Using a Dilemma Case in Early Childhood Teacher Education: Does it Promote Theory and Practice Connection?*

Kevser KOÇ[a]

Gaziantep University

Abstract

The purpose of this study is to investigate the effect of using case analyses on early childhood pre-service teachers' skills on connecting theory and practice, and solving ill-defined problems in teaching young children. In particular, the following research questions were explored: (1) To what degree are pre-service teachers able to make theory–practice connections in response to a written dilemma case of early childhood classroom? (2) What types of solution strategies did the participants suggest? (3) What is the potential value of using a dilemma case in solving ill-defined problems in early childhood education? 48 senior students enrolled in an early childhood education program participated in the study. The participants read, analyze and reflect on case of an early childhood teacher who is having a dilemma regarding a 4-year old child who seems to need special education. The data analysis revealed a notable influence of theoretical knowledge and specific perspective through inclusion provided in class on the students' essays. They suggested two solution strategies (a) strategies that aim to convince the parents to consult a specialist and (b) strategies that aim to support the child's development. The findings were discussed and potential implications were addressed in the paper.

Key Words

Early Childhood Teacher Education, Case-Based Pedagogy, Written Cases, Childhood Inclusion, Home-School Collaboration.

It is a widely-accepted fact that teacher education courses cover all necessary theoretical knowledge; but, do not provide enough opportunities to put the theory into practice (Korthagen, Kessels, Koster, Lagerwerf, & Wubbles, 2001). The "apparent chasm between what often happens in university-based teacher education and teaching in schools – a theory–practice gap – has caused some jurisdictions to shift much of their teacher training efforts out of academia and into the field" (Bencze, Hewitt, & Pedretti, 2001, p. 192). As emphasized by Bencze et al. teacher education programs are pursuing to reducing the gap between the theory and practice of teaching. Early childhood education programs are not exception in the field (Stacey, 2009). In search of an effective strategy to help teachers connect theory and practice, researchers found that case-based pedagogy is one of the effective approaches to put theory into practice (Bencze et al.; Flynn & Klein, 2001; Koc, Peker, & Osmanoglu, 2009; Masingila & Doerr, 2002; Schrader et al., 2003).

Preparing teachers for future requires offering opportunities to pre-service teachers for gaining knowledge and experience in the field (Bransford, Darling-Hammond, & LePage, 2005). Also, teachers need to apply their knowledge and experience into different situations while making decisions in

classroom. Teachers make countless decisions every day (Kohler, Henning, & Usma-Wilches, 2008). Every child and every situation are unique and require the teacher's careful consideration (Sulaiman, Baki, & Rahman, 2011).Teachers are usually alone when making decisions in class and need to take immediate action. While some of the decisions are relatively easy to make for an experienced teacher, but some of them are hard to make for most teachers. They need to analyze the situation, identify the problem, scrutinize the knowledge they accumulated, find a viable solution strategy and adopt it. Hence, finding best solutions for problematic situations involve integrating theory and practice (Korthagen et al., 2001).

The present study was designed to investigate early childhood pre-service teachers' building connection between theory and practice. Particularly, the purpose of this study was to examine to what degree the analysis of a dilemma case helped early childhood education pre-service teachers build a connection between theory and practice. The study was conducted in the context of an *Inclusion* class the author taught in a large public university in a metropolitan city in Turkey. The case used in the study was a real dilemma related to a teacher's experiences with a child who potentially had a disability. In this manner, the study utilizes the case-based pedagogy into early childhood inclusion settings.

Inclusion in Early Childhood Education

Inclusion is a widely-used instructional model throughout the world, including Turkey (Melekoglu, Cakiroglu, & Malmgren, 2009). It is highly respectable and effective philosophy of educating for students who have diverse needs and requires full-participation of the teacher and family. While families are expected to be a part of the entire inclusion process, teachers play the most important role in helping all students learn in the inclusion setting (Diamond, Hestenes, Chakravarthi, & Li, 2009). The very purpose of inclusion classrooms is to invite, respect and welcome all students. Therefore, classroom environments should be designed to accommodate individuals with special needs who are educated with mainstream students (Tomlinson, 2003; Willis, 2007). However, leading an inclusion class is not an easy job. The presence of a student with special needs is a challenge for all teachers. The teacher needs to act professionally, include the child into the classroom environment, guide the family, and support the child's development (Sapon-Shevin, 2008).

Inclusion has a special importance for early childhood teachers because inclusion starts in early years at school. Preschool teachers are sometimes the first ones who notice the needs of a child, even before the family (Diamond et al., 2009). The teacher's daily interaction with the young child in various environments allows the teacher to see the developmental level of the child. Noticing any developmental delay brings other responsibilities to a teacher; such as making necessary adaptations in the curriculum and the classroom setting, sharing personal observations with the family, guiding them to contact with other professionals in the field so that the child can be evaluated and get appropriate services and education. Yet, these tasks can be quite challenging sometimes. They require professional knowledge and personal skills to communicate and manage the situation.

Solving Problems of Classroom and Use of Case-Based Pedagogy in Teacher Education

Teachers face with various classroom tasks in their daily teaching activities. Some of these are clear and easy to complete such as telling the students what to do and writing reminding notes to parents. In other words they are well-defined situations. On the other hand, many other tasks or situations create highly complex ill-defined problems with uncertainties for teachers (Jonassen, 1997, 2000). In such situations, teachers face with dilemmas where it is not clear what to do. They may have multiple solutions for such cases (Lee & Choi, 2008). Ill-defined problems create cognitive conflicts that help teachers grow as professionally; yet, teachers need to know how to deal with ill-structured problems (Jonassen, 1997). Therefore, practicing and prospective teachers should be appropriately trained to resolve such problems. Among other ways, case-based pedagogy can be suggested as a pedagogical approach to help teachers to work with problematic situations (Lundeberg, 1999; Lundeberg & Fawver, 1994). It is also claimed to be effective in teacher education to help teachers take the appropriate action when faced with complex and ill-defined problems of teaching (Grossman, 2005; Jonassen, 1997).

Dilemmas present situations for which there are competing, often equally valid solutions. Using dilemma-based cases in pre-service programs helps students begin to understand and accept tentativeness in knowing, with certainty, what action to take; provides opportunities to marshal and evaluate evidence for judging alternative interpretations

and actions; and can illuminate the moral dimensions of teaching (Harrington, 1995, p. 2).

A case is a written portrayal of a classroom event occurred in the past (Naumes & Naumes, 2006). Teaching cases are authentic teaching situations which reflect the complexity of a classroom (Bonk & Zhang, 2008). Thus, cases are teaching tools to help practicing and prospective teachers study the realistic classroom environments; so, they provide concrete classroom situations; rather than imaginative cases. The use of cases is also essential in helping teachers and pre-service teachers build the theory and practice link (Lundeberg, Levin, & Harrington, 1999).

Cases have been used in teaching various disciplines such as business administration (Barnes, Christensen, & Hansen, 1994), medicine, law and other disciplines (Naumes & Naumes, 2006); but, the idea of using cases is relatively new in preparing teachers (Lundeberg et al., 1999). There are only a few works in early childhood teacher education related to the use of cases. In one of them, Lee and Choi (2008) investigated the effectiveness of using case based discussions on early childhood pre-service teachers' understanding of classroom management. Based on the data collected from a three-week intervention with 23 pre-service teachers, Lee and Choi found out that case-based teaching was effective for promoting the participants' awareness of multiple perspectives in classroom management, enhancing their skills in complex classroom management problems, and helping them see the moral responsibility side of classroom management. It was also noted that case-based teaching motivated pre-service early childhood teachers to use educational theories for decision making in classroom management (Lee & Choi). In another work, a recent book by Ozretich, Burt, Doescher, and Foster (2010) presents several cases of young children of different backgrounds and ages to help teachers connect theory to practice in early childhood education. The cases potentially foster discussion among teachers on challenges of early childhood teaching. A major goal of the book is to help implement the developmentally appropriate practice in early childhood classrooms (Copple & Bredekamp, 2009). More specifically, the book demonstrates how the theory of developmentally appropriate practice can be implemented in real classrooms via use of written imaginary cases. Ozretich et al.'s work can be a useful resource to build the theory and practice link in early childhood teacher education. Both works utilized the cases; however, they both focused on the use of cases as discussion tools. In early childhood teacher education, no research studies on written case analysis were found.

Significance of the Study

This study has unique features that add distinctively what is already known. First, a written case was used as a basis for a reflection paper so that pre-service teachers could scrutinize their knowledge base and adopt appropriate practices into the case to solve the problem. Studies up to date used cases to facilitate class discussions which may not be advantageous every time; discussions can be time consuming and may be hard to manage depending on the participants. Also, ensuring each student's equal participation can be challenging in most discussion groups. On the other hand, reflecting on a written case individually may involve each student in deep thinking. Additionally, letting students write reflection papers is more convenient and allow the teacher to evaluate each student's contribution. This study has explored the effectiveness of written case analysis in early childhood teacher education which has not been explored yet. Second, using a real dilemma case was also an advantage that evokes pre-service teachers' thinking so that they can generate original solution strategies connected to theory.

Purpose and Research Questions

The purpose of this study is to investigate the effect of using case analyses on early childhood pre-service teachers' skills on connecting theory and practice, and solving ill-defined problems in teaching young children. In particular, the following research questions were explored:

Does a written dilemma case promote early childhood pre-service teachers' building connection between theory and practice? (2) What type of solution strategies did the participants suggest to resolve the given dilemma case?

(3) What is the potential value of using a dilemma case in solving ill-defined problems in early childhood teacher education?

Method

This qualitative study was conducted during the 2008-2009 academic semester at a large public university in a metropolitan city in Turkey.

Participants

The class was comprised of 48 senior students enrolled in the early childhood education program at a large public university. All of the students agreed to participate the study. Among the students, 46 of them were females and 2 of them were males and all of them were at the age of early 20s. They had a strong foundation of theoretical knowledge on early childhood education. They had taken several courses that they could relate to the case in this study. The early childhood teacher education program in Turkey covers a variety of courses that are classified under three main areas: content, teaching profession and general education (Atay-Turhan, Koç, Isiksal, & Isiksal, 2009).

Considered the nature of the dilemma case, some of the course contents were more likely to be reflected in the students' papers. These courses were *special education, parent involvement* and *effective communication* that they had taken in the former semesters. *Effective communication* course covers many topics including communication models, effective listening, elements of effective communication with the emphasis on improving the quality of communication between teachers and parents. In another course, *special education,* students learn about the features of the special conditions that children suffer from, how to help children with special needs and their families and a variety of topics that can help early childhood pre-service teachers in their future professional lives. The *parent involvement* course could also influence the participants' responses to the questions related to the dilemma case. The course covered many topics including effective communication with families, the strategies for successful partnership with families and creating a welcoming environment for families.

They had already gained knowledge about early childhood education, family involvement and effective communication in the former semesters. They had also observed and participated in the school activities (without teaching) as a part of the ECE program. At the time of the study took place, they were student teaching at certain days in a week and planning to graduate at the end of the semester.

Setting: Description of the Course

The researcher collected the data as a part of an *Inclusion* class at a public university in a metropolitan city in Turkey. The course was designed and delivered by the researcher to provide early childhood pre-service teachers with a variety of opportunities that make them familiar with the various dimensions of inclusion. The researcher was the course instructor. The main textbook was "Inclusion" by Sema Batu and Gönül Kırcaali İftar (2009). The course content covered many topics including how to identify children with special needs, what they should do to deal with the challenges they can encounter during the process of inclusion, how to communicate this special topic with the parents, and how to collaborate special education teachers and other professionals to include children with special needs in mainstream classrooms. The course content also emphasized the methods teachers can apply to create a welcoming, emotionally and cognitively supportive learning environment for children with a variety of ability levels and needs. Discussions were organized to find practical solutions for dilemmas and challenges teachers may encounter in an inclusion class. During the course, students often divided into groups and worked together to find solutions for different problems, apply theoretical knowledge into specific occasions given by the instructor, and made presentations to share course related topics with each other. Two guest speakers, one teacher educator from the special education department of another university in the same city and an experienced preschool teacher who had been teaching in an inclusion class visited the class and shared their experiences and knowledge with students in an interactive discussion format.

Data Collection

The data were collected at the end of the semester. The participants were given a printed copy of a case of an early childhood teacher who is having a dilemma regarding a 4-year old child who seems to need special education. The participants were also given two questions about the case:

1. How should Suzan act in order to resolve the dilemma?

2. What is the best solution strategy?

The above questions allowed the participants to analyze and reflect on the dilemma. The participants were not constrained in any fashion. They were only asked to read the dilemma and answer the questions. Therefore, they could use the theoretical knowledge they had gained through the early childhood education program they were following.

The participants were given enough space and 20

minutes to write their thoughts. The data consisted of participants' written responses which were about one page long; approximately half page for each question. There was no grade attached to this assignment.

Teaching Case: Suzan's Dilemma

The case is a real dilemma that an early childhood teacher, Suzan, who had been working at a private pre-school in a class of four year olds One of her students, Ekin, who has been in her class for two years, is developmentally behind his peers. Suzan thinks that he needs to be evaluated as soon as possible and probably needs special education. However, Ekin's parents are in denial and Suzan's efforts to make them realize the seriousness of the situation have not come to fruition for months. The parents insist that Ekin's development is normal and he will catch up his peers soon. It seems that they will not attempt to ask for help from a specialist and do anything for Ekin's education in the near future. On the other hand, Suzan wants to do as much as she can for Ekin since he does not have a chance to get extra education by now. She pays special attention to Ekin's behaviors, helps him finish up his art projects so he will learn something, enjoy a finished project, share it with his parents at the end of the day and gain self-confidence. Since she offered extra help for him, Suzan has been observing that her help or scaffolding contributes to Ekin's development to some extent. Some of Ekin's skills have improved with the help of her efforts. She thinks it is critical because time is passing for him, he needs special education and Suzan is the only one who can help him by now. However, Suzan thinks that her help may conceal the truth about Ekin, keep his parents from accepting the reality and consulting a specialist in the field because Ekin's art projects look better with her help. She also knows that Ekin's improvement is not enough and his skills may improve more with the help of special education.

Now, Suzan has a dilemma: if she keeps helping Ekin in art activities, he will get some benefit, but the situation may cause his parents to rationalize their idea that Ekin's ability level is within normal limits and keep them from seeking for more professional help. If she stops helping Ekin, he may be deprived from getting at least some help at this critical period of his life. On the other hand, Suzan is not sure if her act will help Ekin's parents accept the reality or just cause him loose time.

Data Analysis

The participant students' essays were analyzed by using qualitative analysis techniques to identify major themes in the essays (Bogdan & Biklen, 1992; Lincoln & Guba, 1985). In particular, grounded theory methodology (Strauss & Corbin, 1998) guided the data analysis process; meaning, there was no theme or category prior to the data analysis. With the help of another researcher, the author read the data multiple times, looked for patterns in the data, connected diverse pieces within the data and formed the coding categories at the end of this process. Each essay was individually coded then sorted by emerging themes. Themes were grouped into headings. It should be noted that a participant's response could include more than one theme. Another educational researcher with extensive experience in qualitative data analysis also participated into the data analysis process for reliability of the findings.

Initially, the categories were more detailed. For example, there were categories of asking for help from the school psychologist, school counselor, special educator and the local special education center (RAM). These categories were combined to form a single category of asking for help from another professional. In another instance, sharing classroom observations and sharing the student's sample works with the family were two distinct categories; but, eventually these two categories were combined. It should also be noted that a number of categories were put under an umbrella category, *convincing the family*, to indicate that those participants' main aim was to convince the family to help the child. The author and the other researcher read and re-read the data to identify similar patterns and form the categories of themes (See Figure 1). Then, they coded the data independently, and met together to compare and discuss their coding results. This process went on multiple times until they reached full agreement; thus, reliability of the coding process was satisfied. For expert judgment, an educator with multi-year experience in teacher education reviewed the coding themes and the data sources to see if the coding themes represent the participants' responses.

Results

The data analysis revealed a notable influence of theoretical knowledge and specific perspective through inclusion provided in class on the students' essays. Their solution strategies were

grouped in two main themes: (a) strategies that aim to convince the parents to consult a specialist and (b) strategies that aim to support the child's education. The first strategy is convincing the family to ask for the child's evaluation for special education services. This strategy includes several sub-strategies (See Figure 1). The second strategy is supporting the child's development within the classroom environment. The strategy does not contain any sub-strategy.

The two solution strategies were not mutually exclusive; meaning there were participants who suggested both strategies in their responses. The data analysis indicated that while almost all participants (45 pre-service teachers; 94%) suggested that the teacher should convince the parents asking for the child's evaluation for special education services, less than half of them (20 pre-service teachers; 42%) suggested that the teacher should continue supporting the child's development within the classroom environment. 17 participants (35%) used both strategies in their responses; so, all but three of participants who indicated that supporting the child within the classroom would be a resolution of the dilemma also thought that convincing the family would be helpful for the child.

Convincing the Family

The analysis of the data indicates that 45 out of 48 participants in general suggested convincing the family to contact with a professional and ask that their child be evaluated for special education. They suggested various sub-strategies for the teacher to convince the family. Figure 1 gives the names and frequencies of such sub-strategies.

Not Giving Extra Help: As given in the dilemma case, Suzan, the teacher, was offering extra help for the child, and Suzan has been observing that her help or scaffolding contributes to Ekin's development to some extent lso shared that this improvement in Ekin's performance might have kept the family from seeking for more professional help. In order to resolve this dilemma, as shown in Figure 1, eleven participants pointed out that the teacher should stop giving extra help to the child during the art activities to convince the family asking for the child's evaluation for special education services. In the following excerpt, Participant #2 illustrated the strategy of not giving extra help:

I think, the teacher should not give extra help to Ekin. Consequently, Ekin will not be able to come up with a complete or adequate work. The teacher should continue this until the parents realize that Ekin is behind his peers. After they realize this fact, the teacher should talk to them about their child's condition.

A few of the participants who suggested for not giving extra help pointed out that while the teacher should stop helping Ekin in art activities, she should help the child in other areas such as reading tasks and other activities. For instance, Participant #8 indicated that

The teacher should not give extra help in art activities because if she continues giving the help the family will never realize the problems in Ekin's development which will deteriorate the situation. In-
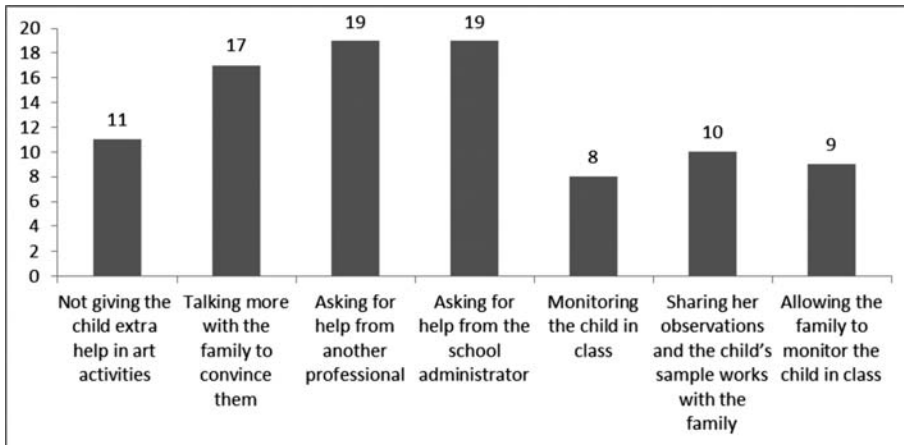

Figure 1. *Frequencies of the Sub-strategies to Convince the Parents to Take the Child to a Special Education Center*

stead the teacher may work with the child in reading activities. She can also do some extra activities with the child during free time activities.

Overall, it can be summarized that about one fourth of the participants felt that giving extra help prevented the parents from seeing developmental problems of the child; thus, they noted that the teacher should not give the extra help. There were a few who wrote that extra help in art activities should be removed; but, at the same time they stated that the teacher should help the child in other areas.

Asking for Help from Others: Asking for help from others, including school administrators and other professionals such as school counselor, special education teacher, school psychologist, and guidance and research centers of the local school districts (RAM) was one of the major solution strategies that the participants offered to convince the family. As seen from Figure 1, 19 participants indicated that the teacher could talk to the school administrator so that the administrator could convince the family taking the child to a special education center for an evaluation. Equal number of participants, 19 pre-service teachers, indicated that Suzan, the teacher, should see a professional for help. They stated that the professionals could convince the family. Participant #40 expressed how the teacher should talk to the school administrator:

Suzan should talk to the administrator and request him to talk to the family. Maybe the family would think about going to the special education services for the child. The family needs to know that the teacher is working with the child in class; yet, it is not enough for the child's needs.

It should be noted that 10 participants offered both strategies; in other words, those participants responded that the teacher should ask for help from both the school administrator and another professional. Participant #42 represented how the pre-service teachers offered both strategies:

Suzan should contact with the school administrator, school counselor and a special education teacher and ask how she could convince the family asking for the child's evaluation for special education services. I would collaborate with the school administrator and a special education specialist. I would convince the family with my soft and gentle manner.

In summary, more than half of the participants thought that the early childhood teacher should reach out to the school administration and other professionals, including special education teachers and school counselor. They indicated that the teacher should collaborate with the administration and other people with experience in working with students with special needs. Some participants even accept the fact that as an early childhood teacher they are not qualified enough to help a child with special needs. For example, Participant # 39 underlined the fact that early childhood teachers are not specialized for special education:

I would tell the family that it is important to pay special attention to Ekin and I would add that I am working with him; yet, I am an early childhood teacher. If they want a better education, Ekin should take special education. Perhaps, the family may realize that he needs special education services.

Monitoring Student Behaviors: The analysis of the data indicates that monitoring the student would be an appropriate strategy to understand the child's situation and convince the family for the child's evaluation for special education services. It was found out that the participants reported that both the teacher and parents should observe and record the child's behaviors in the classroom environment. In particular, as seen in Figure 1, while eight individuals noted that the teacher should monitor the child, nine others indicated that the family should be given the opportunity to monitor him in classroom. Participant #6 detailed how the teacher should monitor Ekin in classroom:

If Suzan thinks that Ekin is developmentally behind his peers, at the first stage she should carefully observe him based on his developmental level and record what she observed on a form designed for four year olds. She should also regularly prepare a report that shows his daily, weekly and monthly progress. The reports should be interpreted with respect to the skills the child is expected to show at his age level.

As seen above, the participant presents a systematic way of monitoring the child in class. The participants with similar responses indicated that the teacher should use the observation reports to convince the family. Nine other participants mentioned that the teacher can also invite the family to the classroom and monitor their child's behaviors. Participant #7 is one those individuals who proposed that inviting the family to the class and let them see the child in class:

Suzan can invite Ekin's mother and/or father into the classroom for 2-3 days. On the first day, Suzan

can support the child during the day and let the parents observe him. On the second day, she may ask them help her by assisting the child in art activities. On the third day, the teacher should remove the extra help from Ekin and allow the family to observe the child. At the end of the day, the teacher and parents can evaluate Ekin's works.

Like Participant #7, other participants with similar thoughts asserted that the parents should come and observe the child in the classroom environment so that they could realize that Ekin is behind his peers when the extra help is removed. It should be noted that the participants wanted the parents to see how the performance of Ekin changes if he is not given extra support.

Talking with the Family: In two of the strategies for convincing the family, the participants, in general, argued that constant and persistent communication with the parents could help them realize the fact that their child has developmental problems. The analysis of the data indicated that 17 participants encouraged the teacher to talking to the parents persistently to convince them taking the child to a special education teacher or institution, and 10 pointed out that the teacher should share her observations and the child's sample works with the family. Three participants proposed both strategies to convince the family. Participant #33 is one of those who emphasized that the teacher should talk more with the family and share her observations with them:

The best solution is that Suzan should tell the family that she has been helping Ekin throughout the semester, and additionally she should share any artifacts and evidence to show them that a professional would move him forward. The teacher should convince the family.

Another pre-service teacher, Participant #27, also stated that the teacher should share the child's works that he completed on his own. Similarly, several pre-service teachers explained that the parents would be convinced if they see what performance Ekin can show on his own. In other words, they believe that if the parents see that their child is behind his peers they could be convinced to see a special education professional. For example, Participant #17 presented her thoughts about talking with the family as follows:

If the teacher shares the child's sample works with the parents and inform them about his performance on each work, they may accept the idea of taking the child to a special education center.

As seen above, the participants shared that the teacher should not stop talking with the family even if they do not accept the fact that their child needs special education services. Additionally, they noted that the teacher needs to child's sample works with the family to help them realize the child's developmental delays.

Supporting the Child's Development within the Classroom Environment

The data analysis showed that 20 participants declared that the teacher should continue supporting the child's development within the classroom environment. As noted at the beginning of findings, 17 of these 20 participants also indicated that the teacher should also convince the parents asking for the child's evaluation for special education services; thus, while they wanted the teacher convince the family, they also asked the teacher to continue supporting the child. Participant #4's response illustrates such pre-service teachers' responses:

The teacher should contact with the school administrator and a special education teacher to convince the parents. She may tell them about Ekin's situation and ask for their help. Two teachers, Suzan and a special education teacher, should work together to convince the parents. Additionally, Suzan should not stop supporting Ekin's development.

Another participant, Participant #11, stated that the teacher should support the child and added that such support was very important for the child:

Suzan should not stop supporting the child. Otherwise, the child will feel disappointed and will not receive his teacher's help which may be the only source of support.

Participant #26 also agrees that the teacher should continue supporting Ekin. The participant indicated that the teacher needs to highlight individual differences across the students while designing the classroom environment:

Suzan should present various alternatives to her students. She may give them two different tasks to the students; one is easy and one is more difficult. She needs to ask the students to choose whichever they want to complete. During the task implementation phase, she should let them free and do what they want, not what she has in her mind.

Discussion

The purpose of this study was to explore if a dilemma case would promote theory-practice connections in early childhood teacher education. The results suggest that dilemma cases have promising capacity to promote theory-practice connections. The data documented a variety of problem solving strategies that connects theory and practice. For instance, the strategies of talking more with the family, asking for help from the school administration, sharing observations and the child's sample works with the family and allowing the family to monitor the class were reflection of their knowledge gained in the program. The impact of the course content the participants were exposed to during the "inclusion" course was evident in their essays. Their suggestions of cooperating with other professionals, cooperating with the parents effectively and observing systematically were parts of the course content that were found in data (Batu & Kırcaali İftar, 2009). Participants' suggestions of the techniques to support Ekin's and other children's development in an inclusion class, especially the modification of tasks, - preparing tasks in different achievement levels- was the reflection of the "differentiated instructional strategies" (Tomlinson, 2003) that were shared with the class during the semester. These topics were components of the theoretical body of knowledge covered in class and their appearance in data indicated the impact of the *Inclusion* course on the participants. As a result, the case analyses provided a venue for the participants to relate theory and practice.

It is also important to note that participants used ideas from their diverse background knowledge gained during the early childhood education program; they did not limit their answers only to the content of the "inclusion" class where the data of the present study was collected. The early childhood teacher education curriculum in Turkey includes courses that help pre-service teachers learn how to communicate and work with parents, teach young children with special needs and use a variety of teaching methods in early childhood classrooms (Atay-Turhan et al., 2009). The data contained the traces of their insight about the importance of parent-school cooperation and parent involvement strategies that were introduced to the participants as a part of the "parent involvement in early childhood education" course that they had taken in the first semester of their senior year. Organizing sessions to observe the child with parents and sharing her personal observation reports with parents are

two of the strategies that can exemplify those traces. It is evident that reflecting on an ill-structured problem –a dilemma- helped participants generate useful ideas and apply theoretical knowledge into a real life situation. The pre-service teachers' strategies can easily be listed under the headings of "the strategies to involve families and maintain effective home-school partnerships" (Diss & Buckley, 2005). Their approach to the family described in the dilemma case is sensitive and corresponds with the current approach to the families of children with disabilities suggested in literature (Ray, Kinder, & George, 2009; Ulrich & Bauer, 2003).

Another interesting observation is that all of the participants approached the problem from the child's perspective and their solution strategies focused on the child's needs. Some participants gave the priority to convincing the parents because they want the child to get appropriate education as soon as possible. On the other hand, others focused on supporting the child's development as much as the teacher (Suzan) can do within the possibilities of an early childhood classroom since Ekin's parents were in denial. Also, some of the pre-service teachers' strategies to convince the parents about the necessities of their son's life show pre-service teachers' sensitiveness towards the situation and abilities of effective communication. For instance, allowing the family to monitor the child in class, sharing her observations and the child's sample works with family are strategies that create cognitive conflict in parents' minds and may allow them to realize the child's situation better. Hence, the data reveals the participants' moral and caring perspectives.

The present research indicates that the use of a dilemma case in early childhood teacher education provided an opportunity for pre-service teachers to bridge the theory and practice, and also helped them develop effective solution strategies to resolve the given dilemma. The solution strategies developed in this study can be results of morality and training in the field, as well as other factors, or a combination of all. In any case, using a real dilemma case allowed the early childhood pre-service teachers develop ideas that were original, sensitive and contain the traces of their background knowledge. These findings and previous research studies (Lundeberg et al., 1999) indicate that teacher educators should consider integrating the case-based pedagogy into the teacher education courses. Additionally, it can naturally be claimed that in-service teacher education efforts can surely contain analyses of and discussion about teaching cases.

Limitations and Future Research

The present study provided worthwhile and interesting findings with solid contribution to the field of early childhood teacher education; yet, it still has a few limitations. The study was conducted in a public university in a metropolitan city with 48 pre-service early childhood teachers. Although a national teacher education curricula guide all early teacher education programs, the background of the pre-service teachers and instructors, and location of the teacher education institution can change outcomes of research studies. Additionally, the findings are limited to the analyses of a single dilemma case; perhaps, cases portraying different teaching dilemmas would yield different aspects of the theory and practice connection. Finally, it should be noted that this study was conducted with pre-service teachers; so, their responses are mainly limited to what they had gained from their coursework and limited field experiences. In-service teachers would respond to the dilemma case considerably different from pre-service teachers as they have extensive teaching experience where they have experienced similar dilemmas; so, the findings of the present study are limited to what pre-service teachers know about teaching young children and special education. In order to address the limitations of the study, similar studies should be carried out in different settings with different characteristics. Such studies will increase the validity of the findings. Additionally, future researchers should investigate the effect of using case-based pedagogy by utilizing different dilemma cases in multiple formats such as written cases, video cases and multimedia cases. It should also be noted that online environments should be considered to examine the use of teaching cases in early childhood teacher education. Finally, further research should involve in-service early childhood teachers as well as pre-service teachers to see how the findings change when participants with extensive teaching experience.

References

Atay-Turhan, T., Koç, Y., Isiksal, M., & Isiksal, H. (2009). The new Turkish early childhood teacher education curriculum: A brief outlook. *Asia Pacific Education Review, 10* (3), 345-356.

Barnes, L. B., Christensen, C. R., & Hansen, A. J. (1994). *Teaching and the case method* (3rd ed.). Boston: M.A.: Harvard Business School Press.

Batu, S., & Kırcaali İftar, G. (2009). *Kaynaştırma*. Ankara: Kök Yayınları.

Bencze, L., Hewitt, J., & Pedretti, E. (2001). Multi-media case methods in preservice science education: Enabling an apprenticeship for praxis. *Research in Science Education, 31*, 191–209.

Bogdan, R., & Biklen, S. K. (1992). *Qualitative research for education* (2nd ed.). Needham Heights, MA: Allyn and Bacon.

Bonk, C. J., & Zhang, K. (2008). *Empowering online learning: 100+ activities for reading, reflecting, displaying, and doing*. San Francisco, CA: Jossey-Bass.

Bransford, J., Darling-Hammond, L., & LePage, P. (2005). Introduction. In L. Darling-Hammond & J. Bransford (Eds.), *Preparing teachers for a changing world: What teachers should learn and be able to do* (pp. 1-39). San Francisco, CA: Jossey-Bass.

Copple, C., & Bredekamp, S. (2009). *Developmentally appropriate practice in early childhood programs serving children from birth through age 8* (3rd ed.) Washington, DC: National Association for the Education of Young Children.

Diamond, K. E., Hestenes, L. L., Chakravarthi, S., & Li, L. (2009). Including young children with disabilities in preschool: Moving forward from 1994. In E. L. Essa & M. Burnham (Eds.), *Informing our practice: Useful research on young children's development* (pp. 241-251). Washington, DC: National Association for the Education of Young Children.

Diss, R., & Buckley, P. (2005). *Developing family and community involvement skills through case studies and field experiences.* Upper Saddle River, NJ: Pearson.

Flynn, A., & Klein, J. (2001). The influence of discussion groups in a case-based learning environment. *Educational Technology Research & Development*, *49* (3), 71-86.

Grossman, P. L. (2005). Research on pedagogical approaches in teacher education. In M. Cochran-Smith & K. Zeichner (Eds.), *Review of research in teacher education* (pp. 425-476). Washington D. C.: American Educational Research Association.

Harrington, H. L. (1995). Fostering reasoned decisions: Case-based pedagogy and the professional development of teachers. *Teaching & Teacher Education, 11* (3), 203-214.

Jonassen, D. H. (1997). Instructional design models for well-structured and ill-structured problem-solving learning outcomes. *Educational Technology: Research and Development*, *45* (1), 656–694.

Jonassen, D. H. (2000). Toward a design theory of problem solving. *Educational Technology: Research and Development*, *48* (4), 63–85.

Koc, Y., Peker, D., & Osmanoglu, A. (2009). Supporting teacher professional development through online video case discussions: An assemblage of preservice and inservice teachers and the case teacher. *Teaching and Teacher Education, 25* (8), 1158-1168.

Kohler, F., Henning, J. E., & Usma-Wilches, J. (2008). Preparing preservice teachers to make instructional decisions: An examination of data from the teacher work sample. *Teaching and Teacher Education, 24* (8), 2108-2117.

Korthagen, F. A. J., Kessels, J. P. A. M., Koster, B., Lagerwerf, B., & Wubbles, T. (2001). *Linking practice and theory: The pedagogy of realistic teacher education.* Mahwah, NJ: Lawrence Erlbaum.

Lee, K., & Choi, I. (2008).Learning classroom management through web-based case instruction: Implications for early childhood teacher education. *Early Childhood Education Journal, 35,* 495-503.

Lincoln, Y. S., & Guba, E. G. (1985). *Naturalistic inquiry.* Newbury Park, CA: Sage Publications.

Lundeberg, M. A. (1999). Discovering teaching and learning through cases. In M. A. Lundeberg, B. B. Levin & H. L. Harrington (Eds.), *Who learns what from cases and how?: The research base for teaching and learning with cases* (pp. 3-24). Mahwah, NJ: Lawrence Erlbaum Associates.

Lundeberg, M. A., & Fawver, J. E. (1994). Thinking like a teacher: Encouraging cognitive growth in case analysis. *Journal of Teacher Education, 45* (4), 289-297.

Lundeberg, M. A., Levin, B. B., & Harrington, H. L. (1999). *Who learns what from cases and how?: The research base for teaching and learning with cases.* Mahwah, NJ: Lawrence Erlbaum Associates.

Masingila, J. O., & Doerr, H. M. (2002).Understanding preservice teachers' emerging practices through their analyses of a multimedia case study of practice. *Journal of Mathematics Teacher Education, 5,* 235-263.

Melekoglu, M. A., Cakiroglu, O., & Malmgren, K. W. (2009). Special education in Turkey. *International Journal of Inclusive Education, 13* (3), 287-298.

Naumes, W., & Naumes, M. J. (2006). *The art & craft of case writing* (2nd ed.) New York: M.E. Sharpe Inc.

Ozretich, R., Burt, L., Doescher, S., & Foster, M. (2010). *Case studies in early childhood education: Implementing developmentally appropriate practices.* Upper Saddle River, N.J.: Prentice Hall.

Ray, J., Kinder, J., & George, S. (2009) Partnering with families of children with special needs: One parent's advice. *Young Children, 64* (5), 16-22.

Sapon-Shevin, M. (2008).Learning in an inclusive classroom. *Educational Leadership, 66* (1), 49-53.

Schrader, P. G., Leu, Jr. D. J., Kinzer, C. K., Ataya, R., Teale, W. H., Labbo, L. D. et al. (2003). Using Internet delivered video cases, to support preservice teachers' understanding of effective early literacy instruction: An exploratory study. *Instructional Science, 31*, 317-340.

Stacey, S. (2009). *Emergent curriculum in early childhood settings: From theory to practice.* MN: Redleaf Press.

Strauss, A., & Corbin, J. M. (1998). *Basics of qualitative research: Techniques and procedures for developing grounded theory.* Thousand Oaks, CA: Sage Publications.

Sulaiman, T., Baki, R., & Rahman, P. Z. M. A. (2011). The level of cognitive ability among learning disabilities children in Malacca Malaysia. *International Journal of Psychological Studies, 3* (1), 69-77.

Tomlinson, C. A. (2003). *Fulfilling the promise of the differentiated classroom.* Alexandria, VA: Association for Supervision & Curriculum Development.

Ulrich, M. E., & A. M. Bauer. (2003). Levels of awareness: A closer look at communication between parents and professionals. *Teaching Exceptional Children, 35* (6), 20–24.

Willis, J. (2007). *Brain-friendly strategies for the inclusion classroom.* Alexandria, VA: Association for Supervision & Curriculum Development.