

TURKISH TEACHERS' BELIEFS ABOUT DEVELOPMENTALLY APPROPRIATE PRACTICES IN EARLY CHILDHOOD EDUCATION*

TÜRK ÖĞRETMENLERİN OKULÖNCESİ EĞİTİMDE GELİŞİMSEL UYGUNLUĞU GÖZ ÖNÜNDE BULUNDURAN UYGULAMALAR HAKKINDAKİ DÜŞÜNCELERİ

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ABSTRACT: This study examines the self-reported beliefs of Turkish in-service early childhood education teachers living in Turkey in order to develop an understanding of the beliefs held by Turkish teachers about appropriate early childhood education practices, to get a sense of the perceived barriers to effective practice. Twelve teachers participated in in-depth interviews from early childhood centers serving children ages 3to 6-years located in Ankara and Istanbul. Results revealed that Turkish teachers beliefs were closer to the developmentally appropriate side of the developmentally appropriate versus developmentally inappropriate continuum considering the main points of Developmentally Appropriate Practices (DAP) curriculum such as active, hands on learning, dramatic play and activities related to children's needs and interests. Teachers' perceived barriers to effective practice include physical conditions and resources (class size, materials etc.), lack of teacher-parent partnership, and low status of teaching profession in Turkey.

Keywords: teacher beliefs, practices, DAP

ÖZET: Bu çalışmanın amacı, Türkiye'de çalışan okulöncesi eğitim öğretmenlerinin "gelişimsel uygunluğu göz önünde bulunduran uygulamalar" (developmentally appropriate practices) hakkındaki düşüncelerini anlamak, etkili öğretime karşı varolan engeller hakkında bilgi edinmektir. Ankara ve Istanbul illerinde bulunan 3-6 yaş arası çocuklara hizmet veren okullarda görev yapan 12 okulöncesi eğitim öğretmenine "derinlemesine mülakat metodu" uygulanmıştır. Öğretmenlerin düşüncelerinin, özellikle ana hatlar dikkate alındığında (aktif, yaparak ve yaşayarak öğrenme, drama, ve öğrencilerin ilgi ve ihtiyaçlarına dayalı aktiviteler) "gelişimsel uygunluğu göz önünde bulunduran uygulamalara" daha yakın olduğu görülmüştür. Öğretmenlerin belirttiği etkin uygulamaya engel oluşturan faktörler arasında en çok tekrarlanan faktörler, fiziksel şartlar ve imkanlar (sınıf büyüklüğü, materyaller), öğretmen-veli işbirliğinin eksikliği ve de öğretmenlik mesleğinin düşük statüsü olarak karşımıza çıkmaktadır.

Anahtar Sözcükler: okulöncesi, öğretmen, aktiviteler

1. INTRODUCTION

An educational system is perceived as consisting of three main components, students, teachers and curriculum. The efficiency and the effectiveness of this system depend upon the degree of compatibility among these components (Karagözoğlu & Murray, 1988). In order to fully understand the nature of an educational system, we need to consider these three components as a guide and a basis for our analysis of the educational system. The common ground among students, teachers and curriculum is knowledge, yet instruction is the major tool. Recently the lenses of research have focused on teachers' beliefs about teaching and the implicit theories behind the beliefs, which are commonly accepted as the driving force for instruction (Clark & Peterson, 1986; Feeney & Chun, 1985; Isenberg, 1990; Pajares, 1992; Spodek, 1988).

Teachers' implicit beliefs or theories are defined as the ideas about instruction that teachers develop from their personal experience based on their practical knowledge. This is in contrast to explicit theories, which are defined as those theories based on knowledge taught in education and child development courses, adopted by professional organizations, and expressed in the professional literature (Clark & Peterson, 1986). An understanding of teachers' implicit and explicit beliefs and applied instructional practices

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provide us with a perspective through which we can obtain a holistic picture of an educational system because it is what teachers believe and how they make decisions about instruction, which connects students, teachers and curriculum to each other.

This study focused on the beliefs of Turkish teachers about curriculum and instruction in early childhood education. The main purpose of this study was to develop an understanding of the beliefs held by Turkish teachers about appropriate early childhood education practices and to get a sense of the perceived barriers to effective practice. This understanding also provides a synopsis of the current situation of early childhood education in Turkey as it relates to developmentally appropriate practices, a philosophy of practice defined by the U.S.'s National Association for the Education of Young Children (NAEYC) and which is based primarily on the theories of Piaget, Dewey, Erikson and Vygotsky.

In this article, firstly, previous research on "teacher beliefs" in early childhood education is presented and then secondly, a brief overview of developmentally appropriate practices (DAP), a philosophy of early childhood education that has influenced curriculum beliefs and practices throughout the world is provided. Thirdly, the findings of the study in terms of developmentally appropriate practices is discussed in order to see to what extent this philosophy has influenced curricular beliefs and practices in Turkey.

1.1 Teachers' Beliefs and Practices Research

For years traditional research has centered its attention on teachers' actions and their observable effects i.e. how teacher behaviors influence student achievement, with the purpose of finding the best recipe for student learning. In search of the best teaching behavior for maximum student learning, the dominant research paradigm, "the process-product approach" primarily focused on defining the relationships between teachers' classroom behaviors as a process of teaching and student outcomes as products of learning (Clark and Peterson, 1986; Fang, 1996). The idea beneath this effort was that there is a direct causal link between teachers' classroom behaviors and students' classroom behaviors and student achievement that is unidirectional. In other words teachers' classroom behavior affects students' classroom behavior and eventually affects students' achievement (e.g. Doyle, 1977; Dunkin & Biddle, 1974).

However, with their model of teacher thought processes, Clark & Peterson (1986) argued that the relationship between teachers' and students' classroom behavior and their achievement is not unidirectional but reciprocal and the direction of causation is cyclical or circular rather than linear. According to Clark & Peterson (1986) teachers' thought processes involve three major categories which are (1) teacher planning, (2) teachers' interactive thoughts and decisions and (3) teachers' theories and beliefs. The first category, teacher planning, also includes the thought processes in which teachers engage prior to classroom interaction and the reflections in which they engage after the classroom interaction. The third category, which is the main focus of the current study reported in this paper involves teachers beliefs and theories which are defined as representations of the rich store of knowledge that teachers have that affects their planning and their interactive thoughts and decisions as well as their classroom behavior. But teachers' beliefs and theories may also evolve as a result of their thinking during classroom interaction and of their planning prior to or after classroom interaction.

The major shift in research from teachers' observable actions and behaviors in classrooms to teachers' thought processes occurred gradually due in large part to several major contributions to the research literature in the late 1960s to mid 1970s. Following the influences of cognitive psychology on research and the applications of ethnographic and qualitative methodology on the study of teaching as a thoughtful profession,

teachers' thinking began to gain a considerable amount of attention (Fang, 1996). The lens of research has shifted from teachers' classroom behaviors to teachers' thought processes, creating a new line of research in literature.

Much current educational research puts heavy emphasis on the study of teachers' beliefs as indicators of the actual classroom behaviors of teachers, and subsequently the outcomes of children The main reason for this interest is the idea that the guiding theory determining teachers' decisions in planning, teaching and assessing would be best understood by understanding what teachers believe to be important and what they believe not to be important (Charlesworth, Hart, Burts, Mosley, & Fleege, 1993). In terms of evaluating educational practices, Spodek (1988), suggests that we need to understand the role of teachers' implicit theories in guiding instruction as well as their explicit theories.

Examining early childhood education studies in the United States and in many other countries reveals that in recent years an important focus of educational research has been the implicit beliefs or theories teachers form about teaching (Clark & Peterson, 1986; Fang, 1996; Isenberg, 1990; Kagan, 1992; Pajares, 1992, Yonemura, 1986). Implicit beliefs are defined as the ideas about instruction that teachers develop from their personal experience and practical knowledge; this is in contrast to the explicit theories that are taught in college courses and that are included in the professional literature (Charlesworth et al., 1993).

Bernstein (1975) suggested that there was an invisible pedagogy underlying English infant schools serving children ages five through seven, which is consistent with the style of middle-class mothering but in conflict with working class mothering. The type of education given in these schools was a result of teachers' ideologies, specifically their views of what is good for children as well as what is educationally effective. A short time later, King (1978) studied the cognitive constructs, beliefs, values and behavioral customs that teachers pass on to young children through instruction in the British classroom and found that in infant schools, teachers' beliefs about children and the learning process was connected to their classroom practices. From this point on, it was nearly a decade before research on the beliefs of early childhood educators gained prominence.

Yonemura (1986)'s in-depth study revealed that the beliefs of the teacher, which she operationally defined as a combination of professional values and technical concerns, underlie classroom practices. In addition, she concluded that the teacher's personal knowledge and beliefs were as important to her professional practice as was her technical knowledge of teaching.

Kagan and Smith (1988) found that the teachers' perceptions of their own classroom behaviors and their actual observable behaviors to be highly interrelated. Similarly later in her study to assess the relationship between teachers' beliefs and practices, Nelson (2000) found that teachers' personal beliefs were a greater determinant of their practice than environmental factors such as support from colleagues and principals.

However, many studies found discrepancy between the beliefs teachers hold and their practices (Hatch & Freeman, 1988; Verma & Peters, 1973; McCarty, Abbott-Shim & Lambert, 2001). Despite this commonly found discrepancy between beliefs and practices the majority of research studies strongly suggest that early childhood teachers' implicit beliefs and theories are a predictor of their in- class behaviors or instruction, and thus beliefs are considered a reliable tool for examining practice. But it has been shown that there are contextual factors that may affect classroom practices and these factors contribute to the discrepancy between beliefs and practices that should be considered when using beliefs to infer what is going on in the classroom (Buchanon, Burts, Bidner, White & Charlesworth, 1998; McMullen, 1999; Spodek, 1988; Vartuli, 1999; Stipek & Byler, 1997). These factors include

self-efficacy, teacher's control over the classroom, grade level, class size, pressure from administrators, unrealistic expectations of parents, achievement tests and the school or state curriculum.

1.2. DAP in Early Childhood Education Curriculum & Instruction

One of the main concerns of early childhood educators in the United States in recent years has been the possible negative effects of so-called developmentally "inappropriate" practices. Such practices are considered to be those that are highly didactic and teacher-directed (Charlesworth, et al., 1993). Because of this concern, the major trend in early childhood education has been towards the encouragement of developmentally appropriate practices (DAP) or child- or learner-centered, progressive education, and away from the "backto-basics" academically oriented approaches that have labeled "inappropriate" or "traditional" (McMullen 1998, 1999, & 2001). The theoretical underpinnings of DAP come primarily from the work of Dewey, Piaget, Vygotsky and Erikson. These theories and others, together with decades of experience shared by practitioners were used to develop the first DAP policy statement articulated by the National Association for the Education of Young Children (NAEYC) in 1987 and then as revised in 1997 (Bredekamp, 1987; Bredekamp & Copple, 1997). The 1987 statement is referred to as one of the most important efforts made to formalize a set of beliefs present in early childhood education (Charlesworth, 1998). The core notion of developmentally appropriate practice has always been the belief that children's development should be taken into account as adults interact with children and that adults should structure children's time and space and plan activities for them based first and foremost upon their level of development.

2. METHOD

2.1 Sample

Twelve early childhood education teachers from various early childhood programs located in

Ankara and Istanbul (public, private, experimental and nursery classes) serving children ages threeto six-years participated in the study.

2.1. Instrument

Data for this study is gathered through in-depth interviews. The purpose of the interview was to get specific and in-depth information from a representative group of Turkish teachers about their philosophies of early childhood education including the major sources and influences on their beliefs, and what they perceive to be the major barriers to effective practice, if any. Each teacher was interviewed for approximately 30-45 minutes using a predetermined set of questions and procedures.

The interview questions were adopted from the dissertation research of Jianhong Wang (2000) who also studied teachers' self-reported beliefs and practices in China and the United States, with her permission. These questions were translated into Turkish.

3. RESULTS

Specifically, the first six interview questions gathered information to address teachers' beliefs along the child centered versus teacher directed continuum such as the things considered before planning an activity, allowing children to make choices according to their interests and teachers' thoughts about giving instructions before starting an activity. The final three questions focused on the barriers and influences on effective practice and the ranking of the items in order of their importance in terms of influence on teaching practice such as the supervisor, the parents, government regulations, common values in society, teacher's own personal experience and educational/professional training, characteristics of children in your classroom and available resources (classroom space, class size, materials, etc.).

The findings of this study are grouped under the following headings:

Teaching Philosophy

In order to explore the self-reported beliefs of Turkish teachers in terms of developmentally appropriate practices, the teachers were asked questions about several specific issues in early childhood education and about their personal teaching philosophies. These issues include the nature of the teacher's role in children's learning, activities necessary for children, things to consider before planning an activity, the relative importance of a teacher's authority, and children's interests and choices.

In terms of teaching philosophy, teachers were asked, "How and when do young children learn best?" and further asked to explain their role (the role of the teacher) in children's learning. The general theme that arose questioning this line of questioning was that active learning in a warm and loving environment was a priority in the learning process. Most of teachers said something to the effect that children start learning as early as infancy and that they learn best when they are in a learning environment prepared according to their developmental level. Almost all of the teachers mentioned that "children learn best through play", "by doing" and "by living", and "by trial and error". Yet most of the teachers emphasized the learning environment needed to be comfortable, loving and free. One teacher especially mentioned the importance of timing in education and said: "the timing is critical; giving everything on time, teaching without placing any pressure and through play, by doing and living." Another teacher from a private preschool said, "Children should be active and creative. Instead of traditional and structured activities, children should be educated by being actively involved in activities in which they can express themselves through words, movements or art activities."

Most of the teachers defined their role as a teacher as "a guide". They said they prefer to function as a guide supporting children's learning. Four of the twelve teachers mentioned family as the primary influence on children's learning and that they support the things children learn from their families. A teacher from a private preschool, in defining her role as a teacher said she saw herself as someone who is "opening a door". Another teacher from a private kindergarten said, "my aim, our aim is, depending on what they are learning, to strengthen that with many activities, experiments, and songs and also by active involvement of the children. These are all parts of a whole".

The responses given in the interview supported the most important notions of child-centered curricula: active learning, provision of a rich and supporting environment, and teacher as a guide and a facilitator rather than someone who provides knowledge. The Turkish teachers' beliefs about early childhood curriculum are thus found to be more in accordance with U.S. conceptions of developmentally appropriate practice than not.

Appropriate Activities

The teachers were also asked to name the three most important activities that they believe children should do in an early childhood classroom. The most popular choice was arts and crafts activities, which when they elaborated, included playing with play-dough, using scissors, coloring, cutting, folding, and painting. They described these as important in order to stimulate and help small motor development, to help children in self-expression, and to teach them how to work as a group. The second most popular choice was language activities, which include poems, words puzzles, pre-story, story, and afterstory activities.

Most of the teachers expressed play or free play as an important activity in early childhood classrooms. While most of the teachers did not make a clear distinction between play and free play, the ones who mentioned free play described this as being able to choose from interest corners or choose among the various activities that the teacher has prepared beforehand. Language activities were also frequently listed as important to the Turkish teachers during the interviews. Such activities are considered to be necessary for language development and listening skills.

Finally, drama was also among the top choices of important and appropriate activities by Turkish teachers. Two teachers who teach children between five-and-six-years-old identified literacy activities such as those related to reading and writing preparation in order to prepare them for primary grades and help them in holding a pencil or sitting in their seats as priorities.

Authority & Choice-Making

When asked about teacher's authority in the classroom, the responses indicated that Turkish teachers believe that authority is very important and necessary. The general tendency was toward a conceptualization of authority in which the teacher is to be kind but firm in establishing order and control in the classroom and setting limits. Most of the teachers emphasized an authority based on shared decision-making with the children and mutual understanding about the rules. Examples of this from teachers' responses include:

"Teacher's authority is quite important, but when I say authority it doesn't mean that everything has to be according to my rules or my way. The children and the teacher should do everything together. Instead of always being the leader in the classroom and having to keep saying don't do this and don't do that I prefer making decisions together and being friends with them. We make the classroom decisions together and set the rules together."

Thus, Turkish early childhood teachers are less "traditional" and more developmentally appropriate in their notions of authority in the classroom. Teachers generally used the words "friend" and "guide" when defining the authority figure and strongly emphasized the need for the teacher to be "kind" but in control. Related to the idea of allowing children to do what they want and to do things how they want to do them, all of the teachers said that children should be able to make choices about what they want to do in the classroom. However, a majority of teachers believed that while children should be able to make choices during free playtime, this was not true during instructional activities. One teacher said: "They should be allowed [free choice] but not in all activities. There are some activities that children can have a choice but there are also some activities which all children need to do."

Some of the teachers said that it is not always possible to allow choice due to the limited amount of resources or environmental conditions. One teacher said, for instance, that:

"This depends on the physical conditions and if we can't allow them, it's only because we have limited physical resources. We couldn't prepare the interest corners so detailed for example. Because our physical environment is not adequate I cannot leave them free too much."

Almost all the teachers said that children should be given some kind of direction before they start working on an activity, not strict or predetermined rules or limits, but rather as openended instructions, more like guidance or to set an example. One of the teachers said:

"Actually it says in the books that they shouldn't be given instruction and we should let them find it themselves. I tried it but I didn't have much success out of it. I mean if you don't direct them and don't give them any directions then they do nothing."

Another teacher said:

"They (scholars, educators etc.) say children should not be given instructions and we discuss it from time to time too. But many children don't know anything when they come to school. They see nothing at home. They know the shape of a triangle and recognize it or the square for example but cannot figure out that when they put them together they'll get a house. I mean even if it's just once, you need to set an example. Later you need to leave it to their imagination but sometimes they cannot think of putting two shapes together."

Some of the teachers said it depends on the type of activity and that when direction is given, it should be in the form of a question-answer dialog. Only one teacher said that instructions shouldn't be given in young ages and children should be left on their own in order to create on their own.

Influences & Barriers

In the interview, teachers were asked to identify the factors they consider before planning an activity. Teachers most commonly responded that they primarily considered the ability or the developmental level of the group of children or the age group of the children in the classroom. The next most common factor considered when planning activities was the interests and the needs of children. In each consideration, teachers admitted they were more likely to consider aspects (abilities, developmental levels, age, needs, interests) of the whole group rather than the individual children. One teacher said: "I try to choose things that they are able to do and also the things they like. For example, watercolors. Do they like it or not and not only for one or two children but the characteristics of the whole group". In addition, a few teachers mentioned environmental conditions or physical resources as an important factor in planning an activity.

In examining perceived barriers to effective practice, teachers were asked if there were any barriers that keep them from being, "the best teacher they can be". While four out of twelve teachers said that there were no barriers, eight teachers reported the following factors to be barriers to effective practice: physical conditions and resources, parents, and the low status of the profession.

Six of the teachers (half of the sample) reported physical conditions and resources as the major barrier to effective practice. The specific physical conditions and resources to which they referred included limited physical space (small and crowded classrooms) and a limited amount of teaching materials.

Several teachers reported parents as an important influence on the one hand, but a barrier on the other. The major complaint was the perceived lack of parents engaging in partnership with the teachers and a lack of understanding about the teacher's role in their children's lives. One teacher said:

"School-home relations are very important. It's not only that we educate the children, but we realize that we are also educating the families. They come here with a lot of wrong information. Some parents when they come here to enroll their children, ask about how we provide care for children. I say we don't give care here, this is not a place for childcare."

Another teacher said:

"From time to time parents interfere with the school. I don't mean there are problems from too much contact, but more like there are problems based on the parents' lack of knowledge. There isn't a teacher-parent partnership; they don't know its importance. They don't know the meaning and the importance of early childhood education. Many mothers send their kids so that they can have some time for themselves. Families are not conscious of what we do. This has a negative influence on us. Parents should be supportive, school should be supportive and then you can successful in what you are doing. But as long as these barriers are set in front of you no matter how hard you try it doesn't work."

One teacher from a public preschool was outspoken about the low status of early childhood teacher in the teaching profession and in general in Turkey as a barrier to effective practice. She said:

"First of all there is one thing, which I am really unhappy about. In our country kindergarten teachers or preschool teachers are not taken seriously or are degraded because they work with young children. For example, middle school teachers undervalue elementary teachers and elementary teachers undervalue us. As if we are doing nothing but playing with children. This is one of the reasons why I said it (early childhood education) must be made compulsory. Sometimes people ask you about your job and if you say you are an early childhood teacher, some people even feel sorry for you and ask why you didn't get a little more education and become an elementary teacher. Really. This kind of thing happens to me. Compared to the past, there has been some progress but it takes too much time. Slowly, slowly with our own resources we are trying to prove ourselves."

When asked specifically to rank in order of importance the things that influence their practice the most, the highest three mean ranking items for the sample were personal experience, characteristics of children, and teacher's education/training followed by parents and available resources. Teachers ranked children as their fourth or fifth most important influence on their practices. Another interesting finding was that both in the interviewed teachers sample (n=12) government regulations was ranked among the least important factors in influencing teaching practices.

4. DISCUSSION

The general tendency in interpreting the NAEYC guidelines for developmentally appropriate practice as set forth by Bredekamp (1987), the first DAP policy statement, was to define Developmentally Appropriate Practices (DAP) and Developmentally Inappropriate Practices (DIP) as dichotomous. Others since, including Bredekamp and Copple (1997) in the revised DAP statement, argue that we should consider developmentally appropriate practice as existing along a continuum from more child centered to more teacher directive (Buchanon et al., 1998 & Vartuli, 1999; Hart, Burts & Charlesworth, 1997; Charlesworth, 1998b.).

Charlesworth et al, 1991 described developmentally "inappropriate" practices, as those in which the teacher, "attempts to pour knowledge through lecture and other whole-group activities" (Hart et al., 1997, p.3). Instead of being a facilitator, the teacher tries to disseminate knowledge through more formal and direct-instructional means using worksheets and workbooks, seatwork, and drill or practice activities. DIP curriculum is compartmentalized into the traditional content areas such as math, science, and social studies, and little opportunity is allowed for children to move around the room, make choices and actively explore the environment carefully designed for their learning. Moreover, while curriculum is characterized by over dependence on punishment and extrinsic reward systems and the use of standardized tests for assessment, little attention is given to the individual difference among children (Hart et al., 1997).

This is in contrast to developmentally appropriate classrooms, which are characterized as places in which the overall development of the whole child is emphasized (i.e. physical, social, emotional and cognitive development as well as academic achievement); the needs of both the group and the individual child are considered while additional attention is given to gender, culture issues and children with disabilities. Curriculum areas are integrated in the context of relevant and meaningful activities and the environment offers many opportunities for active exploration, and concrete, hands-on experience. Children's making of choices and learning through dramatic and other forms of play is encouraged and valued both in indoor and outdoor settings. Finally curriculum is not rigid and prescribed but rather emerges within a framework that is adaptable to each individual group of children as their needs and interests change over time.

The findings of this study suggest that Turkish early childhood teachers' beliefs are closer to the more child-centered or DAP end of the continuum, considering the emphases on active, hands-on learning, dramatic play, activities that respond to the needs and interests of the individual child and also the whole group. Furthermore Turkish teachers perceive themselves more as guides or facilitators rather than as "instructors". Teachers' beliefs about children's freedom of choice is less related to U.S. notions of DAP. According to these teachers self report, this is because of limited physical resources but there seems to be a fundamental difference in beliefs as well. Choice making, while encouraged during free playtime was not during learning time, which while still child-centered, did not involve child choice making.

Regarding the barriers to effective practice findings suggest that early childhood teachers in Turkey perceive themselves to be struggling to overcome multiple obstacles including the physical conditions, lack of resources, difficulties in the home-school relationship, and discouragement about the status of the early childhood profession. An in-depth investigation of such barriers specifically is worth further attention in order to understand the current situation in early childhood education in Turkey. It is important to understand these perceived barriers, not only to help prepare future teachers to deal with them, but also in order for policy makers and administrators to consider ways to alleviate barriers to effective practice.

The most important influences on teachers in the study were reported to be personal experience, characteristics of children, and teacher's education/training. Even though early childhood teachers are required to have a bachelor's degree to work in public preschools and kindergartens, this is not a requirement for private preschools or daycare centers, programs under the supervision of SSCPA. The majority of teachers who work in such programs continue to be high school, rather than college graduates. Therefore teacher qualifications must be increased in order to increase the quality of care and education for young children.

REFERENCES

- Bernstein, B. (1975). *Class and pedaogies: Visible and invisible*. Paris: Organization for Economic Cooperation and Development.
- Breedekamp, S. (1987). Developmentally appropriate practice in early childhood programs serving children from birth through age eight. Washington. DC: National Association for the Education of Young Children.

- Bredekamp, S., & Copple, C. (1997). (Eds.). Developmentally appropriate practice in early childhood programs (rev.ed.). Washington DC: National Association for the Education of Young Children.
- Buchanon, T. K., Burts, D. C., Bidner, J., White, V. F., & Charlesworth, R. (1998). Predictors of the developmental appropriateness of the beliefs and practices of first, second, and third grade teachers. *Early Childhood Research Quarterly*, 13(3), 459-483.
- Burts, D. C., Hart, C. H., Charlesworth, R., Fleege, P. O., Mosley, I., & Thomasson, R., H. (1992). Observed activities and stress behaviors of children in developmentally appropriate and inappropriate kindergarten classrooms. *Early Childhood Research Quarterly*, 7(2), 297-318.
- Charlesworth, R. (1998a). Developmentally appropriate practice is for everyone. *Childhood Education*, 74 (5), 274-282.
- Charlesworth, R. (1998b). Response to Sally Lubeck's "Is developmentally appropriate practice for everyone?" *Childhood Education*, 74 (5), 293-298.
- Charlesworth, R., Hart, C. H., Burts, D. C., Mosley, J., & Fleege, P. O. (1993). Measuring the developmental appropriateness of kindergarten teachers' beliefs and practices. *Early Childhood Reasearch Quarterly*, 8, 255-276.
- Clark, M. C., & Peterson, P.L. (1986). Teachers' thought processes. In M. C. Wittrock (Ed.), *Handbook of Research on Teaching* (pp. 255-296). New York: Macmillan.
- Doyle, W. (1977). Paradigms for research on teacher effectiveness. *Review of Research in Education*, 5, 163-198.
- Dunkin, M. J., & Biddle, B. J. (1974). The study of teaching. New York: Holt, Rinehart & Winston.
- Fang, Z. (1996). A review of research on teacher beliefs and practices. *Educational Research*, 38(1), 47-65.
- Feeney, S., & Chun, R. (1985). Effective teachers of young children. Young Children, 41(1), 47-52.
- Hart, C. H., Burts, D. C., & Charlesworth, R. (Eds). (1997). Integrated curriculum and developmentally appropriate practice- Birth through age eight. Albany, NY: SUNY Press.
- Hatch, J. A., & Freeman, E. B. (1988). Kindergarten philosophies and practices: Perspectives of teachers, principles, and supervisors. *Early Childhood Research Quarterly*, 3, 151-166.
- Isenberg, J. P. (1990). Teachers' thinking and beliefs and classroom practice. *Childhood Education*, 66, 322-327.
- Jaramillo, J.A. (1996). Vygotsky's sociocultural theory and contributions to the development of constructivist currciula. *Education*, 117(1), 133-141.

- Kagan, D. M. (1992). Implications of research on teacher beliefs. *Educational Pyschologist*, 27(1), 65-90.
- Kagan, D. M., & Smith, K. E. (1988). Beliefs and behaviors of kindergarten teachers. *Educational Research*, 30(1), 26-35.
- Karagözoğlu, G., & Murray, K.B. (1988). Profile of new teachers in the Turkish educational system. *Contemporary Education*, 59(3), 173-77.
- King, R. (1978). All things bright and beautiful? Chichester, England: John Wiley.
- McCarty, F., Abbott-Shim, M., & Lambert, R. (2001). The relationship between teacher beliefs and practices, and Head Start classroom quality. *Early Education and Development*, 12(2), 225-238.
- McMullen, M. B. (1998). The beliefs and practices of early childhood educators in the U.S.: Does specialized preperation make a difference in addoptive of best practices? *International Journal of Early Childhood Education*, 3, 3-29.
- McMullen, M. B. (1999). Characteristics of teachers who talk the DAP talk and walk the DAP walk. *Journal* of Research in Early Childhood Education, 13(2), 218-232.
- McMullen, M. B. (2001). Distinct in beliefs/united in concerns: Listening to strongly DAP and strongly traditional k/primary teachers. *Journal of Early Childhood Teacher Education*, 22, 122-133.

- Nelson, R. F. (2000). Personal and environmental factors that influence early childhood teachers' practices. *Jour*nal of Instructional Psychology, 27(2), 95-103.
- Pajares, M. F. (1992). Teachers' beliefs and educational research: Cleaning up a messing constuct. *Review of Educational Research*, 62(3), 307-332,
- Spodek, B. (1988). Implicit theories of early childhood education teachers: Foundations for professional behavior. In B. Spodek, O.N. Saracho, & D.L. Peters (Eds.), *Professionalisa and the Early Childhood Practioner* (pp.161-172). New York: Teachers College Press.
- Stipek, D. J., & Byler, P. (1997). Early childhood education teachers: Do they practice what they Preach? *Early Childhood Research Quarterly*, 12,305-325.
- Vartuli, S. (1999). How early childhood teachers beliefs vary across grade level. *Early Childhood Research Quarterly*, 14 (4), 489-514.
- Verma, S., & Peters, D. L. (1975). Day care teachers practices and beliefs. *The Alberta Journal of Educational Research*, 21 (1), 46-55.
- Wang, J. (2000). American and Chinese teachers' beliefs about early childhood curriculum. Unpublished Dissertation, Purdue University, Indiana.
- Yonemura, M. (1986). A teacher at work: Professional development and the early childhood educator. New.