

PRESCHOOL TEACHERS' SELF REPORTED BELIEFS ON INTEGRATED
CURRICULUM: INTEGRATION OF VISUAL ART WITH OTHER
ACTIVITIES

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ABSTRACT

PRESCHOOL TEACHERS' SELF-REPORTED BELIEFS ON INTEGRATED CURRICULUM: INTEGRATION OF VISUAL ART WITH OTHER ACTIVITIES

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The aim of this study is to investigate preschool teachers' beliefs about integration of visual art with other activities in early childhood settings. More specifically, the present study examined the effects of teachers' year of experiences, their educational background and whether they take a course which is related to visual art or not on teachers' beliefs about integrated curriculum and integration of visual art with other activities.

Preschool teachers were asked to complete "teachers' beliefs about integration of visual art" questionnaire which was developed by the researcher. It includes four parts: demographic information, teachers' beliefs about integration, teachers' beliefs about integration of visual art with other activities, and the status of the integrated curriculum in early childhood education.

The participants of this study consisted of 255 preschool teachers working with children between the ages of 5 to 6. 118 participants were public pre-school teachers whereas 137 of them were private pre-school teachers in Ankara.

The results revealed that there were significant relationship between teachers' year of experience and their beliefs about integration of activities and teachers' perceived role of the integrated curriculum in early childhood education. In addition, a significant relationship was identified between teachers' educational background and their beliefs related to integration of visual art with other activities, usage about integration of visual art, and their perceived role or 'place' of the integrated curriculum in early childhood education. Finally, a significant relationship was reported between the last variable, whether the teacher had taken a course related to visual art or not, and with beliefs about integration of visual art with other activities and usage about integration of visual art.

Keywords: Integrated curriculum, teachers' beliefs, visual art, integration of visual art with other activities.

ÖZ

OKUL ÖNCESİ ÖĞRETMENLERİNİN SANATIN DİĞER ETKİNLİKLERLE BÜTÜNLEŞTİRİLMESİ KONUSUNDAKİ İNANISLARI

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Bu çalışmanın amacı 5-6 yaş okul öncesi öğretmenlerinin sanatın diğer etkinliklerle bütünleştirilmesi konusundaki inanışlarının incelenmesi ve bu bilginin öğretmenlerin deneyim yılları, eğitim seviyeleri, ve eğitim hayatları boyunca sanat ile ilgili ders alınması gibi demografik özellikleri arasında olan ilişkinin araştırılmasıdır.

Bu çalışmanın verileri araştırmacı tarafından geliştirilen “öğretmenlerin sanatın bütünleştirilmesi konusundaki inanışları” anketi yoluyla toplanmıştır. Bu anket dört ana bölümden oluşmaktadır. Bu bölümler sırasıyla; demografik özellikler, bütünleştirilmiş program hakkında öğretmen inanışları, sanatın diğer etkinliklerle bütünleştirilmesi konusundaki öğretmen inanışları, ve bütünleştirilmiş programın okul öncesi eğitimdeki yeri hakkındaki öğretmen inanışlarıdır.

Çalışmanın katılımcıları Ankara ili merkez ve ilçelerinde bulunan devlet ve özel okullarda çalışan, 5-6 yaş okul öncesi öğretmenleri arasından seçilmiştir. Bu çalışmaya toplam 255 okul öncesi öğretmeni katılmıştır. Çalışmaya katılan 118 okul öncesi öğretmeni devlete bağlı okul öncesi eğitim kurumlarında çalışırken, 137 okul öncesi öğretmeni ise özel okul öncesi eğitim kurumlarında çalışmaktadırlar.

Bu alıřmanın sonucunda, alıřmaya katılan ğretmenlerin deneyim yılları ile bütönlöřtirilmiş program, ve bütönlöřtirilmiş programın okul öncesi eēitimdeki yeri hakkındaki inanışları arasında anlamlı bir ilişki gözlenmiştir. Arařtırmadan elde edilen diēer bir sonuç ise; ğretmenlerin eēitim seviyeleri ile sanatın diēer etkinliklerle bütönlöřtirilmesi konusundaki inanışları, sanatın bütönlöřtirilmiş program ierisinde kullanılması, ve bütönlöřtirilmiş programın okul öncesi eēitimdeki yeri hakkındaki inanışları arasında anlamlı bir ilişki bulunmasıdır. Arařtırmadan elde edilen başka bir sonuç ise; ğretmenlerin eēitim hayatları boyunca sanat ile ilgili ders almaları ile sanatın diēer etkinliklerle bütönlöřtirilmesi konusundaki inanışları ve bütönlöřtirilmiş program ierisinde kullanılması ile ilgili inanışları arasında bulunan anlamlı ilişkidir.

Anahtar Kelimeler: Bütönlöřtirilmiş program, ğretmen inanışları, sanat, ve sanatın diēer etkinliklerle bütönlöřtirilmesi

TO MY FAMILY & MY LOVE

Osman, Hamide, and Emre ÖZTÜRK &

İsmail Salih YILMAZTEKİN

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LIST OF SYMBOLS

BR: Brain Research

DAP: Developmentally Appropriate Practice

DBAE: Discipline-Based Art Education

IAS: The Instructional Activities Scale

MI: Multiple Intelligence

NAEA: National Art Education Association

NAEYC: National Association for the Education of Young Children

TBS: The Teacher Beliefs Scale

CHAPTER I

INTRODUCTION

Integrated curriculum has been very popular for educators who have discussed it deeply for many years (Czerniak, Weber, Sandmann, Ahern, 1999). In fact, according to Vars (2001), the concept of integrated curriculum has been present for more than a century. In the 1930s, the Progressive movement developed a problem centered curriculum. John Dewey (1956, as cited in Etim, 2005) mentioned that there are three curricular sources of the problem centered curriculum which are learner's demands, demands of the society living in a democratic society and content of the subject. As can be seen from Dewey's definition, the problem centered curriculum highly resembles today's curriculum integration (Beane, 1993).

Integrated curriculum can be defined in various ways (Brazee & Capelluti, 1995; Drake, 1998; Jacobs, 1989). These definitions are different from each other in terms of the degree of integration. To begin with, Drake (1998) stated that most specialists believe integrated curriculum to be a continuous process involving many connections. This process involves various steps which are traditional, fusion, within one subject, multidisciplinary, interdisciplinary and transdisciplinary. These steps will be discussed in the next chapter in more depth. On the other hand, Etim (2005) defined integrated curriculum as a pedagogical pathway which is student-centered. This pathway focuses on a theme in which real life problems and issues are handled within different subject areas. According to Brazee and Capelluti (1995), integrated curriculum is related to the holistic view of learning. It encourages students to analyze the world as a whole rather than as separate parts. Integrated curriculum emphasizes questioning method, a method which addresses appropriate questions to students rather than relying on traditional subject methods. Therefore, it emphasizes students' needs and their intellectual development through activating learners' thinking. In addition to these definitions, it is important to understand the principles

of learning and teaching in integrative curriculum (Brazee & Capelluti, 1995; Mallery, 2000).

To begin with, integrated curriculum is student-oriented. Hence, integrated curriculum has many advantages for learners. For example, integrated curriculum helps children to improve their social and academic life. Moreover, it assists children to understand their environment in depth and to look at it as a whole. Also, it helps to develop curriculum in relation to students, creates connections among main concepts, and to create interest and promote motivation in the school (Berlin, 1994; George, 1996; Mason, 1996). Furthermore, integrated curriculum includes assisting students to understand and to create connections between subjects and among different subject areas.

Secondly, integrated curriculum involves different subject areas. These subject areas integrate a theme which is related to real life experiences and problems. The reason why the theme has to be integrated and related to the real world is to create connection between the wide networks of distance that involves different academic disciplines. In order to gain different perspectives of these disciplines such as science, history or philosophy, mathematics, and art, each subject should be integrated into the other lessons equally; hence, teachers and students will see that there is actually no difference between all these subjects (Clark, 1995).

Thirdly, in early childhood education, integrated curriculum emphasizes the whole child model offering a wide range of experiences such as visual, oral, and kinesthetic (Walker, 1995). This model emphasizes whole development, holistic model of child development (Schirmacher, 2001). In other words, the integrated curriculum supports equal development of the physical, social, emotional, cognitive, and creative domains of students.

In early childhood education, visual art is an excellent way to support children's whole development. In other words, visual art improves children's different developmental areas. For example, through visual art, children understand their world and can express themselves (Danko & Slutsky, 2003). Moreover, it supports physical development and manipulative activities. That is, visual art activities provide experience and practice in developing and refining gross motor or

large muscle skills (Spodek, 1993). Furthermore, with the help of visual art, children can learn to use many skills such as pre-reading and pre-math skills. Therefore, eye-hand coordination is enhanced. In terms of social development, young children are egocentric and may need assistance in learning how to share; wait patiently; take turns; listen to others; and respect rights, and ideas of others (Nikoltsos, 2000). Visual art also helps to develop these social skills. Moreover, visual art is a wonderful tool to use in fostering children's self-esteem. That is, with the help of visual art children can gain confidence in oneself and feel good about one's self (Alvino, 2000). Visual art is also known to contribute to emotional development. Visual art is a pleasant activity for children. To illustrate, children can show happiness, joy, and pride in their works. Moreover, visual art assists children in engaging in nonverbal communication and language. Therefore, they express everything related to their experiences such as objects, people, places, events. Visual art allows children the freedom to express themselves by drawing or shaping plasticine, or clay. Freedom is important for children because developmentally that is what they need in order to grow (Alvino, 2000). For cognitive development, on the other hand, visual art allows children to show their understandings about the world. This leads to dealing with variety of people, places, and objects. (Schirmacher, 1993). Moreover, through visual art, children learn about the concepts of color, shape, size, line, texture, and other artistic elements. For creative development, visual art allows children to express their own creativity, originality and individuality. That is, children's artistic expressions may be vaguely similar yet still significantly different from all others (Schirmacher, 1993). Therefore, as can be seen, visual art is a core element of the early childhood curriculum.

Visual art is considered to be a core element of the early childhood curriculum as it can be manipulated to teach something to children. In fact, in early childhood education, it can be an excellent way to apply some other activities to children. Therefore, in this study, visual art is an important element of integrated curriculum. This study hopes to identify the role or 'place' of visual art in integrated curriculum. For that reason, firstly the description of visual art is defined for this study. Art is stated as an activity in which children work creatively in the various

appropriate art media such as crayons, plasticity, expressing their individual thoughts, feelings, and perceptions (Herberholz & Hanson, 1995). In general, art activities in early childhood education include graphic and plastic arts, music, movement or dance, and creative dramatics and other language arts (Spodek, 1993). In this study, visual art is stated as two-dimensional activities such as painting, drawing, printmaking, collage, and three-dimensional activities such as clay, play dough, assemblage, and construction with different materials such as waste materials.

Integration of visual art with other activities can be seen in the literature. For example, most people think that science and art are different from each other. However, others believe that the backgrounds of these are the same in terms of feeling for rightness of fit. In all, it is seen that both of them can be integrated with each other in order to foster teaching (Eisner & Powell, 2002). Especially, history component of social studies can be seen as powerful area of visual art integration such as teaching history and historic themes (Manifold, 1995). In addition to this, although there is no prescribed method of integrating visual art and the social studies, the integration should be balanced. Furthermore, using visual art in math concepts shows that visual art works completely support children's learning skills. That is, activities such as building model houses and making puppets help children gain mathematical concepts easily (Herberholz & Hanson, 1995).

Teachers are important figures which provide all of the activities that are mentioned above. They use their educational background and their practices in order to plan and apply these activities. Therefore, it can be stated that teachers may directly influence children's academic, social and individual development. At this point, teachers' characteristics or practices at school affect the educational process. Some studies emphasize the teachers' thought processes which affect their teaching styles. According to Charlesworth, et al. (1993), in light of teachers' beliefs about what they think to be important and what they think not to be important, teachers' behaviors about planning, teaching and assessing can be understood. In deed, early childhood teachers gain this information while working with children. They understand and have knowledge about the meaning of planning, teaching and assessing with the help of the educational concepts and values which have gained.

Therefore, teachers' perceptions and beliefs are shaped by their actions and their classroom decisions (Spodek, 1988). According to Clark and Peterson (1986), teachers' beliefs and theories show important and plentiful knowledge which influence their planning, interactive thoughts and decisions. In light of this, teachers' background plays an important role in their teaching practice. In fact, it can be stated that teachers' beliefs help to understand their classroom practices. Actually, classroom practices are good indicators of their beliefs. According to Kagan and Smith (1988), the results of their study showed that teachers' own perceptions about their behaviors and their real behaviors in the classroom are highly interrelated. Moreover, Vartuli (1999) found that there was consistency between teachers' beliefs and their self-reported and observed practices. In addition, she found that teachers' beliefs were closer to NAEYC guidelines when compared to their practices. On the other hand, some studies showed the inconsistency between teachers' beliefs and their practices (Hatch & Freeman, 1988; McCarty, Abbott-Shim & Lambert, 2001; Verma & Peters, 1975). According to Saracho and Spodek (2003), there are various reasons for this inconsistency. These were the type of research methods, complex school system, and teachers' opposing beliefs. In addition to these, the last explanation is that teachers might hold all of their beliefs as equal strengths (Spodek, 2001). All of these showed that understanding teachers' beliefs are closely related to their practices. In order to reach teachers' beliefs about integrated curriculum, teachers' perceptions about their practices are very important.

Analysis of teachers' thoughts about art indicates that many teachers tend to agree on visual art's impact on promoting a child's sense of personal worth. They view visual art as a way in which a child can gain confidence and a sense of being wanted, or his view of the world becoming accepted (Schirmacher, 1993). Most teachers having realized the importance of visual art in young children's education, use visual art in their activities by applying integrated art curriculum (Schirmacher, 1993). As a result, applying integrated art curriculum may be affected by their beliefs and practices. For that reason, teachers' beliefs about the subject are very important because these beliefs are likely to affect children's development.

1.1. Research Questions of the Study

Teachers' qualifications influence the quality of care and education which supports young children's development (Bowman, Donovan, & Burns, 2001; Phillips, Mekos, Scarr, McCartney, & Abbott-Shim, 2000; Whitebook, Sakai, Gerber, & Howes, 2001). For this study, there are three teacher qualifications which are used to understand the relationships with their beliefs. These are teachers' years of experience, their educational background, and taken courses related to visual art during their school life.

The first teacher qualification is years of experience. In the literature, more experienced teachers reported less acceptance of Developmentally Appropriate Practices (DAP) than teachers who have less years of experience. According to previous U.S. studies, years of experience was not an important factor to affect teachers' beliefs and practices (Bryant, Clifford, & Peisner, 1991; Stipek, Daniels, Galluzzo, & Milburn, 1992), but was an important factor to influence teachers' beliefs and reported practices in S. Korean studies (Nam, 2001; Park, 1994). In this particular study, years of experience variable was conducted to see whether there is a relationship between teachers' beliefs about integration of visual art with other activities and teachers' years of experiences in Turkey.

The second teacher qualification is educational background. According to McMullen and Alat (2002), educational background is one of the agents of beliefs in early childhood that affect "policy", "teacher education reform", and "advocacy initiatives". Educational background is stated as the level of overall education and the nature of content which was received during that education (McMullen & Alat, 2002). In this study, educational background was examined because of the importance of the quality of teacher education. With the help of this study, teacher education programs related to early childhood education can be examined in some ways. In Turkey, preschool teachers are expected to have graduated from related departments in universities, two-year vocational schools, and high schools. Therefore, the aim of this study is to help educational specialists understand the importance of visual art in teachers' life.

The last teacher qualification is whether participants had attended any courses related to visual art or not. In the literature related to teachers' beliefs, there were some studies which examined the courses which were taken by teachers during their school life. For example, Lumpe, Haney, and Czerniak (2000) assessed teachers' beliefs about their science teaching context. They used some background variables in order to see the teachers' beliefs. One of them is the number of science teaching method courses taken. It can be drawn from this study; taken courses related to visual art may have significant effects on teachers' beliefs. For that reason, courses are defined in this study as visual art, instructional materials, and other visual arts.

For this study, four open ended questions were chosen to analyze teachers' beliefs. These questions scrutinized teachers' views on integrated curriculum in general, integration of visual art with other activities, usage about integration of visual art, and role of the integrated curriculum in early childhood education. The questions are as follows:

1. What are your thoughts regarding integrated curriculum in early childhood education? [Okul öncesi dönemde etkinliklerin birbirleri ile bütünleştirilmesi konusunda ne düşünüyorsunuz?] (Q7)
2. Considering your previous applications/practices, do you believe it is possible to integrate visual art with other activities? [Uygulamalarınız sırasında yaşadığınız deneyimlerden yola çıkarak sizce görsel sanatların diğer etkinliklerle bütünleştirilmesi konusunda ne düşünüyorsunuz?](Q15)
3. Do you yourself integrate visual arts in your activities? If yes, HOW? Please explain. [Siz görsel sanatları diğer etkinliklerle bütünleştirerek kullanıyor musunuz? Evet ise NASIL KULLANIYORSUNUZ?](Q17)
4. What are your thoughts regarding the role of integrative curriculum in early childhood education? [Bütünleştirilmiş programın okul öncesi müfredatındaki yeri hakkında ne düşünüyorsunuz?](Q20)

This study will attempt to address the following research questions:

- *Is there any statistically significant relationship between years of experience and teachers' beliefs?*
 - 1.1.1. Research Question 1. Is there a relationship between years of experience and teachers' beliefs related to integrated curriculum?
 - 1.1.2. Research Question 2. Is there a relationship between years of experience and beliefs related to integration of visual art with other activities?
 - 1.1.3. Research Question 3. Is there a relationship between years of experience and beliefs related to usage about integration of visual art?
 - 1.1.4. Research Question 4. Is there a relationship between years of experience and beliefs related to the teachers' perceived role of the integrated curriculum in early childhood education?
- *Is there any statistically significant relationship between teachers' educational background and teachers' beliefs?*
 - 1.1.5. Research Question 5. Is there a relationship between teachers' educational background and teachers' beliefs related to integrated curriculum?
 - 1.1.6. Research Question 6. Is there a relationship between teachers' educational background and beliefs related to integration of visual art with other activities?
 - 1.1.7. Research Question 7. Is there a relationship between teachers' educational background and beliefs related to usage about integration of visual arts?
 - 1.1.8. Research Question 8. Is there a relationship between teachers' educational background and beliefs related to the teachers' perceived role of the integrated curriculum in early childhood education?
- *Is there any statistically significant relationship between whether teachers who attend the courses on visual art or not and teachers' beliefs?*
 - 1.1.9. Research Question 9. Is there a relationship between attended courses on visual art or not and teachers' beliefs related to integrated curriculum?

1.1.10. Research Question 10. Is there a relationship between attended courses on visual art or not and beliefs related to integration of visual art with other activities?

1.1.11. Research Question 11. Is there a relationship between attended courses on visual art or not and beliefs related to usage about integration of visual arts?

1.1.12. Research Question 12. Is there a relationship between attended courses on visual art or not and beliefs related to the teachers' perceived role of the integrated curriculum in early childhood education?

1.2. Significance of the Study

Some studies have been conducted with teachers about visual art and integrated curriculum. Specifically, one study conducted by Hull (2003) examined the beliefs of teachers about arts integrated in the curriculum in Oklahoma K-12 schools by using Q methodological study. Moreover, another study conducted by Lai (2000) showed Taiwanese kindergarten teachers' and principals' beliefs and attitudes concerning developmentally appropriate art education. Although these studies are very important for the field of education, they were conducted in other countries and with teachers for older age children. Thus, the literature lacks studies of pre-school teachers' beliefs related to visual art integration. Hence, this study aims to close this gap by examining preschool teachers' beliefs on integration of visual art activities.

As a result of the previous studies conducted on the issues of integrated curriculum and visual art in early childhood settings, this study is significant because it emphasizes teachers' beliefs. That is, it combines integrated curriculum and visual art applied in early childhood education. In Turkey, there are some studies which are related to the some specific issues such as integrated curriculum, visual art, and teachers' beliefs, but they are studied in isolation. Related to visual art, the previous studies tried to examine the art in early childhood education (Ulutaş & Ersoy, 2004), the interdisciplinary-thematic approach in art education (İşler, 2004), children in early childhood years and art criticism (Akbarak & Kargı, 2003), the effects of drawing lessons on children's physical and mental development in preschool

(Dilmaç, 2002), how preschool teachers plan, implement, and evaluate art activities (Turla, 1995), and the art education applied at the pre-school educational institutes according to teacher's opinions (Aşık, 2005). Moreover, there were teachers' belief studies in the literature. These are Turkish teachers' beliefs about developmentally appropriate practices in early childhood education (Erdiller & McMullen, 2003), early childhood teachers' attitudes towards science teaching (Ünal & Akman, 2006), early childhood teachers' opinions about application of teaching math (Bali & Boz, 2003), investigation of the attitudes of preschool teachers toward computers (Aral, Ayhan, Ünlü, Erdoğan, & Ünal 2007), and the attitudes of preschool teachers toward parent involvement (Kaya, 2007). However, this current study aims to study the relationship between visual art, integrated curriculum, and teachers' beliefs. Hence, this research examines preschool teachers' beliefs about integration of visual art with other activities.

In Turkey, there is a lack of studies in measuring the beliefs of preschool teachers about integration of visual art activity with other activities. It can be stated that the importance of integration of activities has not yet been emphasized in our country. Nowadays, early childhood educators prefer to use some specific approaches such as "Project Approach" and "Reggio Emilia Approach". Therefore, early childhood educators have seen the importance of integration of visual art in the early childhood curriculum. At this point, this study is considered to be significant in emphasizing the educators' attention on the importance of integration of visual art. Moreover, the study shows the importance of pre-service teacher training. That is, the courses and the experiences are considered as fundamentals of teachers' educational life. Therefore, this study provides some benefits for academicians, curriculum developers, and specialists in the early childhood education field.

In addition to this, the instrument of this study was developed specifically for this study. The instrument may be applied for further studies. Moreover, it provides useful information for researchers to develop new ones with the same or related topics.

1.3. Definition of the Terms

The following terms need to be defined for the purpose of this study:

Integrated Curriculum: Integrated curriculum is the combination of two or more disciplines to form one curriculum (Walker, 1995).

Preschool Teacher: Preschool teacher is a person who works in early childhood centers, who prepares and applies annual and daily plans according to educational programs, and who prepares educational materials for activities (Ministry of National Education, Regulations on Early Childhood, 2004). In this study, preschool teachers who have been working with 5-6 years old children were preferred.

Teachers' Beliefs: Teachers' beliefs and theories show plentiful common knowledge about objects, phenomenon, people, and their associations which influence teachers' planning, thinking, judgments and behaviors in the classroom (Fang, 1996).

Visual Art: Visual art is stated as two-dimensional activities such as painting, drawing, printmaking, collage, and three-dimensional activities such as clay, play dough, assemblage, and construction with different materials such as waste materials (Jalongo & Stamp, 1997; Mayesky, 2002; & Schirrmacher, 2001).

CHAPTER 2

REVIEW OF THE LITERATURE

Chapter Two includes three main parts. In the first part, definitions and theoretical background of integrated curriculum will be presented. After defining integrated curriculum, integrated curriculum continuum models will be given. Moreover, three approaches: Multiple Intelligences (MI), Brain Research (BR), and DAP that support curriculum integration will be examined to present their relationships with integrated curriculum.

The second part involves the studies on teacher beliefs with special emphasis on the curriculum, specifically integrated curriculum. Teachers' belief system is examined to find out the importance of the teachers in the integrated curriculum. Teachers' beliefs in integrated curriculum will be explained for this study.

Finally, the third part includes the place of visual art in the integrated curriculum. The main emphasis will be given to early childhood curriculum. The importance of visual art in the curriculum will be stated and the role in the integrated curriculum procedure will be supported by different resources. Why integration of visual art is so important in early childhood settings will be supported by two significant curriculum models; Project Approach and Reggio Emilia Approach. These models are believed to be a rich source to explain how integrated curriculum supports visual art in early childhood classrooms.

2.1. Definitions and Theoretical Background of Integrated Curriculum

An integrated curriculum is not a contemporary or new method of teaching. John Dewey and Francis Parker, who found the progressive movement in the 1800s and early 1900s, formed the concept of an integrated curriculum (Hinde, 2005). Beane (1995) claimed Dewey's idea of the curriculum to be more applicable because of the inclusion of students' experiences. Combining subjects in order to achieve

goals across the curriculum is strengthened as an instructional method. When the term “integrated curriculum” was first utilized early in the twentieth century, one of the main goals was reorganizing existing lesson plans with different subjects (Beane, 1997).

What is an integrated curriculum is an unresolved debate. In fact, there is disagreement in a common description of integrated curriculum (Czerniak et al., 1999). In fact, there have been different definitions of integrated curriculum (Beane, 1993; Beane, 1997; Brazee and Capelluti, 1995; Fogarty, 1991; Jacobs, 1989; Post, Ellis, Humphreys & Buggery, 1997; Walker, 1995). The most general definition in education for integrated curriculum is combining two or more disciplines to form one curriculum (Walker, 1996). The specific definition is represented by Humphreys, Post, and Ellis (1981) who defined integrated curriculum as a method to guide children to attain knowledge relevant to their environment through means of various disciplines. In addition to these definitions, integrated curriculum is stated as a more detailed way to create connection between the instruction and learning process. Shoemaker (1989) represented the integrated curriculum as combining different views of curriculum into the wide ranges of the study by the emphasis on holistic view of learning. Similarly, Brazee and Capelluti (1995) emphasized the holistic way of learning and teaching which help students to see the complete picture rather than its separate small pieces. These different perspectives of integrated curriculum are assumed to support students. In fact, Etim (2005), states that integrated curriculum emphasizes themes and real life problems while assisting students to see and to create connections between and among subjects.

According to Beane (1997), integrated curriculum consists of four major aspects: integration of experiences, social integration, integration of knowledge, and integration as a curriculum design.

1. Integration of experiences: ‘Integrative learning’ includes experiences which are stated as ‘unforgettable learning experiences’. This type of learning includes integration in two paths. The first one is that new experiences are “integrated” into schemes which include meaning. The second one is that

arranged or “integrated” past experiences assist when confronting new problem situations.

2. Social integration: One of the essential aims for schools in a democratic society is obtaining shared educational experiences for adolescents with different features and backgrounds. The concept of these experiences include a link for the idea of integration by highlighting on a curriculum which gains some sense of ‘common values’, or a ‘common’ values or ‘common good’ (Beane, 1980; Childs & Dewey, 1933; Hanna, 1946; Hopkins, 1941; Rugg, 1936; Smith, 1927 as cited in Beane, 1997).
3. Integration of knowledge: Theory of organization and usage of knowledge are essential when integrating knowledge into curriculum. The use of knowledge is not known as separate parts as applied in schools, instead of this, it is “integrated” in the context of the real problems and issues.
4. Integration of a curriculum design: The concept of integration is related to a specific type of “curriculum design”. It is stated that essential projects and other activities includes actual implementation of knowledge. Therefore, with the help of these types of projects or activities, the possibility for adolescents’ curriculum integration experiences which include their schemes of meaning and democratic process of problem solving were increased.

In addition to the various definitions of integrated curriculum, interdisciplinary curriculum may be accepted as integrated curriculum (Drake, 1998). Interdisciplinary curriculum is described in “the Dictionary of Education” as:

a curriculum organization, which cuts across subject-matter lines to focus upon comprehensive life problems or broad based areas of study that brings together the various segments of the curriculum into meaningful association (Good, 1973, p. 102).

Generally, all of the definitions of integrated curriculum or interdisciplinary curriculum include (Lake, 1994):

- A combination of subjects
- Emphasis on projects
- Sources that provide more information than textbooks
- Concepts related to each other
- Thematic units as arranging essentials
- Schedules which are flexible
- Students who are grouped flexibly

Although integrated curriculum and interdisciplinary curriculum are generally used to define curriculum integration, there are still other terms that are used to describe it. While Stevenson and Carr (1993) use the term “integrated studies”, Vars (1987) prefers to use the three terms: “correlation”, “fusion” and “core”. Moreover, Maurer (1994) describes interdisciplinary curriculum as “co-related”, “multidisciplinary”, “interdisciplinary” and “integrated day” (Kysilka, 1998).

2.2. Models of Integration

There are three different ways of integration. Jacobs (1989), Fogarty (1991), and Drake (1998) introduce three different ways of integration which have different levels in order to represent the integration process. Moreover, all of these three models have philosophical views and main elements in order to understand integrated curriculum. These models help teachers understand strategies and learning methods to implement integrated curriculum. Hence, in order to organize an integrated curriculum in a successful way, the first step is to understand these three models.

2.2.1. Jacobs' Continuum of Curriculum

Heidi Hayes Jacobs (1989) explained a detailed interdisciplinary model utilizing themes as a curriculum tool to improve the content of the curriculum. Moreover, she highlighted addressing or crucial questions as being collateral “umbrella” that helps students to make connections between different contents. Drake (1998) stated that there are three important ways which help educators in order to develop integrated curriculum in Jacob’s approach. To begin with, Jacobs (1989) suggested educators and students to utilize “brainstorming” for two causes. First, she mentioned that using brainstorming

would supply productive sources in order to achieve learning. Second, using brainstorming would support the learning process which is gained by using the integrated curriculum. Secondly, Jacobs suggested that teachers construct a ‘data box’ for students in the classrooms to make additions from real life and their own experiences. This box helps students to make connections between the subject and their interests. Therefore, this type of teaching method assists teachers to improve the integrated curriculum because it is related to the students’ interests, demands, and tasks including real-life issues. Finally, Jacobs claims that to help educators is to benefit from the knowledge, comprehensive, application, analysis, synthesis, evaluation levels of Bloom’s cognitive taxonomy in order to supply different kind of activities and a detailed teaching goal in the integrated curriculum. She explained that lower degrees of Bloom’s taxonomy produce knowledge which is called consumer knowledge whereas the higher degrees generate new knowledge. Thus, creativeness and critical thinking skills of the students are supported by an achieved teaching goal. Moreover, evaluation will be used to assess various degrees of student cognitive development.

Jacobs’s continuum of integrated curriculum model (1989) included six levels (see Figure 1). These levels vary from discipline-based to complete integration. She defined these levels as ‘degrees’ of integration which are placed on a continuum.

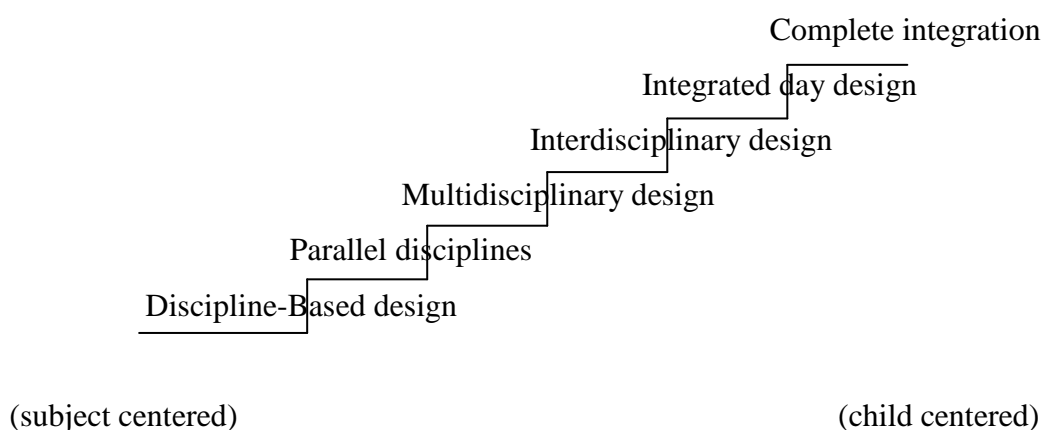


Figure 1. Jacobs’s Continuum of Integrated Curriculum Model

The degrees are defined as follows:

1. **Discipline-Based Design:** This is a traditional design which includes different lessons in different time periods without any integration. Knowledge is represented from separate areas without giving any importance about relationships between them. New material or new base line of knowledge can be introduced with the help of this design.
2. **Parallel disciplines:** The disciplines show themselves separately. That is, teachers generally try to arrange topics to teach some related concepts simultaneously in the separate disciplines.
3. **Multidisciplinary:** Relevant disciplines are arranged formally in order for analysis and study. For example, these disciplines may be fine arts or political history. Creating a “new” subject which is assisted by this type of integration shows an interrelation between existential disciplines.
4. **Interdisciplinary:** Particular units and lessons of the study are designed to arrange all the disciplines which are stated in the curriculum of the school. Themes, concepts or points help to construct the units of the study which come into the usual curriculum. Teachers decide a certain space of time which may be two weeks, a month, or a semester in order to teach the units. That is, there are some certain parts of time which are arranged in the daily or weekly time table in order to accord the interdisciplinary units. Yet, the units do not replace the existential disciplines, they are supplementary to them.
5. **Integrated day:** The interests and needs of the students are supported by a ‘theme-based full-day’ program.
6. **Complete integration:** The curriculum is decided by the students who use their past experiences, demands, and concerns. In New Collage in Sarasota, there is a program which permits students to create their own curriculums including lessons and activities which are more suitable for the aims of the students. There is no common curriculum which applies to all students in order to graduate from this Collage.

She underscores that the lower level of integration is related to a curriculum which is a more subject-centered while the higher level of integration are more child-

centered. She advocated that curriculum should be child-centered curriculum. Hence, teachers should try to apply the higher levels of integration by degrees.

2.2.2 Fogarty's Ten Levels of Curriculum Integration

Robin Fogarty developed a curriculum integration model which was stated as the most particular descriptions of different models (Jenks, 1998). He mentioned that there were ten levels which were related to curriculum integration. These levels are stated between the fragmented approach to a networked approach in order to plan a curriculum (Kysilka, 1998).

Fogarty (1991) has developed ten different levels to integrate curriculum.

1. **Fragmented:** This model is explained as a single discipline. That is, there are main subjects which are math, science, language arts, and social studies. Each one is shown as representing only itself. This model is seen as a traditional curriculum plan which divides lessons into various disciplines. The lessons are seen as separate studies such as mathematics, science, humanities, social studies, art, etc.
2. **Connected:** Each content area of the concepts is related to each other. In addition to this, the linkage is constructed between previous knowledge and newly learned knowledge. This model represents an integration which is stated as simple method. In deed, this model emphasizes only one discipline which includes circumstances and connections.
3. **Nested:** The skills of learning and the skills of organizing are the main points of this model because these are stated within each lesson to know the content of the lesson. In deed, the content is seen as a main part of the lesson, but the teaching skills and organized ideas are focused in the lessons. Integration which occurs in the nested method shows normal consolidation. That is, it is constructed by creating linkage or making consolidations.
4. **Sequenced:** Ideas which are represented in a lesson are reorganized to occur in another lesson. That is, in order to supply a frame for interrelated ideas, organized and arranged subjects and parts are used in spite of teaching these separately.
5. **Shared:** This method uses two different disciplines in order to create one focus. It also adds on ideas as an organizer. Lessons are 'partnered' and the units of the






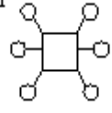




lessons are organized to support ‘overlapping ideas or concepts’. For example, a unit on the Civil War includes two different lessons which are English and history. Hence, English and history are said to be ‘partnered’.

6. Webbed: The main point of this curriculum is using themes. The themes are used to introduce definite conceptions, topics, and skills in the disciplines. The content of the disciplines stay the same, but the themes are selected carefully by educators. A wide range of themes such as cultures, power, time, systems help teachers to select common topics, concepts, and ideas about disciplines.
7. Threaded: A ‘meta curriculum’, is arranged around thinking, social and study skills whereas the content serves as a medium to teach these skills. Also, the teacher exploits concepts about multiple intelligences and technology as learning tool which assists the students to improve their ‘metacognitive skills’. Similar to previous methods, the content stays the same although the process of learning is emphasized.
8. Integrated: All disciplines are worked on by groups of teachers to identify overlapping skills and ideas. Also, they plan how to apply studying units in general teaching time. In summary, the feature of this model is overlapping multiple disciplines which are studied for common ideas, conceptions and behaviors.
9. Immersed: An area of study is examined by students and they refine information in the content areas by using their own views. The integration is the duty of the students. That is, the integration occurs within the students. Teachers or administrators do not intervene in the integration process.
10. Networked: This type of integration needs to rearrange relationships of concepts within and among the different disciplines, and concepts and learning techniques within and among the learners. At this state of integration, the learners lead trying to find the information, concepts and ideas with the help of specialists and other learners as constructing a basis of their own learning. The degree of the integration is completely related to the learners and their teachers.

Fogarty stated three degrees in his continuum of integrated curriculum. The first one is that while spending time within one subject of integrated curriculum, teachers can

utilize the techniques of fragmented, connected, and nested in order to conduct the curriculum. The second one is that while spending time with more than two subjects of integrated curriculum, teachers can utilize sequenced, shared, webbed, threaded, and integrated techniques. The third one is that learners' self-awareness of integration is improved by immersed and networked levels of integrated curriculum (Wu, 2003).

Yang (2000) stated that Fogarty's ten levels of curriculum integration introduce useful techniques for different conditions. Many researchers and educators prefer to use Fogarty's ten levels of integration.

Name	Description	Advantages	Disadvantages
Fragmented 	Separate and distinct disciplines	Clear and discrete view of a discipline	Connections are not made clear for students; less transfer of learning
Connected 	Topics within a discipline are connected	Key concepts are connected, leading to the review, reconceptualization and assimilation of ideas within a discipline	Disciplines are not related; content focus remains within the discipline
Nested 	Social, thinking, and content skills are targeted within a subject area	Gives attention to several areas at once, leading to enriched and enhanced learning	Students may be confused and lose sight of the main concepts of the activity or lesson
Sequenced 	Similar ideas are taught in concert, although subjects are separate	Facilitates transfer of learning across content areas	Requires ongoing collaboration and flexibility, as teachers have less autonomy in sequencing curricula
Shared 	Team planning and/or teaching that involves two disciplines focuses on shared concepts, skills or attitudes	Shared instructional experiences; with two teachers on a team it is less difficult to collaborate	Requires time, flexibility, commitment and compromise
Webbed 	Thematic teaching, using a theme as a base for instruction in many disciplines	Motivating for students, helps students see connections between ideas	Theme must be carefully and thoughtfully selected to be meaningful, with relevant and rigorous content
Threaded 	Thinking skills, social skills, multiple intelligences, and study skills are "threaded" throughout the disciplines	Students learn how they are learning, facilitating future transfer of learning	Disciplines remain separate
Integrated 	Priorities that overlap multiple disciplines are examined for common skills, concepts, and attitudes.	Encourages students to see interconnectedness and interrelationships among disciplines, students are motivated as they see these connections	Requires interdepartmental teams with common planning and teaching time
Immersed 	Learner integrates by viewing all learning through the perspective of one area of interest	Integration takes place within the learner	May narrow the focus of the learner
Networked 	Learner directs the integration process through selection of a network of experts and resources	Pro-active, with learner stimulated by new information, skills or concepts	Learner can be spread too thin, efforts become ineffective

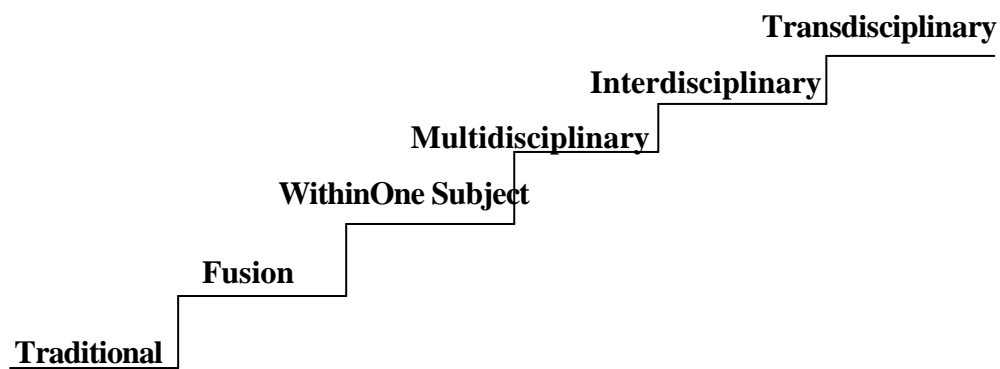
(Source: Lake, 1994, p.4)

Figure 2. Fogarty's Continuum of Integration

2.2.3. Drake's Continuum of Integration

Drake mentioned the curriculum issue by using a continuum of integrated curriculum. She states that teachers should use the continuum from multidisciplinary to interdisciplinary to transdisciplinary approaches.

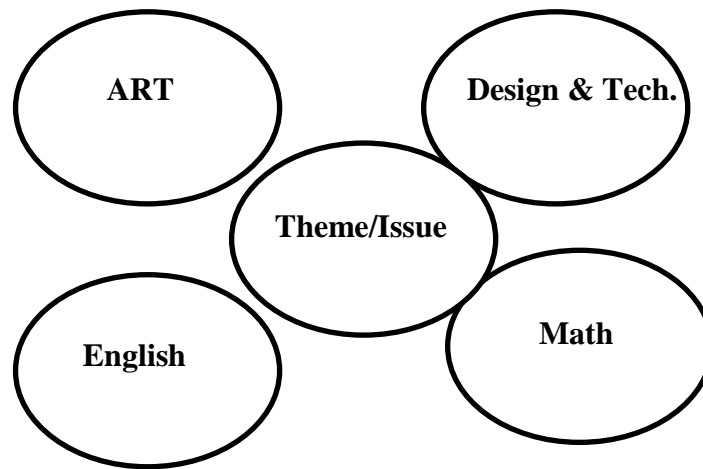
Drake explained six levels of continuum of integration in her theory. Figure 3 shows the levels of the integration. It starts with the traditional level and ends in transdisciplinary level.



(Source: Drake, 1998. p.20)

Figure 3. Drake's Continuum of Integration

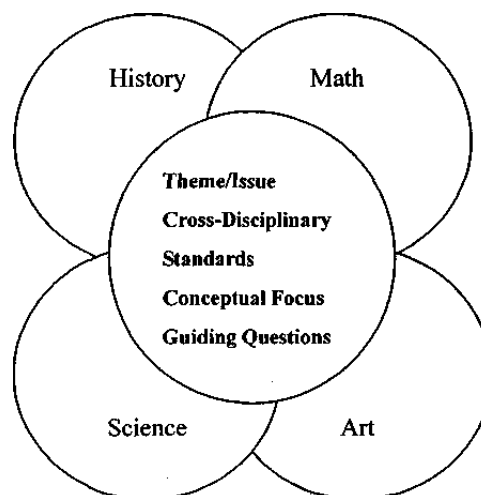
1. **Traditional:** In this level, there is one discipline which helps to construct the teaching process such as science and math.
2. **Fusion:** Different areas of subject are combined for a single topic. For instance, environmental concerns, social accountability, and social behavior collect under a topic such as geography or English.
3. **Within one subject:** One area of subject is composed of other sub-lessons as integration such as physics, chemistry, and biology as science.
4. **Multidisciplinary:** The lessons which are related by a theme or issue are studied simultaneously in different classrooms. In general, it is expected that students should make connections between lessons rather than learn them in explicitly (see Figure 4).



(Source: Drake, 1998. p.22)

Figure 4. Drake's Multidisciplinary Integration

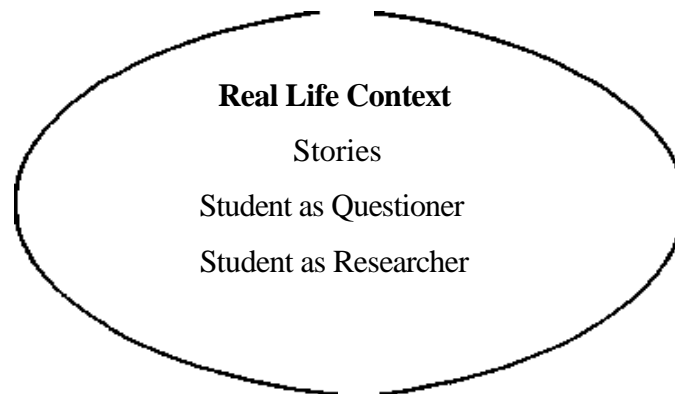
5. **Interdisciplinary:** This level includes different variations. The connections between subjects are stated directly to the students. Interdisciplinary curriculum does not only include the use common themes or issues. With the help of conceptual focus, guiding questions, or across-disciplinary standards, the curriculum is connected together (see Figure 5).



(Source: Drake, 1998. p.22)

Figure 5. Drake's Interdisciplinary Integration

6. Transdisciplinary: This approach is different from other approaches because this approach starts with the disciplines as a real-life context and it highlights personal growth and social responsibility (see Figure 6).



(Source: Drake, 1998. p.23)

Figure 6. Drake's Transdisciplinary Integration

All of these three models presented by Jacobs (1998), Fogarty (1998), and Drake (1998) explain different principles of integrated curriculum which help us to understand curriculum development. Moreover, these models develop important techniques to create successful integrated curriculum design (Wu, 2003). All of these three models include different aspects of the integrated curriculum. For example, Jacobs concentrated on the structure of the curriculum while Fogarty stressed on how the curriculum is taught. Drake also emphasized the continuum from multidisciplinary to interdisciplinary to transdisciplinary approaches and arranged frameworks in order to plan integrated curriculum (Kysilka, 1998).

There are several studies related to these integrated models in order to show the applications of integrated curriculum or interdisciplinary curriculum. In light of the literature about integrated models, the results of the studies demonstrate that this type of teaching supports student achievement as compared to traditional teaching (Cotton, 1982). Latham (1997) emphasizes that an integrated program helps students to improve

their mathematical skills; in fact, results show that grades of females in integrated programs rise dramatically. In addition to academic achievements, integrated curriculum improves children's non-academic skills. For instance, a study reported that students perceived the teaching process as more fun and displayed less disruptive behaviors (Cole, 1994 as cited in Drake, 1998). Similar results have shown that after collecting feedback from students who were sixth-, seventh- and eighth- grade students, while engaging in interdisciplinary units, students showed more enjoyment about learning, found topics more interesting, understood from group work, and showed high quality expression in their work (Davies, 1992). Another research conducted by Geoghegan (1994) showed that students participated in a tribal theme integrated curriculum which includes drama, history, science, social studies, language, and physical and social development on the basis of arts. As a result of this, students understand the importance of showing respect to others and valuing others ideas. Moreover, these activities supported the development of their intrapersonal skills. That is, these activities contributed to the development of their own identities, too. Specifically, it is seen that integrated curriculum provides beneficial opportunities to students and teachers in the learning process. Indeed, according to Lake (1994), integrated curriculum does not include any bad effects on the learning process; furthermore, some students really learned more when integrated curriculum was applied. In addition, she maintains that integrated curriculum enhances teacher cooperation.

2.3. Theoretical Framework

The theory and philosophy can provide opportunity to understand the rationale of why and how educators use integrated curriculum. For this reason, in order to show the relationship between theories and integrated curriculum, three important approaches are considered in this chapter. MI, BR, and DAP which are very important topics in current debates about integrated curriculum. These three approaches support the integrated curriculum in different ways. For example, the theory of MI uses the integrated curriculum in the implementation of the teaching process. While applying the MI curriculum in the classrooms, teachers get assistance

from integrated curriculum models such as using themes. On the other hand, BR and integrated curriculum are related to each other because both of them prove the importance of connectors in the education. That is, if the disciplines are connected to each other in different ways, the learning process can be constructed more easily. Therefore, the knowledge can be obtained in a more meaningful way. Furthermore, the characteristics and basic considerations of the DAP are explained. According to integrated curriculum, DAP explains how the developmental areas- social, cognitive, emotional, physical, and creative are integrated with one another. Hence, when appropriate activities are presented one developmental domain may influence the others. It can be seen that DAP is similar to integrated curriculum because they both support the integration of developmental areas.

2.3.1. Multiple Intelligences

The Theory of Multiple Intelligences was stated by Howard Gardner who first published his book, *Frames of Mind* in 1983. Before Gardner proposed that theory, intelligence was measured by intelligent test scores. One of them was presented by Stanford Binet in order to show individual's high ability levels. These intelligence tests had a problem because they measured only individual's linguistic and mathematical skills (Schiller & Phipps, 2002). On the other hand, MI theory evaluates individual talents and skills as a whole individual rather than only his or her verbal and mathematical skills. In deed, MI theory evaluates intelligence more holistically when compared to IQ tests in terms of human potentials (Fogarty & Stoehr, 1995). Some people wonder why Gardner stated these eight categories as intelligences not talents or aptitudes. Gardner explained that some people used representations like "He's not very intelligent, but he has a wonderful aptitude for music". Therefore he used the term "intelligences" consciously.

Gardner used eight different comprehensive categories or "intelligences" to describe the wide range of human abilities (Armstrong, 2000). These are Linguistic Intelligence, Logical-Mathematical Intelligence, Spatial Intelligence, Bodily-Kinesthetic Intelligence, Musical Intelligence, Intrapersonal Intelligence,

Interpersonal Intelligence, Naturalist Intelligence, and Existential intelligence which has also been added more recently.

There is an interaction between these intelligences to construct different outcomes. For example, while a successful dancer must use musical, spatial, and bodily-kinesthetic intelligences, an effective trial lawyer must combine linguistic and interpersonal intelligences (Moran, Kornhaber, & Gardner, 2006).

In order to understand MI theory in depth, the following points needs to be underscored:

1. Every individual has all eight intelligences.
2. Most individuals can enhance each intelligence to a sufficient level of competency.
3. In general, intelligences work cooperatively in a complicated manner.
4. There are different ways to be intelligent in each classification (Armstrong, 2000).

2.3.1.1. Multiple Intelligences in Schools

Gardner (1983, 1997) proposed a theory which includes curriculum from different types of disciplines. He also stated that curriculum should be related to real life situations. Many educators prefer to use Gardner's theory of MI because this theory advocated that every child has strengths. Generally, educators plan a curriculum which helps students in the learning process. However, the theory of MI represented a curriculum which can be changed according to student's characteristics or needs. With the help of the MI, teachers can provide opportunities to children to use their strengths in order to show what they have learned. For example, students can show their spatial intelligence in their drawings, their musical intelligence in creating a song or producing a melody, or their bodily-kinesthetic intelligence in operating in relationships. The implementation of this theory does not include any single way. For that reason, teachers from different schools can use this theory in their classrooms according to their schools' individual context and culture.

Integrating MI provides opportunity to students in order to improve their potential intelligences and therefore creates deeper and "authentic" understanding

(Lazear, 2000). Mettetal, Jordan, and Harper (1997) conducted a study in order to see the impact of MI curriculum on elementary students, teachers and parents. Observation was used to examine the classrooms, interviews were conducted with students, parents, teachers, and administrators to see their views and parents' surveys were collected. The results which are based on these different types of data show that all of these groups showed very positive attitude toward MI concepts and school-wide implementation. This study shows that by using MI theory, teachers' and students' attitudes about learning can be changed. Moreover, this helps them to see different educational movements.

2.3.1.2. Multiple Intelligences and Integrated Curriculum

Educators prefer to use interdisciplinary approach in their teaching process. While teaching of academic skills or teaching of different types of knowledge may create some competencies for students, this type of teaching provides students with the opportunity to construct background information for their future education (Armstrong, 2000).

There is important evidence for good implementation of MI theory with curriculum integration that shows different considerations about how to apply MI theory with curriculum. Armstrong (1998) stated four steps to integrate MI theory with curriculum integration that is essential for curriculum development.

1. Teachers can reveal various developmental areas to children, while using observational method.
2. Teachers can discover children's strengths using observational method.
3. Teachers help children to improve their strength areas.
4. Teachers aid children to improve their weak areas (Armstrong, 1998).

For example, some teachers planned their school's MI programs by using school wide interdisciplinary units. There were two studies which used interdisciplinary, multiple intelligences-based curriculums. The first school is Seattle's international focus. An inner-city Seattle high school piloted a school wide MI week on international awareness. After the program was applied for a week, the

results showed that teachers worked enthusiastically over their unit plans and they tried to include the parents in their plans. In addition to these benefits, students liked attending this type of curricular event and also hundreds of parents, even immigrant parents, participated in this program. The second one is Montana's use of the arts. This K-12 English and language arts curriculum is taught using the visual and performing arts. As a result of this, the teachers prefer to use the curriculum thematically; also, they help students by motivating and asking open-ended questions in their studies (Campbell, 1997). In addition to interdisciplinary units, the theory of MI use integrated curriculum by utilizing themes and projects in their classrooms. Armstrong (2002) stated that by using projects in the learning process helps students to gain knowledge and to construct their critical thinking skills. In order to construct projects, students firstly work on the theme. They collect their findings and combine these as a big project related to this theme. Then, students show their work to other children, parents and teachers. Therefore, students acquire in-depth knowledge on the chosen topic. Similarly, Chen (1997 as cited in Wu, 2003) summarized that integration of projects in the MI classrooms helps teachers to understand the individual differences among children. Therefore, while planning lesson plans, they can pay more attention to this issue. According to MI theory, the integration of intelligences with subjects helps students to improve their interests and abilities. By this way, teachers can direct children in order to work with their weaknesses and they help them to be successful in different learning areas. For instance, Hancock (1996) claimed that music lessons help children to develop their spatial reasoning and mathematical thinking. Moreover, integration of technology improves children's physical and cognitive disabilities (Latham, 1997).

There are different schools which implement MI in different manners. At the New City School, the personal intelligences are the most important; at the Key School, however, all intelligences are considered equally. The extent of the implementation of MI shows respect to the teachers' professionalism and decisions because teachers try to prepare the day in order to provide the best things for their students (Hoerr, 2000). This does not mean that teachers have to promote all intelligences simultaneously. Instead of this, Gardner stated that teachers can apply

music playing in the background; hence, they will have addressed the students' musical intelligence. Similarly, teachers can provide opportunity to students to crawl on the floor in math lessons to promote bodily-kinesthetic intelligence. When MI is applied effectively, it can be a very important way for meeting student's needs. Teachers have some duties in order to implement MI appropriately. These include creating time and energy, understanding theory of MI and defining usage of this theory in curriculum development, instruction and learning of teaching (Hoerr, 2000).

2.3.2. Brain Research

Children are born with a flexible brain composition. Moreover, the brain changes continuously and grows with billions of cells or neurons which may be more than they will ever use (NEA, 1999). This shows that the years between infancy and late childhood period are essential for brain construction (NEA, 1999). By starting informal education before formal one, the children's brain development embodies this education and this development influences their later life. The brain develops some connections that will decide children's ability to gain knowledge during their life period (Scott, 2004). It is known that while children grow up and have experiences about life, they alter physically and psychologically. Moreover, if children grow in enriched home environments, they have a chance to increase their ability to learn. As the brain is a physiological organ, it seems that the brain structure can alter according to experiences. Moreover, the environment which includes rich educational experiences can have a good effect on brain development and retention of knowledge (Parnell, 1996).

2.3.2.1. Brain-Based Learning

Many teachers prefer to give assignments which include lots of information to be memorized. In addition to this, they assume that this information is learned. However, there may be confusion between learning and memorizing the pages about some situations in the books. This confusion occurs because most educators and students do not know the learning process and the ways in which this process is

managed and controlled (Letteri, 2001). There should be a connectedness in education because the process of brain-based learning includes making connections. If the connection between the content of the subject and the context of the application do not occur, most of the students cannot construct long-lasting learning. BR has shown that the main function of the brain is the need for improving connections (Parnell, 1996). When knowledge is acquired from the environment where connections occur, it is learned more easily and it is recalled longer (Ellis & Fouts, 2001). Similarly, Drake (1998) mentioned that “The more connections we can make to previous knowledge, the more we can apply our learning” (p.15). In fact, if the curriculum is integrated, children can learn lots of things by connecting learning experiences. It is easily seen that if something is integrated to each other, the learning occurs more meaningfully and is more constant. This shows that children can learn more quickly when teachers prepare integrated lessons.

Brain-based teaching and learning is an approach which is holistic, developmentally and socio-culturally appropriate. “Brain-based learning” emphasizes the significance of “patterning”. It indicates that when things do not have any sense or logic, they are not easily learned. This is because learning needs to be integrated, not learned in isolation (Caine & Caine, 1995).

Caine and Caine (1997) stated “brain-mind learning principles” that shows how the right application of curriculum integration occurs. These principles indicate important information for teachers about curriculum integration. There are 12 principles which explain what is learning (Caine & Caine, 1991).

1. “All learning engages the physiology”
2. “The brain/mind is social”
3. “The search for meaning is innate”
4. “The search for meaning occurs through patterning”
5. “Emotions are critical to patterning”
6. “The brain/mind processes parts and wholes simultaneously”
7. “Learning involves both focused attention and peripheral perception”
8. “Learning is both conscious and unconscious”
9. “There are at least to approaches to memory”

10. "Learning is developmental"
11. "Complex learning is enhanced by challenge and inhibited by threat associated with helplessness and fatigue"
12. "Each brain is uniquely organized"

Teachers should take these twelve principles into account in order to construct their lessons, presentations and assessments. Moreover, students who have difficulty in learning should be offered instruction about their information processing system by monitoring, directing, and controlling (Letteri, 2001).

In brain-based program, children develop their knowledge, make patterns, show connections, and have a chance to take risks with the help of the meaningful environment. Brain research claims that children's learning can be supported by thematic instruction. In fact, the integration of the curriculum provides opportunity to children in order to find patterns and construct them on their previous knowledge. For example, the household economics class allows students both to have an enjoyable time while cooking and sewing, and to integrate math, literature and social studies (Wagmeister & Shifrin, 2000). In light of this example, many teachers emphasize that integration supports students learning process according to their experiences. In addition to benefits for students, many teachers have a good time while planning integrated curriculum because they can find interesting relations among different subjects. When this process is shared with students, there will be essential learning which is created by students' own ways (Findley, 2002).

Some people stated that an integrated curriculum provide opportunity to transfer, reinforce, and apply learning. When assisting students in order to make interactions or connections, it can improve essential learning. However, some others think that these associations may be superficial (Case, 1991) or may cause complications (Alleman & Brophy, 1993; Findley, 2002). Some others show the result of recent BR and claim that the brain learns things by seeking patterns and making connections. Therefore, seeking patterns and making connections can be taught with an integrated curriculum.

Recent BR results shows that arts play an important role in education. For example, music is a core element of the curriculum. Therefore, by using music, the

numbers and alphabet can be taught easily. In fact, it seems that the brain have better retention when it creates connections with rhythm and rhyme (NEA, 1999).

2.3.3. Developmentally Appropriate Practices

One of the most important movements to promote developmental theory in early childhood education was stated as Developmentally Appropriate Practices (DAP). It was a set of guidelines claimed in 1987 by the National Association for the Education of Young Children (NAEYC; Bredekamp, 1987). After ten years, they again worked on them and revised it (Bredekamp & Copple, 1997). Piaget's constructivism was one of the roots of the DAP. According to it, children play an active role in their learning. Hence, it suggests that teachers provide opportunity for children in order to explore active learning and age appropriate play (Van Horn & Ramey, 2003).

DAP in Early Childhood Programs Serving Children from Birth through Age Eight (July 1996, 4), a Position Statement of the NAEYC, gives the following information when defining DAP:

Besides acquiring a body of knowledge and skills, children must develop positive dispositions and attitudes. They need to understand that effort is necessary for achievement, for example, and they need to have curiosity and confidence in themselves as learners. Moreover, to live in a highly pluralistic society and world, young people need to develop a positive self-identity and a tolerance for others whose perspective and experience may be different from their own.

2.3.3.1. Appropriate Curriculum

According to DAP, age and experience of the learners are considered while deciding the content of the curriculum. NAEYC position statement about appropriate curriculum declares that developmentally appropriate curriculum contributes to children's overall development which includes all developmental areas such as physical, emotional, social, linguistic, aesthetic, and cognitive. Curriculum also includes a wide range of content areas which are "socially relevant", "intellectually engaging", and "personally meaningful" to children. Furthermore, according to effective curriculum, it includes integration across different traditional subject areas in order to assist children to construct appropriate connections and to supply

opportunities for meaningful conceptual development. In the light of these statements, it can be seen that integrated curriculum is appropriate for DAP. That is, integrated curriculum is seen as a component of an “integrated nature of development”. This shows that one developmental area affects the other developmental areas such as emotional or social (Bredekamp & Rosegrant, 1995).

Integrated curriculum consists of different subjects such as science, math and social sciences. It does not mean that knowledge is divided in various parts. That is, the main method of integration in different subjects is to supply a topic “within children’s range of experience that allows children to explore, interpret, and engage in learning activities that draw on goals from one or more subject-matter disciplines” (Bredekamp and Rosegrant, 1995, p.168).

In early childhood education, there are different approaches to create and apply integrated curriculum. One of the methods which provide integration in the curriculum is generally used by Project Approach (Katz & Chard, 1989) or theme-based approach which is improved by using webbing. These two methods emphasize children’s interests and experiences. Moreover, they provide opportunity to children in order to meaningfully correlate learning experiences. Furthermore, they improve children’s problem solving skills and their knowledge about meaningful problems (Campbell, Reese, O’Sullivan, & Dossey, 1996).

There are some positive outcomes in order to construct learning process through integrated curriculum (adapted from Bredekamp and Rosegrant, 1995):

1. Integrated curriculum is related to children’s experiences. It also allows children to build meaning. Using integrated curriculum, children construct their skills and knowledge by using meaningful content rather than working on separate parts.
2. If the curriculum areas are separate from one another, this situation does not help children to learn how to construct knowledge by using related parts. For instance, in math lessons children not only learn numbers in order to use everyday experiences, but also they use their knowledge when confronting some problems related to math.

3. Integrated curriculum provides children to engage in one main activity. That is, they do not need to attend separate disciplines.
4. If children have opportunity and time to work on repeated activities in order to develop learning progress, teachers do not need to go over all the content of the curriculum. Integrated curriculum helps children to work deeply to related ideas about their interests and explorations. It also provides opportunity to work again on visited issue and support their learning process.
5. When children participate in projects and activities which are related to their interests, this helps them to learn “internal motivation”. If teachers use separated knowledge and skills in different subject matters, this does not support children’s motivation. That is, if the subjects are less related to each other, this supports only children’s external motivation because of the separate disciplines.

According to Wilson (2007), the curriculum plays an important role on the daily schedule because it mainly decides everything that will occur. Learning may occur at all times such as play time, routine time, or activity time with the help of this, children can learn information about good health, appropriate social relationships, autonomy about self-care skills and decision-making skills. In addition to these, the curriculum helps children to construct knowledge about various subject matters such as mathematics, art, language, science, and social studies. Children can learn lots of things from one activity or they can learn the same thing from different activities. There are lots of opportunities to teach something to children while participating actively.

With the help of this information, it can be seen that integrated curriculum and DAP are closely related to each other. According to DAP’s essential curriculum criteria; integrated curriculum is mainly related to integrated curriculum procedure.

In conclusion, all of these three approaches (MI, BR and DAP) showed that applying these approaches help students to learn more easily. Indeed, there are some important elements which provide opportunity to children’s learning process. These may include curriculum, environment, materials, and teachers. Specifically, preschool teachers play an essential role in the early development of children

because children spend most of their times with their teachers in school settings. The teacher's knowledge and their beliefs can affect the way children shape their view of the world and of themselves. Thus, teachers' beliefs are of utmost importance for both children and the application of the approaches.

2.4. Teachers' Beliefs:

Belief is a concept which is studied in psychology and especially social psychology. It is stated that the belief is relevant to the concept of attitude, study on people's behaviors in the external environment (Fishbein & Ajzen, 1975; Rokeach, 1968). In addition, belief is a behavior which may be revealed consciously or unconsciously. It also considered as right by the individuals and so they are committed emotionally. As a result of these, belief helps them to support their thinking and attitudes (Borg, 2001).

Actually, the term "teachers' beliefs" is not always used in the literature. Instead of this, some researchers prefer to use "principles of practice," "personal epistemologies," "perspectives", "practical knowledge," or "orientations". The aim of these different studies understands the teachers in terms of their personal knowledge and beliefs (Feiman-Nemser & Floden, 1984). In this study, the term "teachers' belief" is used to understand teachers' knowledge and their practices.

In the literature, there are different definitions related to teachers' beliefs and knowledge. According to Calderhead (1996), general definition of teacher belief has been defined as:

How teachers make sense of their professional world, the knowledge and beliefs they bring with them to the task, and how teachers' understanding of teaching, learning, children, and the subject matter informs their everyday practice are important questions that necessitate an investigation of the cognitive and affective aspects of teachers' professional lives (p. 709).

Clark and Peterson (1986) showed the importance of teachers' thinking while emphasizing the model of teachers' thoughts and actions. They claim that there is a correlative relationship between teachers' and students' classroom behavior and their achievement. They categorized teachers' thought processes into three main classes: (1) teacher planning, (2) teachers' interactive thoughts and decisions, and (3)

teachers' theories and beliefs. Teacher planning involves thought processes that teachers engage prior to classroom interaction and the reflections in which they engage after classroom interaction. The third category includes teachers' theories and beliefs which are the main point of the current study. This category is defined as the rich store of knowledge that teachers have that influence their planning and their interactive thoughts and decisions. They also conclude that theories and beliefs are essential parts of the general knowledge of teachers by perceiving, processing, and using information in the classroom. In all, teachers' beliefs are essential for teachers in order to shape their classroom actions (Clark & Peterson, 1986). On the basis of this model, other researchers tried to examine this issue in different perspectives. Specifically, Fang (1996) stated that teachers' beliefs and theories show plentiful common knowledge about objects, phenomenon, people, and their associations. This influences teachers' planning, thinking, judgments and behaviors in the classroom. Moreover, according to Pajares (1992), the nature of beliefs is stated as affective, evaluative, and episodic. Moreover, beliefs appear to affect about how individuals respond to new information. Furthermore, a research conducted between the mid 1970's and 1980's related to teaching show the relationship between what teachers do in the classroom and how this influences their students (Hoffman, 2001). In addition to the effects on students, there is an admitted idea that teachers' beliefs are essential to shape teachers' attributions about instructional behavior (Thompson, 1992). These attributions affect teachers' practices and show interaction with environmental reasons. Moreover, it can be changed according to training, policy, and social environment (Kowalski, Brown, & Pretti-Frontczak, 2005).

Several writers mentioned that there were some connections about teachers' beliefs and different aspects. These aspects are common beliefs about education, aims of the curriculum, and beliefs about nature of subject matter (Pajares, 1992; Richardson, 1996). Pajares (1992) stated that it is more essential to consider connections among beliefs instead of sub-group of beliefs. However, so far, the studies of teachers' beliefs have concentrated commonly on general educational beliefs. These beliefs are related to teaching, learning, children and the school (Boulton-Lewis, Smith, McCrindle, Burnett, & Campbell, 2001; Pratt, 1992). In

addition to these studies, there is a literature on teachers' beliefs systems and their influence on learning and teaching practices. (e.g. Agne, Greenwood & Miller, 1994; Fang, 1996; Jordan, Kircaali-Iftar and Diamond, 1993; Schumm, Vaughn, Gordan, & Routhlein, 1994; Westwood, Knight and Redden, 1997). Moreover, teachers' beliefs and their classroom behavior are revealed by some other researches (Fang, 1996; Pajares, 1992; Shavelson & Stern, 1981). In addition to these, one research revealed that according to teachers' educational beliefs, there are relation between beliefs about different aspects such as the curriculum, the learning and teaching related to a subject, and general beliefs about teaching, learning, children, and the school (Calderhead, 1996). Another research showed that teachers take beliefs about students on the basis of race/ethnicity, language, social class, gender, religion, ability/disability, and other differences that influence teachers' expectations and treatments toward their students (Richardson, 1996; Sparapany, Abel, Easton, Edwards, & Herbster, 1995).

Some researchers mention the concept of teachers' belief in terms of different aspects. According to Kagan (1992), two general results can be stated by empirical studies. The first one is that teachers' beliefs can seem to be considerably consistent and stable for altering (Brousseau, Book, & Byers, 1988; Herrmann & Duffy, 1989). The second one is that teachers' beliefs can be related to a compatible tone of teaching that is generally applied to various classes and levels (Evertson & Weade, 1989; Martin, 1989). Because of the power of the beliefs, teachers' educational beliefs and their personal theories in terms of teaching and learning are strongly affected by them (Albion, 1999; Albion & Ertmer, 2002; Ertmer, Addison, Lane, Ross, & Woods, 1999; Ertmer, Gopalakrishnan, & Ross, 2001; Lim & Khine, 2006; Mumtaz, 2000; Pelgrum, 2001; Scrimshaw, 2004). In addition, beliefs are important elements to help teachers in applying instruction and deciding on curriculum events (Pajares, 1992; Prawat, 1992). For example, it can be stated that there is a connection between teachers' views about learning and teaching and their actual classroom practices (Fishbein & Ajzen, 1975). For instance, when looking at this connection, it can be seen that the linkage between classroom practices and stated beliefs may show

teachers' belief related educational procedures and aims about technology in classrooms (Levin & Wadmany, 2006).

Teachers' beliefs are important because they influence teachers to define and see physical and social realities. A study shows that teachers' beliefs are affected by education, specialized training, and experience with young children (Wilcox-Herzog, 2004). In addition, Romanowski (1997) states that teachers' beliefs are closely related to content knowledge and pedagogy. He also adds that the teachers' belief system shows an arranged framework which states the model of meaning, gives information about evaluations, decides what is right and wrong, and helps teachers to construct instruction and curriculum (Romanowski, 1997).

Some researches show that teachers' educational beliefs are interrelated with their ideas, their values or behavior and student's academic achievement. According to Eisner (1994), when teachers have some educational values, individual needs, and different type of beliefs which are true, these help teachers in their teaching process. Some other researchers also agree that teachers' educational values and beliefs influence student's learning in an effective way (Ashton & Webb, 1986; Eisner, 1994).

There are differences between what teachers would do and what they actually do. Thus, it is essential to evaluate both the beliefs and behaviors of early childhood educators because teachers' beliefs or theories may show as a "contextual filter". This helps teachers to show classroom practices, to interpret them, and to adjust their latter classroom experiences (Clark & Peterson, 1986).

There were some studies which emphasize beliefs in early childhood education. These studies are composed of four different aspects. These are the relationship between teachers self-reported beliefs and practices (Bryant et al., 1991; Hyson & Lee, 1996; Smith & Shepard, 1988), self-reported beliefs and observed practices (Charlesworth, Hart, Burts, & Hernandez, 1990; Charlesworth et al., 1993; Kagan & Smith; 1988; Stipek & Byler, 1997; Stipek et al., 1992), the relationship between teacher and principal beliefs (Butterfield & Johnston, 1995; Spidell-Rusher, McGrevin, & Lambiotte, 1992), and beliefs related to child outcomes (Burts et al., 1993; Hart et al., 1998; Marcon, 1994, 1999; Wing, 1989). Some of the studies were conducted to develop belief and practice with self-report and observational

instruments consistent with the NAEYC developmentally appropriate guidelines (Bryant et al., 1991; Burton, 1992; Burts et al., 1992, 1993; Charlesworth et al., 1990, 1993; Charlesworth, Hart, Burts, & Hernandez, 1991; Hyson, Hirsh-Pasek, & Rescorla, 1990; Smith, 1992, 1993, 1997; Spidell-Rusher et al., 1992; Stipek et al., 1992). In the beginning stages of the area of 'beliefs', Charlesworth et al. (1991) conducted a study in order to develop an instrument related to NAEYC's first policy statement on DAP (Bredekamp, 1987). In this study, they used this questionnaire to evaluate kindergarten teachers self reported beliefs and practices. After two years, they confirmed their earlier results (Charlesworth et al., 1993). They found that teachers' developmentally appropriate beliefs were moderately correlated with their developmentally appropriate practices. Similar results were found in other studies (Hart et al., 1998; Kagan & Smith, 1988; McMullen, 1999; Smith & Shepard, 1988; Stipek & Byler, 1997). On the other hand, some studies found a discrepancy between teachers self-reported beliefs and their observable practices (Hatch & Freeman, 1988; McCarty et al., 2001; Verma & Peters, 1975). There are some reasons that affect teachers' developmentally appropriate and inappropriate activities. These are grade levels (Buchanan, Burts, Bidner, White, & Charlesworth, 1998; Vartuli, 1999), whether the teacher had certification in early childhood or not (Bredekamp & Copple, 1997; Haupt & Ostlund, 1997; McMullen, 1999; Smith, 1997), and experience and classroom characteristics (Buchanan et al., 1998).

In "teachers' belief" studies, some instruments were used to assess the beliefs and practices of the teachers. These are Early Childhood Survey of Beliefs and Practices (Marcon, 1988); and the Teacher Questionnaire (Charlesworth et al., 1990, 1993), which includes The Teacher Beliefs Scale (TBS) and The Instructional Activities Scale (IAS). The Early Childhood Survey of Beliefs and Practices (Marcon, 1988) was originally developed for pre-kindergarten teachers (The Pre-K Survey of Beliefs and Practices). This instrument was designed as identifying levels of teachers' beliefs and practices in a longitudinal study of child outcomes. In addition, The Teacher Questionnaire (Charlesworth 1990, 1993) was developed for kindergarten teachers in order to show several areas of instruction on the basis of

NAEYC guidelines (Bredekamp, 1987). This instrument was composed of two parts: TBS and IAS.

Specifically, it is seen that teachers' beliefs related to art education and the learning environment affect their roles. Preschool teachers play an essential role on forming artistic development of children (Bae, 2004). Although teachers' roles and their training are so important in early childhood art education, there is little research on the role of teachers in early childhood art education.

One study conducted by Alvino (2000) examined a group of preschool teachers' beliefs in order to see what their reflections about different issues or interests related to art in early childhood education. It was found that all teachers believed that art is very essential in their daily programs. At that point, it is not enough to think art as an important activity in early childhood education. In deed, studies showed that experiences of preschool teachers about art education denoted insufficient knowledge and no confidence in relation to supply art education to young children. (Baker, 1994; Bresler, 1993; Douglas & Schwarts, 1967; Seefeldt, 1995; Thompson, 1995; Thompson & Bales, 1991). Similarly, Baker (1994) stated that even though ten schools which were examined for this study spent 50 per cent of nursery time on art, the majority of the art activities lacked worth, quality, and educational gains in terms of development of children. In addition to this result, while most teachers think that art experiences with children are important, they do not have an accurate understanding of art teaching. Actually, the role of the preschool teachers is positioned as a facilitator and observer. Teachers provide the developmentally appropriate environment, supply different materials, consider safety precautions, organize the classroom for art experiences which are directed by children, and also encourage children to be creative (Jackman, 2005).

2.5. Visual Art in Early Childhood Education

The arts are composed of symbols and communication systems. This is explained as the ability to explain, imply, and communicate opinions and emotions in order to develop meaning and to show experience. There are five art forms which are dance, drama, media, music, and visual arts (combining art, craft, and design) in the

arts curriculum (Deluca-Lerable, Makaroff, Aaken, & Zirngast, 1999). Looking at the detailed information about these areas of art, art and craft show all actions related to visual arts such as making pictures (drawing, painting) and forming objects (modeling with clay, construction from paper, wood, fabric, etc), and music and movement is relative to listening to music, singing, and making music, and creating dance by using the body. Story and enactment include puppets in order to display a puppet show, write a story, and create dramatics and dramatic play (Jalongo & Stamp, 1997). In addition to these, there are different ways to show individual's experiences artistically. Some of these are literature, drama, music, and visual arts which are plastic and graphic (Schirmacher, 2001). When looking at the usage of the visual art in children's life, they mostly use it in order to express their prior experiences. There are some techniques which are used by children to make visual art. That is, children can use different methods while dealing with visual art activities. These methods include paper art, two-dimensional activities which are picture making, printmaking, and collage and three-dimensional activities such as clay, modeling, assemblage, cardboard construction and woodworking (Mayesky, 2002).

Teachers should consider some important points for applying visual art activities. One of the important considerations is that early childhood art should help children to express themselves individually. Another one is to give importance to artistic process and product equally. The other one is that it should be open-ended which supports children's creativity. Moreover, it should encourage children to discover and experiment. Also, it should support children to engage actively and be involved in sustainable way. In addition to these, early childhood art should include artistic media and it should be for all children (Schirmacher, 2001).

There are various ways to involve art in early childhood curriculum. Firstly, art may be used as an isolated activity. Moreover, it can be applied as a reinforced activity for another subject area. In addition to these, art may be used as a "superactivity" in order to combine different subjects. Also, art may be conducted in an integrated way by extending a unit of study. Lastly, art may be a child-directed work (Schirmacher, 2001). On the other hand, some educators prefer to use art

activities as using models which was prepared by teachers. In fact, copying worksheets, workbooks, and coloring pages of art products are not useful for young children who are especially younger than six (Bredekamp, 1987). As a result of these types of activities, children's creativity is affected negatively. Therefore, the early childhood art program organizes the time and place for children in order to state their own thoughts, ideas, feelings, and actions by using different media and activities (Mayesky, 2002).

Art activities in early childhood education include some important goals (Mayesky, 2002). These goals are;

- to give more emphasis on process rather than product in children's work.
- to meet children's needs by considering their age, ability, and interests.
- to provide opportunity for all children to express themselves originally and independently.
- to improve children's creativity.
- to stimulate children to grow at their own rates.

It is essential that children have plentiful opportunities for making art. In spite of basic process, there are four key elements of any early childhood art program to make art by using different media. An early childhood art program provides sensory experience, creative and beautiful experiences, time, space, and materials to make art, and introduces some concepts to children related to art such as art, artists, and different types of art forms and styles. These four elements are related to each other (Schirmacher, 2001).

According to Schirmacher (2001), art education theory has changed from child-centered to a discipline-based subject approach. It has been termed as Discipline-Based Art Education (DBAE) by the Getty Center for Education in the Arts. DBAE is an extensive approach to teach art developed primarily for grades K-12. It is developed to expose children to various experiences and initiate children to gain experience and knowledge from various disciplines. In fact, it includes four main art disciplines: art making, art criticism, art history, and aesthetics. These disciplines involve education which helps to create, understand, and appreciate art, artists, and the artistic process. These also include the roles and functions of art in

societies. DBAE programs may emphasize different perspectives, but they have some main characteristics. These are to write a plan, organize systematically, engage with art works, and create balance between the four art disciplines, and include developmentally appropriate practices in terms of level and age (Schirmacher, 2001).

The National Art Education Association has combined both NAEYC's recommendations and DBAE's positive views in their guidelines for early childhood art education. Colbert and Taunton (1992) described some criteria for NAEA. The first one is that children be provided with many opportunities to make art. The second one is that children have many opportunities to look and make conversation about art. The last one is that children be aware of art in relation to their daily experiences. These criteria are so important for children making art (Koster, 2001). Moreover, educators should pay attention to some considerations in order to design appropriate art curriculum. These are curriculum, art materials, integration, display, and responding art. Curriculum should support all developmental areas of children which include physical, social, emotional, cognitive, and perceptual. With the help of this point of view, the program should meet children's developmental levels and answer their interests. Moreover, art materials play an important role in art programs. In fact, art materials should be safe and easily used. Also, it should provide opportunity for experimentation. Furthermore, integration is an essential way to make art. While enhancing art activities in combination with other disciplines, learning can be enhanced in this way. Furthermore, display is an important element of art because educators, parents, and other children can see art products easily. Moreover, it invites children to interact with their own work. The last consideration is reacting to children's art. At that point, children can describe their products to others or react to other's works. In fact, children's works are understood more easily (Koster, 2001).

Visual art in early childhood education includes some artistic elements which describe children's artwork and natural forms. These involve line, color, shape, mass or volume, design or composition, pattern, space, balance, and texture (Schirmacher, 2001).

In this study, visual art is stated as two-dimensional activities such as painting, drawing, printmaking, collage, and three-dimensional activities such as clay, play dough, assemblage, and construction with different materials such as waste materials. In early childhood years, children are interested in different types of visual arts activities. These are two-dimensional types such as paintings, drawings, murals and prints and three-dimensional types such as constructing puppets, modeling clay (Jalongo & Stamp, 1997). Some resources use the term art instead of visual art which is stated in this study.

Visual art is a major part of the early childhood education. It helps children to learn about some concepts such as color, intensity, forms, and patterns by providing various opportunities. Moreover, it supplies essential skills such as controlling small motor skills, gaining visual perception, recognizing different colors, and other skills which are related to sensory, cognitive, motor and aesthetic (Piersol, 1996).

Visual art has significant impact on the development of a child which involves a combination of different skills. Moreover, it is important for some experiences that start with the home environment and progress in the early childhood centers. Furthermore, visual art provides assistance to children in order to support their developmental domains such as physical, cognitive, social, and emotional development, language and perceptual development. Physical development includes children's gross motor skills by providing some activities such as easel painting or clay pounding and fine motor skills by giving opportunity with some activities such as finger painting or cutting. Also, hand-eye coordination and self-help skills are supported by visual art using different types of materials and engaging materials in order to compose art expressions (Jackman, 2005). In addition to this, cognitive development involves the clarification of children's viewpoints about the world using the art forms, the new strategies to their problem solving skills with visual art materials, the experimentation with cause-effect relation, the comparisons about the sizes and shapes, and the prediction of results of their participation with visual art activities (Jackman, 2005). Moreover, social-emotional development improves children's positive pictures about themselves, to denote their personality and individuality, to show their imagination and reflection, to build amusing

communication with others, to point out their emotions through art-related words while attending visual art activities which are developmentally appropriate (Jackman, 2005). Moreover, during the visual art activities, they can gain some social skills such as waiting a turn, listening, talking, sharing, collaborating, and helping one another while building new friendships (Artut, 2005). Furthermore, language development is also related to cognitive and social development. While children are engaging in visual art activities, they express color, size, shape, texture, and patterns. Also, perceptual development consists of using the senses in order to learn about the objects, actions, and events (Jackman, 2005). In addition, young children use the visual art in conveying their opinions and knowledge and to express their experiences (Koster, 2005). In addition to these developmental domains, art experiences are supported by creativity using exploration, discovery, or problem solving skills (Eglinton, 2003).

Engaging visual art activities helps children to improve some skills which are required for other academic areas in the curriculum. Moreover, it provides an essential contribution to children's learning experiences.

2.5.1. Integration of Visual Art in Early Childhood Curriculum

Integrated curriculum is not a new idea in early childhood education. John Dewey first claimed that curriculum is relative to life experiences of children and is formed as projects at the end of the century. Recently, as a result of the movement related to developmentally appropriate issues in early childhood education, the thematic approach of organizing curriculum is stated as a renewed issue (Feng, 1994). The idea of integrated curriculum plays an essential role in early childhood education because children can improve and learn in whole contexts (one domain of development affects another, one domain of learning affects another). In fact, children do not see learning as isolated subjects (Puckett & Black, 1994). Considering integrated curriculum, educators prefer to choose different methods in order to overcome the difficulties such as using more flexible, child-centered and developmentally appropriate teaching practices (Jalongo & Stamp, 1997).

The visual art which is a connection to combine the other subject matters together is not considered as a teaching discipline (Colbert, 1997). NAEA has stated a policy statement which is DAP for the Visual Arts Education of Young Children. This claims that visual arts need to be integrated with other subjects in the curriculum (Colbert & Taunton, 1992). This statement claimed that some concepts and skills which are taught by other disciplines of the curriculum are used by visual arts. Quality visual arts program conceived for young children have some aims and objectives. Many of these aims and objectives are related to goals of the early childhood programs. Engaging in art activities help children to develop their language and vocabulary skills, improve their perceptions such as visual and tactical, support their learning about some basic concepts such as shapes, colors, patterns, and develop some processes such as classification concepts (Colbert & Taunton, 1992).

When integration of visual art is applied in a meaningful way, it helps children to improve their reading and interpretation skills, develop their writing skills, enhance their mathematical and scientific reasoning abilities, develop their ability to focus on details and also details in context, and enhances their skills to find inconsistencies related to math and science (Appel, 2006). Moreover, integration of visual art helps children to find different methods of expression, to understand their own cultures as well as others, and to improve their analytic thinking skills (Bloom & Hanny, 2006). Furthermore, according to Dever and Jared (1996), integrative visual art activities have some advantages for learners. One advantage is that visual art helps teachers to determine children's understanding while using their products which show their progress about new learning. Moreover, visual art improves children's learning about some materials which are related to visual art and their usage during art activities.

An integration of visual art activities helps children to study with art materials in open-ended methods. Moreover, it improves children's visual and spatial expressions related to their learning. The art activities of integrated curriculum program are not limited them occurring in art centers rather it develops into other learning areas (Koster, 2005). In fact, different subject areas can be used in the integration of visual art. While the subject areas are arranged for their own purpose,

adding some materials related to visual art may provide an opportunity to integrate these areas with visual art, five of which are:

Math: In order to describe the importance of early experiences about mathematics, National Council of Teachers of Mathematics developed a set of standards and principles. These standards showed mathematical content and processes which should be learned throughout school years. These standards include five content and five process standards which apply across the pre-K-12 grade level (Mayesky, 2002). Mathematical content includes number and operation, patterns functions and algebra, geometry and spatial sense, measurements, and data analysis statistics, and probability. Moreover, mathematical processes involve problem-solving, reasoning and proof, communication, connections, and representation. For early childhood education, these are some basic mathematical concepts which are used commonly in pre-schools. These concepts include numbers such as counting and one-to-one correspondence, classification and sorting, comparing, ordering, shape and form (Mayesky, 2002).

The contents of visual art and math can be associated with each other in a teaching process (Williams, 1995). For example, there are some math concepts which are problem solving, developing patterns, measurement, sorting objects, and classification. These concepts can be associated with art concepts such as recognition of line and shape, pattern and line decoration. Schirmacher (2002) shows that while children use art materials, they can count the number of paint brushes and pots, realize the length of the brushes and the width of the crayons, and different geometric shapes which are used in their art work.

Science: Science in early childhood education includes three different types of science experiences. These are formal, informal, and incidental science. Formal science consists of teacher planned activities in order to improve particular skills. Informal science includes little or no intervention from teachers. That is, children can select activities according to their interests and they can work individually. Incidental science cannot be planned. It occurs immediately after the situation occurs such as an activity after a storm (Mayesky, 2002).

With the help of art activities, children can learn some principles about science. For example, they can see colorful liquid when they add the water color tablet into water. Also, they can see when wet paint is placed away, it dries. In addition to this, children can see that if wet paint is placed in the sun, it dries quickly. Moreover, children can gain scientific process skills such as developing hypothesis, predictions, observations, questions, discussions and explanations (Schirrmacher, 2002). In addition, animals are good ways to plan integrated visual art activity to encourage science experiences. Furthermore, environmental education can be part of the visual art activity by examining the basic needs such as water, food, and clean air. In fact, children need to learn about their immediate environment such as home, school, playgrounds and parks because they need to spend their time in these places (Mayesky, 2002).

The language/ communication arts and literacy: Literacy includes reading, writing, speaking, and listening. According to professionals, literacy starts with the birth and continues to develop during the life span. Activities help children to increase their vocabularies, assist them to make conversation with other children and adults, provide opportunity to children to learn letters of alphabet, and also improve their language skills (Morrison, 2006).

Visual art helps children to express their knowledge nonverbally and graphically. Therefore, children gain different communication skills such as verbal and non-verbal (Baker, 1990). When children are encouraged, they can talk about their art products. Also, visual art supports children's art vocabulary in their discussions with others. Moreover, drawing is considered as a literacy activity. That is, both of them help children to express, organize, and shape their experiences (Schirrmacher, 2002).

Social Studies: Teaching social studies began in 1994 when National Council for the Social Studies stated "ten thematic strands of social studies". These are:

- culture,
- time, continuity, and change,
- people, places, and environment,
- individual development and identity,

- individuals, groups, and institutions,
- power, authority, and governance,
- production, distribution, and consumption,
- science, technology, and society,
- global connections
- civic ideals and practices

In early childhood years, activities related to social studies include learning about one's life, people in the community, celebrations, and different cultures (Mayesky, 2002).

When children learn social studies and history with the help of art, they can be social scientists and historians. While children are participating in art activities, they are most probably related to the subject itself (Goldberg, 2006). Moreover, visual art helps children to see themselves and others more deeply. In addition, inviting artists in the classroom is an essential way to teach something to children. Moreover, visiting a museum or gallery provides opportunity to develop children's knowledge related to art and the process of art. Furthermore, with the help of art, children can see features of different cultures and their preferences about art (Mayesky, 2002).

The Expressive Arts: There are two other expressive arts; music and movement that are so essential for early childhood education. Both of them include nonverbal expressions. Children can also express themselves by using movements and sounds (Schirmacher, 2002).

Music is a common and enjoyable experience in children's life. Music includes some experiences such as singing, rhythm activities, playing simple instruments, learning some basic concepts such as loud and soft, fast and slow, and high and low. On the other hand, movement activities support children's developmental domains such as physical, cognitive, social, and emotional. In early childhood education, movement includes some type of activities which are related to body parts such as bending, turning, and pushing, creating a dance, and combining different movements (Mayesky, 2002). There are some integrated activities both related to music and movement such as musical painting, making musical

instruments and streamers, preparing costumes and props for play and movement (Mayesky, 2002).

According to Koster (2001), the level of integration occurs in different types in order to show children's ideas and experiences. These are introductions, thematic approach and project approach. There are two example approaches to use integration of visual art in their programs.

2.5.1.1. Reggio Emilia Approach:

Reggio Emilia is a city in northern Italy which is well known for its educational approach towards young children. Reggio Emilia approach founded by Loris Malaguzzi (1920-1994) includes schools for children whose ages range from three months to six years (Morrison, 2006). The school of Reggio Emilia takes some variations from Vygotsky's social constructivism and Dewey's progressive education that includes a different form in Italy.

Reggio Emilia programs are applied all over the world. These programs have been used by educators in United States to show the importance of the arts (Isbell & Raines, 2003). There are some key elements of Reggio Emilia including image of the child, environment as a third teacher, teacher as partners, and documentation (Danko-McGhee & Slutsky, 2003).

In Reggio Emilia classrooms, teachers use integrated curriculum that supports child-centered and emergent curriculum. Moreover, while they follow some curriculum goals, they also emphasize children's interests (Schiller, 1995). In Reggio Emilia schools, curriculum is not separated into different areas such as math, science, reading, and social studies. Instead of these, teachers prefer to apply activities by combining them to one other. Moreover, teachers direct children to be more active by asking questions and then finding and constructing solutions (Stegelin, 2003).

There are various types of the lessons applied in Reggio Emilia classrooms. Art is not considered as an isolated or discrete subject matter. Rather it is seen as an integrated subject in the program via projects. In deed, art provides opportunities to children to have one more language which represent children's products and works.

Therefore, with the help of this, teachers understand children's current knowledge about a concept or experience (Wright, 1997).

2.5.1.2. Project Approach:

The Project approach is not a new method to educate children (DuCharme, 1993). It was the main part of the Progressive Education movement and was applied widely in the British Infant Schools in the 1960s and 1970s (Smith, 1997).

According to Koster (2005), there are some ways to help children in order to express their ideas in an artistic way. One of these ways is "Project Approach". Katz and Chard (2000, p.2) define a project as "an in depth study of a particular topic that one or more children undertake." This encourages children working in groups including two to five on a project which helps them to show their individual interests about different topics. These projects may be child-initiated or teacher-initiated (Koster, 2005).

The project work includes three steps. The first phase is "getting started", phase two is "developing the project", and phase three is "concluding the project" (Helm & Katz, 2001). In these phases, children work on the project topic in a detailed way. In fact, they use different subject areas while conducting a project. Indeed, while children are engaging in projects, they tried to make connections among, math, social studies, literature, and science in order to answer open-ended questions which are related to develop the project (Curtis, 2002).

In project approach, most of the teachers use units or themes in order to set the activities. A theme may be a broad concept or topic such as seasons and animals. While using a theme, teachers facilitate the environment by organizing books, photos, and other materials related to the theme. Experiences from different subject areas such as math, language, science are related to the theme (Helm & Katz, 2001). That is, one of the characteristics of the Project work is to assist children's learning process in an integrated manner and prefer to eliminate the separations between subjects and play areas (Koster, 2001). Indeed, while children are engaging in projects, they try to make connections among, math, social studies, literature, and

science in order to answer open-ended questions to develop the project (Curtis, 2002).

In light of the thematic units or projects, teachers can integrate and make connections among developmental domains such as personal, social, emotional, communication, language and literacy, mathematical development, physical development, and creative development (Eglinton, 2003).

Recently, pre-schools prefer to use different teaching approaches such as “Project Approach” and “Reggio Emilia Approach” in their curriculums in Turkey. They can apply these approaches in one part of their curriculum process. In fact, all pre-schools are under the supervision of the Ministry of National Education. For that reason, while they prepare their teaching, they should depend on some basic considerations of Ministry of National Education. Thus, they can add some aspects of these approaches in their curriculum. There is no study to show the rate of the schools preferences in terms of using Project Approach or Reggio Emilia Approach. However, it can be observed that many schools prefer to use these approaches in their curriculum in Ankara. While these schools are applying their own curriculums, they prefer to use these approaches. Therefore, they can support their curriculums using these teaching approaches.

2.6. Summary

In this part, the literature related to integrated curriculum, teachers beliefs, and visual art in early childhood education was reviewed. In order to understand the research questions, the concepts of integrated curriculum, teachers’ beliefs, and visual art in early childhood education were defined for this study. The types of models were described by emphasizing the main points of them. Theoretical framework gave information about three important supporters of integrated curriculum. These are MI, BR, and DAP. Moreover, the definitions of teachers’ beliefs were explained in order to understand their power on teaching process. Furthermore, visual art in early childhood education was mentioned by defining the meanings in order to emphasize the importance of it on child development and curriculum. In addition to this, how visual art could be integrated into other activities

was explained. Finally, Reggio Emilia and Project approaches used the integrated curriculum in their programs were explained by showing the characteristics of the curriculum.

CHAPTER III

METHOD

This chapter describes the overall design of the study, participants, data collection procedures, the data collection instrument, the pilot study of the data, data analysis procedures, and assumptions and limitations.

3.1. Overall Research Design:

This study includes the examination of teacher's beliefs in integrated visual art with other activities. The main point of this study is related to teachers' beliefs in integration of visual art with other activities in early childhood settings. These aspects give information about teachers' understanding of the integrated curriculum. Specifically, this study included both qualitative and quantitative information from preschool teachers in Ankara.

The descriptive research method was used in conducting this study. Isaac and Michael (1990) stated that the aim of the descriptive research is to describe the selected population's characteristics and facts accurately.

After the data were obtained from preschool teachers, it was examined to define categories. At that point, content analysis was used to gain categorical information from the qualitative data. Therefore, the data could be analyzed statistically by using Statistical Package for the Social Sciences program (SPSS).

3.2. Participants:

All 5-6 years olds' teachers in Turkey were identified as the target population of this study. However, it is appropriate to define an accessible population since it is not easy to study with this target population. The accessible population was determined as all 5-6 years olds' preschool teachers working in private and public schools in Çankaya, Keçiören, Yenimahalle, Mamak, and Etimesgut districts of

Ankara. This is the population for which the results of this study will be generalized at the end of the study. Since the visual art activities and their integration of other activities were examined, the sample was teachers working with 5-6 years old children. The participants in this study all indicated that they spent a significant portion of every workday in the direct, hands-on care or education of young children.

The participants of this study involve 265 preschool teachers working in Çankaya, Keçiören, Yenimahalle, Mamak, and Etimesgut districts of Ankara. While 137 of them have been working in private pre-schools, 119 of them have been working in public pre-schools. All early childhood centers are under the supervision of the Ministry of National Education. Convenience random sampling was used to obtain a representative sample of the population. Firstly, the five districts in Ankara, from which the sample of the study was chosen, were selected by the convenience sampling method, and the schools in these districts were determined from the website of the Ministry of National Education. Schools were selected randomly from these districts in Ankara. From the selected schools, the instrument was administered to early childhood teachers who have been working in these schools.

3.3. Data Collection Procedures:

In this research study, the beliefs of preschool teachers in integration of visual art with other activities were examined. The study began with a detailed review of the literature. Educational Resources Information Center (ERIC), International Dissertations Abstracts, Social Science Citation Index (SSCI), Ebscohost, Science Direct, Kluwer Online databases, Internet search engines, theses and other studies done in Turkey (from Higher Education Council, Hacettepe Journal of Education, Journal of National Education) were searched with the help of a keyword list. All the articles and theses were also read.

After completing a comprehensive review of the literature, it was clear that the instrument used for teacher's beliefs in integration related to visual art in early childhood education was unavailable. Therefore, this survey instrument was developed by the researcher along with the professionals from the related field. Before creating "teachers' beliefs about integration of visual art", a pilot study was

conducted. As a result of this study and with the help of related articles and related books, the “teachers’ beliefs about integration of visual art” questionnaire was formed.

After the instrument was prepared, the participant schools of the study were determined, and permission was granted for the study from the Ministry of Education. The correspondence is given in Appendix A. The researcher communicated with all the principals of the selected schools and asked for the administration of the instruments.

The instrument was administered to the 5-6 years olds’ teachers in April and May of 2007. It was explained to all participant teachers that while responses would be used as data for this study, the identification of participants to their responses would not be coordinated in any way in order to assure strict confidentiality. Moreover, teachers were required to fill this questionnaire on their own. After the questionnaires were completed, they were collected.

After the data collection procedure was completed, the data were entered in SPSS program coding all the categories of variables. Male teachers were coded as 1; female teachers were coded as 2. For the teachers’ experience items, “1-5 year” experience was coded as 1, “6-10 year” experience was coded as 2, “11- more year” experience was coded as 3. For the educational background items, “high school” was coded as 1, “two-year vocational school” was coded as 2, “university” and “M.S.” was coded as 3. For the type of the school worked in, “private” was coded as 1 and “public” was coded as 2. For the answers related to yes/no, “yes” was coded as 1 and “no” was coded as 2. Other questions which include open-ended questions were examined by using content analysis. Therefore, the researcher could decide on some categories. Thus, the categories were selected by reading all the answers. In addition to this, two researchers examined the answers in order to verify the reliability of the data collected. The data entry procedure took approximately one month.

3.4. Data Collection Instrument:

The “teachers’ beliefs about integration of visual art” questionnaire was developed in order to explore the teacher’s beliefs in integration of visual art with

different activities (Appendix B). The questionnaire consisted of five parts. The first part was the introductory part which included information and definitions about the study. Moreover, it informed teachers that their identity would be kept secret and the results of the study would not affect them in any way. The second part included demographic information of the teachers. These are gender, years of experience, work place (school type) and whether the teachers attended any courses, seminars or conferences related to visual art. The third part of the questionnaire involved the beliefs in visual art and its benefits on children, teachers, and the program. Moreover, this part included the school's opportunities and materials related to visual art. The fourth part included open-ended questions which asked teachers' beliefs related to the integration of visual art with other activities. The fifth part asked teachers whether they could attend this study for further examination. If they want to attend the further study, they have to fill the part which includes name-surname, phone number, and e-mail address.

3.5. The Pilot Study of the Data:

After necessary permission was taken from M.E.T.U. pre-school, the questionnaire of the pilot study was conducted to 15 preschool teachers in this pre-school. The questionnaire of the pilot study included some general open-ended questions related to visual art and integration of visual art with different activities (Appendix C). According to the answers of the teachers, the third part of the "teachers' beliefs about integration of visual art" questionnaire was prepared.

The pilot study included eight open ended questions. While five of them were related to integration of visual art and integrated curriculum, three of them were related to demographic information. With the help of the answers of the teachers, the researcher was able to construct more specific questions. For example, question 4 in the pilot study includes a question which was "What do you think about visual art in early childhood education". From answers of the teachers about this question, question 11 in the main instrument was constructed. This question was "what do you think about which developmental areas could be supported by visual art?" Therefore, more specific questions could be asked to teachers.

3.6. Data Analysis Procedures:

In this study, both qualitative and quantitative data were collected. Descriptive statistics such as frequency, percentages and non-parametric technique such as chi-square were used to describe the data. Descriptive statistics were used for all of the quantitative data and thus the responses of each question were tabulated. Summary charts synthesized the findings. All the statistical analyses were carried out by the SPSS version 13.0 for Windows program. The 0.05 level was established as a criterion of statistical procedures performed.

It was mentioned in prior sections that content analysis was used to categorize the data in main instrument. In order to analyze the qualitative data gathered from open-ended items, “coding” was employed (Oppenheim, 1992; Miles & Huberman, 1994; Robson, 1994). At that point, the researcher followed some steps in order to define the categories. Firstly, the researcher read all the answers of the related questions respectively; question 7, question 15, question 17, and question 20. After finishing the reading part, researcher again started to read these in order to decide categories. All of these procedures were completed by another person in the department of Early Childhood Education. Both categories which were defined by different people were then compared to each other. Hence, the main categories were constructed. After the categories were defined, the researcher read and selected the answers of the teachers under one category.

Each question includes specific categories related to the content of the answers. First, fifth and ninth research questions include teachers’ beliefs related to integrated curriculum. Under these questions, there are three categories which are “in terms of child”, “in terms of administration”, and “in terms of program”. In fact, teachers generally believe that integrated curriculum helps children to construct knowledge, assist teachers to administrate different activities, and to help the program to be applied. Second, sixth and 10th research questions involve teachers’ beliefs related to integration of visual art with other activities. These questions show three categories. These are “in terms of child”, “in terms of teacher”, and “in terms of administration”. Indeed, teachers thought that integration of visual art with other activities support children, teachers and process of administration. Third, seventh,

and 11th research questions include teachers' beliefs related to usage about integration of visual art. These questions had three categories. These are "with all other activities", "with one specific activity", and "reinforcer after the activity". That is, teachers use integration in their classroom in these three different ways. Fourth, eighth, and 12th questions involve teachers' beliefs related to the role of the integrated curriculum in early childhood education. Under these questions, there are five different categories to represent teachers' beliefs. These categories are "necessary to use/must be used", "need more information", Ministry of National Education", in terms of application", and child-teacher interactions". In fact, teachers thought that integrated curriculum should be used more in early childhood settings. Also, teachers claimed that they need more information about the application, procedures or plans about integrated activities. Moreover, they believe that integrated curriculum is appropriate for new early childhood curriculum developed by Ministry of National Education. The last important category of these questions is child-teacher interactions. Teachers believe that integrated curriculum is a powerful tool for interacting with children.

In addition to the quantitative data, the open-ended answers were also made with the preschool teachers to gain more information on some specific items. Therefore, more detailed information about teachers' beliefs was gathered.

3.7. Assumptions and Limitations:

As in any research study, several considerations may influence the usefulness of the study. The assumptions and limitations of this study were considered below.

3.7.1. Assumptions:

The following assumptions were made for this study:

1. The participant teachers of the study responded to the items of the instrument sincerely.
2. The teachers of the pilot study were assumed to have approximately the same characteristics as the actual subjects of the study.

3. All principals allowed their teachers to attend the study, as they supported educational research. Therefore, teachers were expected to be willingly involved in the study.
4. Reducing the fear of personal exposure would be essential in gaining the most reliable data possible. Thus, their names were not asked bearing in mind that they may not want to give their names for further study.
5. The instrument of this study was assumed to measure teachers' beliefs about integration of visual art with all other activities.

3.7.2. Limitations:

There are some limitations which should be examined when the results are interpreted. The first limitation is that the instrument was only applied to preschool teachers who have been working in public and private early childhood centers in Ankara. For that reason, this situation may limit the generalizability of the study. The second one is gender variable of the study because all participants of the study were female. For that reason, variable related to gender was not tested. The third limitation is the timing of the completion the instrument. That is, it took the participants a long time to complete the questionnaire.

CHAPTER IV

RESULTS

This chapter is devoted to presentation of the results of the study which were gained by analyzing the data in the way described in the prior chapter. The findings concerning teachers' beliefs about visual art, integration of visual art with other activities in early childhood settings are presented in two sections. The first section includes descriptive statistics which present general descriptions of the results and the second section presents the relationship between variables using non-parametric technique.

4.1. Descriptive Statistics

Descriptive statistics concerning the characteristics of the sample and the answers of the questions were considered.

4.1.1. The Characteristics of the Sample:

In terms of gender, 4 % ($N = 1$) of the subjects were male whereas 99.6 % ($N = 255$) of them female. For that reason, male participant was removed from the data.

In terms of the years of experience of teachers, 35.7 % ($N = 91$) of them were 1-5 years experience; 23.9 % ($N = 61$) of them were 6-10 years experience; 40.4 % ($N = 103$) of them were 11-15 years and more experience.

Table 4.1. The Percentages of the Years of Experience of Teachers

Years of Experience	<i>f</i>	%
1-5 years	91	35.7
6-10 years	61	23.9
11 years and more	103	40.4
Total	255	100

According to the educational level of the teachers, 38.4 % ($N = 98$) were high school graduates; 15.3 % ($N = 39$) of them were two-year vocational school graduates; 46.3 % ($N = 118$) were university graduation.

Table 4.2. The Percentages of Subjects According to Educational Background

Graduation Level	<i>f</i>	%
High school	98	38.4
Two-year vocational school	39	15.3
University	118	46.3
Total	255	100

In relation to the type of the school, 53.7 % ($N = 137$) of the subjects have been worked in private school whereas 46.3 % ($N = 118$) of them have been worked in public school.

Table 4.3. Frequencies of the Type of the School

Type of the School	<i>f</i>	%
Public	118	46.3
Private	137	53.7
Total	255	100

Regarding courses related to visual art criterion 60.8 % ($N = 155$) of the subjects took courses related to visual arts whereas 39.2 % ($N = 100$) of the subjects did not take any course related to visual arts.

Table 4.4. Percentages of Lessons Which were Attended By Teachers

Attendance to Lessons	<i>f</i>	%
Yes	155	60.8
No	100	39.2
Total	255	100

For the criteria of courses, percentages of responses given for attending of the courses related to visual arts during teachers' educational life are like this:

Art 36.3 %, instructional materials 12.1 %, other visual arts 8.2 %, other courses 21.5%.

Table 4.5. The Percentages of Art

Art	<i>f</i>	%
Yes	93	36.6
No	163	63.7
Total	255	100

Table 4.6. The Percentages of Instructional Materials

Instructional Materials	<i>f</i>	%
Yes	31	12.1
No	224	87.9
Total	255	100

Table 4.7. The Percentages of Visual Arts

Other Visual Arts	<i>f</i>	%
Yes	21	8.2
No	235	91.8
Total	255	100

Table 4.8. The Percentages of Others

Others	<i>f</i>	%
Yes	55	21.5
No	201	78.5
Total	255	100

Regarding teachers' educational training, 9.8 % ($N = 25$) of the teachers attended inservice trainings; 8.6 % ($N = 22$) of them attended seminars; 1.6 % ($N = 4$) of them attended conferences; 80, 0 % ($N = 204$) did not attend any educational training.

Table 4.9. Percentages of Educational Training

Educational Training	<i>f</i>	%
Inservice Training	25	9.8
Seminar	22	8.6
Conference	4	1.6
No	204	80.0
Total	255	100

4.1.2. The Descriptive Statistics for Activities Related to Visual Art

Descriptive statistics of developmental areas and their frequencies and percentages are described Table 4.10., 4.11., 4.12., 4.13., 4.14., 4.15., 4.16 in this part. 56.1 % ($N = 143$) of the teachers think that visual art improves children's language development. 72.2 % ($N = 184$) of the teachers mention that visual art helps children's motor development. 79.6 % ($N = 203$) of the teachers respond that visual art supports children's cognitive development. 46.3 % ($N = 118$) of the teachers say

that visual art influences children's emotional development. 68.2 % ($N = 174$) of the teachers think that visual art helps children's social development. 23.1 % ($N = 59$) of the teachers respond that visual art improves children's creativity. 9.8 % ($N = 25$) of the teachers say that visual art supports children's self-care development.

Table 4.10. The Percentages of the Language Development

Language Development	<i>f</i>	%
Yes	143	56.1
No	112	43.9
Total	255	100

Table 4.11. The Percentages of the Motor Development

Motor Development	<i>f</i>	%
Yes	184	72.2
No	71	27.8
Total	255	100

Table 4.12. The Percentages of the Cognitive Development

Cognitive Development	<i>f</i>	%
Yes	203	79.6
No	52	20.4
Total	255	100

Table 4.13. The Percentages of the Emotional Development

Emotional Development	<i>f</i>	%
Yes	118	46.3
No	137	53.7
Total	255	100

Table 4.14. The Percentages of the Social Development

Social Development	<i>f</i>	%
Yes	174	68.2
No	81	31.8
Total	255	100

Table 4.15. The Percentages of the Creativity

Creativity	<i>f</i>	%
Yes	59	23.1
No	196	76.9
Total	255	100

Table 4.16. The Percentages of the Self-Care Development

Self-Care Development	<i>f</i>	%
Yes	25	9.8
No	230	90.2
Total	255	100

Table 4.17., 4.18., 4.19., 4.20. show the teachers' preferences to use of the visual art. 67.1 % ($N = 171$) of the teachers prefer to use visual art activity as "main activity". 64.3 % ($N = 164$) of the teachers prefer to use visual art activity as "integrated activity". 38.4 % ($N = 98$) of the teachers prefer to use visual art activity as "assisted activity". 60.8 % ($N = 155$) of the teachers prefer to use visual art activity as "free activity".

Table 4.17. The Percentages of the Main Activity

Main Activity	<i>f</i>	%
Yes	171	67.1
No	84	32.9
Total	255	100

Table 4.18. The Percentages of the Integrated Activity

Integrated Activity	<i>f</i>	%
Yes	164	64.3
No	91	35.7
Total	255	100

Table 4.19. The Percentages of the Assisted Activity

Assisted Activity	<i>f</i>	%
Yes	98	38.4
No	157	61.6
Total	255	100

Table 4.20. The Percentages of the Free Activity

Free Activity	<i>f</i>	%
Yes	155	60.8
No	100	39.2
Total	255	100

Moreover, teachers preferences to integrate the visual art with other activities are described as: 60.0 % ($N = 153$) of the teachers prefer to integrate visual art with

“play”, 40.8 % ($N = 104$) of the teachers prefer to integrate visual art with “music”, 34.1 % ($N = 87$) of the teachers prefer to integrate visual art with “science”, 60.4 % ($N = 154$) of the teachers prefer to integrate visual art with “language and literacy”, 20.4 % ($N = 52$) of the teachers prefer to integrate visual art with “math”, 45.9 % ($N = 117$) of the teachers prefer to integrate visual art with “drama”.

Table 4.21. The Percentages of the Integration of the Play Activity with Visual Art

Play Activity	<i>f</i>	%
Yes	153	60.0
No	102	40.0
Total	255	100

Table 4.22. The Percentages of the Integration of the Music Activity with Visual Art

Music Activity	<i>f</i>	%
Yes	104	40.8
No	151	59.2
Total	255	100

Table 4.23. The Percentages of the Integration of the Science Activity with Visual Art

Science Activity	<i>f</i>	%
Yes	87	34.1
No	168	65.9
Total	255	100

Table 4.24. The Percentages of the Integration of the Language and Literacy Activity with Visual Art

Language and Literacy Activity	<i>f</i>	%
Yes	154	60.4
No	101	39.6
Total	255	100

Table 4.25. The Percentages of the Integration of the Math Activity with Visual Art

Math Activity	<i>f</i>	%
Yes	52	20.4
No	203	79.6
Total	255	100

Table 4.26. The Percentages of the Integration of the Drama Activity with Visual Art

Drama Activity	<i>f</i>	%
Yes	117	45.9
No	138	54.1
Total	255	100

4.2. Assumptions of the Non-parametric Statistics

The chi-square test for a two way contingency table may be implemented in order to see whether a statistical relationship exists between two variables. While studying the results by using chi-square, there can be some assumptions in order to provide validity of the results. While examining the results of the study, all of these assumptions are carefully examined.

When the result of the chi-square test is significant and the table shows more than 1 degree of freedom, a follow-up test may be applied. These follow-up tests are important to assess the significance of an overall which includes multiple sub-categories. In this study, in order to see the relationship between sub-categories, pair wise comparisons can be used. At that point, the Holm's sequential Bonferroni method is used as a follow-up test in order to control Type I error (Green, Salkind, & Akey, 2000).

The observations for a two-way contingency table analysis are independent of each other. That is, the study should be conducted to avoid dependency in the data. If the assumption is not met, the test may show inaccurate results (Green, Salkind, & Akey, 2000).

In order to decide whether sample size is large enough or not, the size of the expected cell frequencies should be examined. According to this, if the expected cell frequency is more than 20% that are less than 5, it can affect the validity of the results (Green, Salkind, & Akey, 2000).

4.3. The Results of the Study

Chi-square test was employed to see if there are significant relationship in the teachers' beliefs about integration of visual art activities in terms of teachers' experiences years, educational background, and whether teachers who attend the courses or not.

4.4. Results Concerning the Relationship among Teachers' Years of Experiences and Their Beliefs Related to Integration of Visual Art

In order to see if there is a significant relationship of the teachers' beliefs about integration of visual art activities in terms of teachers' experience years, chi-square test was employed.

4.4.1. Research Question 1

Is there a significant relationship between years of experience and teachers' beliefs related to integrated curriculum?

Table 4.27. The Result of Chi-square Tests of the Criteria Related to Years of Experience and Beliefs about Integration of Activities

Beliefs	in terms of child		in terms of administration		in terms of program		TOTAL
Experience Years	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%	
1-5 Years	49	41.2	28	32.6	9	32.1	
	57.0		32.6		10.5		100.0
6-10 Years	24	20.2	30	34.9	2	7.1	
	42.9		53.6		3.6		100.0
11-15 Years and More	46	38.7	28	32.6	17	60.7	
	50.5		30.8		18.7		100.0
TOTAL	119	100.0	86	100.0	28	100.0	

$$\chi^2 = 13.77 \text{ df}=4 \text{ p} = .008$$

Table 4.28. Results for the Pairwise Comparisons among Years of Experience Related to Beliefs about Integration of Activities Using Holm's Sequential Bonferroni Method

Comparison	Pearson Chi square	p-value	Required p-value for significance	Significance	Cramér's V
1-5 years vs. 6-10 years	7.06	.029	.025	NS	.223
6-10 years vs. 11 years and more	11.12	.004	.0165	*	.275
1-5 years vs. 11 years and more	2.42	.299	.05	NS	.117

*p-value (required p-value for significance)

Based on the Pearson χ^2 test, the p-value for the comparison between 1-5 years and 6-10 years is .029. The p-values for the comparisons between 1-5 years and 11 years and more and between 6-10 years and 11 years and more are .299 and .004, respectively. The results of these three tests using Holm's sequential Bonferroni method for controlling Type I error are reported in Table 4.28.

According to these results, there was a significant relationship between teachers who have been working for 6-10 years and 11 years and more in terms of beliefs about integrated curriculum in early childhood education. As shown in the Table 4.27 and 4.28, teachers who have been working for 11 years and more believe in the contributing effect of the integration on the program 8.55 times (60.7/7.1) more than teachers who have been working for 6-10 years. Similarly, teachers who have been working for 11 years and more think the integration as a contribution of child development 1.91 times (38.7/20.2) more than teachers who have been working for 6-10 years.

4.4.2. Research Question 2

Is there a significant relationship between years of experience and teachers' beliefs related to integration of visual art with other activities?

Table 4.29. The Result of Chi-square Tests of the Criteria Related to Years of Experience Related to Beliefs about Integration of Visual Art with Other Activities

Beliefs	in terms of child		in terms of teacher		in terms of administration		TOTAL
Experience Years	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%	
1-5 Years	36	36.7	9	33.3	34	31.8	
	45.6		11.4		43.0		100.0
6-10 Years	26	26.5	6	22.2	23	21.5	
	47.3		10.9		41.8		100.0
11-15 Years and More	36	36.7	12	44.4	50	46.7	
	36.7		12.2		51.0		100.0
TOTAL	98	100.0	27	100.0	107	100.0	

$$x^2 = 2.19 \text{ df} = 4 \text{ p} = .700$$

Table 4.29 indicates the result of chi-square which shows whether there is a significant relationship among teachers' experience years on their beliefs about integration of visual art with other activities. According to results, there was no significant relationship among teachers' experience years ($x^2_{(4)}=2.19$, $p=.700$)

4.4.3. Research Question 3

Is there a significant relationship between years of experience and beliefs related to usage about integration of visual arts?

Table 4.30. The Result of Chi-square Tests of the Criteria Related to Years of Experience and Beliefs about the Usage about Integration of Visual Arts

Beliefs	with all other activities		with one specific activity		reinforcer after the activity		TOTAL
Experience Years	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%	
1-5 Years	8	38.1	53	32.5	26	44.8	
	9.2		60.9		29.9		100.0
6-10 Years	7	33.3	39	23.9	13	22.4	
	11.9		66.1		22.0		100.0
11-15 Years and More	6	28.6	71	43.6	19	32.8	
	6.3		74.0		19.8		100.0
TOTAL	21	100.0	163	100.0	58	100.0	

$$x^2 = 4.60 \text{ df} = 4 \text{ p} = .331$$

Table 4.30 indicates the result of chi-square which shows whether there is a significant relationship among teachers' experience years on their beliefs related to usage about integration about visual arts. According to results, there was no significant relationship among teachers' experience years ($\chi^2_{(4)}=4.60$, $p=.331$).

4.4.4. Research Question 4

Is there a significant relationship between years of experience and beliefs related to related to teachers' perceived role of the integrated curriculum in early childhood education?

Table 4.31. The Result of Chi-square Tests of the Criteria Related to Years of Experience and Beliefs Related to Teachers' Perceived Role of the Integrated Curriculum in Early Childhood Education

Beliefs	Necessary to use/must be use		Need more info.		Ministry of Education		In terms of app.		Child-teacher inter.		TOTAL
Exp. Years	f	%	f	%	f	%	f	%	f	%	
1-5 Years	30	34.9	19	38.0	2	20.0	18	45.0	11	35.5	
	37.5		23.8		2.5		22.5		13.8		100.0
6-10 Years	13	15.1	8	16.0	1	10.0	7	17.5	15	48.4	
	29.5		18.2		2.3		15.9		34.1		100.0
11 Years and More	43	50.0	23	46.0	7	70.0	15	37.5	5	16.1	
	46.2		24.7		7.5		16.1		5.4		100.0
TOTAL	86	100.0	50	100.0	10	100.0	40	100.0	31	100.0	

$$\chi^2 = 24.24 \text{ df}=8 \text{ p} = .002$$

Table 4.32. Results for the Pairwise Comparisons among Years of Experience and Beliefs Related to Teachers' Perceived Role of the Integrated Curriculum in Early Childhood Education

Comparison	Pearson Chi square	p-value	Required p-value for significance	Significance	Cramér's V
1-5 years vs. 6-10 years	7.14	.129	.05	NS	.240
6-10 years vs. 11 years and more	20.89	.000	.0165	*	.390
1-5 years vs. 11 years and more	7.06	.133	.025	NS	.202

*p-value (required p-value for significance)

According to the Pearson χ^2 test, the p-value for the comparison between 1-5 years and 6-10 years is .129. The p-values for the comparisons between 1-5 years and 11-years and more and between 6-10 years and 11 years and more are .133 and .000, respectively. The results of these three tests using Holm's sequential Bonferroni method for controlling Type I error are reported in Table 4.32.

According to these results, there was a significant relationship between teachers who have been working for 6-10 years and 11 years and more in terms of beliefs about related to the status of the integrated curriculum in early childhood education. Table 4.31 and 4.32. show that teachers who have been working for 11 years and more think about the integrated curriculum as a necessary 3.32 times (50.0/15.1) more than teachers who have been working for 6-10 years. Moreover, teachers who have been working for 11 years and more believe that teachers need more information about integrated curriculum 2.88 times (46.0/16.0). Similarly, teachers who have been working for 11 years and more think the appropriateness of the integrated curriculum for Ministry of Education 7 times (70/10) more than teachers who have been working for 6-10 years. Moreover, teachers who have been working for 11 years and more think the integrated curriculum as helping administration process 2.14 times (37.5/17.5) more than teachers who have been working for 6-10 years. On the other hand, teachers who have been working for 6-10 years think the contributing effect of the integrated curriculum on the child-teacher relationship 3 times (48.4/16.1) more than teachers who have been working for 11 years and more.

4.5. Results Concerning the Relationship between the Educational Background of the Teachers and Their Beliefs Related to Integration of Visual Art

In order to see if there is a significant relationship of the teachers' beliefs about integration of visual art activities in terms of teachers' educational background, chi-square test was employed.

4.5.1. Research Question 5

Is there a significant relationship between teachers' educational background and their beliefs related to integrated curriculum?

Table 4.33. The Result of Chi-square Tests of the Criteria Related to Educational Background and Beliefs about Integration of Activities

Beliefs	in terms of child		in terms of administration		in terms of program		TOTAL
Graduation Level	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%	
High School	44	37.0	28	32.6	16	57.1	
	50.0		31.8		18.2		100.0
Two-Year Vocational School	15	12.6	17	19.8	2	7.1	
	44.1		50.0		5.9		100.0
University	60	50.4	41	47.7	10	35.7	
	54.1		36.9		9.4		100.0
TOTAL	119	100.0	86	100.0	28	100.0	

$$x^2 = 7.42 \text{ df} = 4 \text{ p} = .166$$

Table 4.33 shows the result of chi-square which shows whether there is a significant relationship among educational background on their beliefs related to integration of activities. According to results, there was no significant relationship among teachers' graduation levels ($x^2_{(4)}=7.42$, $p=.166$)

4.5.2. Research Question 6

Is there a significant relationship between teachers' educational background and their beliefs related to integration of visual art with other activities?

Table 4.34. The Result of Chi-square Tests of the Criteria Related to Educational Background and Beliefs about Integration of Visual Art with Other Activities

Beliefs	in terms of child		in terms of teacher		in terms of administration		TOTAL
Graduation Level	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%	
High School	41	41.8	11	40.7	37	34.6	
	46.1		12.4		41.6		100.0
Two-Year Vocational School	22	22.4	2	7.4	12	11.2	
	61.1		5.6		33.3		100.0
University	35	35.7	14	51.9	58	54.2	
	32.7		13.1		54.2		100.0
TOTAL	98	100.0	27	100.0	107	100.0	

$$x^2 = 10.21 \text{ df} = 4 \text{ p} = .037$$

Table 4.35. Results for the Pairwise Comparisons among Years of Experience Related to Beliefs about Integration of Visual Art with Other Activities

Comparison	Pearson Chi square	p-value	Required p-value for significance	Significance	Cramér's V
High School vs. Two-Year Vocational School	2.74	.255	.05	NS	.148
High School vs. University	3.86	.145	.025	NS	.140
Two-Year Vocational School vs. University	9.21	.010	.0167	*	.254

*p-value (required p-value for significance)

According to the Pearson χ^2 test, the p-value for the comparison between high school and two-year vocational school is .255. The p-values for the comparisons between high school and university and between two-year vocational school vs. university are .145 and .010, respectively. The results of these three tests using Holm's sequential Bonferroni method for controlling Type I error are reported in Table 4.35. According to these results, there was a significant relationship between teachers who have graduated from two-year vocational school and teachers who have graduated from university in terms of beliefs related to integration of visual art with other activities.

As shown in the Table 4.34 and 4.35, teachers who have graduated from university believe in the supporting effects of the integration of visual art on teachers 7 times (51.9/7.4) more than teachers who have graduated from two-year vocational school. Similarly, teachers who have graduated from university think the integration as a contribution of administration process 4.84 times (54.2/11.2) more than teachers who have graduated from two-year vocational school.

4.5.3. Research Question 7

Is there a significant relationship between teachers' educational background and their beliefs related to usage about integration of visual arts?

Table 4.36. The Result of Chi-square Tests of the Criteria Related to Graduation Level and Beliefs Related to the Usage about Integration of Visual Arts

Beliefs	with all other activities		with one specific activity		reinforcer after the activity		TOTAL
Graduation Level	<i>f</i> %		<i>f</i> %		<i>f</i> %		
High School	7	33.3	64	39.3	20	34.5	
	7.7		70.3		22.0		100.0
Two-Year Vocational School	3	14.3	16	9.8	18	31.0	
	8.1		43.2		48.6		100.0
University	11	52.4	83	50.9	20	34.5	
	9.6		72.8		17.5		100.0
TOTAL	21	100.0	163	100.0	58	100.0	

$\chi^2 = 20.52$ df=6 $p = .002$

Table 4.37. Results for the Pairwise Comparisons among Years of Experience Related to Beliefs Related to the Usage about Integration of Visual Arts

Comparison	Pearson Chi square	p-value	Required p-value for significance	Significance	Cramér's V
High School vs. Two-Year Vocational School	9.40	.009	.025	*	.271
High School vs. University	.774	.679	.05	NS	.061
Two-Year Vocational School vs. University	14.54	.001	.0167	*	.310

*p-value (required p-value for significance)

According to the Pearson χ^2 test, the p-value for the comparison between high school and two-year vocational school is .009. The p-values for the comparisons between high school and university and between two-year vocational school vs. university are .679 and .001, respectively. The results of these six tests using Holm's sequential Bonferroni method for controlling Type I error are reported in Table 4.37. According to these results, there was a significant relationship between teachers who

have graduated from high school and teachers who have graduated from two-year vocational school in terms of beliefs related to integration of visual art with other activities. In addition to this result, there was a significant relationship between teachers who have graduated from two-year vocational school and teachers who have graduated from university.

As shown in the Table 4.36 and 4.37, teachers who have graduated from high school believe in the integration of visual art activity with all other activities 2.33 times (33.3/14.3) more than teachers who have graduated from two-year vocational school. Similarly, teachers who have graduated from high school think about the integration of the visual art activity with one specific activity 4 times (39.3/9.8) more than teachers who have graduated from two-year vocational school.

Table 4.36 and 4.37 also present the relationship between two-year vocational school and university. The results show that teachers who have graduated from university believe in the integration of visual art activity with all other activities 3.66 times (52.4/14.3) more than teachers who have graduated from two-year vocational school. Similarly, teachers who have graduated from university think about the integration of the visual art activity with one specific activity 5.19 times (50.9/9.8) more than teachers who have graduated from two-year vocational school.

4.5.4. Research Question 8

Is there a significant relationship between teachers' educational background and their beliefs related teachers' perceived role of the integrated curriculum in early childhood education?

Table 4.38. The Result of Chi-square Tests of the Criteria Related to Graduation Level and Beliefs Related to Teachers' Perceived Role of The Integrated Curriculum in Early Childhood Education

Beliefs	Necessary to use/must be use		Need more info.		Ministry of Education		In terms of administrati on		Child-teacher inter.		TOTAL
Graduation Level	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%	
High School	30	34.9	30	60.0	2	20.0	11	27.5	11	35.5	
	35.7		35.7		2.4		13.1		13.1		100.0
Two-Year Vocational School	15	17.4	3	6.0	4	40.0	4	10.0	8	25.8	
	44.1		8.8		11.8		11.8		23.5		100.0
University	41	47.7	17	34.0	4	40.0	25	62.5	12	38.7	
	41.4		17.2		4.0		25.3		12.1		100.0
TOTAL	86	100.0	50	100.0	10	100.0	40	100.0	31	100.0	

$$x^2 = 22.70 \text{ df} = 8 \text{ p} = .004$$

Table 4.39. Results for the Pairwise Comparisons among Graduation Level Related to Beliefs Related to Teachers' Perceived Role of The Integrated Curriculum in Early Childhood Education

Comparison	Pearson Chi square	p-value	Required p-value for significance	Significance	Cramér's V
High School vs. Two-Year Vocational School	12.57	.014	.0167	*	.326
High School vs. University	10.29	.036	.025	NS	.237
Two-Year Vocational School vs. University	8.03	.091	.05	NS	.246

*p-value (required p-value for significance)

According to the Pearson x^2 test, the p-value for the comparison between teachers who have graduated from high school and two-year vocational school is .014. The p-values for the comparisons between high school and university and between two-year vocational school and university are .036 and .091, respectively. The results of these three tests using Holm's sequential Bonferroni method for controlling Type I error are reported in Table 4.39.

According to these results, there was a significant relationship between teachers who have graduated from high school and two-year vocational school in terms of beliefs about related to the integration of visual art with other activities. Table 4.38 and 4.39. show that teachers who have graduated from high school think about the integrated curriculum as a necessary 2 times (34.9/17.4) more than teachers who have graduated from two-year vocational high school. Similarly, teachers who have graduated from high school believe the necessity of information about integrated curriculum 10 times (60/10) more than teachers who have graduated from two-year vocational school. On the other hand, teachers who have graduated from two-year vocational school believe the appropriateness of the integrated curriculum for Ministry of Education 2 times (40/20) more than teachers who have graduated from high school .Moreover, teachers who have graduated from high school believe the integrated curriculum as a contribution of administration 2.75 times (27.5/10) more than teachers who have graduated from two-year vocational school. Similarly, the teachers who have graduated from high school think the contributing effect of the integrated curriculum on the child-teacher relationship 1.38 times (35.5/25.8) more than teachers who have graduated from two-year vocational school.

4.6. Results Concerning the Relationship between Whether Teachers have Attended the Courses on Visual Art or Not, and Their Beliefs in the Integration of Visual Art

In order to see if there is a significant relationship between whether teachers have attended courses on visual art or not and their beliefs about integration of visual art activities, chi-square test was employed.

4.6.1. Research Question 9

Is there a relationship between attending courses on visual art or not and teachers' beliefs related to integrated curriculum?

Table 4.40. The Result of Chi-square Tests of the Criteria about Whether Teachers Have Attended Courses or not Related to Beliefs about Integration of Activities

Beliefs	in terms of child		in terms of administration		in terms of program		TOTAL
Attending Courses	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%	
Yes	79	66.4	46	53.5	18	64.3	
	55.2		32.2		12.6		100.0
No	40	20.2	40	34.9	10	7.1	
	44.4		44.4		11.1		100.0
TOTAL	119	100.0	86	100.0	28	100.0	

$$x^2 = 3.62 \text{ df}=2 \text{ p} = .164$$

Table 4.40 shows the result of chi-square which shows whether there is a significant relationship among attending lessons on their beliefs related to integration of activities. According to results, there was no significant relationship between whether teachers attend the courses or not in terms of their beliefs about integrated curriculum ($x^2_{(2)}=3.62$, $p=.164$).

4.6.2. Research Question 10

Is there a relationship between attending course on visual art or not and beliefs related to integration of visual art with other activities?

Table 4.41. The Result of Chi-square Tests of the Criteria about Whether Teachers Have Attended Courses or not Related to Beliefs about Integration of Visual Art with Other Activities

Beliefs	in terms of child		in terms of teacher		in terms of administration		TOTAL
Attending Courses	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%	
Yes	44	44.9	21	77.8	76	71.0	
	31.2		14.9		53.9		100.0
No	54	55.1	6	22.2	31	29.0	
	59.3		6.6		34.1		100.0
TOTAL	98	100.0	27	100.0	107	100.0	

$$x^2 = 18.36 \text{ df}=2 \text{ p} = .000$$

The result of chi-square test which shows whether there is significant relationship between teachers who attended the courses or teachers who did not attend the courses in terms of beliefs about integration of visual art with other activities. Table 4.41 shows the percentages of teachers who attended the courses

believe the integration as a contributing effect on child development (44.9 %), as a contributing effect on teachers (77.8%), and as a contributing effect on administration (71.0%). On the other hand, the percentages of teachers who did not attend the courses believe the integration as a contributing effect on child development (55.1 %), as a contributing effect on teachers (22.2%), and as a contributing effect on administration (29.0%).

As shown in the Table 4.41, teachers who attended the courses believe in the supporting effects of the integration of visual art on teachers 3.50 times (77.8/22.2) more than teachers who did not attend the courses. Similarly, teachers who attended the courses believe in the supporting effects of the integration of visual art on child development 2.45 times (71/29) more than teachers who did not attend the courses.

4.6.3. Research Question 11

Is there a relationship between attending course on visual art or not and beliefs related to usage about integration of visual arts?

Table 4.42. The Result of Chi-square Tests of the Criteria about Whether Teachers Have Attended the Courses or Not Related to Beliefs about the Usage about Integration of Visual Arts

Beliefs	with all other activities		with one specific activity		reinforcer after the activity		TOTAL
Attending Courses	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%	
Yes	16	76.2	106	65.0	26	44.8	
	10.8		71.6		17.6		100.0
No	5	23.8	57	35.0	32	55.2	
	5.3		60.6		34.0		100.0
TOTAL	21	100.0	163	100.0	58	100.0	

$$x^2 = 9.54 \text{ df} = 2 \text{ p} = .008$$

The result of chi-square test which shows whether there is significant relationship between teachers who attended the courses or teachers who did not attend the courses in terms of beliefs about the usage about integration of visual arts. Table 4.42 shows the percentages of teachers who attended the courses believe in the integration of visual art activity with all other activities (76.2 %), the integration of the visual art activity with one specific activity (65.0), the integration of the visual art activity as a reinforcer after the activity (44.8).

As shown in the Table 4.42, teachers who attended the courses believe in the integration of visual art activity with all other activities 3.2 times (76.2/23.8) more than teachers who did not attend the courses. Moreover, teachers who attended the courses think about the integration of the visual art activity with one specific activity 1.86 times (65/35) more than teachers who did not attend the courses. Furthermore, teachers who attended the courses think about the integration of the visual art activity as a reinforcer after the activity 1.23 times (55.2/44.8) more than teachers who did not attend the courses.

4.6.4. Research Question 12

Is there a relationship between attending course on visual art or not and beliefs related to teachers' perceived role of the integrated curriculum in early childhood education?

Table 4.43. The Result of Chi-square Tests of the Criteria about Whether Teachers Have Attended the Courses or Not Related to Beliefs about Teachers' Perceived Role of the Integrated Curriculum in Early Childhood Education

Beliefs	Necessary to use/must be use		Need more info.		Ministry of Education		In terms of administration		Child-teacher inter.		TOTAL
Attending Courses	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%	
Yes	52	60.5	41	82.0	7	70.0	27	67.5	17	54.8	
	36.1		28.5		4.9		18.8		11.8		100.0
No	34	39.5	9	18.0	3	30.0	13	32.5	31	45.2	
	46.6		12.3		4.1		17.8		19.2		100.0
TOTAL	86	100.0	50	100.0	10	100.0	40	100.0	31	100.0	

$$\chi^2 = 8.74 \text{ df}=4 \text{ p} = .068$$

Table 4.43 shows the result of chi-square which shows whether there is a significant relationship between whether teachers who attend the courses or not on their beliefs related to the status of the integrated curriculum in early childhood education. According to results, there was no significant relationship between whether teachers who attend the courses or not ($\chi^2_{(4)}=8.74$, $p=.068$).

4.7. Summary

Overall, this part summarized the results of the study in terms of twelve research questions about the relationship between early childhood teachers' beliefs related to integrated curriculum. Specifically, the relationship was examined in respect to some variables like teachers' experience years, their educational levels, whether attending courses related to visual art or not.

The results revealed that there are some relationships between teachers' beliefs in terms of their experience years, educational levels, and attending course related to visual art. The further studies were conducted to see the relationship deeply. Therefore, it could be reached more accurate results.

This current study is important because it contributes to early childhood area by examining the relationship of early childhood teachers' beliefs about integration of visual art in respect to many variables in Turkey. This issue will take attention from researchers because there is no specific study about this issue.

CHAPTER V

DISCUSSION

The purpose of this study was to explore the preschool teachers' beliefs about integration of visual art with other activities in early childhood settings. The beliefs of teachers working with children between the ages of 5 and 6 in public and private schools were measured by using "Teachers' Beliefs about Integration of Visual Art" questionnaire.

The research questions were as follows;

- Is there a relationship between years of experience and teachers' beliefs related to
 - integrated curriculum?
 - integration of visual art with other activities?
 - the usage about integration of visual arts?
 - teachers' perceived role of the integrated curriculum in early childhood education?
- Is there a relationship between teachers' educational background and teachers' beliefs related to
 - integrated curriculum?
 - integration of visual art with other activities?
 - the usage about integration of visual arts?
 - teachers' perceived role of the integrated curriculum in early childhood education?
- Is there a relationship between attending courses related to visual art and teachers' beliefs related to
 - integrated curriculum?
 - integration of visual art with other activities?
 - the usage about integration of visual arts?

- teachers' perceived role of the integrated curriculum in early childhood education?

This chapter presents the discussion of the results, implications derived from the study, and recommendations for practice and further studies. The discussion of the findings will be given in subsections drawn from the research questions.

5.1. Discussion on Statistical Results

Is there any statistically significant relationship between years of experience and teachers' beliefs? For this main research question, there were four specific research questions because the item of teachers' beliefs is composed of four subcategories.

5.1.1. Research Question 1. Is there a relationship between years of experience and teachers' beliefs related to integrated curriculum?

For this research question a significant relationship was found between teachers who have been working for 6-10 years and 11 years and more in terms of beliefs about integrated curriculum in early childhood education. Further analysis showed that teachers who have been working for 11 years and more believe that integrated curriculum promotes child development and the program. However, teachers who have been working for 6-10 years believe that integrated curriculum promotes the application process, the application of activities.

Results of this research question indicate that the more experienced teachers prefer to use integrated curriculum. As mentioned in the literature review, integrated curriculum is a part of DAP. There are some studies in the literature showing the relationship between DAP beliefs of teachers and their years of experience. The literature on teachers did not support this relationship because these studies stated that teachers who have less experience have more developmentally appropriate beliefs and practices than teachers with more experience (Buchanan et al., 1998; Vartuli, 1999). This may result from the participant teachers' graduation levels because the rate of the experienced teachers' educational level is more compared to

less experienced teachers. That is, for teachers with experience of 11 years and more, 18.4 % of teachers were graduated from high school, 23.3 % of them from two-year vocational school and 58.3 % of them from university. The number and the content of the courses in the universities may provide more detailed and theoretical information about DAP and integrated curriculum, too. That is, teachers might improve themselves with the help of their preservice education. Therefore, teachers who have 11 years and more apply integrated curriculum more commonly in their classrooms.

5.1.2. Research Question 2. Is there a relationship between years of experience and beliefs related to integration of visual art with other activities?

Teachers' years of experience was expected to affect their beliefs about integration of visual art with other activities as mentioned in this research question. However, the results showed that teachers' years of experience had no relationship on their beliefs related to integration of visual art with other activities.

In order to understand the reasons about this unexpected result, the data were analyzed again. As a result of this analysis, it was found that three different types of experienced teachers; 1-5 years, 6-10 years, and 11 years and more attend training such as conferences, seminars, and in service training related to visual art in approximately the same percentages: 30.9 % of 1-5 year experienced teachers, 30.9 % of 6-10 year experienced teachers and 38.2 % of 11 years and more experienced teachers. At this point, it can be said that the courses which were taken in teachers' educational life may not be the only reason to improve their understanding about integration of visual art. In addition to courses related to visual art, training such as conferences, seminars, and in-service training related to it may help them to gain more knowledge about the usage of visual art. Therefore, teachers can combine the detailed information about visual art by taking courses and attending different training programs. This insignificance might result from this finding because the rates of participation in training are very similar to each other.

5.1.3. Research Question 3. Is there a relationship between years of experience and beliefs related to usage about integration of visual art?

Results obtained for this question reported no significant relationship between years of experience of preschool teachers and their beliefs related to usage about integration of visual art. This may be because of the content of the question. The question related to this research question revealed three common experiences. These are integration of visual art with all other activities, with one specific activity, and use of visual art as a reinforcer tool after the activity. These activities are generally used in the classroom, hence, may not be perceived to be a component of integrative curriculum by the teacher. Hence, it may be inferred that even though the teachers are integrating visual art into their curriculum, they are not consciously aware of doing so. In other words, teachers' natural instinct to reinforce their teaching with visual art may not be recognized and identified as a usage to integrate visual art.

5.1.4. Research Question 4. Is there a relationship between years of experience and teachers' beliefs related to teachers' perceived role of the integrated curriculum in early childhood education?

For this research question a significant relationship was recorded between teachers who have been working for 6-10 years and 11 years and more in terms of beliefs about teachers' perceived role of the integrated curriculum in early childhood education. In this research question, there were five different beliefs which were stated by participant teachers. The first one is that integrated curriculum should be used more in early childhood settings. The second one is that teachers need to have more information about integrated curriculum. The third one is that integrated curriculum is appropriate for new early childhood curriculum which was recently improved by Ministry of National Education. The fourth one is that integrated curriculum helps teachers while they administer activities to children. The last one is that integrated curriculum supports child-teacher interactions in the classroom. Further analysis indicated that some teachers who have been working for 11 years and more think about the integrated curriculum as necessary whereas some believe that they need more information about it. Moreover, teachers who have been working

for 11 years and more believe that integrated curriculum is appropriate for new early childhood curriculum developed by Ministry of National Education and integrated curriculum helps teachers in administering activities. On the other hand, teachers who have been working for 6-10 years believe that integrated curriculum supports child-teacher interactions in the classroom.

In the literature, more experienced teachers are expected to practice traditional instructional experiences (Sarason, 1991; Zeichner & Gore, 1990). The result of this study is not consistent with the literature probably because the concept of integrated curriculum is a new idea in early childhood education. Contrary to this literature (Sarason, 1991; Zeichner & Gore, 1990), more experienced teachers prefer to use new approaches, more specifically an integrated curriculum in their classrooms. This is due to the fact that integrated curriculum is seen as a new approach which is not traditional. This may show that teachers who were more experienced might initiate new ideas or new approaches in their teaching life. Firstly, the results showed that more experienced teachers claimed that integrated curriculum is placed on the “New Early Childhood Program” (Ministry of National Education, 2006). Especially, “New Early Childhood Program” revised in 2003 emphasized the integrated curriculum in a more detailed way. The more experienced teachers may trust themselves to apply new things in their classrooms. Therefore, they may give more emphasis to this issue. Secondly, while they try to apply integrated curriculum, they stated that they need more information about this new curriculum. At that point, they may want to learn more information about integrated curriculum because they think that integrated curriculum in early childhood education is important. Thirdly, more experienced teachers believe integrated curriculum to be necessary, and useful in administering activities. According to them, integrated curriculum should be a part of the early childhood curriculum because it provides opportunities to teachers in order to teach more durable information. This may result from their high number of years of experience. In their teaching life, they may have applied different curriculums and had different experiences related to them. Thus, they may prefer to use integrated curriculum and they believe in its benefits in children’s life. For that

reason, they may believe that an integrated curriculum in early childhood education is necessary and believe it is useful to administer activities.

Is there any statistically significant relationship between teachers' educational background and their beliefs? For this main research question, there were four specific research questions as previously indicated.

5.1.5. Research Question 5. Is there a relationship between teachers' educational background and their beliefs related to integrated curriculum?

The findings of this research question did not match with expectations. The results showed no significant relationship between teacher's graduation levels and their beliefs related to integrated curriculum.

The literature claimed that educational background is one such mediator of beliefs in early childhood (McMullan & Alat, 2002). However, the results of this study were not supported by the literature. The number of teachers who have graduated from two-year vocational school are insufficient (39 out of 255) when compared to teachers who have graduated from high school and university (216 out of 255) might be the reason of the insignificance of educational level on teachers' beliefs. Therefore, comparing these variables may not be suitable for statistical analysis.

5.1.6. Research Question 6. Is there a relationship between teachers' educational background and their beliefs related to integration of visual art with other activities?

Results of this research question indicated a significant relationship between teachers who have graduated from two year vocational school and teachers who have graduated from university in terms of beliefs related to integration of visual art with other activities. Further analysis was conducted to examine the relationship in more detail. This showed that teachers who had graduated from university believe that the integrative curriculum had more positive impact on the teacher and administration of activities when compared to teachers who had graduated from two year vocational school.

This finding is consistent with the literature (Cassidy & Lawrence, 2000). It found that preschool teachers with 4-year versus 2-year degrees were better able to construct their beliefs related to their practices with young children. In addition, when compared to these, university graduates are twice as likely to supply “cognitively focused” rationales for their curriculum preferences. This may result from the differences between the features of the university and two-year vocational school graduates. These features include the number of the courses, the quality of the courses, and the content of the courses which were taken during the teachers’ school life. It is expected that university graduates took more courses compared to two-year vocational school graduates. The curriculum for child development program in two-year vocational school, (Child Development Curriculum, 2003) shows nineteen departmental courses. On the other hand, the old version of the early childhood education curriculum includes twenty-nine departmental courses. Examining the content of the courses in two-year vocational schools is similar to the content of the university programs. However, the time of the courses in the two year vocational school is less than the early childhood program in universities. Interestingly, while teachers who have graduated from two-year vocational school have a significant relationship between university graduates, teachers who have graduated from high school have no significant relationship with university graduates in terms of their beliefs related to integration of visual art with other activities. Actually, the same results related to both high school and two-year vocational school graduates were expected to be found when compared to university graduates. However, when university programs were compared with high school programs, it can easily be seen that university programs are designed to improve pre-service teachers’ knowledge in a detailed manner. Moreover, further analysis was conducted. As a result of this analysis, the following outcome was found: The teachers’ educational level in private school is higher (63.5 % of them have graduated from high school) than public school teachers (8.8 %). At that point, it can be said that teachers who have been working in private schools may apply integrated activities more easily because of their flexible curriculum approach. This may be the result of the difference between

high school and two year vocational school graduates in terms of this research question.

5.1.7. Research Question 7. Is there a relationship between teachers' educational background and their beliefs related to usage about integration of visual arts?

For this research question, a significant relationship between teachers who have graduated from high school and university in terms of beliefs about the usage about integration of visual arts was found. To understand the relationship, further studies were conducted. The results showed that teachers who have graduated from high school prefer to use integration of visual art with all other activities and with one specific activity compared to graduates from two-year vocational school. Similarly, teachers who have graduated from university prefer to integrate the visual art activity with all other activities and with one specific activity compared to graduates from two-year vocational schools.

The results indicate the importance of teacher education programs. In fact, teacher education programs are so important to be a teacher. Of course, there is a difference between teacher education programs in high school and university in terms of number of courses or content of the courses. However, the issue of integrated curriculum may be emphasized in both programs because both of them try to follow recent developments in education.

The reason for this result might be the idea that the rate of teachers who have graduated from high school and university attend training related to visual art such as seminars, conferences, or in-service training are similar to each other. That is, 47.3 % of teachers who have graduated from high school participate in training related to visual art while 41.8 % of teacher who have graduated from university participate in training. This might indicate that the preschool teachers' who have attended training were aware of the importance of integration. Moreover, teachers might prefer to apply visual art more consciously with the help of the training.

5.1.8. Research Question 8. Is there a relationship between teachers' educational background and their beliefs related to teachers' perceived role of the integrated curriculum in early childhood education?

According to the results of this research question, a significant relationship between teachers who have graduated from high school and two-year vocational school in terms of teachers' perceived role of the integrated curriculum in early childhood education was found. Further analysis indicated that teachers who have graduated from high school think about the integrated curriculum as necessary and they need more information about it. Moreover, teachers who have graduated from high school think that integrated curriculum contributes to the administration of activities and it supports child-teacher interactions in the classroom. On the other hand, teachers who have graduated from two year vocational schools believe that integrated curriculum is appropriate for new early childhood curriculum developed by Ministry of National Education and integrated curriculum helps teachers in the administration of activities. One of the teachers involved in this study commented on this issue as follows:

This curriculum is a part of the program which has been developed by Ministry of National Education. With the help of it, teachers can apply the activities in a more free and flexible way. This curriculum offers us to apply activities by giving importance to children's age, their developmental levels, their needs, and individual differences among them (Participant # 36).

Another participant teacher stated:

Integrated curriculum should be part of the Early Childhood Program because visual art is very important for child development. Moreover, in order to educate more sensitive individuals, the importance of visual art must not be disregarded (Participant # 41).

Answers to this research question indicated that teachers who were graduated from high school think that integrated curriculum should be used more in early childhood settings. Also, teachers claimed that they need more information about the application, procedures or plans about integrated activities. Moreover, they believe that integrated curriculum helps teachers to teach something to children. As a result of this, they can see children's progress during the activity. The last important category of this question is child-teacher interaction. Teachers believe that integrated

curriculum is a powerful tool for interacting with children. Therefore, they can get to know children more deeply. There are some examples about teachers' answers about the role of the integrated curriculum in the early childhood curriculum. These are;

- “This curriculum is in need of child-centered approach” (Participant # 27).
- “I think that this program is very helpful for children to help them to construct more durable knowledge” (Participant # 39).
- “This curriculum is an important point on the agenda and on the Early Childhood Program. With the help of it, early childhood teachers apply the curriculum in a more creative and enjoyable way with more time” (Participant # 45).
- “This curriculum prepares children for primary education” (Participant # 90).
- “While this curriculum supports child development, it helps teachers to apply their activities more easily” (Participant # 158).

It can be obviously seen from answers of teachers that the role of the integrated curriculum is essential for early childhood education.

Is there any statistically significant relationship between attending courses related to visual art and teachers' beliefs related to integrated curriculum? For this main research question, there were four specific research questions as previously stated.

5.1.9. Research Question 9. Is there a relationship between attending courses on visual art or not and teachers' beliefs related to integrated curriculum?

Results to this research question reported no significant relationship between whether teachers attended courses or not in terms of their beliefs about integrated curriculum.

Although the teachers did not take any courses about this subject, they might learn lots of things in their experiences. In fact, although pre-service experiences were very important, teachers may have developed themselves more in their practical life. That is, as the number of their experiences rises, they may have gained more

useful information about improving themselves. Therefore, they may have a strong sense of self-efficacy about integrated curriculum.

5.1.10. Research Question 10. Is there a relationship between attending course on visual art or not and beliefs related to integration of visual art with other activities?

The results revealed a significant relationship between teachers who attended the courses or teachers who did not attend the courses in terms of beliefs about integration of visual art with other activities. Further analysis was conducted to understand the relationship between them. Results showed that teachers who attended the courses believe more in the supporting effects of integration of visual art on teachers and child development when compared to teachers who did not attend any course related to visual art.

The finding was supported by the literature in a general way. That is, teachers who have taken courses in early childhood education were probably taught the principles that are reflected in the NAEYC guidelines. Although teacher beliefs are affected by their experiences prior to teacher education programs (Brousseau et al., 1988), teachers' beliefs and practices are influenced by teacher education programs (Smith, 1997). In addition to this, further analysis indicated that 54.2 % of teachers who attended the courses have graduated from university (84 out of 155). This might be the result of this significance because the content of the courses are different from the high school, two year vocational school, and university level. It can be drawn from the findings that teachers who have graduated from university have more positive attitudes toward integration of visual art with other activities in terms of child development, teachers, and administration of activities.

5.1.11. Research Question 11. Is there a relationship between attending course on visual art or not and beliefs related to usage about integration of visual arts?

For this research question, the results revealed that there was a significant relationship between teachers who attended the courses or teachers who did not attend the courses in terms of beliefs about the usage about integration of visual arts. Further study showed that teachers who attend the courses related to visual art prefer

to integrate visual art with all other activities, with one specific activity and as a reinforcer activity after applying one activity.

This result revealed that courses which are related to visual art might influence teachers' experiences related to integration in their classrooms. These courses were generally applied in two parts. The first part includes the theoretical and the second part includes practice. This might be helpful for pre-service teachers to learn the principles of visual art more effectively in those courses. Moreover, the literature claimed that practice teaching in pre-service teacher education can be seen as an important opportunity for further exploration (Martinez, 1998). Pre-service teachers have opportunity to practice in early childhood institutions in all educational levels such as high school, two year vocational school, and university. Every teacher in each level has to participate in practice teaching in order to get a degree. For example, university programs such as Early Childhood Education offer this experience three times during teachers' educational life (Higher Education Council, 2007). Therefore, pre-service teachers could apply this knowledge which was gained from the courses. This type of learning will be durable for pre-service teachers. For that reason, these teachers might be applying more things about integration of visual art because they could have experience about them in their school life. As a result, this finding might be related to the importance of courses which are related to visual art and their application in real settings.

5.1.12. Research Question 12. Is there a relationship between attending course on visual art or not and beliefs related to teachers' perceived role of the integrated curriculum in early childhood education?

Results revealed no significant relationship between teachers who attended the courses or teachers who did not attend the courses in terms of beliefs about the teachers' perceived role of the integrated curriculum in early childhood education.

This may result from the opportunities of pre-schools. That is, in Turkey, even though both public and private schools depend on Ministry of National Education, there may be different opportunities and facilities in these schools. However, with the help of the Ministry of National Education, schools follow the

same curriculum, hence, the same basic considerations. Therefore, teachers might improve themselves with the help of their working institutions. As a result of this, while working in private or public pre-schools; these teachers might gain essential information about early childhood education. That is, when they deal with young children, they might have opportunity to have various useful experiences in classroom settings. Of course, courses which were taken during educational life are important; however, teachers might continue to develop themselves by using the facilities of their working institutions. The reason behind the insignificance of this research question might derive from this issue.

5.2. Validity Threats of the Study

5.2.1. Internal Validity of the Study

Internal validity of the study includes the degree, to which the observed differences about dependent variables directly influence the independent variables, not the extraneous variables that may influence the results of the study (Fraenkel & Wallen, 2006). Possible threats to internal validity are discussed in this section.

In a survey research, four main internal validity threats are stated to influence the results of the study such as; “mortality, location, instrumentation and instrument decay” (Fraenkel & Wallen, 2006, p.424).

In the present study, the instrument was indirectly administered. That is, it was collected from the participants after they completed the instrument. Therefore, there was no mortality threat as there was no loss of subjects. However, some participants did not want to complete the questionnaire. At this point, response rate was calculated. In fact, response rate was 80% in the study. Moreover, the instruments were administrated to all participants in similar physical settings of the preschools classrooms. That is, the participant teachers filled the questionnaire in their own classrooms. For that reason, location and instrumentation could not be threats to the study. According to instrumentation decay, this study is also not expected to be a threat to internal validity in this study.

5.2.2. External Validity of the Study

External validity is defined as the “extent to which the results of a study can be generalized from a sample to a population” (Fraenkel & Wallen, 2006, p.104). The target population of the present study was all 5-6 years olds’ teachers in Turkey. The accessible population was determined as all 5-6 years olds’ preschool teachers working in private and public schools in Çankaya, Keçiören, Yenimahalle, Mamak, and Etimesgut districts of Ankara. The participants of this study involve 265 preschool teachers working in Ankara. While 137 of them have been working in private pre-schools, 119 of them have been working in public pre-schools. In fact, the sample of the present study still consisted of quite large number of participants, and it was representative of the intended population to at least some degree. Therefore, the findings of this study may be generalized to all preschool teachers in Ankara.

5.3. Implications

According to findings of this study and previous studies about this issue or related issues, some implications can be offered to preschool teachers, specialists who have work on curriculum development, schools, teacher education programs and Ministry of National Education.

According to teachers, this study offered significant information about general beliefs of preschool teachers on integrated curriculum issue. This will provide them with information regarding integration of visual art activities and explain the importance of applying it for children and teachers. Moreover, this research may help teachers be aware of different kinds of integrated activities in order to support child development, help teacher in administration of activities, and provide opportunity to understand the early childhood integrated program in a more detailed way. Furthermore, this study may encourage teachers to start working with specialist in order to prepare appropriate integrated curriculum for children.

Regarding curriculum development, this study emphasized the issue of integrated curriculum. Therefore, specialists who have worked on curriculum

development could begin to work on integrated curriculum such as integration of visual art with other activities in early childhood education.

According to teacher education programs, this study showed that there are important implications about this issue. By means of the current study, it was seen that teachers did not use integration of activities consciously. They use integration to save time, and because it is enjoyable and easy to apply. Hence, it is hoped that this study will encourage related departments such as early childhood education, to give more importance to child development by adding more courses or enriching the content of the courses such as “curriculum in early childhood education, visual art in early childhood education, teaching science and teaching mathematics in early childhood settings”. In addition to teacher education programs, this study showed that Ministry of National Education may realize the importance of training programs for preschool teachers about integrated curriculum and may prepare more programs on integrated curriculum to help teachers become aware of the current issue.

Furthermore, this study conducted for preschool teachers in Turkey showed different beliefs and their relationships about integrated curriculum, thus it can offer the way to other researchers who are interested in this issue.

5.4. Recommendations for Further Studies

This study can be developed or adapted in the following ways:

- A scale related to “Teachers’ Beliefs about Integrated Curriculum” can be developed on the basis of the questionnaire in this study.
- Some additional data collection methods such as observation, and interviews could be added in order to identify teachers’ practices.
- Analysis of the differences between beliefs of art and integrative curriculum of teachers who have been working in public and private schools.
- More teachers who have worked in early childhood settings in other regions could be involved in such a study.
- Pre-service teaching plays an important role on teachers’ teaching life. For that reason, it would be interesting to analyze pre-service’s effect on teachers’ beliefs related to integrated curriculum.

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APPENDIX A

PERMISSION TO USE INSTRUMENT IN SCHOOLS OF ANKARA

**ÖĞRENCİ İŞLERİ
DAİRESİ BAŞKANLIĞI**

**T.C.
MİLLÎ EĞİTİM BAKANLIĞI**
Eğitimi Araştırma ve Geliştirme Dairesi Başkanlığı

Sayı : B.08.0.EGD.0.33.05.311- **372/1328** 16/03/2007
Konu : Araştırma İzni

ORTA DOĞU TEKNİK ÜNİVERSİTESİ REKTÖRLÜĞÜNE


İlgi : 20.02.2007 tarih ve B.30.2.ODT.0.70.72.00-1255/2592 sayılı yazı.

Üniversiteniz Okul Öncesi Eğitimi Ana Bilim Dalı Yüksek Lisans öğrencisi Elif ÖZTÜRK'ün "Okul Öncesi Dönemde Sanatın Matematik ve Fen Etkinlikleri İle Bütünleştirilmesi Konusunda 5-6 Yaş Okul Öncesi Öğretmenlerinin İnanışları" konulu araştırmada veri toplama aracı olarak kullanılacak anketlerin Ankara İli eğitim kurumlarında uygulama izni talebi incelenmiştir.

Üniversiteniz tarafından kabul edilen onaylı bir örneği Bakanlığımızda muhafaza edilen (2 sayfa – 8 sorudan oluşan) anketlerin belirtilen eğitim kurumlarında uygulanmasında bir sakınca görülmemektedir.

Araştırmanın bitiminde sonuç raporunun iki örneğinin Bakanlığımıza gönderilmesi gerekmektedir.

Bilgilerinizi ve gereğini rica ederim.


Cevdet CENGİZ
Bakan a.
Müsteşar Yardımcısı

EK :
1- Anket Örneği (1 Adet-2 Sayfa)
2- Okul Listesi (1 Adet-6 Sayfa)

26.03.07 004925

**EĞİTİM
%100
DESTEK**

**DANISMA
444 0 632
H A T T I**

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APPENDIX B

THE INSTRUMENT USED IN THE MAIN STUDY

1. BÖLÜM

Okul Öncesi Dönemde Görsel Sanat Çalışmaları ve Bu Çalışmaların “Bütünleştirilmiş Program” İçindeki Yeri

AÇIKLAMA: Biraz sonra dolduracağınız anket sizin okul öncesi eğitimde “bütünleştirilmiş program” (bir etkinliği diğer bir etkinliğe entegre etmek) ve bu program içerisinde görsel sanatların (resim çalışmaları-boyama, çizim, baskı, ebru, vd iki boyutlu çalışmalar- ve üç boyutlu inşa ve şekillendirme çalışmaları -kil, oyun hamuru, artık malzeme ile inşa çalışmaları vd.) yeri hakkındaki düşüncelerinizi ve inanışlarınızı öğrenmeyi amaçlamaktadır. Sizden alınmış olan cevaplar akademik bilgi elde etmek amacıyla, sadece araştırmacı tarafından kullanılacak ve kesinlikle gizli tutulacaktır. Bilimsel bir çalışmaya yapacağınız katkılardan ve sorulara cevap verirken göstereceğiniz duyarlılıktan dolayı şimdiden teşekkür ederim.

Arş. Gör. Elif Öztürk
ODTÜ, Eğitim Fakültesi, İlköğretim Bölümü

2. BÖLÜM

1. Cinsiyetiniz 1) Erkek ☐ 2) Kadın ☐

2. Kaç yıldır öğretmenlik yapıyorsunuz?

☐ 1-5 yıldır ☐ 6-10 yıldır ☐ 11-15 yıldır ☐ 16-20 yıl ☐ 20 yıl ve üzeri

3. En son mezun olduğunuz okul hangisidir? Lütfen bölümünüzü yazınız.

- 1) Lise ☐
- 2) Yüksekokul ☐
- 3) Üniversite ☐
- 4) Yüksek Lisans ☐
- 5) Doktora ☐

4. Şu anda görev yaptığınız okulun türü nedir?

1) Özel ☐ 2) Devlet ☐



Lütfen sayfayı
çeviriniz

5. Eğitim hayatınız boyunca görsel sanatlarla ilgili ders aldınız mı?
Cevabınız Evet ise bunlar nelerdir?

1) Evet ☐ 2) Hayır ☐

Evet ise,

6. Öğretmenlik yaptığınız süre içerisinde görsel sanatlarla ilgili herhangi bir eğitim, seminer ya da konferansa katıldınız mı? Cevabınız Evetse bunlar nelerdir?

1) Evet ☐ 2) Hayır ☐

Evet ise,

3. BÖLÜM


7. Okul öncesi dönemde etkinliklerin birbirleri ile bütünleştirilmesi konusunda ne düşünüyorsunuz?

8. Sizce okul öncesi eğitimde hangi etkinlikler birbirleri ile entegre edilebilir?

1) ile 3) ile.....

2)ile..... 4)ile.....

9. Sizce etkinliklerin birbirleri ile bütünleştirilmesinin olumlu ya da olumsuz yanları nelerdir?

1)Olumlu:	2)Olumsuz:
<ul style="list-style-type: none">➤➤➤➤➤	<ul style="list-style-type: none">➤➤➤➤➤ 

Lütfen sayfayı
çeviriniz

10. Sizce görsel sanatın okul öncesi müfredatındaki yeri (önemi) nedir?

11. Sizce görsel sanat yolu ile gerçekleştirilen etkinlikler çocukların hangi gelişim alanlarına yardımcı olur?

- | | |
|----------|---------|
| 1) | 4)..... |
| 2) | 5)..... |
| 3) | 6)..... |

12. Sınıf içi uygulamalarınızda görsel sanat etkinliğini ne şekilde kullanıyorsunuz? (Birden fazla seçenek işaretleyebilirsiniz)

- | | |
|---|---|
| <input type="checkbox"/> 1) Ana etkinlik | <input type="checkbox"/> 3) Yardımcı etkinlik |
| <input type="checkbox"/> 2) Bütünleştirilmiş etkinlik | <input type="checkbox"/> 4) Serbest zaman etkinliği |

13. Sizce aşağıdaki sanat materyallerinin hangilerinden okulunuzda yeterli ölçüde var? (Birden fazla seçenek işaretleyebilirsiniz).

- | | | | |
|---|---------------------------------------|---|--|
| 1)Pastel boya <input type="checkbox"/> | 4) Sulu boya <input type="checkbox"/> | 7) Kuru boya <input type="checkbox"/> | 10) Parmak boyası <input type="checkbox"/> |
| 2) Toz boya <input type="checkbox"/> | 5) Kil <input type="checkbox"/> | 8) Oyun Hamuru <input type="checkbox"/> | 11) Elişi kağıd <input type="checkbox"/> |
| 3) Fon kartonu <input type="checkbox"/> | 6) Fırça <input type="checkbox"/> | 9) Yapıştırıcı <input type="checkbox"/> | 12) Makas <input type="checkbox"/> |

➤ **Yeterli olduğunu düşünmüyorsanız sizce nedeni/leri ne olabilir?**

➤ **Bu materyallerden sizin hazırladıklarınız var mı? Cevabınız Evet ise bunlar nelerdir?**

- 1) Evet ☐ 2) Hayır ☐

Evet ise,



Lütfen sayfayı
çeviriniz

14. Aşağıdaki görsel sanat etkinliği türlerinden hangilerini sınıf içi etkinliklerinizde uyguluyorsunuz? (Birden fazla seçenek işaretleyebilirsiniz).

1) Boya (Renklendirme) Çalışmaları	2) Baskı Çalışmaları
- Pastel boya <input type="checkbox"/> - Sulu boya <input type="checkbox"/> - Kuru boya <input type="checkbox"/> - Parmak boyası <input type="checkbox"/>	- Fırça Baskısı <input type="checkbox"/> - Parmak Baskısı <input type="checkbox"/> - Yaprak Baskısı <input type="checkbox"/> - Kumaş Baskısı <input type="checkbox"/> - İp Baskısı <input type="checkbox"/> - Sebze-Meyve Baskısı <input type="checkbox"/>
3) Kolaj	4) Yoğurma Maddeleri İle Çalışma
- Kağıtla yapılan kolaj (dergi, gazete, elişi kağıdı) <input type="checkbox"/> - Artık materyallerle yapılan kolaj (plastik, metali kumaş) <input type="checkbox"/> - Doğal malzemelerle yapılan kolaj (yaprak, ağaç dalı) <input type="checkbox"/>	- Oyun hamuru <input type="checkbox"/> - Kil <input type="checkbox"/> - Kağıt Hamuru <input type="checkbox"/> - Plastilin <input type="checkbox"/> - Tuz Seramiği <input type="checkbox"/>
5) Üç Boyutlu Düzenleme (Yapısal) Çalışmaları	6) Origami <input type="checkbox"/>
- Artık materyallerle yapısal çalışma <input type="checkbox"/> - Doğal materyallerle yapısal çalışma <input type="checkbox"/>	
7) Kukla <input type="checkbox"/>	8) Maske <input type="checkbox"/>
9) Yazılan tekniklerin dışında eklemek istediğiniz çalışma varsa yazar mısınız?	
.....	

4. BÖLÜM

15. Uygulamalarınız sırasında yaşadığınız deneyimlerden yola çıkarak sizce görsel sanatların diğer etkinliklerle bütünleştirilmesi konusunda ne düşünüyorsunuz?



Lütfen sayfayı çeviriniz

16. Sizce okul öncesi eğitimde görsel sanat etkinlikleri ile hangi etkinlikleri bütünleştirebilirsiniz?

1).....

4).....

2).....

5).....

3).....

6).....

17. Siz görsel sanatları diğer etkinliklerle bütünleştirerek kullanıyor musunuz?

1) Evet ise NASIL KULLANIYORSUNUZ?

2) Hayır ise NEDEN KULLANMIYORSUNUZ?

18. Sizce görsel sanatların diğer etkinliklerle bütünleştirilmesi çocukların gelişimlerine ne şekilde katkıda bulunulabilir?



Lütfen sayfayı
çeviriniz

19. Sizce görsel sanatların diğer etkinliklerle bütünleştirilerek kullanılması eğitim süreci içerisinde sizlere ne gibi kolaylıklar sağlar?

20. “Bütünleştirilmiş Program”ın okul öncesi müfredatındaki yeri hakkında ne düşünüyor sunuz?

Anket bitti, yardımlarınızdan dolayı teşekkürler...



Lütfen sayfayı
çeviriniz

5. BÖLÜM

Bu çalışmanın devamında yapacağımız görüşmede yer almak ister misiniz?

Eğer cevabınız EVET'se aşağıdaki bilgileri doldurur musunuz?

1) EVET ☐

2) HAYIR ☐

Ad-Soyad:.....

Tel No:.....

E-mail:.....

* Bu çalışma ile ilgili soru, öneri ve her türlü bilgi için iletişime geçebilirsiniz.

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Tel No: 210 36 58

APPENDIX C

THE INSTRUMENT USED IN THE PILOT STUDY

Değerli Meslektaşım,

Bu anket yüksek lisans tezim için hazırlanmış olup, amacım okul öncesi öğretmenlerinin görsel sanatlar hakkındaki görüşlerini belirlemek ve okul öncesinde kullanılan görsel sanatların (resim ve heykel çalışmalarının) diğer derslerle entegre edilmesi konusundaki görüşlerini araştırmaktır. Vereceğiniz cevaplar benim için büyük önem taşımaktadır. Bu yüzden cevaplarınızın samimi ve detaylı olması çok önemlidir. Cevaplarınız sadece araştırmacı tarafından incelenecektir. Bu anketler doldurulduktan sonra yine araştırmacı tarafından alınacaktır. Zaman ayırdığınız için şimdiden teşekkür ederim.

Arş. Gör. Elif Öztürk, ODTÜ, Eğitim Fakültesi, İlköğretim Bölümü

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ANKET

1. Kaç yıldır öğretmenlik yapıyorsunuz?
2. En son mezun olduğunuz okulun adı ve bölümü nedir?.....
3. Üniversite/Lise eğitiminiz sırasında *görsel sanatlarla ilgili ders* aldınız mı?
Evet.....☐..... Hayır.....☐.....

Aldıysanız derslerin isimleri nelerdir?

Almadıysanız nedenini açıklayınız?

4. Sizce okul öncesi eğitimde görsel sanatların (*resim ve heykel çalışmalarının*) yeri nedir? *Düşüncelerinizi açıklayınız.*

5. Okul öncesi eğitimde görsel sanatların (resim ve heykel çalışmaları) diğer etkinliklerle entegre edilmesi konusunda ne düşünüyorsunuz? Uyguluyor musunuz? Nasıl?
6. Okul öncesi eğitimde matematik ve fen etkinliklerinde sanatı kullanıyor musunuz?Evetse ne şekilde kullanıyorsunuz? Eğer kullanmıyorsanız neden?
7. Sizce görsel sanat okulöncesinde diğer etkinliklerle kullanılması dışında nasıl kullanılabilir?
8. Görsel sanatlara karşı özel bir merakınız var mı? *Varsa açıkla mısınız?*

Teşekkür Ederim.....