with special needs to stay in the general education environment and directly support them at the highest level. In this sense, it is directly related to inclusion and integration practices. Co-teaching approach, which is based on cooperation, is a strategy used by the classroom teachers in general education environments in the historical process. However, as the attention has been directed to effective and need-based practices in the education field in time, it has been accepted as a support service approach in inclusive environments rapidly (Arguelles, Hughes & Schumm, 2000; Friend, 2008).

In *one teach, one observe* model, one of the co-teaching models, the classroom teacher has the responsibility of intra-class teaching. Special education teacher, who is generally included in the process as an observer, is responsible for obtaining observation data about the classroom teachers and all students in the classroom (Friend & Chabernain, 2011). In the literature, the co-teaching approach conducted with one teacher and one observer teacher is accepted as a proof based practice as observation databased on preparation-teaching and assessment processes are obtained (Cook & Friend, 1995). *One teach, one observe model* which is accepted as an effective model in supporting social acceptance of the students with special needs into the general education environments on the first days of their participation also contributes to the development of classroom management and effective teaching skills of the teachers who teach in inclusive classrooms (Sileo, 2011).

The knowledge and skill levels of the teachers who will apply the curriculum in co-teaching environments have a main role in carrying out effective teaching process (Alptekin, 2012; Aykut, 2012; Dayı, 2012; Güzel-Özmen, et al., 2012). Effective educational environments and the effective teaching skills of the teachers have great importance in the education of the individuals who have different development characteristics in terms of mental, physical and social aspects compared to their peers (Conderman, 2011; Güzel-Özmen et al., 2012; Weiss, 2004). Thus, co-teaching practices have been accepted as one of the ways of supporting the effective teaching skills of the teachers who teach in inclusive environments (Cook & Friend, 1995; Friend, 2008).

Co-teaching method is an approach which brings the individualization forward in general education programs, from which all students with or without special needs academically benefit, and in which general education and special education teachers work in a cooperation process based on information and skills

sharing (Grenier, 2011; Scruggs, Mastropieri & McDuffe, 2007). It is a practice preferred for the skills preservice teachers thought they gained theoretical knowledge but could not see the examples of application and have not experienced properly, which coincides with inclusive teaching philosophy. When the co-teaching approach is preferred for the preservice teachers, teachers and other experts; the participants have the opportunity to prepare plans with different teaching approaches and methods, to revise the prepared plans, to evaluate the process, to evaluate the individual and to evaluate themselves, their professional skills and cooperation skills. As it is a process in which the teachers both learn and revise the preparation and application period, it has been stated that it resembles action research in this sense (Im & Martin, 2015; Murphy & Beggs, 2006; Siry, 2011; Tan, Teo & Poon, 2016; Teo, Badron & Tan, 2017).

It has been aimed to determine characteristics of classroom teachers who work in inclusive classes regarding effective teaching skills, investigate the effect of intervention program which includes one teach one observe model based on the co-teaching approach on the planning, applying the teaching and assessment of the teaching skills of the teacher, solve the problems which can arise during the implementation of the program, based on the idea that the classroom teacher is the main responsible in applying the teaching. For this purpose, the answers to the questions below have been sought.

- Is *One Teach One Observe Model* of Co-teaching Approach effective in the development of the effective teaching skills of the classroom teachers who teach in inclusive environments?

- Is the Co-teaching Approach effective in the instructional planning, implementation and assessment of teaching skills of the classroom teachers who teach in inclusive environments?

-Is the Co-teaching Approach effective for teachers in maintaining the effective teaching skills they have gained for 10 days to 3 weeks?

Limitations

The study is limited to Turkish lesson curriculum of three grade levels in which inclusive practice is conducted in the general education schools on a lower socio-economic level in Ankara Province of Turkey and the teachers who work with these grades. It is limited to the student and/or students, who continue general education classrooms, need special support in their academic and social skills.

Method

Study Design

Studies in which the effectiveness of the independent variable is investigated separately for each subject by gaining repeated measurements from one or several subjects under standard conditions are called as single subject studies (Gast, 2010). In single subject studies, the effect of independent variable on dependent variable is investigated on a single subject. Between subjects multiple surveys design among single subject designs was used in this study. While applying the between subjects multiple surveys design, a survey measurement from three different subjects was taken on the same day in order to assess the instructional planning, implementation and assessment performance among effective teaching skills of the subjects. Starting level data were collected from the first subject who would start teaching process in three separate sessions which are conducted consecutively. In survey measurements and in order to collect starting level data, starting level data regarding both the planning and assessment skills for Turkish lesson were obtained from the teachers. To collect the instructional planning and assessment data, how the teachers teach the curricula was observed and recorded. When the effective teaching skills performance of the first teacher showed stability, instructional planning, implementation and assessment skills among effective teaching skills were studied with the first teacher with *one teach one observe* model. While studying these skills, an assessment was made at the end of each session, and three sessions post-teaching assessment data were obtained when the change in the effective teaching skills of the teachers reached 80% or above occurrence level. When the post-teaching data were stable, the starting level data were obtained from the second teacher regarding the effective teaching skills related to

the subject in Turkish lesson curriculum for at least three sessions as for the starting level and one survey data were obtained from the third teacher. The same process continued until the independent variable was applied all the teachers who participated in the study. In order to evaluate the continuity of the learning outcomes regarding the effective learning skills (preparing a teaching plan, implementation of teaching and assessment), monitoring data were obtained once 3 weeks after completing the practices from the first and second teachers and 10 days after completing the practice from the third teacher.

Providing Internal Validity in the Study

Between subjects multiple surveys design is a design with a high internal validity. Internal validity is proved when there is no change in starting level and survey data before the independent variable is applied and when there is an observable change in the effective teaching skills of the teachers after the independent variable is applied (Gast, 2010). The internal validity is provided in this study by collecting the starting level data before the co-teaching sessions of each subject started and controlling the possible learning conditions which threatened the validity before the independent variable was applied with the survey sessions at intervals.

Subjects and Selection.

Three volunteer teachers who work in inclusive classrooms and have at least five years of classroom teaching experience. Permission was received both from the parents of the students with special needs and school administration for recording video in the classrooms. A code name was determined for each teacher and *Nazlı* was used for the first subject, *Hale* was used for the second subject and *Belma* was used for the third subject. The researcher interviewed the parents of the inclusive students with perfect attendance (a 9 year-old male student with orthopedically handicap, a 9-year-old male student who has mild hearing loss on right ear, very severe hearing loss on left ear and uses hearing aid on the left side and a 9-year-old female student diagnosed with learning disability) and the parents of students with normal development, a written approval form was received from the families. Table 1 shows the implementation stages of *one teach one observe model*.

Table I
Implementation Stages of One Teach One Observe Model

Preparation for Co-teaching	
The researcher introduced the implementation stages of " <i>one teach one observe model</i> " before starting studying with each subject.	
Stages of the model	The studies conducted on the implementation of one teach one observe model
Planning	An information session was organized about the Co-teaching Approach. The researcher and classroom teacher watched a video including study examples of the implementation of co-teaching model which included <i>one teacher and one observer</i> .
	In order to improve the lesson plans, the teachers filled a form in which theme, text type, learning outcomes, method, techniques and material are included in the sessions which varied from 15 minutes to 40 minutes. In the preliminary preparations part, they investigated the IEP of the student with special needs and made educational regulations.
Implementation of Teaching	The implementation of the teaching process of the implementation process of the lessons plans prepared by the classroom teacher in planning session. The researcher who represents the special education teacher joined every lesson and recorded a video in the classroom. Each session of the implementation of the teaching process is the duration of a Turkish lesson (40 minutes). While the special education teacher recorded the data, the classroom teacher applied the process in the planning stage.
	The special education teacher never participated in the process with a teaching role while the subject was being taught.
Assessment	This stage was conducted as approximately 20-30 minutes out-of-class sessions after the in-class implementation process is over. In the sessions, the taught lesson and the next lesson were constructed with the participation of classroom teacher and special education teacher.
	The practices were assessed together in terms of the classroom teacher, special education teacher, students with special needs and students with normal development in the classroom. In the assessment session, the learning outcomes of the next lesson, materials to be used, methods and techniques, educational regulations were determined.

The treatment integrity was calculated for both assessment and implementation sessions. The treatment integrity form was listed in a way which included the steps of the assessment and implementation sessions which were followed during the study and a checklist was prepared and given to the observer. The observer is an academician who completed the undergraduate and doctorate degrees in the special education field. The observer sat in a place which would not draw the attention of the teacher and was appropriate for the observer to watch the implementation during the treatment integrity practice and was asked to observe the teacher, intervene the defective or wrong points of the implementation. The treatment integrity was calculated during this period and when at least three consecutive sessions provided 80% or above treatment integrity, the observation duration in the practice environment was finalized. The observer was given the number of videos met at least 30% of all practices and treatment integrity and asked to fill after watching the videos. The treatment integrity was calculated by dividing the observed researcher behavior to the planned researcher behavior and taking the percentage of it (Billingsley, White & Munson, 1980). Of the co-teaching practice, planning sessions treatment integrity was calculated 93% for the first subject, 100% for the second and third subjects; implementation sessions treatment integrity was found as 95% for the first subject, 92% for the second and third subjects; assessment session treatment integrity was 100% for all three subjects.

Data Collection Tools

The effective teaching skill which is the dependent variable of the study consists of three main skills: *planning, implementation of teaching and assessment skills*. The independent variable of the study is *the teaching model which includes one teacher and one observer*. In order to measure the dependent variables of the study, *Effective Teaching Skill Checklist, Co-teaching Skill Checklist* were developed by taking the opinions of four field expert academicians by the researcher.

Effective Teaching Skill Checklist: consists of three parts and 38 items in order to determine if the classroom teacher perform the skills of the co-teaching approach. *Planning* stage, which is the first part consists of 11 skills (1-11), implementation of teaching process, which is the second part consists of 21 skills (12-32) and the assessment, which is the third part consists of 6 (33-38) skills. The checklist was scaled between 0 and 2 points. *Often means 2 points, Rarely: 1 point and Never: 0 point*. The highest total point which can be obtained from the checklist is 76.

Co-teaching Skills Checklist: consists of three parts and 37 articles in total in order to determine if the classroom teacher perform the skills of the co-teaching approach. "Planning" stage, which is the first part, consists of 13 skills (1-13), implementation of teaching, which is the second part consists of 13 skills (14-26) and the assessment, which is the third part consists of 11 (27-37) skills. The checklist was scaled between 0 and 2 points. *Often means 2 points, Rarely: 1 point and Never: 0 point*. The highest total point which can be obtained from the checklist is 74.

Co-teaching Approach Components Assessment Matrix.

In order to obtain social validity data in the study, the opinions and the suggestions of the teachers about the co-teaching practices were obtained with Co-teaching Approach Components Assessment Matrix. Social validity data is the assessments which are made by the individuals about the effectiveness, importance, meaningfulness for themselves and satisfaction levels for being included in this practice (Kennedy, 1992). This form is a semi-structured interview form. This form includes the opinions of the teachers about the components of the co-teaching approach. The opinions of the teacher about the applicability of co-teaching were taken with semi-structured interviews, then the teacher was given Co-Teaching Approach Components Assessment Matrix and asked to write their opinions about the components of the co-teaching. Questions regarding if the co-teaching approach is suitable for the current curriculum, can strengthen the teaching process and will be effective in inclusive environments. The written and verbal answers they gave were assessed under the titles of interpersonal communication, physical regulation, appropriateness to the curriculum, making adaptations according to the learning outcomes of the curriculum, planning, presentation in the teaching process, classroom

management and assessment.

Implementation Process

First, the preliminary application was done, the planned process was started to be applied.

Implementation Environment.

The researcher and the subjects conducted the sessions in different environments according to the processes. The planning session which is performed regarding the preparation for the lesson, methods-techniques, materials and practices for the students with special needs which are the first step of teaching and the assessment session in which the teachers prepare the teaching, lesson plan, assess the learning needs of the students and prepare the next lesson's plan with the post-lesson suggestions formed the out-of-class studies. Implementation of teaching, which is the second step of the practices formed the in-class teaching durations of the subjects. In this process, while the classroom teacher and the students studied the lesson, the special education teacher take part in the classroom as an observer and recorded with a video camera.

Preliminary Application.

The researcher made an application with a teacher who did not take part in the experiment process in order to gain experience in the application of the planning, implementation of teaching and assessment sessions of the co-teaching model. For this purpose, the practices conducted in the planning, implementation of teaching and assessment stages of the preliminary application and the application step of the study were shown in Table 1 in detail.

Stages of Experiment Duration.

The experiment duration was performed mainly in four stages as starting level, teaching, post-teaching assessment and monitoring. The processes conducted in assessment stage are stated in Table 2.

Table II
The Processes Conducted in the Assessment Stages of the Study

The Stages of the Multiple Surveys Model Followed	The steps followed in order to assess the one teach, one observe model
Starting Level	The assessment of the lesson plans prepared for Turkish lesson by the teachers with the Effective Teaching Skills Checklist. Video recording by monitoring the teaching process. Analyzing the records. The analyses of the teaching implementation behaviors and assessment of them with Effective Teaching Skills Checklist.
Co-Teaching Practice	Preparation of the lesson plans by both teachers in accordance with "one teach one observe model" Implementation of teaching by the classroom teacher. The in-class observation by the researcher who is in the special education teacher role. The assessment of the planning and implementation of teaching process by the teachers with an assessment session.
In-course Teaching Assessment	By applying the Co-teaching Skills Checklist, the stages of co-teaching in which the classroom teacher should improve himself were decided and planning was done. The teacher was assessed with Effective Teaching Skills Checklist and the planning, implementation and assessment skills were recorded.
Post-teaching assessment	The assessment of the lesson plans prepared by the teachers with the Effective Teaching Skills Checklist. The assessment of Turkish lesson plans with Co-teaching Skills Checklist.
Monitoring	The assessment of the lesson plans prepared by the teachers with the Effective Teaching Skills Checklist. The assessment of Turkish lesson plans with Co-teaching Skills Checklist.

The studies done in order to assess the effect on the effective teaching skills were applied for Nazlı, Hale and Belma teachers separately. 3-4 lesson plans prepared for the Turkish lesson were demanded from the teachers before starting the study and these plans were assessed in accordance with effective teaching checklist. The researcher who saved these points which created the starting level data continued the teaching practices with the one teach one observe model which was the independent variable consecutively. Post-teaching practice session was done with each subject at the end of the

practice until the data showed stability. Besides, the monitoring data were obtained from the first and second subjects 3 weeks after the study was completed, from the third subject 10 days after the study was completed. With the first subject Nazlı teacher, 3 starting level sessions, 15 co-teaching sessions, 1 monitoring session; with the second subject Hale teacher, 1 survey session, 3 starting level session, 14 co-teaching sessions and 1 monitoring session; with the third subject Belma teacher, 2 surveys, 3 starting level sessions, 14 co-teaching sessions and 1 monitoring session were conducted. The practices are stated in Table 2 in detail.

Monitoring stage in order to determine if they continue the learning outcomes; when at least three sessions showed stability, the monitoring data related to the "one teach one observe model" of co-teaching approach were obtained from that subject and the process was finalized.

Data Collection and Scoring

Effectiveness and Monitoring Data Collection and Scoring: The assessment was done in order to determine to which degree the teachers included the effective teaching skills in preparation of lesson plans, implementation of teaching and assessment in the starting level, post-teaching practices and monitoring stages. In starting level data, the preparations of the teachers regarding the lesson plans were noted at the end of the session by the researcher. After each session, the researcher filled *Co-teaching Skills and Effective Teaching Skills Checklist* with the teacher worked together by taking into account the behaviors the teacher performed regarding the co-teaching skills separately for each teacher, the related parts were scored by the researcher and the effective teaching skills which are the dependent variable of the study were assessed.

Application and Scoring of Co-teaching Skills Checklist: In order to determine to what extent the classroom teachers perform the skills in *one teach one observe model* in Co-teaching Skills Control Checklist, the classroom teacher and the special education teacher prepared the Turkish lesson plan which was going to be taught together. The researcher scored the skill expressions in the Co-teaching Skills Checklist in accordance with the observation data and video records for the classroom teacher.

Application and Scoring of Effective Teaching Skills Checklist: In order to investigate to what extent the classroom teachers perform the effective teaching skills in the planning, implementation of teaching and assessment in Effective Teaching Skills Checklist, the special education teacher scored the skill expressions in the effective teaching skills checklist for the classroom teacher in accordance with the observation data and video records at the end of each session. After the researcher scored, an independent observer watched the videos which included the examples of each session and assessed and scored the effective teaching skills of the classroom teacher.

Collection and Scoring of Social Validity Data

The social validity data, opinions and suggestions of the teachers regarding the co-teaching practices were collected using Co-Teaching Approach Components Assessment Matrix developed. This form is a semi-structured interview form and includes the opinions of the teachers about the components of the co-teaching approach.

Data Analysis

Analysis of Effectiveness Data Analysis of Effective Teaching Skills

In order to determine the effect of *one teach one observe model* which is the independent variable of the study on the effective teaching skills of the classroom teacher, the data obtained were shown in a line chart. The data were analyzed visually. The chart shows the number of steps on the horizontal axis and total percentage of proper behaviors on the vertical axis. In the analysis of effective teaching skills, the level of the data obtained in starting level was compared to the level of the data obtained at the end of co-teaching practices. As a result of applying the independent variable in accordance with the starting level, the increase in the level of data stated the effectiveness of the applied teaching model. And the monitoring data was compared to the post-teaching data in which the teaching model was used and

determined if there was a level difference (Figure 1).

Analysis of Planning, Implementation of Teaching and Assessment Skills among Effective Teaching Skills

In order to determine the effect of *one teach one observe* model on the planning skill among effective teaching skills, the data obtained was shown as a line chart, the number of sessions was shown on the horizontal axis and the percentage of proper behaviors was shown on the vertical axis in all charts (Figure 2). In the charts, as a result of applying the independent variable in accordance with the starting level, the increase in the level of data stated the effectiveness of the applied teaching model. The steps followed in the analyses of planning skills were similarly applied in the analyses of implementation of teaching skills (Figure 3) and the analysis of assessment skills (Figure 4) among effective teaching skills. A separate chart was drawn for each skill.

Analysis of Social Validity Data

The teacher opinions which form the social validity data were analyzed descriptively.

Calculation of Interobserver Reliability

In the study, interobserver reliability was calculated by receiving planning, implementation of teaching and assessment session samples, which include all assessment stages (starting level, implementation sessions, post-teaching assessment and monitoring). Interobserver reliability was calculated at least for the 30% of the data. Interobserver reliability was calculated by dividing the total researcher and observer agreement by the total of agreement and disagreement and multiplying it with 100 (House, House & Campbell, 1981). Interobserver reliability was calculated as 100% for all three subjects. In order to provide the reliability of the data obtained from *Effective Teaching Skills Checklist*, the skills observed to be performed by the classroom teacher in planning, implementation of teaching and assessment steps were scored by a researcher and an expert who is a doctor in the special education field. In this study, interscorer reliability was found as 92% for the first subject, 94% for the second subject and 95% for the third subject.

Results

Finding Regarding the Implementation of Effective Teaching Skills of Classroom Teachers

The starting level, implementation and monitoring data in accordance with the total points the subjects gained from the teaching sessions are shown in Figure 1.

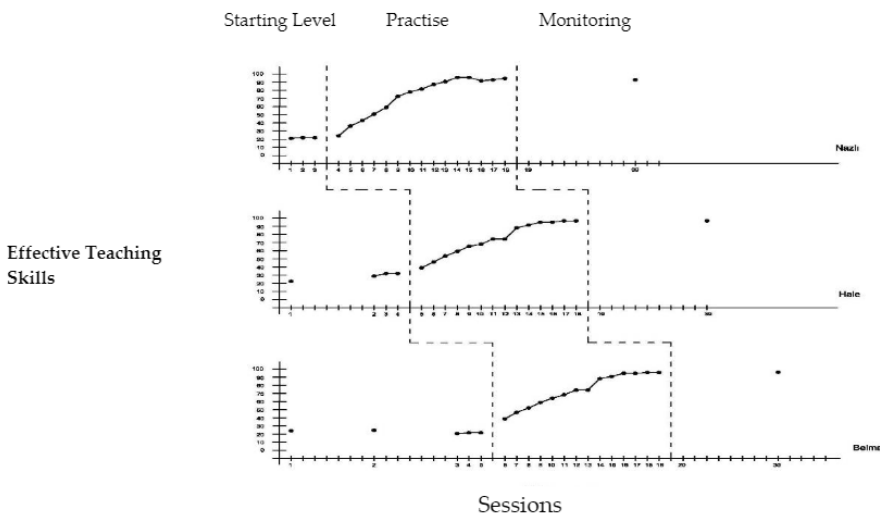


Figure 1. Total scores of the subjects on effective teaching skills for starting level, practice and monitoring

As seen in Figure 1, while the effective teaching skills of the **first** subject were between 21%-21%, with the beginning of the implementation sessions, it showed an increasing vertical tilt of 24%-60% from the first session to the fifth. It was observed that the tilt become stable at 93% level in the fifth session and the effective teaching skill outcomes were continued at the end of the sessions. The starting level data which were observed between 29%-32% for the **second** subject increased to 39% level in the first session with the implementation of teaching. It was fixed at 96% level in the thirteenth and fourteenth sessions, and it was observed that the outcomes continued at 96% level. The effective teaching skills of the third subject which were observed between 21%-22% level in starting level increased to 39% level in the first session. The tilt fixed in the eleventh and twelfth sessions reached 96% level in the thirteenth and fourteenth sessions. The results shown in Figure 1 shows that the effective teaching skills provided with co-teaching approach one teach one observe model are effective on the outcome levels of the classroom teachers.

Findings Regarding the Instructional Planning Skills of the Classroom Teachers

The starting level, implementation and monitoring data in accordance with the planning skills of the subjects are shown in Figure 2.

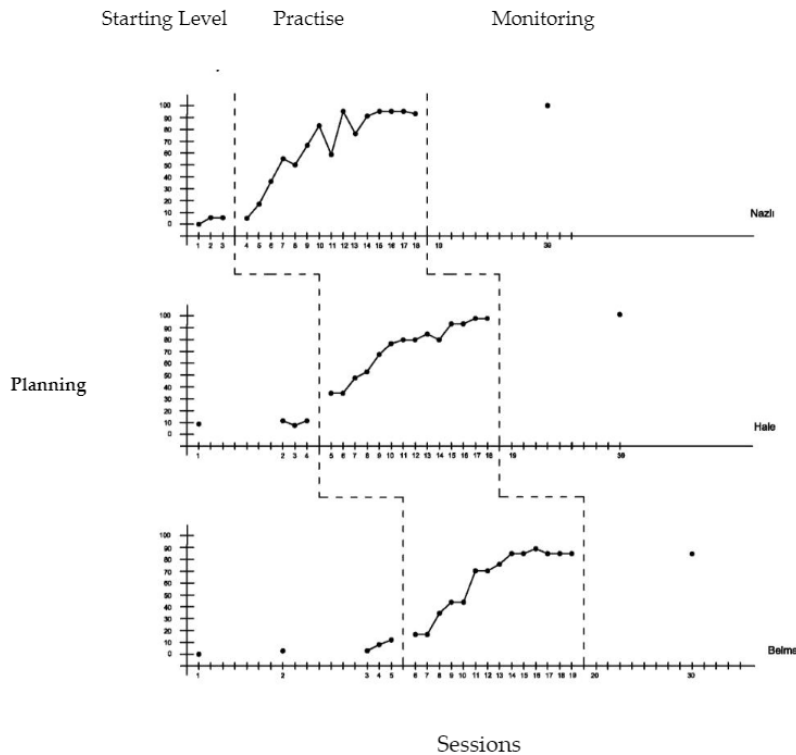


Figure 2. Total scores of the subjects on planning skills for starting level, practice and monitoring

As seen in Figure 2, while the planning skills of the **first** subject were observed at 05%-5% level in the starting level, with the beginning of implementation sessions, it was observed between 5% and 82% from the first session to the seventh. It was observed that the tilt became stable at 95% level in the fifteenth session and the first subject continued the planning skills outcomes at the end of the implementation sessions. The starting level data which were observed between 5%-9% for the second subject increased to 32% level in the first session with the implementation of teaching, and it was observed that the subject continued the outcomes at 98% level. The planning skills of the third subject which were observed between 0%-9% level in starting level increased to 14% level in the first session. Between the tenth and eleventh sessions in which the most vertical tilt was observed in the findings of the third subject, it was determined that the outcomes in planning skills reached

86% level. It has been seen that the planning skills provided with co-teaching approach one teach one observe model are effective on the outcome levels.

Finding Regarding the Implementation of Teaching Skills of Classroom Teachers

The starting level, implementation and monitoring data in accordance with the implementation of teaching skills of the subjects are shown in Figure 3.

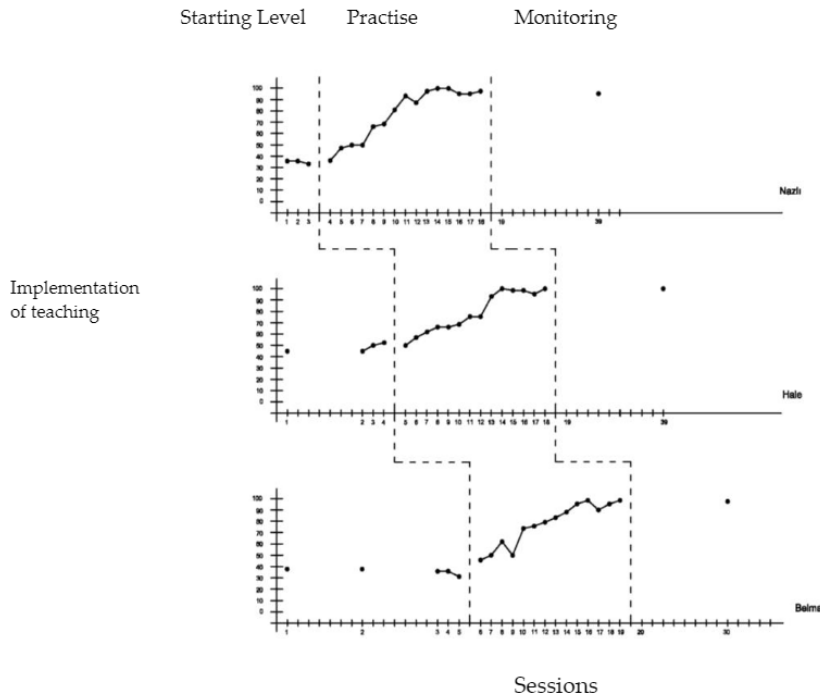


Figure 3. Total scores of the subjects on implementation of teaching skills for starting level, practice and monitoring

As seen in Figure 3, while the implementation of teaching skills of the first subject was observed at 31%-36% level in the starting level, they reached 98% level in the fifteenth level and the subject continued the implementation of teaching skills outcome. The starting level data of the second subject which were observed between 45%-52% in the starting level were 52% in the first session with the implementation of teaching. It has been observed that the subject continued the outcomes which reached 100% level in the fourteenth session at 100% level after the implementation of teaching sessions. The planning skills of the third subject which were observed between 31%-36% level in starting level increased to 45% level in the first session. It was observed that the tilt reached 98% level in the fourteenth session and the effective teaching skills outcomes were continued at 98% level.

Findings Regarding the Instructional Assessment Skills of Classroom Teachers

The starting level, implementation and monitoring data in accordance with the instructional assessment skills of the subjects are shown in Figure 4.

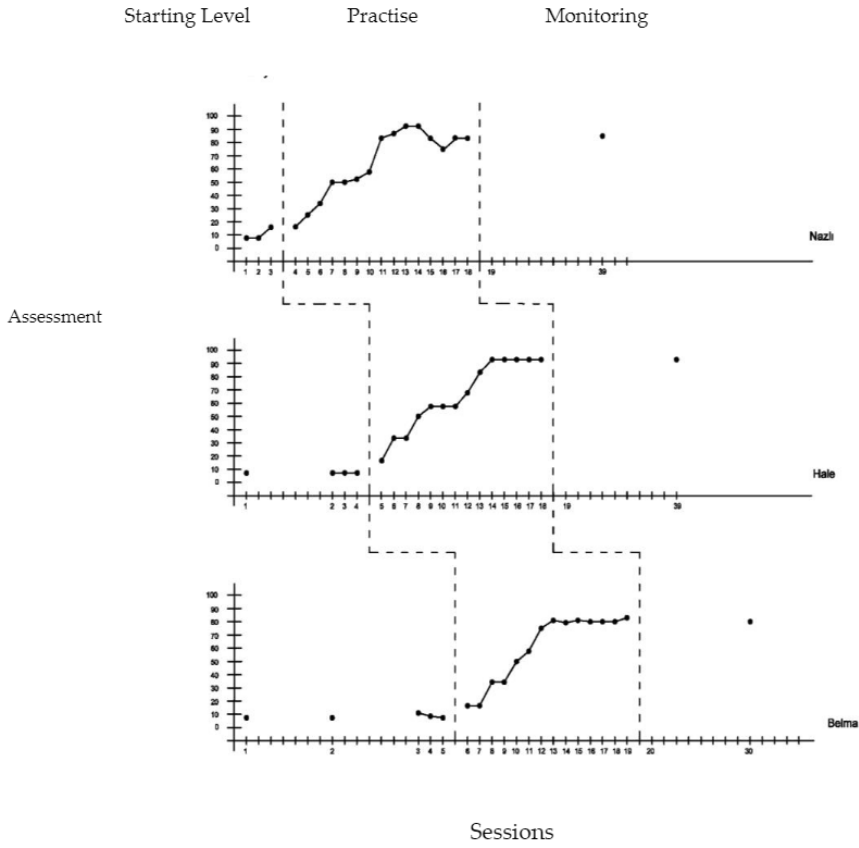


Figure 4. Total scores of the subjects on assessment skills for starting level, practice and monitoring

As seen in Figure 4, while the assessment skills of the first subject were between 8%-17% in the starting level, with the beginning of the implementation sessions, it showed an increasing vertical tilt of 17%-92% from the first session to the fifth. It was observed the first subject continued the implementation of teaching skills outcomes at 85% level. The starting level data which were observed at 8% in three sessions consecutively for the second subject were at 17% level in the first session with the implementation of teaching. It was fixed at 92% level between the tenth session and fourteenth session. It was observed that the outcomes were continued at 92% level after the teaching sessions. The assessment skills of the third subject which were observed between 8%-11% level in the starting level increased to 17% in the first session, the effective teaching skills outcomes continued at 80% level. The findings show that the assessment skills provided with co-teaching approach one teach one observe model are effective on the outcome levels.

Social Validity Data Findings Regarding the Effect of Co-Teaching Approach on the Effective Teaching Skills

All three teachers stated that the practices were helpful both for themselves and the students with special needs. The teachers who stated that the researcher who was in the special education teacher throughout the practice process did not show a behavior which would cause a negative feeling for them and their students stated that the co-teaching sessions contributed to the skills such as doing mid-term assessments during the presentation of the lesson, giving rewards to create a positive and incentive classroom environment during teaching, making presentations on the subject during the instruction, using the black board and other materials correctly, providing different materials for the children on different performance levels in the class and providing the student participation for the students who have different disability types. They drew attention

that *the co-teaching practices* are an effective and useful process.

Conclusion and Discussion

Discussion of the Findings Regarding the Effective Teaching Skills

When the effective teaching skills of the classroom teachers who participated in the study were investigated, it has been seen that the teachers continued the outcomes regarding 11 planning, 21 instructional implementation and 6 assessment skills which consist of effective teaching skills in the monitoring session. When the co-teaching approach based implementation process was completed, all three subjects were met the 80% of the criterion level, showed a performance above the criterion. It has been determined that three teachers who participated in the study showed less number of skills in planning skills starting level sessions than the other effective teaching skills. For example, while Nazlı teacher realized 0%, 5% and 5% of the skills in three consecutive sessions according to the starting level data, she reached a skill percentage varied between 5% and 95% in co-teaching sessions. Nazlı teacher, who performed "writing the function, number and features of the equipment which will be used for the purpose in the plan (if it will be used) and including how to do the assessment" skills among planning skills, mostly performed "Entering the purposes written in accordance with the learning outcomes in the curriculum to the IEP of the students with special needs, determining the prerequisite behaviors of the content which will be taught" skills at the end of the co-teaching practices. As for Hale teacher, she performed 9%, 5% and 9% of the planning skills respectively in three sessions and reached a level varied between 32% and 95% in co-teaching sessions. While Belma teacher showed 0%, 5%, 9% performance consecutively in starting level data in terms of planning skills, she performed a planning skill varied between 14% and 82% in co-teaching practices. Belma teacher performed *including the environment which will be used in teaching process into the plan* skill among planning skills at starting level, mostly improved "writing the time which will be spared for attracting the attraction, motivation, teaching, assessment and review of the lesson, Planning how to present the same task for the children who have different skill performance with various instructional regulations" skills.

These results have shown that the studies the teacher do in for the preparation for the lesson and the lesson plans are the most important component of teaching in inclusive classes. Because it has been observed that a well-prepared lesson plan effect the effective presentation skills, in-class teaching process behaviors, interaction with the student, ability to assess social skills and instructional assessment skills of the teachers during teaching. All three subjects explained the difficulties of working in an inclusive class, the aspects of it they cannot cope with and mutual requirements to the researcher. In the planning stage, the classroom teacher and the special education teacher sought an answer for "How and why are we going to teach?" question after they answered *What are we going to teach?* question. Planning skills are multidimensional and predict the professional competence sense. The studies show that the planning skills are the instructional regulation field in which the classroom teachers have most difficulty as a result of the lack of inclusive support education services (Idol, 2006). Another important finding regarding the effective teaching skills of the teachers that the classroom teachers who voluntarily participated in the study work devotedly, spare time for the sessions and can share their sources and materials limitlessly when they make a positive contact with the special education teacher. This finding shows similarity with the literature finding that states that the teachers should be informed about the mutual information and skill sets, open to professional development and have effective communication skills (Adams, Cessna & Friend, 1993; Friend & Cook, 2004). It has been stated that the competence of the teachers who work in inclusive environments about independently preparing an effective plan taking into account the students with special needs in their classes is low; they want to be supported by the special education teachers most (Carter, Prater, Jackson & Marchant, 2012). As a result, one teach one observe model has been effective in the development of planning skills of the classroom teachers.

When the implementation of teaching skills among the effective teaching skills of the classroom teachers who participated in the study were investigated, it was observed that they had performed more skills in the implementation than the starting level data. It has been observed that the teachers hardly ever included *including daily revisions in order to activate the previous learning of the students before starting teaching the subject,*

giving feedbacks to the students in mid-term evaluations in starting level data. In the starting level data of the teachers, the first subject performed 33%-36%, the second subject performed 45%-52% and the third subject performed 31%-36% of the skills. When the implementation process based on co-teaching approach was completed, the scores obtained in the monitoring stage were 95%, 100% and 98% for Nazlı, Hale and Belma respectively. It was observed that the teachers showed a similar performance to the post-teaching performances in the Turkish lessons after the practices had been completed. These results have been shown that *Co-teaching Approach* is effective on the implementation of teaching skills among the effective teaching skills of the classroom teachers who work in inclusive environments.

Another highly important result obtained from the study is that the type and the level of the disability effect implementation of teaching process in inclusive classrooms. It has been observed that Nazlı teacher, who stated that the number of the students with special needs is three and they have different disability types, included fewer skills in the implementation of teaching stage. The special education teacher discovered in the in-class observations and teaching sessions that the physical capacity of the classrooms affects the students with different disability types and the lesson presentations of the classroom teachers. It was observed that all three teachers included implementation of teaching skills more often than the planning and assessment skills in the starting stage of the study. This finding matches with the study results in the literature. Implementation of teaching skill is defined in the literature as the field in which the teachers most frequently used their professional skills. It has been stated that each teacher performs a teaching process in accordance with his/her own personal and professional competencies. However, how accurate and systematically effective performance they show regarding teaching has been debated (Winther, Volk & Shrock, 2002; Zabel & Zabel, 1996). It has been stated in the literature that especially the special education teachers who have knowledge and experience regarding the general education curriculum perform the co-teaching practices more effectively (Murawski & Swanson, 2001).

In the studies which investigate the needs of the classroom teachers who will work in inclusive environments, it has been stated that the teachers need knowledge and practice in special education field and they cannot perform the effective instructional regulations and the regulations regarding the students with special needs when these needs are not met (Çolak, 2007; Hudson & Glomb, 1997). The co-teaching practices were effective in supporting the professional knowledge and the skills of the classroom teachers in the study. A similar finding has been seen in the studies of Adams, Cessna and Friend (1993), Gürgür (2005); Murawski and Lochner (2011). In the findings of these studies, it has been stated that informing the classroom teachers about the special education, supporting them with the cooperation models regarding the regulations for the students with special needs contribute to the use of effective teaching skills in inclusive classrooms. As a result, one teach one observe model has been effective in the development of implementation of teaching skills of the classroom teachers. It has been found out in the study that the teachers have difficulty in obtaining the data related to the teaching process. In-class data which forms a basis for the assessment of teaching are mostly used for determining how much the students learn the content and why they cannot learn. Thus, the records and the video samples the researcher get in the in-class teaching in which she participated as an observer were found useful by the classroom teachers. It has been also stated in the literature that one teach one observe model contributes to obtaining the systematic observation data in the inclusive classrooms and to the teachers for both the assessment of themselves and the students (Kefe, Moore & Duff, 2004; Mastropieri, McDuffie & Scruggs, 2007; Murawski & Swanson, 2001). When the development of the effective teaching skills of the classroom teachers was investigated, it was observed that they had performed more assessment skills than the starting level data as in the case with planning and implementation of teaching skills. All three teachers reached the 80% level which is the criteria level for the assessment skills as a result of co-teaching practices. It has been observed that all three teachers frequently included *giving and explaining the materials such as homework and worksheet regarding the subject to the students* assessment skill, but they hardly ever included *question examples which are appropriate for the performance levels of the students, repeating the important parts of the subject, determining how many of the steps which are written in the presentation plan were performed* skills.

It has been stated that the skill in which the classroom teachers feel themselves most competent is the

implementation of teaching among the skills related to forming an effective teaching environment; they think their planning and assessment skills should be supported. When their opinions about this subject are asked, Nazlı teacher said "When I look back to determine what has changed after the co-teaching practices, I see that a lot of things has changed. When I talked about assessment, I only meant the grades before", Hale teacher said "in the co-teaching approach based practices, she and the special education teacher used teaching techniques appropriate for the individual differences and she felt more competent in classroom management", Belma teacher drew attention to that "She has been successful in preparing detailed lesson plans based on individual differences, a more realistic assessment of the individual's performance and creating a classroom climate far from discrimination".

The opinions of the classroom teachers about the assessment skills resembled the study findings of Picard (2004). Picard stated that assessment skills of the teachers who work in general education classrooms, one of the effective teaching skills, were related to preparing lesson plans based on learning differences, structuring the content of the lesson and using the questioning strategies. Assessment skill, one of the skills the effective teacher performs most, has a great importance for the students with special needs. In this sense, co-teaching approach provides an opportunity to record the monitoring data based on the in-class performance of each student (Güzel-Özmen, 2012; Güzel-Özmen et al., 2012). The study findings in the literature have been shown that the most important factors that affect the learning of the students are in-class teaching activities (Aykut, 2012; Conderman, 2007; Güzel-Özmen, 2012) and assessment skills of the teachers (Friend & Bursuck, 2002). In the teaching process performed regarding the assessment skills, the special education teacher shared information about assessment and evaluation in the out-of-class sessions. In the use of assessment method and techniques skills, it can be said the fact that the lessons the special education teacher took in the undergraduate, post graduate and doctorate levels, her teaching experience and the fact that she gives the Individualized Teaching Programs and Individualization of Teaching lessons for the teacher candidates of mentally handicapped for a year have provided an advantage.

As a result, one teach one observe model has been effective in the development of planning, implementation of teaching and assessment skills of the classroom teachers. The opinions of the teachers also stated that the co-teaching approach used contributes to the planning, implementation of teaching and assessment skills.

Recommendations

It can be suggested that the special education teachers who will be work in the co-teaching approach regarding the education and practice should receive an education about the general education curriculum, planning, implementation of teaching and assessment skills before they start teaching. It can be suggested for the teachers who will study on the effective teaching skill to investigate the lesson plans prepared based on the effective teaching skills in general education and special education, to watch videos about the practices and regulations before they implement the co-teaching approach. In order to increase the generalizability of the findings of the study, it can be repeated with a lesson, classroom level, educational environment different from Turkish, in educational environments in which the students with special needs and with different researchers. This study was conducted with co-teaching approach one teach one observe model. Different studies in which other teaching models of co-teaching approach can be used separately or together.

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