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The Curricular Practices of Early Childhood Teachers Working in Public Sschool Primary Grades.

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by

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ABSTRACT

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Little is known about the curricular practices or thinking of early childhood teachers attempting to use developmentally appropriate practices in public school primary grades. The purpose of this study was to investigate four primary grade teachers' thoughts and classroom practices, through observation, interviews, and classroom schedules. Data were analyzed following the procedures for open, axial, and selective coding as explained by Strauss (1987). All four teachers exhibited common elements: educational beliefs consistent with those of the National Association for the Education of Young Children; frustration with their school's curriculum; and the combination of a rich pattern of guidance strategies in the use of whole group math and language instruction. The curricular practices are viewed as a compromise between the teachers' personal beliefs and the expectations of their schools. They reflect the historical difficulty of using a child-centered curriculum in a public school setting.

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CONTENTS

CHAPTER 1

INTRODUCTION

Statement of the Problem

The purpose of this study was to investigate the thoughts and classroom practices of early childhood teachers attempting to use developmentally appropriate practices in public school primary grades by documenting their thinking and the kinds of curricular activities they use with their students.

Research Questions

Three questions guided this research:

1. What actual activities do early childhood teachers working in public school primary grades use with their children?
2. How do they use their knowledge of developmentally appropriate practices when planning and implementing activities for children?
3. What influences their selection and implementation of curricular activities?

A better understanding of the influences on early childhood teachers' determination of best practices for their students in the primary grades may contribute to knowledge of better ways to support the use of developmentally appropriate practices with children these ages.

Rationale for Study

Need for a Qualitative Study

Little is known about the actual curricular practices of early childhood teachers working in public school primary grades. Documentation of teachers' curricular activities in combination with an interview about their thinking is needed to understand their teaching practices. Knowing what teachers do in their classroom and why is essential for determining the best way to support a greater inclusion of developmentally appropriate practices.

Methodology

Data about primary grade, early childhood teachers' thoughts and curricular activities was gathered through observations, interviews, and classroom schedules. Data were analyzed using the procedures for open, axial, and selective coding as explained by Strauss (1987).

CHAPTER 2
LITERATURE REVIEW

Historical Overview of Curriculum in the Primary Grades

Historical Context for a Developmentally Appropriate Curriculum

The professional standards for early childhood educators, as expressed by developmentally appropriate practices, encourage teachers to adopt a curriculum that supports the natural development of children. From an historical point of view, such a curriculum falls into the tradition of those emphasizing the developmental needs of an individual more than the transmission of subject matter or molding children to fit the needs and expectations of society (Marsh & Willis, 2003). Marsh and Willis describe developmentally-oriented curricular programs as those favoring individualized instruction, meaningful work based on children's interests, and opportunities for children to learn by actively engaging with their environment. The goal of this kind of curriculum is to support not only the cognitive development of children but their physical and affective development as well. Marsh and Willis credit John Dewey for establishing the curricular point of view that the nature of the individual is an appropriate basis for school experiences.

Historically, although child-centered educational philosophies have resembled each other, more than the older school traditions they sought to reform, these ideologies have nonetheless differed in their particular conceptions of knowledge and how children learn (Chung & Walsh, 2000). In fact, Chung and Walsh have shown that by 1930, the term child-centered was used to describe three very different understandings of how children learn. The meaning of this term continues to depend very much upon the context in which it is used.

In his study of teaching practices in American public schools, Cuban (1993) identified two major kinds of instruction: teacher-centered and student-centered. Cuban asserts that these "two traditions of teaching are anchored in different views of knowledge and the relationship of both teacher and learner to that knowledge" (p.8). He associates student-centered instruction with the broad tradition of progressive education that has its roots in the ideas and methods advocated

by Dewey. For the purpose of identifying historical instructional practices, Cuban lists the classroom characteristics he associates with each. He describes teacher-centered classrooms as those in which:

1. Teacher talk exceeds student talk during instruction.
2. Instruction occurs frequently with the whole class; small-group or individual instruction occurs less often.
3. Use of class time is largely determined by the teacher.
4. The teachers rely heavily upon the textbook to guide curricular and instructional decision-making.
5. The classroom furniture is usually arranged into rows of desks or chairs facing a chalkboard with a teacher's desk nearby (p. 7).

Student-centered classrooms are those in which:

1. Student talk about learning tasks is at least equal to, if not greater than, teacher talk.
2. Most instruction occurs individually, in small groups (2 to 6 students), or in moderate-sized groups (7 to 10) rather than being directed at the entire class.
3. Students help choose and organize the content to be learned.
4. Teachers permit students to determine, partially or wholly, rules of behavior, classroom rewards and penalties, and how they are to be enforced.
5. Varied instructional materials (e.g., activity centers, learning stations, interest centers) are available in the classroom so that students can use them independently or in small groups.
6. Use of those materials is scheduled, either by the teacher or in consultation with students, for at least half of the academic time available.
7. The classroom is usually arranged in a manner that permits students to work together or separately, in small groups, or in individual work spaces; no dominant pattern in arranging classroom furniture exists, and desks, tables and chairs are realigned frequently (p. 7).

Cuban associated teacher-centered classrooms with curricular philosophies that are considered subject-centered, hard pedagogy, or mimetic. He associated student-centered classrooms with

those philosophies considered child-centered, progressive, or soft pedagogy. For the purpose of studying how teachers have taught, Cuban focused on a broad interpretation of these two educational orientations.

Cuban (1993) argued that classroom characteristics indicate certain beliefs on the part of the teacher. For instance, desks arranged into clusters shows that student interaction is valued. The presence of classroom learning centers suggests that children are at times allowed to move about the room and to engage in projects with their peers. The presence of student talking indicates that the teacher respects their thoughts and recognizes that children learn by sharing their thinking with others.

Developmentally appropriate classrooms are established according to similar beliefs about children. According to Bredekamp and Copple (1997) to achieve developmental appropriateness teachers are "to plan the curriculum, time schedule and environment so children can learn through active involvement in various learning experiences with each other, with adults, and with a variety of materials" (p. 164). In the Primary Teacher Questionnaire developed by Smith (1992), four of the developmentally appropriate items about which teachers are to rate their agreement or disagreement describe classroom practices that are favorable to children's learning:

1. Instruction should consist mainly of projects, learning centers, and play managed primarily by children.
2. Opportunities for work focused peer social interaction should predominate over whole-group and individual experience.
3. For most of the time, children should be encouraged to work cooperatively in informal small groups.
5. Children should be allowed to use space flexibly to pursue a variety of learning activities alone or in small groups. (pp. 31-32)

Although Cuban's (1993) definition of a child-centered classroom is narrower than that of a developmentally appropriate one, the characteristics he identified are typically part of developmentally appropriate classrooms. Consequently, the historical conditions he associated with teachers' efforts to include child-centered practices are a useful background for understanding the challenges that primary grade teachers in public schools face today.

Origins of Developmentally Appropriate Practices

The kindergarten created by Friedrich Froebel embodied the earliest curricular program of instruction for young children (Snyder, 1972). Snyder describes Froebel's methods for educating young children as stressing the importance of play and hands-on experience. Under the influence of G. Stanley Hall, Froebel's methods were later modified to be less formal and more reflective of children's individual experiences and needs. According to Snyder, this shift away from traditional Froebelian methods created a split among the early advocates of kindergarten programs. The liberal group of kindergarten teachers, led by Patty Smith Hill, placed an even greater emphasis on play and natural expressions of a child's interests than the traditional Froebelian programs. Moreover, in the 1920s, spurred by the interest in child study, nursery schools emerged as another form of early childhood education (Bloch, 1991). By 1929, The National Association of Nursery Education (NANE) was established. In 1930, NANE attempted to set the earliest standards for nursery care by publishing the book *Minimum Essentials for Nursery School Education* (Bredekamp, 1997).

Although invited to merge with the International Kindergarten Union (IKU) NANE decided to remain a separate organization (Lascarides & Hinitz, 2000). In 1931, the IKU merged with the National Council of Primary Education and become the Association for Childhood Education (ACE). NANE supported the ACE by preparing the nursery section of their journal, *Childhood Education*, and by collaborating in meetings for school administrators. NANE, however, remained a separate organization dedicated to promoting knowledge of child development as a guide for effectively nurturing the development of young children (Copple, 2001). According to Lascarides and Hinitz, the primary goal of the ACE was to foster the establishment of quality kindergarten programs throughout the world

In 1964 the National Association of Nursery Education (NANE) became the National Association for the Education of Young Children (NAEYC) (Copple, 2001). In response to the growing numbers of children in care outside of the home, NAEYC published the first edition of *Developmentally Appropriate Practice in Early Childhood Programs Serving Children from Birth through Age 8* in 1986 (Bredekamp, 1997). Later revised in 1997, the publication supports the use of curricular practices that will foster the optimal development of young children. The developmentally appropriate practices described by Bredekamp and Copple (1997) are tied to the

long-standing belief that quality programs for young children are those grounded in a understanding of child development.

History of Developmentally-Based Curricula and American Public Schools

Standardization of public school curriculum. The first schools to be established in America were colleges (Snyder, 1972). Harvard was established in 1636. After Harvard the College of William and Mary was established in 1693 and then Yale in 1701. According to Snyder, all these schools stressed an education in traditional classical subjects because this kind of education was considered the best preparation for assuming positions of leadership in the government and followed the course of study offered by universities in England. Snyder writes that Latin Grammar schools were an early type of formal schooling for children. These schools were intended to prepare students for the classical programs of the colleges. As early as 1642, laws were passed to create publicly-funded schools for children whose families could not afford the private education offered by the Latin Grammar schools. Thomas Jefferson proposed the *Bill for the More General Diffusion of Knowledge* in 1779 (Spring, 1996). His proposal was that all non-slave children should receive state-supported schooling for three years.

The earliest program for educating large numbers of students of varying abilities was the monitorial method popularized by Joseph Lancaster (Rayman, 1981). Introduced in England in 1798, Lancaster's schools involved training older students and those of greater ability to teach younger, less able students. The curriculum emphasized memorization and drill. Students were rewarded with prizes for lessons well done. Students were expected to adhere to a strict behavior code and were severely punished for any infractions. Rayman writes that Lancaster's schools were popular, in part, because they provided a very inexpensive way of educating large groups of children. The school system of New York City adopted the Lancaster method as its first curricular program. The Lancaster method did not lose its popularity until the 1850s.

Between 1820 and 1900, cities grew tremendously as massive groups of immigrants came to America (Reese, 2000). According to Reese, Horace Mann promoted a view of public schools as a way to Americanize children. He created the first state board of education in Massachusetts. While he was secretary of the board of education from 1837 to 1848, Mann actively promoted public education as essential for preparing future citizens to participate in a democratic society. The first attempt, however, to organize school curriculum into distinct

programs of study for children was made by William Harvey Wells, the superintendent of Chicago schools between 1856 and 1864 (Kliebard, 1986). He divided the students in his school system into grades and established a program of study for each level.

By 1892, increasing numbers of students were attending secondary schools across the country (Kliebard, 1986). In addition, the growth in newspaper circulation and improvements in transportation facilitated the spread of ideas throughout the country. According to Kliebard, as information increased, parents became more concerned about whether their local schools were teaching children what they needed to know. In addition, Kliebard writes that principals of secondary schools were unhappy because colleges did not have a uniform expectation of subjects necessary for students to study before admission.

When the National Education Association met in 1892, it appointed a Committee of Ten to create a course of study for secondary schools that colleges would accept as appropriate for preparing applicants (Kliebard, 1986). Charles Eliot, the president of Harvard, was chosen to lead this committee because he had the greatest experience with secondary education and was well-respected by principals. Kliebard writes that because the committee believed that the cultivation of reason was the primary goal of education, they adopted the accepted method of the times for developing a rational intellect. This method was called mental discipline, and it viewed the mind as a muscle best developed by following a program of mental exercise. The program of study published by the committee reflected their belief that traditional courses such as mathematics, Greek, and Latin were the best ones for developing the ability of the mind to reason. In addition, Kliebard asserts that the committee unanimously decided not to distinguish between secondary school educations as preparing children for life and such educations as preparing them for college. The committee decided that the college preparatory course of study was the best preparation for life.

Immediately, those engaged in the scientific study of child development criticized the committee's report (Kliebard, 1986). G. Stanley Hall, the emerging leader of the child study movement, attacked the report for prescribing a uniform education for all children. According to Kliebard, Hall argued that teaching all children in the same way ignored the differences in their development. Hall expressed the view that it was wrong to give all subjects the same educational value, since they would be of varying degrees of importance to the children studying

them. Hall also asserted that it was wrong to equate preparation for college with preparation for life. Eliot, however, opposed altering the curriculum for those not attending college, because this kind of program would place the school in the position of making decisions about children's futures. Kliebard quotes Eliot as saying, 'Who are we to make these prophecies?' (p. 15).

In 1895, another committee was appointed to create a curriculum for elementary schools. This committee was called the Committee of Fifteen, and William Torrey Harris, the U. S. Commissioner of Education, was appointed to coordinate the reports of its sub-committees (Kliebard, 1986). According to Kliebard, although Harris was very aware of the new study of children, he did not think child development was a good basis for determining school curriculum. Harris, however, was not a mental disciplinarian. Kliebard reports that he regarded the primary mission of schools as that of transmitting knowledge of western culture, and that the committee's published report reflected this goal. Public reaction to this report reflected three points of view that have continued to influence American curriculum.

First, the National Herbert Society opposed the suggested curriculum. As proponents of the pedagogical philosophy of John Herbart, these educators asserted that children learned through their interactions with nature and society (Kliebard, 1986). In many ways this society was the forerunner of the modern study of child development (Marsh and Willis, 2003). According to Kliebard, the Herbartians criticized the report for failing to establish meaningful connections between the subjects being taught and the children taking them. They compared the report to an edition of *Hamlet* that failed to include Hamlet. Kliebard asserts that this group believed that educational programs should be tied to an understanding of children's natures. Like Hall, they thought children matured by passing through all the stages of civilization. They wrote that curricular programs should be derived from "culture epochs" and use materials and activities that are meaningful to children, depending on their particular stage of development. These early proponents of a developmentally based curriculum asserted that elementary school activities should be dominated by play until children reached age 8. Kliebard writes that, the Herbartians advocated the delay of reading and writing instruction until age 8. John Dewey became a member of this group in 1894 when he joined the faculty of the University of Chicago. In 1900, the National Herbert Society changed its name to the National Society for the Scientific Study of Education. It remained strongly associated with the child-study movement.

Another criticism of the committee's report came from a group later known as social efficiency educators (Kliebard, 1986). The leader of this group was Joseph Mayer Rice, a doctor who studied pedagogy in Germany in 1888. He returned home from his studies and was sponsored by a journal, *The Forum*, to study American education. According to Kliebard, Rice was very unhappy at what he saw in his study of schools, and his reports were widely circulated by *The Forum* throughout the country. Rice wrote that on the whole, schools did not teach any subject well. The few schools, however, that he judged as doing a good job inspired him to continue investigating.

Rice continued his study by documenting the achievement of third graders in math. He then investigated the educational methods used by teachers in the schools that he had evaluated as offering superior math instruction (Kliebard, 1986). Rice's educational reforms further focused on determining the most effective ways of teaching all subjects and on pressuring administrators and teachers to adopt these particular educational methods. Kliebard reports that Rice believed schools were wasteful in their educational practices when they used any teaching methods other than the ones he had shown to be most effective. Rice's reforms launched the curricular reform in education known as the social efficiency movement. Kliebard writes that later, as an extension of this movement, reformers used ideas from American factories as ways to make education more cost-effective. In addition, the social efficiency educators advocated the use of standardized tests to sort American school children so that each child received an appropriate education.

A third criticism of the educational curriculum endorsed by the committee came from a group concerned with the social welfare of America's children (Kliebard, 1986). Later known as the social meliorists, this group was inspired by Lester Frank's publication of *Dynamic Sociology* in 1883. According to Kliebard, Frank's book espoused a view that education was a way to direct the social evolution of society. Kliebard asserts that Frank himself was very influenced by the publication of *On the Origin of Species* by Charles Darwin in 1859. Many other social Darwinists at this time, however, such as Herbert Spencer, advocated a hands-off attitude toward the poor and regarded their problems to be nature's way of eliminating undesirable strains of people. Kliebard writes that Frank, in contrast, believed these views were incorrect, because mankind was different from animals. Frank asserted that man had developed power over nature

and therefore could use his intellect to create a better society. He wrote that schools were the best way to help people to create a better life for themselves.

Embodied in these three criticisms of the curriculum adopted by the Committee of Fifteen are various conceptions of how schools should educate children (Kliebard, 1986). In spite of these concerns, the first standardized public school curriculum was based primarily on an intention to transmit knowledge and thereby prepare all children for meeting the challenges of continuing education (Marsh & Willis, 2003). Additionally, Kliebard asserts that the curriculum was based on a belief that preparation for higher education was the best preparation for life. Furthermore, Kliebard writes that adopting a single public school curriculum was believed to benefit all children by giving each the same opportunities for advancement regardless of their social, ethnic or economic background.

Debate about what should be the primary ingredient of school curriculum - subject matter, the needs of society, or the nature of children - continues to affect our classrooms today (Marsh & Willis, 2003). Each focus embodies a different cultural view of human potential and development. Marsh and Willis assert that, historically, the conveyance of subject matter has prevailed over the other two perspectives in shaping public school curriculum. For most of American history, teaching has been primarily understood as the act of transmitting knowledge to children, and this has been reflected in the prevailing instructional methods used by public school teachers.

Child-centered programs and the public schools. Francis Parker first demonstrated the feasibility of child-study as the basis for an entire public school curriculum (Cuban, 1993). According to Cuban, Parker became the superintendent of schools in Quincy, Massachusetts in 1873, and changed the existing school curriculum, materials, and instructional methods to reflect the child-centered pedagogy he had studied in Europe. Under Parker's leadership, the school system became an example of the "New Education" (p. 40) and attracted educators who were interested in trying new methods with children. Although child-centered instruction was considered quite innovative, Cuban quotes Parker as describing his program as sensible, given the ways that children learn:

> I repeat that I am simply trying to apply well established principles, principles derived directly from the laws of the mind. The methods springing from them are

> found in the development of every child. They are used everywhere except in school. I have introduced no new method or detail. No experiments have been tried, and there is no peculiar 'Quincy System' (p. 40).

Later, Parker became the principal of Cook County Normal School, the predecessor of Chicago State University, and here he oversaw an experimental school for children (Cuban, 1993). In 1892, Superintendent J. W. Greenwood of Kansas City, Missouri observed children working in Parker's school. Cuban quotes Greenwood describing the teaching method he saw as 'the kindergarten idea carried up through the grades' (p. 41). John Dewey enrolled both of his children in Parker's school before he began his own Laboratory School at the University of Chicago. Cuban attributes the description of Parker as the 'Father of Progressivism' (p. 39) to Dewey.

According to Ross (1976), by 1890 the value of kindergarten programs was well accepted by the American public. Kindergarten classes had been included as part of the public schools system in St. Louis, Indianapolis, Boston, Chicago, and Philadelphia. These settings provided the basis for the first interaction between the child-centered kindergarten philosophy and the traditional one of the primary grades. Ross asserts that the structure of the public school created changes in the kindergarten curriculum. The public school kindergarten programs became more skill-focused than the traditional kindergarten curriculum in order to prepare children for first grade. Unlike kindergarten, the first grade curriculum had traditionally stressed the acquisition of skills for reading, writing, and mathematical computation (Parker & Temple, 1925). Parker and Temple attributed this curricular tradition to pressure on educators to satisfy commercial and religious expectations of young children. In contrast the kindergarten curriculum created by Froebel and modified by Patty Smith Hill, emphasized child development through play, imitation, and active involvement with subject matter.

When kindergartens were first placed in public schools, some primary grade teachers complained because these children came to their classes unable to sit still and with the expectation that school would reflect their interests (Ross, 1976). According to Ross, children preferred the play-based curriculum of kindergarten to the traditionally structured subjects of first grade. Carter (1899), an early kindergarten teacher, shared:

> We thought it but natural that when children reached the primary school they should receive instruction in the arts of reading, writing and arithmetic. Accordingly we began our lessons upon them. The children went to the blackboards to copy certain letters. For three days this was a great success. Then Freddie asked, 'Ain't this work?' We replied that it was intended to be, whereupon he laid down his crayon, remarking, 'Then I don't want to do it any more. In kindergarten we don't work; we play' (p. 359).

In regard to the kindergarten children and math instruction she wrote:

> We had always been of the opinion that a modicum of attention was necessary in order to add and subtract or to multiply and divide: but without storytelling the lessons ceased to be 'interesting,' and the children declined to give us any attention at all (p. 359).

Carter's experience was that the children who had attended kindergarten were less responsive to traditional activities than the non-kindergarten children. She ends the article lamenting on behalf of herself and the other primary grades teachers:

> We believed that our attainments might have fitted us to shine in many spheres, but not as Freddie's teachers; and in the course of time it was borne in upon us that our abilities were not such as to enable us successfully to develop in the primary school the flabby kindergarten intellect of the kindergarten child (Carter, p. 366).

Despite such complaints, primary classrooms began to adopt some of the curricular practices used in the kindergarten such as songs and more opportunities for physical movement (Ross, 1976). Ross writes that the primary grades adopted the kindergarten practice of having meetings with mothers and home visits. Furthermore, many schools encouraged kindergarten and primary teachers to work together and learn about each other's methods. According to Ross, some kindergarten training programs, such as that run by Lucy Wheelock, expanded to train teachers to teach in kindergarten as well as in the primary grades. In their book, *Unified Kindergarten and First-Grade Teaching*, Parker and Temple (1925) advocated breaking the traditional lines between the curriculum of kindergarten and first grade. They supported incorporating more freedom and play in the first grade and incorporating more reading and

writing activities into kindergarten programs for children who are ready to develop such skills. Despite these efforts, primary and kindergarten teachers continued for the most part to be trained differently (Fromberg, 1999).

Dewey oversaw the Laboratory School from 1896-1904 (Lascarides & Hinitz, 2000). According to Lascarides and Hinitz, Dewey's approach to teaching, was very influenced by Froebel's curriculum for young children. Ross (1976) writes that Dewey admired Froebel for recognizing that children learn through play, benefit from collaboration with their peers and construct knowledge through meaningful activities. Lascarides and Hinitz assert that Dewey's instructional methods may be understood today as early examples of developmentally appropriate practices. Tanner (1999) quotes Dewey describing his school, 'This laboratory problem takes the form of the construction of a course of study which harmonizes with the natural history of the growth of the child in capacity and experience' (pp. 63-64). Dewey attempted to integrate school subjects. According to Tanner, Dewey taught problem-solving skills and nurtured children's creative thinking. Cuban (1993) describes Dewey as teaching reading, writing and math skills through meaningful group activities. His teachers guided the children's learning by connecting subject matter to actual work done by people in society.

Dewey organized the Laboratory School to support his understanding of the best curriculum for children (Tanner, 1999). Tanner describes Dewey's teachers as not only providing him with weekly subject reports, but also with their own assessments of how well certain activities worked with the children. In this way, Dewey's administration could respond to the teachers' difficulties and support their work with the children by suggesting modifications. According to Tanner, Dewey had great faith in the abilities of his teachers and treated them as professionals.

Although Dewey's methods were emulated primarily by private schools, some experimental public schools did attempt to incorporate his instructional techniques (Cuban, 1993). In 1924, Agnes DeLima, a journalist and advocate of child-centered curriculum, observed some of these experimental, progressive, public school classrooms in New York City. Cuban summarizes her observations by describing these teachers as imitating some of Dewey's techniques but, in general, remaining very authoritarian in their instructional practices. For instance, in her 1924 observation of an elementary classroom, DeLima (1925) noted that the

teacher allowed children to work in groups and to converse with each other as they completed their assignments. In addition, DeLima described the teacher as moving around the room to help individual students. The teacher, however, had a class of 42 children who sat in rows facing her desk. The school subjects were taught separate from each other, and the nature of the students' participation was completely determined by the teacher. The teacher observed by DeLima, however, was considered one of the best experimental teachers in the school. DeLima reflected on her observations:

> There may be better 'best' teachers in the system, but it is worthwhile to ask just how much in the way of creative experience can be afforded to children by any teacher, no matter how technically skilled or graciously human, who suffers under a fixed course of study, an overcrowded class, a room void of any materials save blackboards, desks and books, and the tradition of the teacher as the active directing agent, and of the pupils as the docile receptive ones (p. 21).

Cuban summarizes DeLima's belief that unless class size was reduced and changes were made in school administration, progressive instructional methods would not succeed in public schools.

In 1934, Harold Campbell, Superintendent of the New York City Public Schools, implemented a 6-year experiment with a child-centered curriculum called the Activity Program (Cuban, 1993). This program was based on the progressive curricular belief that children learn best while engaged in meaningful work. In her book, *The Activities Curriculum in the Primary Grades*, Stevens (1931) wrote:

> Children should have a chance to explore, to investigate, to make things happen, to satisfy their curiosity. They should have a chance to express themselves, not only through social intercourse and free conversation, creative writing and art, and through carrying out their own purposes, but also through materials, so that by experimenting with materials freely, they may have a rich perceptual experience upon which to build. The experiences, problems, and materials chosen should lead naturally to further activity on ever higher levels (p. 11)

Although there was some disagreement and confusion about what implementing this curriculum entailed, a memo sent to the assistant commissioner of education in 1940, outlined the basic school objectives:

1. Children and teachers participate in selecting subject matter and in planning activities.
2. The program centers on the needs and interests of individuals and groups.
3. Time schedules are flexible, except for certain activities…which may have fixed periods.
4. Learning is largely experimental.
5. The formal recitation is modified by conferences, excursions, research, dramatization, construction, and sharing, interpreting, and evaluating activities
6. Discipline is self-control rather than imposed control…
7. The teacher is encouraged to exercise initiative and to assume responsibility; the teacher enjoys considerable freedom in connection with the course of study, time schedules and procedure.
8. Emphasis is placed on instruction and creative expression in the arts and crafts (p. 65).

According to Cuban (1993), 10% of all the New York City elementary schools were chosen to participate. Although teachers were encouraged to try the new methods, evaluations of the Activity Program indicated that few elementary teachers followed the child-centered curriculum for more than three hours a day. In addition, Cuban writes that school reports indicated that teachers continued to use traditional methods of drilling children on particular skills in order to accommodate those children who might be moved to non-experimental schools. Nonetheless, in 1943, the state evaluators concluded that the Activity Program was as effective as traditional methods of instruction and recommended that it be expanded into all New York City public schools.

In the wake of the Depression, World War II, and the Cold War, public support for progressive methods gradually faded (Marsh & Willis, 2003). According to Marsh and Willis, after the launching of Sputnik in 1957, school policy changed in favor of adopting a single curriculum for all American public schools. Emphasis was placed on achieving academic excellence in public education, and there was a push for graduating students with strong skills in math and science.

In 1960, A. S. Neill's book *Summerhill* marked a resurgence of interest in child-centered methods of instruction (Cuban, 1993). Cuban writes that the Civil Rights movement as well as public outrage at the governmental policies in regard to Vietnam and the environment also fueled a renewed desire for "schooling that would free children's imagination and creativity from deadening routines, tyrannical authority and passive learning" (p.151). According to Cuban, Charles Silberman presented the concept of the open classroom as being 'the keystone in the arch of educational reform' (p.151). Cuban quotes Silberman describing these classrooms as 'organized as to encourage active learning rather than passive learning; learning and expression in a variety of media, rather than just pencil and paper and the spoken word; self-directed, student-initiated learning more than teacher directed learning…' (p. 155). Informal education, like progressivism, called for flexible use of classroom space and the integration of school subjects. In addition, the educational advocates for each philosophy endorsed instructional methods in which children could choose their activities, use hand-on materials, and receive instruction in small groups.

Interest in informal education, however, was brief, lasting only from the mid- 1960s to the mid-1970s (Cuban, 1993). Furthermore, Cuban asserts that, unlike progressivism, informal education was never widely accepted among professional educators. Cuban's study of classroom practices during this time indicates that particularly in elementary schools teachers did use more group work and learning centers in their classrooms. As he found in the New York City classrooms that were encouraged to adopt an Activity Curriculum, teachers typically only partially adopted the new informal methods. Generally, he found the teaching practices were mixtures of informal and traditional teaching methods.

History of Elementary and Early Childhood Training Programs

Historically, training programs for elementary teachers and early childhood teachers have differed in the emphasis they place on the significance of child development in regard to making curricular decisions for young students (Bloch, 1991; Fromberg, 1999). According to Fromberg, early childhood education has typically been associated with Departments of Home Economics, Agriculture, or Child Development. Elementary training, on the other hand, has usually occurred within Departments of Education or Curriculum. Bloch (1991) writes that the earliest educational interest in young children was directed at the children of poor families. Bloch (1987) asserts that,

because these children were often hungry and neglected, early childcare workers concerned themselves with supporting the child's physical needs as well as cognitive development. In addition, Froebel's kindergarten curriculum contributed to a new conception of a child's nature as basically good and needing a nurturing environment in which to grow rather than a punitive one (Bloch, 1987). Historically developments in psychology and child study have continued to influence thinking about how to best educate young children (Bloch, 1991).

Training programs for elementary teachers have traditionally emphasized techniques for managing groups of children more than ways to support individual development (Cuban, 1993). Rather than being primarily influenced by psychology and child development, elementary education was shaped more by those wishing to make schools cost efficient and effective agencies for social change (Bloch, 1991). According to Cuban, teacher-directed lessons have been the preferred method of instruction in elementary schools for the last century. Cuban attributes this preference to the emphasis that elementary schools place on managing children:

> Student-centered approaches where students work together, move freely around the room, and determine certain classroom tasks for themselves make a shambles of classroom routines geared to handling batches of students. These approaches are incompatible with existing school and classroom structures and would require a complete overhaul of basic modes of classroom operation (p. 19).

Cuban writes that this management-oriented way of educating children has been a part of our culture for so long that most people accept it without question.

Teacher Autonomy in Public Schools and Child-Centered Practices

The Role of Teachers in a Public School Setting

The role of the teacher is also viewed differently by early childhood and elementary education (Cuban, 1993). NAEYC supports the classroom teacher as an important decision-maker about what constitutes best practices for the teacher's students. In fact, in the 1997 revised edition of *Developmentally Appropriate Practice in Early Childhood Programs* Bredekamp and Copple include changes intended to reflect better the complexity and importance of the classroom teacher's role as a professional decision maker (Bredekamp, 1997). Cuban, however, asserts that traditionally teachers have been viewed by school systems as being classroom managers rather than as curricular decision makers.

According to Cuban (1993) elementary school teachers have typically received instructions about what and how to teach from a person outside of the classroom. In fact Cuban asserts that for many years, teachers in urban school systems were told not only what to teach but they also received weekly schedules telling them how much time to spend on each subject. For instance, Cuban quotes from the 1928 *Report On Survey of the Public School System of the District of Columbia by the Bureau of Efficiency* that stipulated: "Every officer and teacher in the elementary school shall consider himself governed by this weekly schedule" (p. 100). Furthermore, Cuban reports that school principals were expected to inspect teachers' plans to "know that each teacher is observing the distribution of time" (p. 100). Cuban speculates that to a certain extent the control that elementary teachers have traditionally exerted on their students may reflect how little control these teachers had over other aspects of their jobs. Historically, the elementary setting has not empowered teachers to act as decision-makers for determining the best curricular practices for their students.

For example, in 1944, Bank Street School for Teachers was invited to work with New York City teachers who were participating in the Activity Program (Mitchell, 1950). According to Mitchell, rather than offering training, Bank Street created workshops in which teachers could share their difficulties with the new curriculum and explain the ways in which they needed help. Mitchell writes that kindergarten, first grade, and second grade teachers all expressed frustration at the conflicting expectations for their work. For example, the teachers were uncertain about the degree to which they were allowed to depart from the official course of study prepared by the Board of Education. In addition, although many teachers expressed a belief that their children were not yet ready to learn to read, they were concerned about upper grade teachers complaining about the children's lack of preparation. The teachers also expressed concerns about managing their large groups of children on outings away from the school. Mitchell quoted the teachers' expression of frustration at the mixed messages they received about what they were expected to do:

> This was made an 'Activity School' and it was one for eight years. Then a state examiner sat for five hours in the school [and] handed us the fundamental words the children must know; the phonetics they must know. Where did the activity come in?… Another thing is all the clerical work we have to do. It's against the

rules to take roll or record books home. You can imagine where we do them (p. 95).

Mitchell asserted that much of the teachers' difficulty implementing the Activity Program was related to their lowly position in the hierarchy of the school administration. The teachers were expected to implement curricular decisions they had no part in making. In Mitchell's opinion, the hierarchal nature of public school administration diminished the teachers' stature as professionals capable of making significant curricular decisions for their children.

Cuban (1993) writes that the issues of teacher authority and autonomy within the institution of public schools are crucial to any analysis of curriculum and instruction. He lists some important decisions affecting instruction that historically have been made by an authority figure outside the classroom:

1. How many and which students should be in the class.
2. Which students should leave the class because they are not profiting from instruction?
3. What extra instructional help should students get?
4. How long should the school day or classroom period be?
5. Should teachers' daily schedule include planning time, and, if so, how much and when?
6. What texts should be used for each subject?
7. What grades or subject should each teacher teach?
8. What should be the format or content of the report card?
9. What standardized tests should be given? (p. 263)

These decisions have the potential to limit significantly what teachers can and cannot do with children in their classrooms.

Expectations of Teachers in a Public School Setting

Furthermore, Cuban (1993) asserts that teachers' historical preference for traditional methods of instruction is related to their position in the hierarchy of a school system. He views the nature of a classroom as being like that of a "Russian wooden doll" (p. 252) located within the larger structure of the school. Teachers are affected not only by curricular decisions made

outside their classrooms, but also by the institutional expectations of their schools. Cuban summarizes:

> A teacher has to manage students of approximately the same age who involuntarily spend -depending upon their age- anywhere from 1 to 5 hours daily in one room. Amid continual exchanges with individual students…the teacher is expected to maintain control, teach prescribed content, awaken the students' interest in the subject matter, vary levels of instruction according to student differences and show tangible evidence that students have performed satisfactorily (pp. 252-253).

Given the enormity of their task, teachers must carefully allocate their time and energy. Cuban asserts that, historically, teachers may have preferred whole-group, traditional instruction, in part, because these methods are more efficient for accomplishing the goals of the school than are child-centered curricular practices. Child-centered instruction utilizing learning centers and hands-on activities is both material and time intensive. Cuban writes that often teachers are unable to get the needed additional support from their schools. Furthermore, Cuban contends that without peer support for child-centered methods, many struggling new teachers resort either to replicating the traditional instruction by which they were taught or adopt traditional methods advocated by more established teachers in the school.

In the position statement on developmentally appropriate practices written for NAEYC, Bredekamp and Copple (1997) describe the particular difficulties that primary grade teachers face when implementing developmentally appropriate practices:

> Classrooms serving primary-age children are typically part of larger institutions and complex educational systems with many levels of administration and supervision. Classroom teachers do not make decisions in isolation; many teachers have little control over the curriculum or policies they are expected to carry out. Although ensuring developmentally appropriate practice in primary education requires the efforts of the entire group of educators who are responsible for planning and implementing curriculum- teachers, curriculum supervisors, principals, superintendents, and school boards- it remains the professional obligation of each individual educator (p. 142).

Furthermore, Bredekamp and Copple recognize that often classroom practices considered developmentally inappropriate result from conditions beyond the teacher's control:

> Class sizes are too big-30 to 35 or more- making it difficult for teachers to know children and their families well and to individualize instruction. Children's emotional and physical needs are not being met, and the school and community lack the resources or services to assist them. The mandated curriculum is incoherent, fragmented, or unrealistic. The learning environment is unsafe or has insufficient supplies of books and other learning materials. Administrative policies require out-dated methods and structures. Any of these factors or all of them together could be the root cause for observed practices such as those described as inappropriate in this chart (p.161).

Bredekamp and Copple write that the purpose of developmentally appropriate practices is not "to issue a prescriptive set of practices but to encourage educators to reflect upon their practice" (p.161) and to strive always for greater inclusion of the instructional methods that research has shown are best for children birth through 8.

Progressive Methods and Public School Teachers

Despite the historical preference for teacher-centered methods in public schools, some progressive practices have become part of typical teaching practices particularly in elementary schools (Cuban, 1993). For instance, desks are no longer attached to the classroom floor, and teachers may arrange them to suit their instructional purposes. According to Cuban, teachers are more "humane" (p.268) in their treatment of children than they once were and grant their students more freedom both to move in the classroom and to make some choices about their work. Projects and activity centers are utilized more often as at least some part of instruction, and teachers have a greater tolerance for noise than they once did.

Cuban (1993), however, quotes from a reflection on progressive education written by John Dewey shortly before his death in 1952:

> The most widespread and marked success of the progressive movement has been in bringing about a significant change in the life conditions in the classroom. There is a greater awareness of the needs of the growing human being, and the personal relations between teachers and students have been humanized and

> democratized. But the success in these respects is as yet limited, it is largely atmospheric; it hasn't yet really penetrated, and permeated the foundations of the educational instruction. The older gross manifestations of the method of education by fear and repression-physical, social and intellectual-which was the established norm for educational system before the progressive movement began, have generally been eliminated… The fundamental authoritarianism of the old education persists in various modified forms (p.116).

Despite the adoption of some progressive methods, Cuban's own analysis of historical teaching practices supports Dewey's conclusions about the effect that early progressive reformers had on public school classrooms. While teachers, particularly those in elementary schools, did adopt some progressive instructional techniques, they never relinquished their traditional methods.

Cuban (1993) describes the coexistence in classrooms of traditional as well as progressive teaching practices as being a curricular hybrid. Kliebard (1992) conceives of curricular hybrids as evidence that "divergent and even competing doctrines almost invariably exist side by side"(p. 174) in American classrooms. Cuban views the competition between child-centered and teacher-centered practices in schools as a reflection of "long term cultural beliefs about the nature of knowledge, what teaching and learning should be and the social setting (the ethnic, racial, and social backgrounds of the children attending school) established by the outer context" (p. 260).

Need for Developmentally Appropriate Practices in Kindergarten and Primary Grades

Development of Children At-Risk for School Failure

The description of children entering kindergarten published by the National Center for Education Statistics (U. S. Department of Education, 2001) indicates that, by this time, students already vary greatly in their acquisition of skills and approaches to learning. Nearly half of all children entering kindergarten are considered to be at-risk for school failure. These are children whose mothers have less than a high school education, whose families receive welfare, who live in a single-parent home, and whose parents' first language is not English. In many cases, these children are the ones who enter school without the basic skills and interest in learning that other children have.

Efforts to educate these children often focus on helping them catch up to the other children and, thus, reflect a view of curriculum that is reminiscent of its Latin meaning, which is "race track" (Shubert, 1996). To this way of thinking, children's learning is measured by what has been determined worth knowing. Shubert writes that other educators, however, emphasize the act of learning as more than a measured outcome and view the process as an integral part of the curriculum. Cuban (1993) asserts that traditional instructive methods were developed in accordance with the belief that teachers can place knowledge into a child's head by following a sequential series of lessons. In contrast to this view, educators knowledgeable in child development recognize genuine learning as happening only when children are active participants in the learning process (Krogh, 1997). Efforts to equalize children's skills by using traditional methods of instruction do not work as well as methods based on knowledge about child development (Burchfield, 1996; Burts et al., 1993).

Two well-known class size studies, Wisconsin's Student Achievement Guarantee in Education Study (SAGE Study) and Tennessee's Student Teacher Achievement Ratio Project (STAR Project) were initiated with the intended goal of increasing the academic achievement of children considered as at risk for school failure (Ehrenberg, Brewer, Gamoran & Willms, 2001; Halbach, Ehrle, Zahorik, & Molnar, 2001; Nye, Hedges, & Konstantopoulos, 2001). Each study found that there was a statistical achievement advantage for at-risk children placed in smaller classes with one teacher.

Both the STAR Project and the SAGE Study collected data by asking participating teachers to describe their classroom practices (Halbach et al., 2001; Nye et al., 2001). Many of the reported teaching practices in small classes were identified as being similar to developmentally appropriate practices advocated by NAEYC, for children birth through age 8. According to Nye et al., teachers in the STAR Project reported practices that included more one-on-one interaction between themselves and the children and a greater degree of individualized teaching practices. According to

Halbach et al. (2001) write that teachers participating in the SAGE Study also reported more individualized instruction and student attention. In addition, the teachers mentioned using a greater array of instructional strategies, including more hands-on activities. The teachers also reported spending less time on classroom discipline issues and more time on instruction. In

many cases, the teachers stated that they not only met the curriculum objectives for their grades but that they surpassed them as well. The teachers characterized their instruction as going into greater depth than required by the state. The studies done by Halbach et al. and Nye et al. (2001) suggest that children considered at-risk for school failure benefit from the expertise of educators who can implement school curriculum in developmentally appropriate ways.

Development of the Whole Child

In the position statement for NAEYC, Bredekamp and Copple (1997) write that developmentally appropriate practices for children in the primary grades, ages 6-8, are those that follow a curriculum supporting all areas of a child's development. Concentrating on one area, such as on cognitive development, may result in the neglect of other areas and lead to poor performance in school. NAEYC considers cognitive, social, emotional, and moral development as being interrelated. Children learn best when they are intellectually stimulated within a network of positive supportive relationships. Furthermore, children's brains need to make connections among the concepts they are being taught. Using an integrated curriculum is the best way to facilitate these associations. In addition, an integrated curriculum allows children in various stages of development to work together and practice skills at different levels (Krogh, 1997). According to Bredekamp and Copple, the rigid, sequential manner in which curriculum has traditionally been taught in elementary schools is not considered developmentally appropriate. Furthermore, Krogh asserts that children learn best when they can connect schoolwork to themselves personally. For this reason, children need to be allowed to make choices about their activities and engage in play, so they can use their new knowledge. Bredekamp and Copple recognize that the primary grades are usually a part of institutions that may not understand or support a teacher's use of developmentally appropriate practices in the teacher's classroom. Nonetheless, they assert that teachers are ultimately responsible to the children they teach and therefore have an obligation to use their professional knowledge to make the best possible decisions for their educational development.

Importance of Play

Research shows that children aged 6-8 benefit from a curriculum that allows them to make choices and engage in hands-on learning experiences (Bredekamp & Copple, 1997). Often, however, primary teachers who are unfamiliar with how children learn view these kinds

of activities as "play" and consequently doubt their educational value (Perlmutter, 1995; Stone, 1995). In many primary classrooms, recess is the only time that children are allowed to play (Gronlund, 1995). According to Gronlund, these teachers do not realize the importance of play as a vehicle for language development, problem-solving, and social interaction, as well as physical development. Gronlund asserts that when given opportunities, children in first, second, and third grade engage in play that is as intense and creative as that of younger children. Socio-dramatic play centers are as educationally important for primary age children as they are for younger ones. Gronlund writes that some primary teachers, however, fear the loss of classroom control that follows when children are given choices and allowed to play.

Importance of Developmentally Appropriate Guidance

Developmentally appropriate strategies for guiding children are also important in the primary grades (Gartrell, 1995). Many elementary schools still use the practice of "shaming" children into being good. Gartrell describes such programs as holdovers from a time when children were regarded as evil and in need of punishment to help them control their behavior. Gartrell writes that teachers with knowledge of child development realize how easily children can internalize negative views of themselves when shamed into being good. Developmentally appropriate strategies for guidance include those that distinguish between "misbehaviors" and "mistaken" behaviors. Gartell (1995) describes mistaken behavior as an expected part of the learning process. Therefore, corrective measures focus on teaching the child alternative behaviors rather than responding with negative consequences. Developmentally appropriate strategies teach children to control themselves rather than teaching them to conform to the expectations of their environment. Ambery (1995) asserts that many elementary schools follow a behaviorist program of rewards and punishments to elicit student compliance with rules. Such programs do not support the individual development of each student, and, consequently, challenge teachers with an understanding of child development to establish their own programs for guiding children.

Pressure of Standardized Tests

The current emphasis on standardized test scores as a way of measuring student progress also diminishes a view of the classroom teacher as an important decision-maker (Smith, 1991). Furthermore, this emphasis may pressure some teachers to adopt developmentally inappropriate

practices in their classrooms (Bolenbaugh, 2000). In a qualitative study of the effects that testing had on schools, Smith observed that many teachers were reluctant to try new programs in their classrooms for fear that the students' test scores might drop. In addition, the study documented instances in which teachers reduced the amount of time spent on hands-on activities in order to focus on test preparation. The study further noted that teachers made curricular decisions for their students based on the subject content of the standardized test. Smith also observed that teachers adopted more multiple-choice kinds of assessment in their classrooms because this format reflected that of the standardized test.

Smith (1991) described teachers who refused to teach to the test as fearful of the repercussions from their administrators if their scores were below those of other teachers. Such emphasis on test scores pressures teachers to all teach the same way. Furthermore, standardized testing programs foster a view of teachers as unskilled workers needing direction from the outside to tell them how to do their jobs. In such a climate, however, it is especially important that teachers resist pressure to abandon developmentally appropriate practices (Bolenbaugh, 2000). Kohn (2001) writes that supporting teachers who understand a difference between teaching for test-preparation and real learning is essential for our children's education. Teachers need encouragement to modify their curriculum and experiment with teaching methods until they find what will stimulate their students' thinking and help all children realize their intellectual strengths. NAEYC supports this approach to teaching by including the wording of "both/and" (Bredekamp & Copple, 1997, p. 37) in regard to instructional strategies that may be developmentally appropriate for different groups of students at various times depending on their needs. At the current time, such support is essential for classroom teachers to act as advocates for the children in their care.

Research on Kindergarten and the Primary Grades

Research on Developmentally Appropriate Practices in Kindergarten Programs

Instruments for measuring teachers' beliefs and practices. Most studies looking at developmentally appropriate practices in an elementary setting have examined kindergarten programs. The first set of studies has focused on the creation of instruments for identifying and measuring developmentally appropriate practices in kindergarten programs. For example, Bryant, Clifford and Peisner (1991) studied 103 kindergarten classrooms in the state of North

Carolina. They used a modified version of the Early Childhood Rating Scale to record information about the classrooms. The researchers found that only 20% of the observed classrooms met or exceeded the criteria for developmental appropriateness. Next, the researchers developed a new questionnaire intended to measure knowledge and beliefs about developmentally appropriate practices. This rating scale, named the Checklist of Kindergarten Activities, was based on the 1987 NAEYC guidelines for developmentally appropriate practices. The researchers had the teachers whose classrooms they observed and their principals complete a Checklist of Kindergarten Activities. The study found that scores of teachers and principals on the Checklist of Kindergarten Activities correlated with the observed degree of developmentally appropriate practices in classrooms.

Additional research has examined the beliefs and practices of kindergarten teachers in their use of developmentally appropriate practices. Charlesworth, Hart, Burts, and Hernandez (1991) conducted a study to further establish the validity of The Teacher Questionnaire as an instrument for determining the developmental appropriateness of kindergarten teachers' beliefs and practices. The questionnaire was administered to 113 kindergarten teachers in four southern states. Classrooms were then observed using the checklist for Rating Developmentally Appropriate Practice in Kindergarten Classrooms. Positive correlations were found between expressed developmentally appropriate beliefs and observed developmentally appropriate practices and between expressed developmentally inappropriate practices and observed developmentally inappropriate practices. The study also noted that teachers with higher ratings on observed developmentally appropriate practices also reported in their beliefs that they felt more in control of classroom planning than the teachers with lower ratings.

In addition, Charlesworth et al. (1993) conducted a study of 204 kindergarten teachers in 60 elementary schools in a medium-sized Southern city. The goal of the study was to test the validity of a questionnaire for predicting the degree of developmental appropriateness of teacher practices. The questionnaire used was one modified from an instrument measuring the developmental appropriateness of programs for 4 and 5-year-olds. The researchers changed it to reflect 1987 NAEYC guidelines for programs serving children ages 5-8. The questionnaire was given to 219 kindergarten teachers, and 204 were returned. Classroom practices and procedures were then rated using the Checklist for Rating Developmentally Appropriate Practices in

Kindergarten Classrooms. The study found that scores on the questionnaire identified teachers who were observed using more developmentally appropriate practices and those who were observed using more developmentally inappropriate practices.

Stipek and Byler (1997) studied the relationships among teachers' beliefs about how children learn, their views on the goals of early childhood education, their positions on policies related to school entry, testing and retention, their satisfaction with current practices and pressures for change and their actual practices. The study participants included 18 preschool, 26 kindergarten, and 16 first grade teachers. The researchers used Stipek's Early Childhood Program Observation Measure to rate the classroom instruction and social climate after two and a half hours of observation. They found that the beliefs, goals, practices, and policy positions corresponded with debates among professionals concerning the merits of child-centered versus more skill-based approaches to teaching children. Findings among the first grade teachers did not support as strong an association.

Comparisons of beliefs held by parents, teachers, and school administrators. Other studies of kindergarten programs have compared the views of teachers, parents, and administrators about the appropriate curriculum for kindergartners and have shown that these views are often different. For example, Hatch and Freeman (1988) conducted an ethnographic interview study on school districts in Ohio examining kindergarten practices from the perspectives of teachers, principals, and supervisors responsible for implementing kindergarten programs. They found that kindergarten programs tended to be academic and skill-oriented and that the persons responsible for implementing the programs did not believe that they were in the best interests of the children served. The researchers observed that these teachers, principals, and supervisors were implementing programs with which they personally disagreed.

In addition, Rusher, McGrevin and Lambiotte (1992) examined the relationship between kindergarten teachers' and principals' beliefs about child development, early childhood curriculum, and teaching strategies. They sent a 56-item, survey-style questionnaire to 500 kindergarten teachers and 167 elementary school principals in the state of Texas. The researchers found that teachers expressed greater agreement with child-centered practices than did male principals. There was less discrepancy, however, between the beliefs of teachers and female principals about child-centered practices.

Finally, Knudsen-Lindauer and Harris (1989) compared the views of parents and teachers about best practices for children in kindergarten. They studied 146 kindergarten teachers and 436 parents of kindergarten children in two large school districts in a Western state. The researchers developed two instruments for use in the study: The Kindergarten Teacher Questionnaire and the Kindergarten Parent Questionnaire. Knudsen-Lindauer and Harris (1989) used these questionnaires to determine what skills kindergarten teachers and parents of kindergarten children felt that children should have before entering kindergarten and which skills they felt should be emphasized in kindergarten curricula. The study found that teachers rated social, listening, speaking, and large motor skills significantly higher than mothers or fathers. Parents rated cognitive skills as being more important.

Relationship between pupil stress and developmentally appropriate practices. In addition to research comparing views of appropriate curricular practices, studies have also examined the relationship between developmentally appropriate practices and observed stress behaviors in children. In 1990, Burts, Hart, Charlesworth and Kirk used The Teacher Questionnaire to identify teachers using the most and least developmentally appropriate practices. This instrument was created using the NAEYC 1987 position statement on developmentally appropriate practices for 4 and 5-year-olds. It measured both teachers' beliefs about developmentally appropriate practices as well as teachers' perceptions of how often their children participated in certain kinds of classroom activities. The teachers surveyed were located in a small Southern school district. The classrooms of these teachers were then observed and scored by using The Checklist for Rating Developmentally Appropriate Practice in Kindergarten classrooms. These scores were used to validate the teacher's responses to the questionnaires. The researchers then chose a developmentally appropriate classroom and a developmentally inappropriate classroom located within the same school. Children in these rooms were observed using the Child Stress Behavior Instrument. The researchers found that children in the developmentally inappropriate classroom exhibited much higher levels of stress than children in the other room.

In 1992, Burts et al. studied observed stress behaviors of kindergarten children as mediated by race, gender, and socioeconomic status (SES). The researchers chose teachers and classrooms using the same methods as in the 1990 study. All the classrooms were located in a

medium-sized southern city. The study found that males in developmentally inappropriate classrooms exhibited more stress than males in appropriate classrooms. Black males in inappropriate classrooms exhibited more stress during transition, waiting, and teacher-directed whole group instruction, while white males showed more stress during story time. In addition, the researchers found that low SES children and black children tended to be less involved in developmentally appropriate activities in their classrooms.

Haupt, Larsen, Robinson, and Hart (1995) used The Teacher Questionnaire to study whether attending a teacher in-service about developmentally appropriate practices would influence teachers' beliefs. Twenty-five teachers participated in the in-service training session. The teachers' expressed beliefs and practices were measured at the beginning of the in-service. Researchers found that nearly all the teachers who attended the training session had high scores on developmentally appropriate practices before attending the in-service. They also found that although the scores rose for the participating teachers in both expressed belief and practice after the training session, the scores in beliefs were much higher than the scores in practices.

Relationship between training and teacher beliefs. Smith (1997) compared the beliefs of student teachers with only elementary training to those who had some early childhood preparation for teaching. He used 60 volunteers who were all both undergraduate students and elementary education majors at an urban campus of a Midwestern University. He administered the Primary Teacher Questionnaire and the Internal Locus of Control Index. Smith found that students with some early childhood training endorsed developmentally appropriate beliefs more than elementary-training-only students. The elementary group endorsed more traditional beliefs. The beliefs of each group remained stable during the course of student teaching. Internal locus of control had no effect on the convergence of student-teacher and cooperating-teacher beliefs.

Developmentally appropriate practices and later academic achievement. Finally, studies have looked at the relationship between developmentally appropriate practices in kindergarten and preschool and academic achievement in the primary grades. Frede, Austin, and Lindhauer (1993) studied the relationship between the developmentally-based curriculum, High Scope Preschool Curriculum, and children's school achievement in first grade. The researchers studied 12 classrooms in three urban settings in South Carolina. They developed the Preschool Classroom Implementation Rating Instrument to examine teaching practices and measure the

implementation of the High Scope Preschool Curriculum. Performance in first grade was determined by a standardized test of achievement. The study found that children from classrooms that scored higher on the Preschool Classroom Implementation Rating Instrument scored higher than other children on a standardized achievement test in first grade.

Burts et al. (1993) examined the relationship between the developmental appropriateness and inappropriateness of kindergarten instruction and first grade report card overall averages and averages in reading, spelling, math, social studies, and science. The researchers studied the extent to which gender, SES, and kindergarten classroom-type play affected children's later achievement. Developmentally appropriate classrooms were identified for the study using The Teacher Questionnaire and the Checklist for Rating Developmentally Appropriate Practices in Kindergarten Classrooms. Participants were 204 subjects from an earlier study (Burts et al., 1992). The study found that first graders from developmentally appropriate classrooms had higher reading averages than children from less appropriate classrooms. Females had higher overall averages than males. High SES children from inappropriate classrooms had higher overall averages and higher averages in subject areas than low SES children from less appropriate classrooms. Low SES children from more appropriate classrooms had higher overall averages in all subjects except reading than low SES children from less appropriate classrooms. No significant differences were found between children from high and low SES from more appropriate kindergarten classrooms.

Stipek, Feiler, Daniels, and Milburn (1995) compared the basic skills achievement of children who came from child-centered preschool and kindergarten programs to those of children from highly academic programs. Classrooms were rated using an observation measure created by the researchers and the Early Childhood Rating Scale and the Classroom Practices Inventory created by Hyson, Hirsch-Pacek and Rescorla (1990). Children's number and reading skills were assessed using the Woodcock Johnson Achievement Test and Peabody Individual Achievement Test. The study found that children from didactic programs had significantly higher scores in reading and letters but not on numbers. The program effects were the same for economically disadvantaged and middle-class children.

Research on Developmentally Appropriate Practices and the Primary Grades

Instruments for measuring teacher beliefs and practices. Although early childhood encompasses birth to age 8, less research has focused exclusively on developmentally appropriate practices in first, second, and third grade classrooms. Some research has focused on creating instruments for measuring developmentally appropriate beliefs and practices in the primary grades. Smith (1992) developed the Primary Teacher Questionnaire, an instrument designed to measure teachers' beliefs about developmentally appropriate practices in the primary grades. His research consisted of three stages. The first was the development of the survey questions. Smith used NAEYC's position statement on developmentally appropriate practices published in 1987 to design the questions. He used a Likert style format to present each question. The second stage of development was initial testing and revisions. Smith had the survey questions reviewed by specialists in early childhood and elementary education. Smith then field-tested the questions by administering the survey to 29 undergraduate students in early childhood education and 18 students in elementary education. After revising the questionnaire, the instrument consisted of 42 items, 24 of which reflected traditionally-oriented (TRAD) views about curriculum, and 18 of which reflected a developmentally-based view of curriculum.

The revised version of the Primary Teacher Questionnaire was administered to 144 individuals. Of the total, 61% were in-service teachers, and 39% were pre-service teachers. In addition, 61% had received elementary training only, and 38% had received elementary plus early childhood training. Smith found that individuals with training in early childhood education expressed greater agreement with developmentally appropriate practices. Those with elementary-only training favored traditional views of curriculum. Smith concludes that the Primary Teacher Questionnaire is a promising way of assessing teachers' beliefs about appropriate instruction in the primary grades.

Buchanan, Burts, Bidner, White, and Charlesworth (1998) also studied the practices and beliefs of teachers in the primary grades. The study was conducted in a single southern school district using elementary schools that were culturally diverse, represented rural and urban settings, and served high and low income children. The school system endorsed no particular curricular emphasis other than encouraging teachers to use technology. The teachers were

certified to teach in grades first through eighth. They also could obtain an early childhood add-on certification for kindergarten, nursery school, or both. Information about the teachers' educational background, teaching experience, and current work history was collected using The Primary Teachers' Beliefs and Practices Survey.

The survey used was a revised version of The Teacher Questionnaire used to measure teachers' beliefs and practices in previous research on kindergarten classrooms (Charlesworth et al., 1993). The survey was modified to reflect differences between curriculum in kindergarten and that of first through third grades. The modifications were made using the 1987 guidelines for developmentally appropriate practices written for NAEYC by Bredekamp and Copple, which included kindergarten and first grade in the same section. The surveys were coded by grade level. The new survey was piloted with a group of 36 pre-service teachers for reliability. The validity of the revised survey was examined using a sample of 16 teachers from another state. Two researchers using the Checklist for Rating Developmentally Appropriate Practice observed the classrooms of teachers who scored as being most inappropriate and most appropriate. These observations confirmed the validity of the questionnaire.

The revised questionnaire measured teachers' self-reported beliefs and practices using a five-point Lickert scale ranking the importance the teacher ascribed to each belief or frequency with which he/she was observed engaging in each practice. The researchers found that most classrooms were mixtures of developmentally appropriate practices as well as developmentally inappropriate practices. After sorting practices and teacher beliefs on a continuum ranging from developmentally appropriate to developmentally inappropriate, the researchers studied the classrooms that fell closest to being either entirely developmentally appropriate or inappropriate. The researchers identified classroom and teacher characteristics that predicted the degree to which classroom practices were developmentally appropriate or inappropriate.

Buchanan et al., (1998) found that the more experience a teacher had teaching in an elementary setting, the more likely the teacher was to use traditional instructional methods in the classroom. Conversely, they found that recent graduates from early childhood programs, as well as from elementary programs with philosophies compatible with developmentally appropriate practices, used more of these strategies in their classrooms. Teachers with traditional training in elementary education used more developmentally inappropriate practices in their classes. The

factor they found that best predicted the degree of developmentally appropriate activities was the amount of influence a teacher believed she or he had on the children's learning experience. Teachers who believed that parents and school policies had more influence on the children than their classroom activities used more developmentally inappropriate activities in their classrooms.

Characteristics of teachers using developmentally appropriate practices. White, Buchanan, Hinson, & Burts (2001) surveyed teachers in primary grades about their use of developmentally appropriate practices. Following the survey, the researchers interviewed teachers who scored well on the measure of developmentally appropriate practices. They were interested in seeing what personal characteristics the teachers had in common with each other. White et al. asked the teachers to describe their professional training, childhood experiences, the support they received from their families and colleagues, and their classroom practices. The study found that the five teachers had very different personalities and teaching styles from each other. What they had in common, however, were views of themselves as teachers. First, all the teachers regarded themselves as "competent, capable and professional" (p. 32). Second, they placed the needs of their students above all other job considerations. Third, these teachers believed their methods would positively affect the development of their students. Fourth, all five of the teachers had a positive outlook on their ability to meet professional challenges. Each believed that every student in his or her class was capable of learning.

Ethnographic case study of a teacher's practices and experiences. Goldstein (1997a) worked in the suburban multiage classroom of a Northern California primary school teacher for three months as a participant observer. Although her ethnographic study was about caring relationships in an elementary classroom, Goldstein changed her focus as she noticed how difficult it was for the classroom teacher to maintain a developmentally appropriate program. Goldstein documented ways that the classroom teacher attempted to individualize the program for each child and allowed children to make choices about their work in her classroom.

In 1988 the California State Department of Education adopted an educational policy advocating the use of developmentally appropriate practices in the elementary and primary grades. Goldstein (1997b) noticed, however, that despite having strong administrative support for her practices, parental support for the teacher's methods was lacking. Many parents did not consider the teacher's child-centered methods as real teaching. They expressed concern about

whether their children would be ready for the next grade. In addition, they worried whether their children were learning basic skills. Furthermore, parents did not consider the classroom projects done by the children as real schoolwork. Some parents requested worksheets. Other parents felt that a teacher ought to be telling the children what to do rather than letting them make decisions for themselves. The parental discomfort was surprising to Goldstein (1997a; 1997 b), because these children were attending a magnet school chosen by the parents. Goldstein (1997a) surmised that although in theory the parents wanted their children to be in a developmentally appropriate classroom, in reality they associated the traditional practices of elementary school with actual learning. In addition, although the classroom is multiage, parents wanted measures of their children's progress by comparing their skills to traditional grade-level expectations.

Goldstein (1997a) also found that although the classroom teacher aspired to implement developmentally appropriate practices, her actual teaching methods included some inappropriate ones. At times the teacher made her objectives for the children more important than those of the children for themselves. In addition, the choices she offered the children about their work were usually limited and often reflected the teacher priorities such as finishing project work before engaging in free play. In addition, the teacher required children to maintain a level of concentration while doing their work by interacting with them as if they are off-task when their attention wandered. Although Goldstein noticed more opportunities for play than in traditional classrooms, she described the classroom as regarding play as being less important to finishing assigned work.

In her book, *Teaching with Love: A Feminist Approach to Early Childhood Education*, Goldstein (1998) reflected upon her experience as a participant observer in the multiage classroom and described the caring relationships she observed between the children and their teacher. She described the teacher as showing affection for the children by treating students as individuals, never yelling, or drawing unnecessary attention to misbehavior, giving the children choices, and helping children to realize and build on their strengths. Although Goldstein considered such practices developmentally appropriate, she asserted that it was the effect of the children feeling loved that made the interactions effective. In fact, Goldstein criticized developmentally appropriate practices for promoting child development without describing a purpose for nurturing a child's growth. She wrote that developmentally appropriate practices

were reflective of the traditional emphasis in early childhood education on scientific knowledge as best means for guiding the development of young children. In contrast, Goldstein stated that teachers should be more like parents seeking not only "to preserve the lives of children" and "to foster their growth" but also "to shape them according to some ideal of acceptability" (p. 25). Goldstein wrote that knowledge of developmentally appropriate practices could guide a teacher's interactions with a child, but communicating love to a child was the greatest catalyst for child development. She asserted that the creation of caring relationships was the most important teaching task.

Teacher Perspectives on Developmentally Appropriate Practices in the Primary Grades

Jipson (1991) studied classroom journals and personal narratives of 30 practicing teachers who were attempting to implement the 1986 guidelines for developmentally appropriate practices written for NAEYC by Bredekamp and Copple. She was interested in the perspective of the practitioner on the process of determining best practices for children. Each of Jipson's participants was enrolled in one of her graduate seminars on early childhood education curriculum and had experience working with children in an early childhood classroom. Among the participating teachers, five were public school teachers working in the primary grades. They all expressed the need for additional people and financial resources to implement developmentally appropriate practices into their classrooms. They also mentioned that the use of developmentally appropriate practices required additional paperwork to be done by the teacher. In general, they pointed out that individualizing the curriculum resulted in more responsibility and work for the teacher. In addition they described their classrooms as having a culture of their own. They wrote that moving the children away from an egocentric view of themselves and into the classroom culture was an important part of their curriculum. In this respect they stated that individualizing the curriculum was not in the best interest of their children.

In her work educating primary teachers about developmentally appropriate practices, Gronlund (1995) found that many teachers without a background in early childhood do not understand that children learn best through active participation in hands-on activities. Furthermore, in her experience, many teachers in primary classrooms were uncomfortable with the idea of giving children choices and allowing them to spend less time sitting and listening. In addition, teachers were concerned about how they would cover the required curriculum if their

classrooms became less structured. Gronlund also wrote that teachers worried about how their children would perform on standardized tests. She also noted that many teachers had trouble associating play with learning and worried that having fun in school would not prepare children for the difficulties of life in the real world.

Gronlund (1995) made a point of telling teachers that, although developmentally appropriate practices change many aspects of life in the classroom, the content being taught and the expectation that children will learn did not change. Most of the teachers Gronlund counseled realized that the disadvantages of using developmentally appropriate practices were related to adult issues such as wanting quiet, orderly classrooms. In general, they understood how an active classroom would facilitate their students' learning. Gronlund also found that many teachers understood developmentally appropriate practices as only being effective if they were completely adopted. She assured teachers that most classrooms were mixtures of developmentally appropriate and inappropriate practices and suggested that they should view themselves as being on a continuum.

When a first grade teacher asked Beardsley (1991) for advice about his math program, she suggested that he buy a set of blocks for the class. The teacher rejected her idea explaining that he did not know how he could justify the presence of blocks to other teachers, his principal, and the children's parents. In addition, the teacher feared that the children would spend all their time playing with the blocks rather than doing their schoolwork. Inspired by this conversation, Beardsley began to examine more closely some of the issues involved with implementing developmentally appropriate practices into the primary grades. She saw that parents are uncomfortable with developmentally appropriate practices and worry whether their children are learning basic skills. In addition, Beardsley found that parents did not like seeing preschool type activities in primary classrooms. They believed their children had outgrown the need for a playful environment. In addition, parents wanted to see quantifiable evidence that their children were learning. Furthermore, parent education was more difficult in primary grades, because the class sizes were so much larger than preschool classes. For this same reason, teachers had more difficulty including parents in the classroom. Teachers faced the big challenge of overcoming the cultural and socioeconomic expectations that parents have of schools. Beardsley noted how important it was for children that developmentally appropriate practices be adopted in a uniform

and consistent manner from preschool into the primary grades. She stated that inconsistency put children in the position of interpreting the curriculum. For example, children might find it confusing if one year they were encouraged to write using invented spellings but the next year were told that only dictionary spellings are acceptable.

Pelander (1997) wrote about his experience of changing from a teacher-centered first grade classroom to a more developmentally appropriate one. Pelander shared that one of the biggest challenges he faced was changing his own thinking about how children acquire knowledge. He had come to trust his traditional teacher-directed methods and looked at numbers of completed worksheets as evidence that his children were learning. Pelander recalled that he felt fear at the thought of relinquishing his traditional methods of "drill and practice" (p. 19).

As Pelander (1997) considered the changes he made in his classroom, he recognized the advantages of children having opportunities for more hands-on learning. For instance, he described his students as spending less time talking about reading and actually reading. Pelander realized how few opportunities his traditional classroom had given the children to move, play, and make decisions about their learning. He asserted that recognizing the children's ability to make decisions for themselves improved their self-esteem. Pelander wrote that in addition to changing his own thinking about how children learn, he also faced the challenge of educating his parents about developmentally appropriate practices. Pelander shared that he has tried to help parents focus on the "process skills" (p. 24) their children are developing. He stated that developmentally appropriate practices were helping his students develop skills for life-long success.

Developmentally Appropriate Practices and Teacher Preparation Programs

Teacher education classes are an important source of information for pre-service and in-service teachers about developmentally appropriate practices (Fromberg, 1999; Rogers & Sluss, 1996; Smith, 1997). Fromberg and Rogers and Sluss write, however, that it is important for the practices of teacher education programs to be consistent with their philosophy of learning. Fromberg asserts that a teacher cannot understand the "nonlinear" way in which a child's mind works if he or she is not challenged to change his or her own linear way of thinking. Roger and Sluss write that a teacher preparation program educating students about developmentally appropriate practices should incorporate these ideals into its instructional practices. For instance,

just as social interaction is considered beneficial to children's development, so students in education programs should also be given opportunities for collaborative learning. Moreover, just as observation is considered the best way to assess the learning of young children, likewise university teacher training programs should not rely solely on test scores as measures of their students' learning. As with children, it is important to consider the needs of adult learners when planning course curricula. In addition, Fromberg contends that pre-service teachers must be challenged to realize their own assumptions about how children learn. Often these assumptions are held unconsciously. It is important for teachers to realize the relationship between theory and practice.

Research on Teacher Beliefs and Classroom Practices

Research on teacher beliefs tends to focus on two areas. The first is the degree to which teachers believe they may influence students in their care. The second is the teacher's judgment about the appropriate instructional activities for the children in her care. Teacher beliefs have been found to remain stable over time, and often teachers are unaware of the beliefs that guide their practice. Furthermore, teachers appear to form their beliefs primarily from their own classroom experiences both as practitioners and students (Jacobs & Eskridge, 1999; Kagan, 1992). Kagan cites studies (Feiman-Nemser & Buchman, 1986; Tabachnick & Zeichner, 1984; Zeichner, 1989) suggesting that teachers' beliefs are not influenced by teacher education programs. According to Jacobs and Eskridge, teachers' memories may, in fact, override their professional knowledge and training. Kagan and Jacobs and Eskridge assert that the effectiveness of teacher training programs depends on the extent to which they make students aware and reflective of their beliefs and memories. Furthermore, Kagan contends that the success of teachers in balancing conflicting classroom tasks, such as providing individualized instruction and maintaining control of the whole class, depends upon their ability to create meaningful, internal guidelines on which to base their practice.

Manley-Casimir and Wasserman (1989) describe classroom decisions as rarely easy or straightforward and as ones requiring judgment and intuition as well as time to gauge the results. They created a class that gave teachers an opportunity to reflect upon themselves as decision makers. The course was intended to make practicing teachers more aware of themselves as decision makers and of the extent to which their "professional options are circumscribed and/or

delimited in certain school settings" (p. 289). As part of the class, the participating teachers kept journals of their thoughts and feelings. The themes of isolation, complexity, and stress were common to all the decisions made by teachers.

At the completion of the course, Manley-Casimir and Wasserman (1989) identified seven features of the classroom decision making process. They found that decision making had not been a part of the teacher's educational training. In addition, most teachers were unaware of how they arrived at many of the classroom decisions they made. In all classrooms there are certain conditions that require teachers to act without thinking. Furthermore, some schools made important decisions about classroom policies and curriculum for their teachers. The expectation that teachers were to implement decisions they themselves did not make contributed to burn out. All teachers were required at times to participate in carrying out decisions that were contrary to their individual beliefs and values. Finally, very few teachers have access to situations that seek to understand and validate their classroom decisions.

Isenberg (1990) regards decision making as the most basic teaching skill. Teachers continuously reflect upon the effectiveness of their pedagogical decisions and base their decisions both on professional knowledge and observed student behaviors. Isenberg cites research (Elbaz, 1981;Yonemura, 1986) showing that teachers base many of their classroom decisions on practical knowledge. Consequently, teachers' decisions about their classroom practices may not be fully understood unless they are given an opportunity to explain their actions. The professional growth of teachers is associated with the degree to which they acknowledge the complexity of their classrooms and actively engage in problem-solving decisions.

Summary of Literature

Statement of the Problem

Developmentally appropriate practices encourage teachers to follow a curriculum that supports not only children's cognitive development, but their social, emotional, and moral development as well (Bredekamp & Copple, 1997). A developmentally appropriate curriculum allows children to make choices about their work, engage in meaningful activities, and learn through interaction with their peers as well as their teacher. All early childhood teachers encounter varying degrees of support for their decisions about what constitutes developmentally

appropriate practices. In the primary grades, however, teachers encounter challenges related to the very culture in which they teach (Cuban, 1993; Goldstein, 1997a). Because educational training for elementary school teachers has also differed from that of early childhood programs, teachers certified in early childhood education who work in the primary grades may find themselves without peer or administrative support for their practices (Beardsley, 1991; Bloch, 1991; White et al., 2001). Moreover, Beardsley, Goldstein, 1997a and 1997b, and White et al. assert that parents of primary school-aged children have expectations for what they consider age-appropriate school work and often do not recognize developmentally appropriate activities as being educational. Nonetheless, according to Bolenbaugh, 2000, Pelander, 1997, and White et al., children in the primary grades benefit as much from individualized instruction and hands-on learning as do younger children. Gronlund, (1995), Pelander, Perlmutter and Burrell, 1995, and White et al. contend that currently, educators are interested in facilitating the use of developmentally appropriate practices in the primary grades. Little is known, however, about the actual curricular practices of early childhood teachers working in the primary grades or about how to best support their use of developmentally appropriate practices.

Summary of Research

Historical studies of curriculum in American public schools show that the conveyance of subject matter has been the primary concern (Marsh & Willis, 2003). Earliest efforts to standardize curriculum focused on preparing children to meet the next level of school challenges and were based on the belief that all children benefit from the same kinds of instruction (Kliebard, 1986). The kindergarten curriculum developed by Froebel was the first set of child-centered instructional methods (Cuban, 1993; Lascarides & Hinitz, 2000; Ross, 1976). According to Ross, these methods were introduced to the primary grade in public schools when kindergarten classes were added to urban school systems. In addition, Cuban and Lascarides and Hinitz assert that Dewey's laboratory school further established the efficacy of child-centered instructional methods. According to Cuban, Lascarides and Hinitz, and Tanner (1999), these teaching practices typically included the use of hands-on activities, projects, child play, and collaborative projects. Cuban contends that for the most part, these methods were only ever partially adopted by teachers in the public schools.

Most of the research that has been done on developmentally appropriate practices in an elementary setting has focused on the creation of instruments for measuring teacher beliefs and practices (Bryant et al., 1991; Charlesworth et al., 1991; Charlesworth et al., 1993; Smith, 1992; Stipek & Byler, 1997). In addition, research has compared the views of teachers, parents, school principals, and administrators about how children learn and what skills are most important for kindergarteners (Hatch & Freeman, 1988; Knudsen-Lindauer & Harris, 1989; Rusher et al., 1992). Burts et al. (1990) and Burts et al. (1992) looked at the relationship between pupil stress and developmentally appropriate practices in kindergarten classrooms. Haupt et al. (1995) and Smith (1997) have studied the relationship between teacher training and teacher beliefs about developmentally appropriate practices. Frede et al. (1993), Stipek et al. (1995), and Burts et al. (1993) have studied the relationship between developmentally appropriate practices in kindergarten and later academic achievement. White et al. (2001) studied characteristics of primary teachers who use many developmentally appropriate practices in their classrooms. Finally, Goldstein (1997a; 1997 b; 1998) did a single case ethnographic study of a multiage teacher's practices and experiences working in a public school. From an historical point of view, Cuban (1993) has researched public school teachers' use of child-centered instructional practices such as those supported by developmentally appropriate practices.

Research on teachers as decision makers has shown that their teaching practices are affected by their own classroom experiences (Jacobs & Eskridge, 1999; Kagan, 1992; Rogers & Sluss, 1996) In addition, training programs for early childhood teachers have emphasized knowledge of child-development as the basis for making classroom decisions where as elementary programs stress child-management (Block, 1991; Fromberg, 1999). Furthermore, a teacher's ability to make significant decisions for his/her children is limited by his/her position in the hierarchy of school organization (Cuban, 1993). Manley-Casimir and Wasserman (1989) have shown that nearly all teachers are expected at some point in their career to carry out curricular decisions that are contrary to their own beliefs and values. Isenberg (1990) has found that practical issues form the basis for many of a teacher's classroom practices and are often not understood by an outsider unless the teacher has a chance to explain his/her decisions.

Significance of Research

These studies have contributed to the ability of researchers to measure the developmental appropriateness of elementary teachers' beliefs and practices (Bryant et al., 1991; Charlesworth et al., 1991; Charlesworth et al., 1993; Smith, 1992; Stipek & Byler, 1997). In addition, they have contributed to the knowledge of factors that predict a teacher's use of developmentally appropriate practices in a primary grade setting (Buchanan et al., 1998; White et al., 2001). Furthermore studies have indicated ways that the use of developmentally appropriate practices in kindergarten through third grade benefit children (Burts et al., 1990; Burts et al., 1992; Burts et al., 1993; Stipek et al., 1995). Research has also contributed to an awareness of the different views that school administrators, parents, and teachers have about the appropriate curriculum for children (Hatch & Freeman, 1988; Knudsen-Lindauer & Harris, 1989; Rusher et al., 1992). Goldstein's (1997a) research has contributed to knowledge of the actual curricular practices used by an early childhood teacher working in the primary grades as well as to an understanding of the challenges faced when educator's attempt to use developmentally appropriate practices in an elementary setting.

Cuban (1993) has shown that historically child-centered curricular practices such as those supported by developmentally appropriate practices have generally not been well supported in public schools, and they typically appear in classrooms as parts of curricular hybrids. He has also shown that lack of materials, guidance, and adult support has hampered teachers' efforts to use child-centered instructional practices. In addition, Cuban has found that the hierarchy of public school systems has traditionally not supported teachers in the role of making significant curricular decisions for their children.

Research on teachers as decision makers has shown the significance of teachers' own educational background and experiences as an influence on their teaching practices (Bloch, 1991; Fromberg, 1999; Jacobs & Eskridge, 1999; Kagan, 1992; Rogers & Sluss, 1996). Furthermore, classroom practices may related to school decisions and not reflective of a teacher's personal beliefs (Cuban, 1993; Manley-Casimir & Wasserman, 1989). In addition the rationale for a teachers' classroom practices may not be clear unless they are given an opportunity to explain their decisions (Isenberg, 1990).

CHAPTER 3
METHODOLOGY

Description of Research

Data Collection

Data about the teachers' curricular activities was collected in three ways. First, the researcher spent a single, entire school day in each classroom recording observations of the teacher as she worked with the children. Second, at the end of each observation day, the researcher interviewed the teachers, asking each teacher the same set of questions about the activities used with the children. Third, the researcher requested that each teacher provide a copy of her classroom schedule, such as she might give to a substitute teacher working in her room.

Participants

Sampling criterion. Because the use of a purposeful sampling strategy is an integral part of qualitative research, participants sharing a certain set of characteristics were invited to collaborate with this study (Creswell, 1998). First, I sought participants with whom I had actually shared graduate classes at East Tennessee State University. I hoped that sharing the same educational experience of the ETSU graduate program in early childhood education would provide a common framework through which the teachers could explain their thinking. In addition, I hoped that sharing a common educational experience might contribute to the teachers' ease in sharing their thoughts and classrooms. Second, I looked for people who were close to completing their graduate degrees. Third, I wanted participants who I believed were both highly intelligent and caring. This criterion was a subjective determination made during the shared classroom experiences in the graduate program. The attributes of intelligence and caring were determined by the quality and frequency of the participants' contributions to our shared graduate classes. Finally, I was interested in classmates who were already teaching in public school primary grades. The primary grades were defined as being first, second, and third grades.

Participants. A total of six people were invited to participate in the study. One declined and one moved from the area before she could be observed and interviewed. The remaining four participated in the entire study. Two were first grade teachers: Susan and Dorothy. The other two were Jenny and Teresa, and they were each teaching second grade. Susan, Jenny, and Teresa completed their Master's degrees in early childhood in summer 2001 before I interviewed and observed them. Dorothy completed her degree at the end of the fall 2001 semester after the interview and observation of her.

Research Relationship. Although the study participants and I were former classmates, the relationship was a professional, non-social one. Given the shared experiences of graduate classes at ETSU, the research relationship was entered into with a high degree of rapport already well-established. In discussing aspects of fieldwork in qualitative research, Spradley (1979) describes rapport as significant because it "encourages informants to talk about their culture" (p.78). Glesne and Peshkin (1992) distinguish friendship from rapport:

> Friendship means mutual liking and affection and implies a sense of intimacy and mutual bonding. We trust our friends; even more, we like them and will do things for them that we would not do for others. The concept liking also helps to differentiate rapport and friendship. A relationship characterized by rapport is marked by confidence and trust, but not necessarily by liking; friendship invariably is (p. 94).

Rapport is understood as "a necessary but not sufficient condition for obtaining good data" (Glesne & Peshkin, 1992, p. 94).

When introducing the study to the participants, I made it very clear that the intention was to describe rather than to evaluate their teaching practices. It was hoped that, given the pre-existing rapport, the teachers would trust the intention of the study and not alter their typical classroom activities. Furthermore, I hoped that the pre-existing relationship would contribute to their feeling comfortable enough to share thoughts about classroom activities that they might not share with a stranger. Finally, the pre-existing conditions of rapport and trust proved to be essential for gaining admission to the teachers' schools in which they taught. After obtaining a written consent from each participant, each school principal was contacted both by mail and by

telephone. In each situation, the principal's permission was finally obtained through the interventions of the teachers themselves.

Research Setting

I spent a full day as a participant observer in the classroom of each teacher. At the time of the study, all of the study participants were teaching in rural areas and small towns in upper East Tennessee. None of the classrooms were located in urban areas of upper East Tennessee or had populations of students from predominantly middle and upper income homes. All of the schools had similar populations of students from predominately middle to lower income homes. None of the teachers were teaching in the public school system my own children attend.

Research Perspective

Guiding Theory

Educational historian, Kliebard (1992), describes school curriculum "as an invaluable relic of the forms of knowledge, social values, and beliefs that have achieved a special status in a given time and place" (p. 157). He views the history of curriculum as one that "focuses on the interaction between curriculum ideas and those political and social conditions that support or undermine their incorporation into the curriculum that is actually experienced at the school level" (p. 159). Kliebard (1992) asserts that historically the significant question regarding instruction is not so much whether curricular prescriptions were changed by practicing teachers, but rather "to what extent, how, and with what effect" (p. 174). He understands the blending of instructional practices as seen in the hybridization of the curriculum as reflective of the various competing cultural beliefs about appropriate school experiences for children.

The theoretical framework shaping this study was that of cultural psychology (Bruner, 1996). Bruner (1996) describes learning as "the creation and negotiation of meaning in a larger culture" (p.84). Human development is understood as an ongoing process of attaching symbolic meaning to increasingly complex interactions with the environment. The culture in which children live largely determines both the nature of their developmental experiences as well as the symbolic implications.

As institutions for human development, schools are reflections of the cultures that created them (Bruner, 1996). From the perspective of cultural psychology, school curricula are understood as symbolic representations of various cultural beliefs about what experiences are

necessary to prepare children for later participation in society. School curriculum "always reflects inarticulate cultural values" (Bruner, 1996, p. 27). Bruner (1996) views the teacher as "the vicar of the culture at large" (p. 84).

Furthermore, Bruner (1996) writes that an important part of theorizing about educational practices is the acknowledgement of folk pedagogy. He describes folk pedagogy as beliefs about learning that individuals have absorbed from the culture at large. Bruner (1996) explains:

> Watch any mother, any teacher, even any babysitter with a child and you'll be struck by how much of what they do is steered by notions of 'what children's minds are like and how to help them learn,' even though they may not be able to verbalize their pedagogical principles (p. 46).

Folk pedagogy is an expression of assumptions that individuals hold about the nature of children as well as the process of learning. For example:

> [Children] may be seen as willful and needing correction; as innocent and [needing] to be protected from a vulgar society; as needing skills to be developed only through practice; as empty vessels to be filled with knowledge that only adults can provide; as egocentric and in need of socialization (Bruner, 1996, p. 49).

Educational practices advocated by schools, teachers, and parents are always based on pedagogic beliefs that have been formed through private experiences with the culture at large (Bruner, 1996). Not only do, early childhood teachers working in the primary grades in public schools have their own personal beliefs about what constitutes best practices for their children, but they also encounter a myriad of cultural beliefs from the communities they serve. Their teaching practices are influenced not only by their own folk pedagogy but also by those of the parents and schools they serve. Teachers' determination of developmentally appropriate practices for their students requires sensitivity to the cultural implications of the choices they make.

Background of Researcher

Because of the shared educational experience of the ETSU early childhood education graduate program, all of the participants were familiar with my background. At the time of all the teacher interviews and classroom observations, I had completed two semesters of the graduate program in early childhood education. Most of my personal classroom experience

had involved teaching English and Latin for three years to children in grades 9-12 in a public high school in Middle Tennessee. In addition, I had spent a year substituting in my children's preschool and a year working as a teacher's aide in a four-year-old children's room. My primary experience with children had been as a stay-at-home mom for 10 years with three children.

As part of my graduate work in early childhood education, I intended to add a pre-K – 4th grade teaching license to my 7-12 certification in English and Latin. The teaching practicum requirement for the license was completed after the study observations. At the time of the interviews and observations I had no classroom experience with primary-aged children without the guidance of a supervising teacher. Fieldwork connected to a methods' class was the only teaching experience I had with primary-aged children. The experience had been assisting fourth graders with their in-class assignments as well as planning and teaching a single lesson with the supervising teacher present.

The participants in the study were aware of my level of experience in the primary grades and of my intention to add a pre-K – 4th grade license to my existing 7-12 certification. In addition, part of the shared graduate school experience had been discussion concerning the difficulties that teachers face when leaving the theoretical world of university education classes and entering the realities of a classroom. As I was considering teaching in the primary grades, I had a very personal interest in learning about how these women used their early childhood training in working with their children.

Assumptions

The use of a purposeful sampling strategy formed the basis of the assumptions that shaped this study. Given the shared experience of the ETSU graduate program, I assumed the participating teachers were knowledgeable about developmentally appropriate practices. In addition, I believed the participants had a strong commitment to excellence in the teaching profession and that their primary concern as educators was the welfare of their students. Furthermore, I did not enter the teachers'classrooms to determine if their curricular activities were developmentally appropriate. Instead, the study objective was to understand how the observed activities were connected to the teachers' thinking about what young children need to learn. For the purpose of this study, early childhood was defined in accordance with NAEYC as

encompassing birth through age 8. In keeping with the belief of NAEYC that primary classrooms should support development of the whole child, curriculum was understood as including all classroom activities involving the children.

Research Questions

The purpose of this study was to understand the thinking of early childhood teachers as they determined the best curricular practices for their students in public school primary grades. This was accomplished by documenting the kinds of curricular activities the teachers used with their children and then by interviewing the teachers to determine the considerations they made when planning these activities. Three questions guided this research:

1. What actual activities do early childhood teachers working in public school primary grades use with their children?
2. How do they use their knowledge of developmentally appropriate practices when planning and implementing activities?
3. What influences their selection and implementation of curricular activities?

A better understanding of the influences on early childhood teachers' determination of best practices for their students in the primary grades may contribute to knowledge of better ways to support the use of developmentally appropriate practices with young children.

Research Method

Rationale for a Qualitative Design

Most of the research that has been done on developmentally appropriate practices in an elementary setting has focused on the creation of instruments for measuring teacher beliefs and practices (Bryant et al., 1991; Buchanan et al., 1998; Charlesworth et al., 1991; Charlesworth et al., 1993; Smith, 1992; Stipek & Byler, 1997). In addition, research has compared the views of teachers, parents, school principals, and administrators about how children learn and what skills are most important for kindergarteners (Hatch & Freeman, 1988; Knudsen-Lindauer & Harris, 1989; Rusher et al., 1992). Burts et al. (1990) and Burts et al. (1992) looked at the relationship between pupil stress and developmentally appropriate practices in kindergarten classrooms. The relationship between teacher training and teacher beliefs about developmentally appropriate practices has been studied by Haupt et al. (1995) and Smith (1997). The relationship between

developmentally appropriate practices in kindergarten and later academic achievement has been studied by Frede et al. (1993), Stipek et al. (1995), and Burts et al. (1993). White et al. (2001) studied characteristics of primary teachers using many developmentally appropriate practices in their classrooms. Finally, Goldstein (1997a; 1997 b; 1998) did a single case ethnographic study of a multiage teacher's practices and experiences working in a public school.

Very few studies of actual teaching practices have been done (Cuban, 1993). Cuban writes that without spending an extended period of time in a classroom many researchers fail to understand the degree to which a public school setting influences a teacher's classroom practices. Cuban asserts that often researchers overestimate the degree to which teachers are free to teach as they would like. Furthermore, because few teachers publish research, their voices are often not heard.

An ethnographic multi-case study was needed for two reasons. First, an ethnographic study would describe actual curricular activities used by early childhood teachers with a similar educational background, working in public school primary grades. Second, an ethnographic study would allow teachers to express their thinking about the activities they use with their children. Knowledge of what teachers do with children in their classrooms and why they make the curricular choices they do is vital for determining how to support greater inclusion of developmentally appropriate practices in the primary grades.

Research Design

Data about the teachers' curricular activities were collected in three ways. First, I spent a single, entire school day in each classroom recording observations of the teachers as they worked with children. Second, at the end of each observation day, I interviewed the teachers, asking each the same set of questions about the activities they used with the children. Third, I requested that each teacher provide a copy of her classroom schedule, such as she might give to a substitute teacher working in her room.

Fieldwork

Observations. The first interview/observation experience was with Dorothy. The I spent a day in May 2001, close to the end of the school year, with Dorothy in her first grade classroom. The second interview/observation was with Teresa and her second graders in September 2001.

The third interview/observation was with Susan in her first grade classroom in October. The final interview/observation was with Jenny in her second grade classroom in November 2001.

Before the observations, I told the teachers that I would help them in whatever way she could while visiting their classrooms. As the intention was to be as unobtrusive as possible, each teacher was allowed to determine the extent of my participation in her classroom. In Dorothy's room I listened to some children read during Drop Everything And Read [DARE] time and ran some copies for her. I did not participate with the curricular activities in any way in Teresa's room. In Susan's room, I listened to children read during free center time. In Jenny's room, children read to me from their journals and their free reading books, and I read from *Runaway Ralph* to all the children after lunch.

The plan for each observation day was to arrive at the school at about the same time the teacher did in order to settle into the classroom before the children arrived. This was accomplished in every case except Susan's. I arrived at Susan's school as children were entering the classroom and others were already engaged in their morning work.

During each observation day the participants and I shared freely with each other. The study participants were open about their growth as teachers. Furthermore, I felt very comfortable sharing my lack of confidence about implementing teaching practices such as learning centers and about managing a room full of young children by myself. All of the study participants acted as mentor teachers in relationship to me. They took time to explain the observed classroom practices. In addition, they shared classroom materials and resources. As hoped, the pre-existing rapport became the basis of the research relationship. As I documented the teachers' interactions with their children, the teachers responded to my queries as fellow students of early childhood education.

Personal communication. The classroom conversations between the study participants and me formed the basis of an unanticipated source of data that emerged during the study. The information and thoughts that the teachers shared during the visitation day were recorded as part of the observation narrative. In addition the teachers' comments or reactions to the observation narrative were also made part of the document. Together they provided data in the form of personal communication.

Interviews. Following the observation of each classroom, the researcher interviewed each teacher using the same set of questions:

1. Tell me about your day.
2. Tell me about the kinds of activities that you consider most important for
3. the students you teach.
4. Tell me about how you schedule activities into your classroom each day.
5. Tell me about what would make it easier to include more of these kinds of
6. activities.

Each teacher was given a set of questions at the time she consented to participate in the study and another before the interview. At the first interview it was determined that the question, "Tell me about your day," was ambiguous. It was amended to: "Tell me about today. How was it similar to, or different from, other days?" I asked all the study participants the revised version of the first question.

Classroom schedules. Each teacher was requested to provide a copy of her classroom schedule (see Appendices A, B, C, and D). Each schedule indicated not only what the children were doing on the day of the observation/interview but also the schedule they follow during the week.

Data Verification

Classroom Observations

After each observation day, the notes made in the classroom were typed into a descriptive narrative account of the children's activities. The day was described according to the notes made for each 10-minute interval of the day. In reconstructing the day, the concern was not only to create an accurate description of each activity but also to understand what the teacher was doing. As part of the study all the teachers had agreed to participate in member checks, a process in which study participants have the opportunity to critique the researcher's portrayal of them. Member checking is used in ethnographic research as a means for establishing the credibility of the researcher's observations (Lincoln & Guba, 1985; Stake, 1995).

The observation narratives were filled with questions for the teachers about details missing from the classroom observation notes. For instance, Teresa's children were described as getting their books out for math, but there was no mention in the notes of Teresa's having asked

them to do this. Consequently, she was asked to clarify by explaining how the children knew it was time to get their books out for math. Her explanation was simply that by this time of the year her children knew the schedule so well that she did not need to tell them which book to get out. They automatically did it. In this case, the notes did not omit a detail from the classroom activity; instead they indicated a lack of understanding on the part of the researcher.

The observation narratives were exchanged with the teachers several times. The trade continued until I believed I had sufficient understanding of the classroom activities and until the teachers were satisfied and comfortable with the descriptions both of their classrooms and of their comments. With the exception of Teresa, all the observation notes were traded by mail three times before it was agreed that no more changes were needed. Notes were exchanged with Teresa twice. Each time a revised version of the narrative was sent to a participant, the prior version was included, as a reference to check on the incorporation of her responses or comments. All the teachers wrote notes expressing their satisfaction that the observation notes and record of our conversations were accurate.

To further support the accuracy of the observation narratives, each teacher was asked to provide a copy of her classroom schedule (see Appendices A, B, C, and D). Dorothy, Teresa, and Susan shared these documents at the time of the observation/interview. Jenny provided hers by mail before the classroom visit. Each schedule indicated not only what the children were doing on the day of the observation/interview but also the schedule they followed during the week. Some aspects of the daily schedule, such as lunch, related arts times, and recess, remained constant throughout the week. In addition, language arts and math instruction were a part of each daily schedule. In some time slots, the weekly schedules noted daily changes, such as when the children received Title One support for reading and math or alternating instructional times for science and social studies. For the most part, however, the schedules indicated a regular daily routine.

Personal Communication

The record of personal communication between the researcher and the study participants was verified by the teachers. Each had the opportunity to add, delete, or amend all of my descriptions of our communication both during the observation day as well during the transcript exchange.

Classroom Schedules

The accuracy of the classroom schedules (see Appendixes A, B, C, and D) was confirmed by the teachers themselves as well as by the researcher's observations of the schedule on the day of her classroom visit.

Interview Questions

After each interview, the tapes were transcribed. An attempt was made to capture not only the teacher's exact words, but also pauses and fillers such as um, uh, ah, you know, yeah, and hmm as well. The tape transcriptions were shared with a graduate student in speech language pathology at ETSU. The graduate student listened to the tapes and indicated places where she heard words and fillers differently from the ways in which they had been transcribed. For each interview the number of agreed and disagreed upon utterances was calculated. The average percentage of agreement was 98.7 with a range of 96-99.5 (Gillespie, Pelren, & Twardosz, 1998).

Triangulation

In order to establish the validity of the classroom data, the observation narratives were compared to the schedules obtained from the teachers as well as to the teachers' responses to the first interview question: "Tell me about today. How was it similar to or different from other days?" The observation narratives all followed the schedules the teacher had provided, and each teacher expressed her view that the observation day was representative of a usual one in her classroom. By triangulating the data sources, the credibility of the observation narratives as representing typical classroom activities was established (Lincoln & Guba, 1985; Stake, 1995).

Limitations of Research Design

Study Limitations

None of the classrooms observed was located in an urban area or had a population of students from predominantly middle and upper income homes. All of the schools had similar populations of students from predominately middle to lower income homes. No third grade classrooms were included in this study. Furthermore, each classroom was observed only for a single day and the participating teachers interviewed only once.

Effect on Reliability and Validity of Data

The triangulation of multiple sources of data, in combination with the member-checks done by the teachers' themselves was sufficient for establishing the credibility of the data. As with all qualitative data, the descriptions of classroom practices and the responses given by teachers to the interview questions are considered valid within the "time and context" of the research situation (Lincoln & Guba, 1985). The reliability of such data depends upon the determination of similarity between the context of the research situation and that of the reader. A qualitative researcher "cannot specify the external validity of an inquiry; he or she can provide only thick description necessary to enable someone interested in making a transfer to reach a conclusion about whether a transfer can be contemplated as a possibility" (p. 316). Consequently, the limitations of this study will not necessarily limit the usefulness of the data.

Analysis of the Data

Data derived from the classroom observations, interviews, and schedules were analyzed according to the procedures for open, axial, and selective coding as explained by Strauss (1987). Strauss quotes Glaser (1978) that in general coding is a procedure that:

1. Both follows upon and leads to generative questions
2. Fractures the data, thus freeing the researcher from description and forcing interpretation to higher levels of abstraction
3. Is the pivotal operation for moving toward the discovery of a core category or categories
4. Moves toward ultimate integration of the entire analysis
5. Yields the desired conceptual density (i.e., relationship among the codes and the development of each) (pp. 55-82)

Open coding describes the initial efforts to break data into units for analysis. Associations among the coded data are established in axial coding. The identification of an overall theme tying the axial categories together is the basis for selective coding (Strauss, 1987).

CHAPTER FOUR
DATA AND ANALYSIS

Purpose of Study

The purpose of this study was to support the use of developmentally appropriate practices in the primary grades by describing the kinds of curricular activities that early childhood teachers working in the public school primary grades use with children and their thinking about their classroom practices. I hope this information will contribute to a better understanding of how teachers determine best practices for their students in an elementary setting and to knowledge of what will facilitate greater inclusion of developmentally appropriate practices in public school primary grades.

General Classroom Description

Physical Environment

In each classroom, desks were arranged into groups of two to four. The number of children in each class ranged from 18-20. All the teachers' classrooms were colorful. Each had an area where the children could store their coats and lunch. In every room there were written descriptions of thinking done by the children, such as facts about what is needed to throw a party, facts about amphibians, classroom rules, and lists of words the children were learning. All the teachers had a variety of books, including fiction, non-fiction, and books for different reading levels, on display. In every room, these books included classroom books made by the children. In addition, in each classroom there was evidence that the teacher used learning centers as part of her instruction.

Daily Routine

In each classroom, activities began with the presence of children in the room. Even before the bell rang for the official start of school, children entered the classroom, stored their belongings, and began their morning work. Dorothy had work on the board for the children to do. Susan's children were making fish by using blocks that she had placed in tubs on top of their

desks. Teresa had directions on the board for her children to write in their journals and complete a worksheet. Jenny's children began their day writing in their journals and reading books. A part of each teacher's morning task was the determination of who was absent and who was buying lunch that particular day. In both first grade classrooms, the morning activity was followed by a circle or carpet time. In Teresa's second grade the morning work was followed by language arts instruction. In Jenny's room, morning work was part of her language arts instruction, and it extended into the morning. In each classroom, the children had some movement and a bathroom break during the morning. This was followed by another period of instruction and then lunch. Both of the first grades had a period of recess/free time and related arts after lunch, in addition to two short instructional periods. Both of the second grades had related arts, recess, and a single, short instructional period after lunch.

According to the classroom schedules obtained from the teachers (See Appendices A, B, C, and D), the average school day for all the classrooms ranged from 6 to 6 and 1/4 hours in length. Nearly two and a half hours of each day were spent in non-academic activities such as lunch, recess, related arts, and bathroom breaks. Each teacher scheduled math for an average of 45 minutes daily. With the exception of Teresa's classroom schedule, science and social studies were listed together or were taught as a theme activity lasting from 30 to 45 minutes. Although Teresa alluded to science and social studies activities in her interview, they did not appear on her daily schedule. While explaining her schedule to me during the interview, she shared, "There's not enough time every day to have science and social studies." In general, in each classroom the bulk of time is devoted to language arts activities. Each teacher allocated two to two and a half hours to reading, writing, and language mechanics. The activities I observed in each classroom followed the outline of the classroom schedules each teacher provided.

Description of Interview Themes

Because the goal of the study was to understand the teachers' thinking in relationship to their curricular activities, analysis began with a study of the interview tapes and the record of personal communication in the observation narrative. The teachers' thoughts were sorted in accordance with the procedures for open, axial, and selective coding (Strauss, 1987). First the information was condensed into short summaries of each thought. Next the units of thought were sorted into those providing information that directly answered the interview questions and

those that supported the teacher's thoughts by way of examples. The supporting information was then sorted into that related to the language arts curriculum and that related to the math curriculum. The information was further sorted into categories of curricular activities favored by the teacher and those not favored by the teacher.

Two large themes emerged. First, the units of thought that answered the interview questions indicated that all teachers held beliefs about appropriate activities for primary aged children that are consistent with those in the 1997 position statement written for NAEYC by Bredekamp and Copple. Second, the supporting units of thought indicated that all the teachers experienced dissatisfaction with the curriculum supported by their schools.

Answers to Interview Questions

Overall Theme

In general, the interview answers supported an understanding of learning that is consistent with an early childhood philosophy. The teachers' answers reflected a belief that children construct their own knowledge by interacting with the subject matter. In addition, children have organic needs that affect their learning and need to be considered when planning classroom activities. Ideal classroom activities are those that are meaningful to the children and support the development of their thinking. Furthermore, access to hands-on materials, adult support, and a flexible curriculum are viewed as necessary to the creation of these kinds of activities. The teacher's responses are consistent with the principles guiding the use of developmentally appropriate practices with children (Bredekamp & Copple, 1997).

Interview Question One

General themes. The first interview question for the teachers, "Tell me about your day" was amended to: "Tell me about today. How was it similar to, or different from, other days?" All the participants responded by sharing that for the most part their classroom routines follow a fixed schedule. They regarded the observation days as differing in only minor ways from other days in their classroom.

Individual responses. Each of the participants answered by sharing the view that the observation day was representative of a typical day in their classrooms. For example, Teresa replied, "Today was a typical day, rather uneventful; we didn't have any excitement or any things that went wrong, or any big problems or questions." Jenny shared, " The children always

follow the same schedule, so basically the day was the same with a few differences." Susan answered the question by saying, " I think schedule-wise everything was as normal as it could have been." Dorothy responded by saying, "For the most part, the day went as it normally does. They are very routine."

Susan and Dorothy clarified their daily schedules by saying they felt routine was important to their children and that they strived to make the classroom days predictable. Dorothy shared:

> I am very set in my routine. I think [the children] need that. They need to know what is expected of them. They need a predictable environment that makes them feel safe and not afraid to take risks. So, everything pretty much goes the same in my room. We do different things every day, but the subjects are taught at the same time. Everything pretty much goes the same [way] every day.

Susan added to her comments about the routine in her room saying, "I think they need routine. I think they need to know that when we get done with reading, then literacy centers will be next… That's why I keep [the schedule] posted right here."

The teachers did allude to some differences in the observation day from other ones in their classrooms. Susan explained:

> I felt like the children were a little more active today than normally. I don't know if that's because there was a stranger in the room, and they thought that they might need to put on a show, but I felt their activity level was a little higher. They were talking more than usual, but there have been a lot of changes: a new student teacher, Halloween is coming… I think they did fine. It was a pretty average day.

Dorothy shared:

> It's different today, because I had four kids out. It's the end of the year. It was a Monday, and Mondays are always different. You could see how they came in kind of lethargic, and they sat and did their work, and they were quiet, and then, after lunch, they were much more active, and they had a hard time sitting still and listening. I think a lot of it was that it's the end of the year. They have two weeks left, and they know they have all these big activities coming up next week.

In reflecting on the day with her, Jenny shared "What was different today probably was that I normally get started a little bit sooner as far as conferencing with children reading." and "Our class meeting lasted a little longer than normal, and then my speech people were gone today. That was an issue."

Interview Question Two

General themes. The second question for the teachers was: "What kinds of activities do you consider most important for the children you teach?" The teachers' answers to the second question all reflected a view of learning as something that happens when children make connections between themselves and the outside world. They all favored activities that provide opportunities for children to interact in meaningful ways with the subject matter being taught. Susan wished to activate her children's multiple intelligences. Both Dorothy and Susan preferred activities that were fun for the children and allowed them to be active participants. Dorothy and Jenny mentioned the importance of children seeing the significance of what they are learning in their daily lives. Teresa stated the value of activities that supported her children's growth as independent learners and nurtured their natural love of learning. All the teachers shared a view that the most important kinds of activities for their children are those that will facilitate the child's construction of understanding the subject matter being taught.

Individual responses. Jenny answered the question by saying that she felt the most important classroom activities were those that integrate subjects and make them meaningful to the children. She explained:

> I would say the most important thing that I think about is integrating what I teach into the things that they're learning, to tie everything together, so they can see connections and a purpose for what they're doing. If we are writing, we are not just writing to practice our writing. Instead we're writing for a purpose, to tell somebody something.

In addition she stated that it was important to provide activities that connected new material to what the children already knew. Jenny shared:

> I think it's important that the children are able to share and construct their learning, so they can share first what they know, and then they hook something on to that, to extend their knowledge of what they're learning, so they can move on

and feel good about what they are doing and say 'Oh, this is like this, and I know about this.'

Jenny mentioned that she valued activities giving children experiences that would provide a foundation for future learning.

> Some of our children haven't had previous experiences with some of the things we are talking about and those times we try to create what we call 'being there' experiences for them like when we go to the fire-station and go to the grocery store and go to the bank and go to the hospital. A lot of our children had never been to those places. So, actually seeing what people do is an experience that when we are in the classroom, and we say, 'people who provide services, like the fireman' the children know what we are talking about.

Teresa answered the question by saying that she understood her role as a teacher as going beyond just following the curriculum. She shared:

> I think my job with the children goes beyond curriculum. It is important that they read, but I think I go even deeper than that. My job is to try to motivate and to help them develop [their] intrinsic desire to learn and to see new things, so when we get a new book on the shelf, they may drive me crazy like today with everybody wanting to pull it off and taking turns and having to put it back over here for a while, so we could do what we had to do, but it's still exciting to see that they are wanting to do that, because that's my goal. That's the intrinsic desire…

Teresa stated that she likes to include classroom activities that will help the children get through school. She shared:

> And that's my goal to try to build into them something that's going to help them get through the next 10 years of school, because they have 10 years more, before they finish high school, and hopefully, they'll discover that they do enjoy learning things, and some of these will go on past high school. We don't have a big percentage that do go past high school, and we even have a certain percentage that don't, or have not in the past graduated.

In addition, Teresa also stated the importance of activities that help the children to develop a good attitude towards coming to school. She explained:

> The second thing I think that I want them to develop besides motivation is a good disposition because it works right with it, their attitude toward coming to school, their attitude toward what's going on in the classroom. So, I see my job as, as being much more than just seeing that we cover spelling pages and, and that kind of thing. I'm not just saying that, because it sounds good. I really do feel [this way].

Finally, Teresa also mentioned valuing activities that help children make connections between subjects. By way of example she reflected on the math lesson I observed, "If we're in the middle of math, like today, [and] they already know how to do 'ABC' order then, I use 'ABC' order to try and show them how to put numbers in order."

Susan answered the second question by sharing her belief that the most important activities are those that engage children's multiple intelligences. She explained:

> I think that because of whole multiple intelligences, children need to see information in as many ways as they can…I think the children need to have material, new material especially, presented to them in as many ways as it can be presented.

Susan also stated that she values activities that children find fun, not frustrating, and that allow them to work in teams. Concerning classroom work, Susan shared, "I think it needs to be fun and adaptable and something that they can do without frustration. I think they work well in cooperative teams. I like to do a lot of buddy activities, things like that." Later, while explaining how she scheduled activities for her children, Susan told how important it was to plan work that was interesting to the children. She explained:

> So, then another thing [is]…when I am doing the planning, I try to take the curriculum and flourish it as much as I can. I think that's the biggest difficulty…You really have to find those creative activities to go along with the boring things that are required.

When describing the activities she believed were best for her children, Dorothy shared that she valued ones that were hands-on, active and meaningful to the children. She explained:

> The most important activities are the ones that incorporate hands-on meaningful things to them. Like we did in math today. We studied quarters, and [the children] got to manipulate their own quarter, and they got to relate it to buying things like in the cafeteria; they buy their milk for a quarter...

Dorothy gave another example of an activity that she tried to make hands-on and meaningful to the children. She explained her thinking:

> Activities that are meaningful to [the children] and that are hands-on, active activities, I think are the most important ones. The children remember more from them. For instance, we did a letter writing activity where the children learn the parts of the letter with their body. The date sits on your head. You greet with your mouth. Your body contains the information, and you close the door with your foot. So, when they visualize parts of the letter, they're going to visualize that.

Dorothy finished her answer saying, "Anything I can do that makes it more meaningful, I do. I think those kinds of activities are the most important ones."

Interview Question Three

General themes. The next interview question was: "How do you schedule activities for the children you teach?" In answering this question, all the teachers expressed their awareness of the organic nature of children. They mentioned the energy levels that the children had at different times of the day and considered when the children were by nature more likely to be still and when they needed to have opportunities for movement in the classroom. In addition, the teachers were sensitive to when the children would be most receptive to learning and naturally interested in certain activities. All of the teachers' responses reflected sensitivity to the nature of children and indicated that this sensitivity informs their scheduling of classroom activities.

Individual responses. Jenny answered this question by explaining that her reading about brain-based learning had been the biggest influence on her schedule. She shared:

> I think that the biggest thing that has helped me develop my schedule is my own reading about brain-based learning and when children are most alert. What most studies say is that [time] is in the morning. I am very fortunate to have a late

lunch, so I can get all of my direct instruction that I have to provide or intense learning like math and our reading in the morning when children are most alert. After lunch what I've read is that you don't need to have a complete down time, or children will go into a bigger slump than they're already in after their food digests, but you need to have [the activity] not so focused either, because of that afternoon slump. So normally, the afternoon is when I try to have those free centers or more of a hands-on activity that'll kind of perk the children back up, but may not require their intense focus.

Teresa answered the third question by sharing that her greatest concern in scheduling activities was tying ideas together and making the most of the time she has with the children. She explained:

I'm a very structured person, so I actually do follow a schedule. I have a master schedule that [shows] we are going to this subject at this time of day. If the subjects can be correlated, for instance, if I can use their spelling words to learn some language or use their story to do some language, or even sometimes work math in with a story, then that's great. Lots of times, however, it is just individual subjects. So, I first take that master schedule, and say, 'What am I doing in reading this week?' I will sit down with the reading curriculum, all the activities that they suggest in the reading book and I'll sit down with my plan book, and I will look at what I want to do in reading on Monday, but I [also consider] 'How does that apply to, what I can do with it on Tuesday, or what am I going to do on Wednesday?' I'll map out the whole week, but at the same time, I may look at it and say 'The reading book this week is talking about nouns, so, let's go over to language now and correlate that. If the reading book is going to talk about nouns this week, then let's go ahead and do nouns in language.' I'll take the spelling, and Monday, we always just introduce the words and see what the generalization is for the spelling for that week, but then I will try to see how that might work in with language…So, I try to look at the whole week, look at each subject and what the idea is for that week, see if they work together, see how I can try to structure the subjects so they support one another. It's probably partly a time thing. For

example, there's not enough time every day to have both language and spelling. I do try to have reading every day and math every day, but there's not enough time every day to have science and social studies.

In addition, Teresa mentioned the importance of planning activities that meet the specific needs of her children. For example, she shared:

> My children this year are having difficulty creating their own sentences, and that's not been my experience. I usually have had second graders who can come in and create a sentence. I've had one or two, usually children with learning disabilities, who can't, but I have several this year who are having trouble. So, when we practice spelling words, I'll sometimes go to the overhead, and we'll create sentences. I'll write them on the overhead, and the children will write them. Some children don't need that, so, they'll be doing a different activity. I'll separate the class.

Teresa also mentioned following the interests of her children when scheduling activities. For instance, she explained:

> You follow the children some. The science that we did on the frogs and toads and amphibians went with the story two weeks ago, but the children weren't ready to give it up. So even though we finished that reading story, we're still pursuing this.

In addition, Teresa shared that she considers the schedule of children in her classroom who are receiving special services when she plans activities:

> In the past, I've always started the morning with phonics, spelling, or word building. This year I had to re-evaluate that for two reasons. I had two children who would benefit from these activities, who were leaving the room, at the time that I would be doing that. Those two boys would definitely benefit from word building and word decoding…So, I wanted them in the room when we did the spelling and phonics that I would be doing at that time. So, I had to look at that… Between the 9:00 slot and 10:15 slot, when these boys are coming and going, I didn't want to do the decoding and the phonics and the spelling, if possible. The two boys who would benefit come back at 9:30. Because I hate for them to miss

anything, from 9:00 to 9:30, we discuss characters in a story, the characters' feelings, or the setting of the story. We talk about the story for that week, and start working on that. I may read the class another story that goes with it. I try to do things that go with the story, but not things that these boys are going to miss a great deal of. Then, when they come in at 9:30, we actually get into the story. They get to hear it read, and we separate into small group instruction…

Finally, she also stated that she considers the children's needs in general:

> So, you schedule things, and you adjust your day largely depending on, the children, but also on what the activity is going be and on what you need to get [done]. I take it for granted, and I think most teachers do, that your optimal time is the beginning of the day until lunch. Now it's not true for every child; some children wake up after lunch… I don't usually start the day with math, because math is a more active, verbal, talking, coloring, and moving around the room activity. Sometimes there are scissors. Sometimes there are blocks. Sometimes there are manipulatives. So, I try to use that activity later in the morning, when they've gotten tired of sitting still, tired of listening. I always move math for that reason.

In her answer to the question of how she schedules activities for her children, Dorothy cited the energy level of her children as a primary concern. She explained:

> Most of the time, like we saw today, after lunch is when they're starting to wake up and get more active. So, most of the important activities…well, I wouldn't say reading and language arts are more important, but I feel like they have to sit still with them. So, I schedule those activities in the morning. Before lunch they've pretty much done all their language arts, reading and spelling and all that's left is math and science, which can be active. They don't have to sit still to learn something…So, in scheduling my curriculum on my daily schedule, I thought of that. I scheduled language arts as a big block in the morning, and then scheduled something they don't have to sit as still in, such as math, after lunch when they are a little more active. Then the children go to related arts right after that. So, I think of their attention spans and their age level.

Susan mentioned the various needs of the children as her chief concern when scheduling activities. She shared:

> The things that I worry about when I'm planning are the different levels…because when you teach first grade, especially at the beginning of the year, there are children coming in who don't know by sight alphabet letters or sound. This year, I have a child who is reading on a fourth grade level and another child who is reading middle third grade level, so, I have to try to think of open-ended activities that are flexible and adjustable to any level.

Susan also told me about the necessity of planning around school activities:

> And the other thing I was going to tell you about planning your day is that there are so many extraneous factors that come in like the party tomorrow afternoon at 1:00 for the PTA, and so that's, usually there almost something a week, every week, some kind of something that's going on, that we have to consider and schedule around.

Interview Question Four

General themes. The next interview question for the teachers was: "What would make it easier to include more of the kinds of activities that you believe are best for the children you teach?" In answering the fourth question all the teachers shared what they considered as necessary ingredients of ideal activities for their children. They cited the availability of materials, the importance of having an appropriate school curriculum, and the significance of adult interaction as important parts of optimal activities for their children. In addition, Dorothy mentioned the importance of individualizing classroom activities, and Jenny expressed the value of adult collaboration in planning. All of these answers supported a view that ideal classroom activities are those providing opportunities for children to make connections between themselves and the material being taught. The responses were consistent with a belief that children learn by making connections between themselves and the environment. All the teachers stated that activities should be scheduled based on the optimal time of day for these connections to happen.

Individual Responses. Susan began her answer by expressing frustration with the curriculum she is expected to follow:

> Unfortunately this year we have had to stick to our reading series. So, all of the workbook pages are really binding me to a routine that I can't really do anything about. [This] is frustrating just coming out of the [early childhood] program…We've made a commitment as a first grade team and as a district, that we will do the workbook pages that are required each day. Some days we have five or six…Coming from last year, when I didn't use any workbook pages at all, going into this has been hard…So, it's frustrating to battle the curriculum that's required, but when you have a job and get a paycheck, and you know that you're expected to do that, then you have to do that.

Susan explained that each week she was expected to complete a certain number of workbook pages with the children and that this expectation hampers her ability to create the kinds of activities that she felt the children should be doing. Susan also stated that having more adult assistance in the classroom, smaller classes, and additional money for materials would help her provide more of the kinds of activities that she felt the children needed. She explained:

> Having a student teacher has been nice, because we can do lots more small group kinds of activities…Having Mrs. Carter (not real name), a Title I assistant in our room, has also enabled me to have a small pull-out group for reading. A parent comes in every day for a 45-minute time slot during literacy centers, and this frees me up to read individually with the children. So more adults. Of course, always smaller class sizes would be nice…Another thing that would really help is having a bigger budget to operate our classroom on. We get 50 dollars at the beginning of the year, and then we get another $100.00 maybe toward Christmas, and that's what we get to operate on, but that includes [purchasing] printer cartridges which are $50.00 a piece almost… That includes all of our construction paper, typing paper, anything that's used in our classroom, dry erase markers, we pay for all of that…We get nothing furnished at all… I've had to write grants to get the digital camera and the camcorder. We had a television. You know, the basics were here, but not any furniture above and beyond the teacher's desk and the student desks. I

think there might have been one or two tables. I've had to get other teachers to donate furniture to me. The Boy Scouts built one bookcase…A friend gave me the other bookcases…and the books, I got from friends and yard sales and stuff like that, so…I mean, you think that when you are a teacher, you just have to get these children from point A to point B, but you have to work so hard on details such as funding your classroom and things like that.

In answering the third question, Dorothy mentioned that having additional money and materials would help her provide more of the kinds of activities that she believed would benefit the children. She shared:

> One thing that would make it easier would be either more materials provided or more money to access the materials. Because these, math manipulatives, or anything I use like that, is not given to me. I've bought them with either classroom money or my money …The only thing the principal did buy was unifix cubes, but everything else I bought myself.

Dorothy also stated that her children would gain more from the kinds of activities that she believes they need if they had had more early experiences with hands-on materials:

> If I had more money that would help… Also, if the children had been exposed to these kinds of activities before, then they wouldn't be so new to them when they get in here. Some things I expose them to, they want to just sit and play, because they've never seen it before. For instance, if I give them something to work on as a math manipulative, I have to give them at least 5 to 10 minutes to play with it, before they have to actually do something with it, because it's so neat and new to them. They come from kindergartens where some of them had this stuff and some didn't.

In addition, Dorothy expressed a desire to have access to more kinds of activities that would accommodate the different skill levels in her classroom. She explained:

> …As far as reading and language arts hands-on activities…. I do a lot of games in which a child has to be able to read a word in order to accomplish the game. So, I think about the participation of the children who do not read as well as the

> others… Access to activities that go across all levels would make it easier too, but there's not a lot of that stuff out there. You have to create it yourself.

Teresa began her answer to the fourth question by expressing frustration with the second grade curriculum demands. She shared:

> The push down curriculum is so evident. The push down is getting worse and worse…Every time we get a new textbook or new program, it seems like it is asking the children to do more. The current push is for higher thinking skills, which is great if you have a higher thinking ability, but my children are in that transitional period between pre-operational and operational [thought]. So, I have some children who can handle the curriculum, and I have some who cannot. Also, given the community I serve, I have children who haven't had a lot of opportunities or experiences. I find it very frustrating helping the children handle the curriculum…

Teresa also shared her concern with the amount of professional material she had to evaluate when planning activities for the children.

> And the second thing is the time and the material that is presented. Teachers' manuals used to be pretty cut and dry, and I know it's good that we have more opportunities…but, the next story has 40 pages of teacher possibilities and suggestions and so forth to go with that story. That would be fine, if all you were doing is reading, but then you've got the spelling book that also has five or six pages of possibilities, and you have the math book which for every page has four pages for the teacher and so, you look at this and you think, 'The children are gone to the library for 30 minutes, and I'm trying to make lesson plans. I'm not going to be able to read all these pages and get all those wonderful ideas.' So, it's very frustrating to know how to use all the materials that are put before you and how to use your time wisely.

In addition, the expectation that she was supposed to cover a certain amount of material in the time she has with her class also made it difficult for Teresa to include more of the kinds of activities that she felt the children needed:

> So, I find it frustrating that there are so many opportunities and options. We seem to be getting more and more. I don't think extending the school day is going to help that situation…Sometimes due to snow, we have extended [the day] to seven hours, and I find with primary children that [the] last 30 minutes is not going to be very productive.

When asked specifically what would make it easier to provide activities that would accommodate the children's different levels Teresa shared that she would like to have more adults in her classroom. She explained:

> If I had another adult, I could try to have her help with the reading a little bit and then help with the math… When the [Title I assistant] is in here I can separate the children into two groups. Children learn better in small groups; they're just going to learn better, if you only have four or five to actually deal with. I want them to read orally. I think that's very important, and they are not going to read orally well for 20 children at a time. So you need to have small groups for that. So, I think it would be great, if we had more people… We had a parent volunteer program. The VIP program, Volunteers in Polishing Stars (our children are STARS) but that has not been extremely successful. I think one reason is, because most of our families work. They're not available during the day. [Needing extra adults] is my biggest frustration, because if you do small groups, you're going to have one group of children who are working alone. The last two years, I've had a larger class, and I've had children who really needed a different level. This year I don't have as many who need a different level, so I was able to give some to the Title teacher. Then I take some to another table to work with them, but those children at their desks have no one. In order to work with the ones I had, I had to make the rule they did not come over and ask me [questions], which sounds very cruel, but if you allow that, then you don't get anything done with those 3 or 4…I really feel sorry for the ones at their seats, and I have told them if you get stuck, just pass that up and go on and do something you understand. Sometimes, they will read a story and do a comprehension sheet on it. They will read silently or sometimes, they will be doing an activity like putting words in alphabetical order,

> but the groups require more planning…and my concern is for the ones in their seats who are doing their best trying to decode a word or figure out directions and there's nobody there for them to depend on, to monitor them. I find that frustrating.

Teresa stated that reducing class size would be a great help to her in providing more of the kinds of activities that the children need.

Jenny answered the fourth question by sharing that it would help her provide more of the kinds of activities that she believed the children needed if she had more opportunities for collaboration with other teachers. She explained, "I think the easiest thing for me…would be to have a team of teachers that believed the same that I did, so I could depend on them, and we could share more of the work." When asked if she would like a team to help her plan or work in the classroom, Jenny answered:

> Well, both. I was thinking planning actually, a team of teachers that share the same philosophy, that could share the work involved in planning, and that could bounce ideas off of [each other] and have that synergy and energy going and growing. I've been in teams like this before and that is most helpful for me. It makes me want to work harder, and this year I don't have that. I feel like I can't do as much as I would like to do, because I have a lot of areas to plan rather than just maybe one or two, [as] when I've been sharing the work in the past. So, that would probably make it …easiest.

In addition, Jenny also mentioned that having more money for supplies would help her, "Also, what would make it easier is if I had an endless supply of money to buy supplies. That…hinders some of what I do…[not having an adequate] supply of money…[for] resources that I don't have…" When asked what financial resources she has available to her, Jenny answered:

> We are very fortunate. I haven't heard of many systems that have more [money]. We have about $400.00 a year that we are able to spend. Now we do have to buy all of our supplies like paper, glue and pens and that sort of thing and that takes some, but I still feel like I'm a new teacher. I went into a classroom where there were not a lot of supplies that I needed. I've had to invest every year in games and more expensive things that take up a lot of money. So, I really try to invest in

> instructional games and materials that I can use, and I try not to spend it on consumables. Really, I guess this extra money that I am talking about would go into stuff like that. I spend hundreds of dollars of my own money every year buying that kind of stuff, and I really don't need to do that; I mean, my husband would die…

Dissatisfaction with the School Curriculum

General Themes

Dissatisfaction with the school curriculum was a theme that emerged in both the interview answers as well as in personal communication between the researcher and the participating teachers. They all expressed frustration with the kinds of curricular activities supported by their schools.

Individual Responses

Teresa expressed concerned about her school's assumption that by a certain grade level all children were reading on the same level. Teresa explained:

> It is important that they read, and I think reading on the second grade level is probably the foundation and basis of everything. They can't do math, they can't do the science…there are so many things they have trouble doing…if they can't read and so, reading is extremely important…For instance, if we go into math, they can do 8+7 and 9+9, and they're doing fine. Then they get to the bottom of the page, and they have a reading problem, a word problem, and they can see the numbers, but they can't necessarily read all the words… They have trouble decoding the words to figure out whether to add or subtract, or they don't necessarily catch the idea of…what's going on in the problem, whether to add or subtract. For instance, you can have a problem that says,… 'Mary had so much money; Mary bought this. How much did she spend?' and you're supposed to subtract but then you can have a problem that says, 'Mary had so much money, and Mary bought this and this. How much did she spend?' And you're supposed to add the two things she bought, and so it's very frustrating to me that the curriculum is set at that level.

Teresa also shared that diagnostic reading tests at the start of the year indicated that most of her children entered second grade with reading skills below what is considered to be a second grade level:

> When school started, we have STAR reading program on the computer… and…every child in the school, from second grade on up…does the STAR reading program at the beginning of the year to give us a level, and…I don't have the statistics right here with me, but the majority of my children are below second grade level. They came out 1.2, 1.5, a few even came out at .8, below first grade level, and so then you hand them this curriculum, and that's very frustrating to me to try to not frustrate them.

She stated that the curriculum was based on the assumption that children enter second grade at the same skill level and was set according to a standard that someone outside of her classroom had determined for her students:

> It's very frustrating to me that the curriculum is set at this level. It's set at what someone out there in the world determines is second grade level, and it's much higher than what they used to determine was second grade level.

Teresa was observed teaching three-digit place value to her second graders and her expressed belief that this lesson was inappropriate for her children was noted as personal communication in the observation narrative, "Teresa is teaching the children to read three-digit numbers. She tells me later that for the last two years the teachers were told to teach three-digit numbers in the fall." Teresa shared "that she feels she is teaching this lesson out of place. She believes that the children will understand the material later…" Teresa continued to share her feelings about the math lesson when explaining why she was working with children individually at the back of the room. Her thoughts were summarized:

> Teresa is having the children read three-digit numbers to her. They are learning to associate the numbers with place value. Teresa explains to me that this is part of the new math program. She is trying to prepare the children by helping them learn to find three-digit numbers in their textbooks. She explains to me that the students must take a county test at the end of each six weeks. Teresa tells me later

that the county test may not be required every six weeks this year. Instead the children may just take a test at the end of the semester.

Finally during the transcript exchange she shared "…After this particular lesson they [the second grade teachers] received word that they may decide when to teach three-digit numbers, and she has decided to do it later in the year."

During her interview, Susan expressed frustration with the rigid expectations of her school's language arts curriculum. She described the kinds of workbook pages that she is expected to cover with the children each day and expressed her concern over the appropriateness of some of the exercises:

> You see we have a phonics workbook and a practice workbook, so sometimes we are doing reading types of thing[s]. For instance, it might be combining sentences like,… 'Bob plays basketball. Bob…walks down the street,' and combining those into, 'Bob plays basketball and walks down the street.' We are already doing language activities like that, which I think are inappropriate for first grade.

She shared her opinion that the pressure on schools to have children reading by the end of first grade has resulted in the structured nature of the language arts curriculum that she is expected to follow. Susan stated that she had much greater freedom to be creative with math, science, and social studies than she did with language arts. When asked to compare the flexibility of the two, Susan answered:

> Definitely, [I have] more freedom with the math curriculum. I know that these things that have to be taught this year, and I have this math book as a tool, but as far as reading goes, there is such a push on the need for literacy before they end first grade year, and that's why they want us to really stick to the manual and [so we can] see where the problems lie. After we've done what they tell us to do, [they will want to know] 'Now what are our problems? How many children are not reading?' [and] that kind of thing.

When asked if her greatest problem with the language arts curriculum was the lack of flexibility, Susan replied:

> Exactly…Our creativity comes with our related science or social studies in the afternoon where we pull in our story content and try to translate it into some kind

of science or social studies, fun thing to do. It's much less structured for science and social studies.

Dorothy expressed frustration with the language arts curriculum because she felt the activities required her children to sit still and included few hands-on materials that she believed would help her children learn. She explained, "With reading and stuff, you've got to sit and read or you've got to sit to write." In contrast, Dorothy regarded the math and science curriculum as including more opportunities for the children to interact with materials and to be active in the classroom. When asked if it was harder to make the language arts curriculum hands-on, Dorothy answered:

> Yes, and this year, I've tried to do it more [activities] like the letter writing one and we'll do…flash cards, and we'll do games with the cards…like word games…with nouns and like we did…today's news thing... Just trying to do different things, [so,] they're more involved in it, rather than just sitting there listening to me lecture on what a noun is, and…how to write a sentence, or how to read. I try to get them involved and relate it to them, but [of the things I do] language arts is the hardest of all subjects, because they need hands-on related activities…

In addition, Dorothy expressed frustration with the appropriateness of the spelling requirements in language arts curriculum. Dorothy's spelling instruction was observed. In preparation for the lesson, she passed out notebook paper and shared that "…The second grade teachers have requested that the children start practicing writing letters on paper this size, so they will be prepared for second grade." At the start of the lesson, "Dorothy shows the children how to position their names on the left side of the paper, skip a line, then write the long date, skip a line, and then write the subject." She explained the procedure, "…This is the format the second grade teachers use." Dorothy added that, "she is not happy with starting this structure in first grade." Later as the children are writing and drawing about the "Baby Rattlesnake" story, she further shared, "that she feels the language skills (such as nouns, plurals, and possessives) that she is teaching the children are very abstract for children this age." In general, Dorothy expressed pressure to have the children prepared to meet second grade expectations:

> Dorothy watches the children work and talks to me about the pressure she feels to have the children "ready" for second grade. She shares that some second grade teachers question the first-grade preparation of children who are not doing as well as they expect they should. Dorothy shares that she feels very informed about what her children can do and are capable of doing and consequently she can defend her program. She recalls that once a second-grade teacher told her that one of her children couldn't read. Dorothy said she responded by saying, 'That's strange. He could read when he left my class.'

Jenny expressed frustration with the school curriculum in personal communication during the observation day. She alluded to instructional activities that she felt pressured to include as a part of her academic instruction. For example, when asked if she used workbooks:

> She tells me that she doesn't. When asked if this was a problem with her principal, Jenny tells me that once she told him why she wasn't using them, he was fine about it. She shares later, though, that he suggested she give the children some workbook pages towards the end of the year to prepare them for using them in third grade.

Jenny also shared:

> Spelling tests are something she has not had the energy to fight this year. She tells me that parents are concerned enough when the children don't bring home workbook pages and that to eliminate spelling tests would be very controversial as well.

In addition, she described the reaction of other teachers' to her guidance program as the belief that "she was babying her children" by not using a traditional methods of rewards and punishment. Jenny added that recently she had "persuaded her principal to allow her to educate the other teachers about the program."

Furthermore, she explained that this particular year her school was emphasizing the acquisition of reading skills in first and second grade and using standardized tests to measure children's abilities at both the beginning and the end of the school year. Jenny shared that "the teachers were feeling stressed about it. This was the first year the school had done this."

Observation Notes

Analysis

Analysis of the classroom observations began as the observation notes were converted into a narrative account of the daily activities. Reflecting on the sequence of events in the room, particular attention was paid to understanding the instructional activities in which the children participated. Most of the post-observation questions for the teachers had to do with checking the accuracy of the activity descriptions.

After finishing the observation narratives with the teachers, the notes were reorganized following the same coding procedure used for the interviews. Personal communication between the teachers and myself had already been separated from the rest of the observation narrative. Next, information about the classroom environment was separated from that about curricular activities. Curricular activities were then divided into the categories of ones related to math and language arts; ones that were open ended and subject blended (such as circle times); ones that were primarily social (such as class meetings or recess) and ones that provided movement (such as a lap break or bathroom break).

Thematic Patterns

The activities were then examined for the presence of thematic patterns that were evident in all four classrooms. The only patterns that were identified in all four classrooms were related to language arts and math activities. In regard to these activities the teachers used both an individualized as well as whole group instructional format. The individualized instruction included the use of learning centers, journal writing, and free reading. During these activities the children made choices about their work and participated according to their individual needs. The whole-group instruction focused on skills related to a particular subject area, was lead by the teacher, and expected all children to participate in the same activity.

These two kinds of activities were examined for thematic patterns that were present in all four classrooms. Although all the classrooms used individualized instruction, no patterns were identified. Thematic relationships, however, did emerge among the whole group instructional curricular activities.

Whole Group Instructional Activities

General Description

In Susan and Dorothy's first grade classrooms, periods of whole group language instruction were observed lasting for 50 minutes before lunch and periods of math instruction lasting 30 minutes after lunch. In the second grade classrooms, Teresa and Jenny each completed their whole group instruction related to math and language arts before lunch. Teresa's whole group language arts instruction was documented as lasting for 70 minutes and her whole group math instruction as lasting for 60 minutes. In Jenny's classroom, whole group language and math instruction were observed as each lasting for 30 minutes. Each whole group activity included several instructional tasks in combination with a rich pattern of guidance strategies.

Instructional Tasks

General description. Each whole group, math and language arts activity encompassed several instructional tasks in which all the children were expected to participate. These activities included the assignment of specific tasks that the children were to complete in class as part of the lesson.

Classroom examples. In Teresa's second grade classroom, the language arts lesson included six different instructional tasks during the 70-minute lesson [See Appendix I]. As a class, the children played "Farmer in the Dell;" they completed a standardized story comprehension test; they completed a standardized language mechanics test; they reviewed spelling words; they learned about story sequence, and they completed a worksheet on story sequence. Four different instructional activities were given to Teresa's children during the hour-long whole group math lesson [See Appendix J]. Her children engaged in a review of an earlier math lesson; they learned about number place value; they completed place value worksheets, and they completed math review worksheets.

In Jenny's second grade classroom, the children engaged in three different instructional activities during her 30-minute whole group language arts lesson [See Appendix K]. The children reviewed what they knew about history and pioneers; they listened to Jenny read a story, *The Keeping Quilt*; and they participated in a modeled writing summary of the book. During her 30-minute whole group math lesson, Jenny included three instructional tasks [See Appendix L].

The children reviewed what they had learned about two-digit addition; they learned how to play a math shuffleboard math game, and they played the game.

In Dorothy's first grade room, during her 50-minute whole group language arts lesson she provided the children with three instructional tasks [See Appendix E]. She had the children listen and discuss a folktale, "How the Stars Came to Be." Then Dorothy had the children read a story about a baby rattlesnake and write or draw the four main parts of the story. Her 35-minute whole group math lesson was divided into four instructional tasks [See Appendix F]. The children reviewed math facts with each other using flash cards; they worked on math review worksheets; they learned about coins, and they did math worksheets related to coins.

Susan's 50-minute whole group language arts lesson with her first graders included four different instructional tasks [See Appendix G]. The children played tic-tac-toe in teams with their sight words. Then, they read a fish story. Afterwards they wrote "f" words in their journals, and finally they listened to a story, "Frank's Pants." Susan's 30-minute whole group math lesson had the children participate in three instructional tasks [See Appendix H]. Her students played a game about open and closed shapes. Then, they created open and closed shapes at their desks with glue, yarn, and paper. Finally the children completed math worksheets on open and closed shapes.

Kinds of Guidance

In addition to providing several instructional tasks, the teachers were also all observed as using a blend of guidance strategies as part of their whole group math and language arts instruction. Their guidance fell into three patterns: (1) that which presented information to the children; (2) that which directed the children's behavior in some way; and (3) that which initiated conversation with the children. Within each broad type of guidance, three sub-categories were identified: (1) Guidance presenting information included that of showing something to the children, showing and telling the children about something, and simply telling the children about something; (2) guidance directing behaviors included expectations for general classroom conduct, expectations for the completion of a specific instructional task, and expectations for particular behaviors related to the instructional task; (3) conversational guidance included dialogue for the purpose of problem solving, reflecting on prior knowledge, and stimulating thinking about the current lesson.

Directing Guidance

Directing guidance was that which expected children to engage in a particular behavior either for the purpose of completing a task or maintaining classroom order.

Instructional task guidance. The teachers used instructional task guidance to facilitate the children's completion of specific assignments related to the whole group lesson. For example, this included having the children read aloud either singly or in unison. In addition this kind of guidance, included directives for the children to count or sing together. Another type of instructional guidance was having the children listen either to the teacher read or to another child. Direction for movement or gestures that were integral to the instructional task was another example of this kind of guidance. Requests for the children to predict the reading text by looking at pictures or to find a particular item in a visual aide were two other examples of this kind of guidance strategy (See Appendices E, F, G, H, I, J, K, and L).

Examples of instructional task guidance. As part of her math lesson on coins, "Dorothy and the children…count the money in each bag together" (See Appendix F). As part of having her students read the baby rattlesnake story with her, "Dorothy has the children look at the pictures to guess what the words on the page will say" (See Appendix E). As part of her game of making open and closed shapes by holding hands together, "Susan asks the children to open a place, and the child gets out" (See Appendix H). While she is having the class read the fish story, "Susan asked different children to read the pages of the story aloud" (See Appendix G). After Jenny explained the shuffleboard game to her students, "The children go to their spots and begin to play the game" (See Appendix L). As she was doing the modeled writing exercise with the children, "When Jenny comes to a certain word, she asks the whole class to spell it with her" (See Appendix K). While she was reviewing a previous math lesson with her class, "Teresa asks the all the children to count from zero to nine" (See Appendix J). As part of Teresa's language arts lesson showing children how to take a standardized language mechanics test, "She has the children take turns reading sentences from the passage" (See Appendix I). In each case, the teachers asked the children to complete specific tasks related to the instructional activity.

Other examples of instructional task guidance included the teacher having individual children model specific activities for the rest of the class. For example, during her math lesson, "Teresa has a child count backwards. Then, she has all children count backwards" (See

Appendix J). Instructional task guidance also included the teacher requesting the class to tell a particular student the answer to a problem. For example, during Susan's sight word tic-tac-toe game, "The student on the first team cannot read the word, and Susan has the class say the answer"(See Appendix G). In addition, the instructional task sometimes included having the children sing together. As part of her math lesson on coins, "Dorothy and the children sing the morning money song again" (See Appendix F). Gestures integral to the instructional task were also included. For instance, during her language arts lesson on "f" words, "Susan begins to read the story aloud to the children and asks for a 'thumbs up' whenever she gets to an 'f' word" (See Appendix G). The instructional task also included movement that was integral to the completion of the activity. For instance, during Susan's sight word tic-tac-toe game, "The student reads it [the sight word] correctly and goes to the board and makes an O in a place on the tic-tac-toe board" (See Appendix G). In addition, the movement that is part of Teresa's "Farmer in the Dell" activity is integral to the activity, "A child goes to the middle of the ring. Teresa tells a student to turn the 'way a clock' goes. The children begin to sing "Farmer in the Dell" and walk in a circle" (See Appendix I).

General behavior guidance. The teachers used general behavior guidance to reinforce daily expectations for student conduct in the classroom. These behavioral directives were not related in any way to the performance of the assigned instructional task. Instead they were concerned with ongoing classroom policies governing particular situations such as children needing to use the bathroom, wanting a drink, or asking questions. In addition, classroom policies for appropriate behavior, such as what to do when finished with a task or raising hands in response to a teacher's question were examples of this kind of guidance. Understanding the daily classroom schedule was also considered part of the general behavior guidance. Unless the teacher asked the children to write their names in a particular way, name writing was also considered part of the general classroom behavior. In addition, directives from the teacher about moving to particular areas of the classroom were considered examples of general classroom behavior. Although this movement in the classroom was often in preparation for a particular activity, the children were usually unaware of how it would relate to the instructional task. Consequently, their response was understood as part of a general expectation to comply with the teacher's requests (See Appendices E, F, G, H, I, J, K, and L).

Examples of general behavior guidance. During Teresa's math lesson, "A student wants to leave for the bathroom, and Teresa tells him he must wait, because Teresa wants him to hear everything" (See Appendix J). Her daily bathroom policy was that children may ask to leave during the lesson if they needed to. While Jenny was discussing the book, *The Keeping Quilt*, with her class, "Some children get up and get a drink from their water bottles" (See Appendix K). Leaving the circle to get a drink was part of the accepted general classroom conduct in Jenny's classroom. When Susan's students were finished with their math activity, "Some children get up and are writing in the classroom journal" (See Appendix H). The students knew this was acceptable behavior for when they had finished their work.

General behavior guidance also included task-related behaviors that were a part of everyday classroom life. For instance, when Jenny asked her children about how many had played shuffleboard before the "children raise their hands and briefly share experiences with shuffleboard sorts of games" (See Appendix L). Jenny's students knew that raising their hands was the appropriate way to indicate their readiness to answer her question. During her math lesson, "Susan has a child move his bug for interrupting the class" (See Appendix H). This student broke an understood rule for how to participate in class discussion. In each classroom, there was an understanding between the children and the teacher about what behaviors are expected.

Understanding the daily classroom schedule was also considered part of the general behavior guidance. For example, at a certain point during the morning, "the children have put their math away" in Teresa's classroom even though she had not asked them to do this (See Appendix J). Likewise, in Susan's classroom, "the Title I kids line up at the door" when they know it is time for them to leave (See Appendix G). In each case, the children were responding to previously communicated guidance concerning the order of daily events in the classroom.

Unless the teacher asked the children to write their names in a particular way, name writing was considered part of the general classroom behavior. For example, as Teresa called children to review their math work with her she remarked to the class that "[she] has one page without a name on it" (See Appendix J). Part of her daily expectation was that the children put their names on their work. Sometimes name writing, however, was part of the instructional task. For example, as part of Dorothy's math activity, "The children start the worksheet by drawing a

line that should measure a certain length. They use their rulers to do this. Then, the children write their names on this line" (See Appendix F). Before starting the shape math activity with her students, "Susan asks the children to put their names on the bottom of the paper" (See Appendix H). Because in each of these situations the teachers give specific directions, name writing was considered as part of the instructional task.

Directives from the teacher about moving to particular areas of the classroom were also considered examples of general classroom behavior. Although this movement in the classroom was often in preparation for a particular activity, the children were usually unaware of how it would relate to the instructional task. Consequently, their response was understood as part of a general expectation to comply with the teacher's requests. For example, in Dorothy's classroom in preparation for their writing activity, "The children go back to their desks"(See Appendix E). When Dorothy's children finish their math worksheets, "[She] has the children go and sit on the carpet" (See Appendix F). In Teresa's classroom, she rearranges the children so they can play a game:

> She asks the children to stand up and push their chairs into their desks. Teresa then asks different children to move to various places along the outside of the desks, until the children have made a circle around the desks (See Appendix I).

Likewise, in preparation for their math activity, " [Susan] …asks the children to push in their seats, stand up, form a circle and hold hands" (See Appendix H). Before their art activity of making open and closed shapes, "Susan…has the children get back into their seats" (See Appendix H). In each case, the directive for movement in the classroom was presented to the children before they saw its connection to the instructional task and, for this reason, it was considered part of general classroom behavior guidance.

Instructional task behavior guidance. The teachers used guidance concerned with instructional task behavior to communicate specific directives for the children's behavior while performing instructional tasks. These behaviors were closely related to the assignment but were not an integral part of the instructional task. For example, this kind of guidance included directions about what the children are supposed to do when finishing their work if it was a deviation from the usual classroom policy. This kind of guidance included specific instructions about where to put completed work. Instructional task behavior guidance also included

directions from the teacher about obtaining materials necessary for completing the instructional task as well as directions about removing certain materials in preparation for the assignment. In addition, instructional task behavior task guidance included telling the children what kind of conduct was appropriate during the instructional task. This included whether the children could talk with each other as they worked, whether they could dramatically participate while listening to a story, and how to clap quietly during a game. Teachers also used this kind of guidance when requesting specific behaviors as feedback from the children during the instructional task. Instructional task behavior guidance also included requests to get certain books for the task as well as directions about when it was appropriate to use them. In addition, instructional task behavior included the children's knowledge of problem solving techniques as they completed their instructional task (See Appendices E, F, G, H, I, J, K, and L).

Examples of instructional task behavior guidance. This kind of guidance included directions about what the children were supposed to do when finishing their work if it was something other than the usual classroom policy. In Teresa's classroom, "The children who are finished with the math sheet get books to read. Teresa asks them to put the books back and to pick up another math sheet" (See Appendix J). Usually, the children read books after finishing their work, but on this particular day Teresa wanted them to do a review sheet instead as they wait for other children to finish. Consequently this directive was understood as instructional task behavior. The children were directed to depart from the usual classroom policy.

This kind of guidance also included specific directives about where to put completed work. For instance, at completion of the writing in Dorothy's classroom, "When children are finished, she asks them to put their work into a basket, so she may examine their work more closely later" (See Appendix E). When Susan's children were done with their glued math shapes, "She asks the children to get out their math workbooks and to put their glued shapes under their desks to dry" (See Appendix H). Knowledge of where to put completed work or what to do when finishing without prompting by the teacher was considered part of general classroom behavior guidance.

Instructional task behavior guidance also included directions from the teacher about obtaining materials necessary for completing the instructional task as well as directions about removing certain materials. For instance, as part of her math activity, "Susan asks a child to pass

out yellow paper, and she passes out yellow yarn to the children. Susan asks the children not to fold the paper or to tie the yarn as they are waiting for instructions" (See Appendix H). Before she has her students imagine they are little fish, "Susan…asks the children to clear off their desks" (See Appendix G). In preparation for her reading lesson, "Dorothy tells the children that it is time to put the STAR books away." This guidance was related to the instructional task as it indicated what materials were necessary for the task and how they would be used. This kind of guidance, however, did not include behavioral directives specifying what the children were to do to complete the instructional task.

Instructional task behavior guidance included telling the children what kind of conduct was appropriate during the instructional task. For instance, while her class was playing sight word tic-tac-toe, Susan showed them how to express their enthusiasm. "The team is excited to score, and Susan shows them how they can clap by using their fingers. The children are very excited and do lots of finger clapping (See Appendix G). After Teresa gave her students their place-value worksheets, "She reminds the children that they are to work quietly" (See Appendix J). Dorothy's children understood that they could participate with her as she read the folktale to them. "The children begin to repeat certain phrases with her such as, 'Coyote, where are you?' The children and Dorothy howl like coyotes" (See Appendix E).

Teachers also used this kind of guidance when requesting specific behaviors as feedback from the children during the instructional task. For example, as a way of having the children reflect on their math shape activity, "[when] one child has finished, and Susan asked for a thumbs up from the other children, if they think the student has done it correctly" (See Appendix H). During Jenny's math lesson, "She asks [the children] to tell her what 15+15 is and to put their fingers on their noses when they have the answer" (See Appendix L). After asking her class to get out their math workbooks, "Susan asks the children to give her a thumbs up to show her when they are ready" (See Appendix H). None of these behaviors were part of the general classroom conduct expectations for the children. They were all related to the instructional task but not specifically to the completion of the task.

Instructional task behavior also included requests to get certain books for the task as well as directions about when it was appropriate to use them. As Dorothy was talking to her children about folktales, "Some children begin to open their reading books, and Dorothy asks them to

keep the books shut until they are ready to read" (See Appendix E). After she plays "Farmer in the Dell" with her children, "Teresa has the children…get out their reading books and turn to a certain page" (See Appendix I).

In addition, instructional task behavior included the children's demonstration of problem-solving techniques as they completed their instructional task. For instance, as Dorothy's children do their math worksheets, it was noted "that many children are counting silently to themselves using their fingers as they work" (See Appendix F). In Teresa's room as the children do their math, "They speak quietly to each other and themselves as they count on their fingers to figure the worksheets out," and "One child does the sheet by counting on the number line" (See Appendix J).

Instructional task behavior, however, excluded any suggestions for problem solving behaviors that were optional. For instance, before reading in Dorothy's room, "Dorothy reminds the children that sometimes it is easier to follow the words if they use their fingers to point to them as they read" (See Appendix E). This was considered a telling statement because Dorothy was not explicitly asking the children to do something.

Presenting Guidance

This kind of guidance expected the children to look, listen, or both look and listen for the purpose of thinking about the lesson. The three kinds of presenting guidance the teachers used were, showing, telling, and showing and telling.

Showing guidance. Showing guidance included the display of written information, pictures or objects during the whole group instructional activity (See Appendices E, F, G, H, I, J, K, and L).

Examples of showing guidance. For example, as part of Dorothy's math lesson about coins, "Dorothy places three bags of pretend coins on the carpet. One bag contains 25 pretend pennies; one contains 5 pretend nickels; the other contains 2 pretend dimes and a pretend nickel" (See Appendix F). As part of her language arts reading lesson, "Dorothy has the children look at the authors" (See Appendix E). During Susan's math lesson about open and closed shapes, "Susan asks the children to look at the page with her" (See Appendix H). While teaching a language arts lesson, "Susan puts 'f' on the board" (See Appendix G). As part of her math lesson on double digit addition, Jenny has placed a class number grid on the easel" (See Appendix L).

While doing modeled writing during a language arts lesson, "Jenny writes, 'Quilts are made with lots of love'" (See Appendix K). As she is teaching a math lesson about place digit place value, "Teresa points to the number line hanging on the wall above the overhead projector" (See Appendix J). While showing the class how to do a worksheet on their reading, "Teresa has the children look at the pictures of turnips and look at the arrows"(See Appendix I).

When teachers used visual material as part of having the children engage in a particular behavior, this guidance was considered part of the children's instructional task. For example, in Dorothy's classroom during her reading lesson, "The children and Dorothy continue predicting the text by looking at the pictures" (See Appendix E). The act of looking at the pictures is integral to the task of predicting the reading. Consequently this use of pictures was considered an example of instructional task guidance. Likewise, during Dorothy's math lesson about coins, "[She] has the children find the letters, 'USA' (See Appendix F). Because the coin is so closely related to the activity of finding "USA," this was also regarded as instructional task guidance.

Showing and telling guidance. Showing and telling guidance included the teacher's use of visual material while telling the children something about the lesson. As with showing guidance, the children were not expected to react either verbally or by engaging in a particular behavior (See Appendices E, F, G, H, I, J, K, and L).

. *Examples of showing and telling guidance*. For example, during her math lesson about money, as the children are each handling a coin, "Dorothy points out that the head is positioned upside down in relationship to the picture on the other side of the coin" (See Appendix F). While she is teaching her reading lesson, Dorothy has the children look at the authors in the text:

> She points out that one name looks different from the kinds of names the children usually see. Dorothy also points out that one author has created the story, but it has been retold many times and another person wrote it down. In addition, Dorothy points out the name of the illustrator to the children, and they discuss what illustrating means (See Appendix E).

While explaining the math activity to her children, "Susan models what she wants the children to do by working with her own sheet of paper" (See Appendix H). During her reading lesson, "Susan points out rhyming words to the children" (See Appendix G). As part of her math instruction, Jenny introduces a shuffleboard game. She holds up a shuffleboard and "Jenny

shows them how to play the game" (See Appendix L). In Jenny's classroom, "She shows the children a book she is going to read to them called *The Keeping Quilt* as she starts her lesson (See Appendix K). While she is pointing to the number line in her room, "Teresa shows them how the pattern goes backwards and forwards and you can predict numbers by following the pattern" (See Appendix J). As she shows her children how to take a standardized reading test, Teresa utilizes a transparency on the overhead projector:

> Teresa has the children look at the words and see that they refer to a male, female and thing. Teresa shows the children how they can use this information to answer question one and question two. She has them look at clues in the sentence that will tell them whether the missing word should refer to a male, female, thing or to many people (See Appendix I).

The use of visual material with verbal information for the purpose of problem solving was excluded from the category of showing and telling guidance. For example, during her math activity, Dorothy sees that her children are having trouble adding coins. "Because some of the children are still confused, Dorothy takes out a little chalkboard and writes down the amounts that the children are adding to make a dollar" (See Appendix F). Her use of showing and telling in this context is as an alternative way of looking at the instructional activity. For this reason, it was coded as problem solving guidance.

Telling guidance. The third kind of presentation guidance was that of conveying information to the children by telling them something. As in the cases of showing and of showing and telling, this kind of guidance did not expect either a behavioral or a verbal response from the children. It included all verbal statements that did not use something visual and did not request the children to engage in a particular behavior. Telling statements also included those that suggested certain behaviors but did not explicitly require the children to comply. Telling statements that implied consequences for not engaging in a particular behavior are considered as guidance directing behavior (See Appendices E, F, G, H, I, J, K, and L).

Examples of telling guidance. For example, as she was introducing a story, "Dorothy reminds her children that folk tales include stories in which animals talk and that these stories may change as they are retold to other people"(See Appendix E). As part of their reading lesson, "[Susan] tells them [the children] that the story is fiction and explains why it is not non-fiction.

She reminds them that fish swim in schools" (See Appendix G). Before Jenny reads a story to her class, "She reminds the children about a visitor who talked to them about quilts" (See Appendix K). During her math lesson, Teresa told the children that putting three-digit numbers in order was similar to putting three letter words into alphabetical order:

> She explains that they would do so by looking at the second letter, since the first letter is the same for all words. Teresa makes a comparison to numbers. She tells the class that they must look in the middle of numbers when the first digits are all the same (See Appendix J).

These statements conveyed information without using a visual aide, and they did not ask the children to engage in a particular behavior.

In other cases, telling statements were about what the children would be doing. For example, before starting the math activity, "Dorothy explains [to the children] that they will play a game in which they fill cups with quarters until the cups reach a dollar" (See Appendix F). The statement described the activity. It did not ask the children to do something. In preparation for her math activity, Susan had the children stand and hold hands. Then, "Susan told the children that they were going to learn about open and closed" (See Appendix H). When introducing the math activity, "Jenny explains to the children how the game works" (See Appendix L).

Telling statements also included those that suggested certain behaviors but did not explicitly require the children to comply. For example, while helping the class complete a story test, "Teresa tells the children that it is best to read the whole story before thinking about the answers to the questions" (See Appendix I). Before the children got started creating their open and closed shapes, "Susan suggests that the children first make a design on the paper with their glue" (See Appendix H). Later as the children were working on their shapes, "Susan encouraged them to look at the letters on the wall to check whether they were open or closed" (See Appendix H). In each case, these teachers have suggested, but not required, a behavior.

Statements that implied consequences for not engaging in a particular behavior were considered as behavior directing guidance. For example, "Susan tells the children that they will miss some of their free center time, if they do not get their work done" (See Appendix H). Although the words were telling children about the consequences of not finishing their work the

implication was that the children were not to waste time. Consequently this statement was coded as an example of instructional task behavior.

Conversing Guidance

This kind of guidance was that which expected a verbal response from the children and was for the purpose of thinking about the lesson. This kind of guidance excluded verbal responses that were part of the instructional task such as counting or reading.

Problem-solving dialogue guidance. Problem-solving dialogue was conversation intended to stimulate thinking about an issue that emerges during the whole group instructional period. This category included problem-solving dialogue among the children as well as between the children and the teacher. Sometimes the problem-solving dialogue included both the teacher and other students. Problem-solving dialogue also included teacher intervention in social issues that emerged between the children during the instructional period. Problem-solving dialogue also included the children's solicitation of teacher feedback about their work as well as requests for information related to the completion of the instructional task are also included. Sometimes the children brought problems with the instructional task to the teacher's attention. In addition, problem-solving dialogue included questions the children asked the teacher in connection with issues not related to the lesson. The teacher's creation of problem-solving situations in the classroom was also included, because they provided children with opportunities to engage in problem solving dialogue with the teacher (See Appendices E, F, G, H, I, J, K, and L).

Examples of problem-solving dialogue guidance. For instance as Dorothy's children are doing math worksheets, "Some ask for help with addition, and Dorothy suggests that they put the big number in their heads and then count up as a way of adding the smaller number. She also suggests that they use their fingers" (See Appendix F). As Susan's children are listing "f" words in their journals, "One child asks her for help spelling 'porcupine.' Susan helps him and asks why he is writing that word. The child answers that it is the kind of fish that he is drawing" (See Appendix G). While one of Teresa's children is reading:

> The student has trouble with the word, 'world'. He reads 'would' instead. Teresa remarks that his word is very close to the correct word, and she asks him to look closely at what is written and think about the sounds in the word he has guessed.

> The student corrects himself. Teresa then helps him sound out the word, 'enormous.' (See Appendix I)

In addition this category included problem-solving dialogue among the children as well as between the children and the teacher. For example after Jenny's children broke into groups to play shuffleboard, "I hear them discussing the [math] problems with each other as well as the problem of some [children] flicking the penny so far that it flies off the shuffleboard" (See Appendix L). Sometimes the problem-solving dialogue included both the teacher and other students. For instance in Susan's room during the sight word tic-tac-toe game:

> When children have difficulty, Susan has them sound the word out. One child tells another child on her team to put the sounds together. Susan responds to the first child by telling her not to put pressure on the child who is reading the word (See Appendix G).

Problem-solving dialogue also included teacher intervention in social issues that emerged between the children during the instructional period. For example in Susan's room during her language arts lesson about "f" words, as she gave some children feedback on their work, she also worked with other children who were having trouble getting along:

> Children begin to bring their notebooks to Susan to show her their work. At the back table, some children are talking, and Susan asks them if they are having trouble getting along. A child starts to share his problem, and Susan reminds him that this is a problem for the classroom journal. Susan also reminds him that life is too short to fight about silly stuff (See Appendix H).

Problem-solving dialogue also included the children's solicitation of teacher feedback about their work. For example, as children were doing their writing assignment, "The children begin to bring their work to Dorothy for her to see it" (See Appendix E). Requests for information related to the completion of the instructional task are also included. For instance, as the children begin the shape activity in Susan's math class, "The children ask [her] if they may make an open letter. Susan says they may, and she lists the open letters with the children" (See Appendix H). Sometimes the children brought problems with the instructional task to the teacher's attention. For instance, after Teresa asked her children to find a certain page in their reading book, "A student corrects Teresa about the page number. Teresa acknowledges the

correct number and asks the students to turn to this page" (See Appendix I). In addition, problem-solving dialogue included questions the children asked the teacher in connection with issues not related to the lesson. In Dorothy's classroom, after talking to her children about the author of their story:

> The children ask how old the creator of the story is now, and they wonder if she is still alive. Dorothy says that probably she isn't, because she was quite old at the time the story was written down and people usually don't live much past age 100 (See Appendix E).

In the middle of Teresa's language arts lesson, "Some children ask what the sound is from across the hall. Teresa says that it is the laminator" (See Appendix I).

This kind of guidance also included the teacher's creation of problem-solving situations in the classroom. These moments were included because they provided children with opportunities to engage in problem solving dialogue with the teacher. For example, as part of her math instruction on three-digit place value, "Teresa continues to walk around the room and monitor their [the children's] work. After Teresa has observed the children working on their math worksheets:

> She then works one-on-one with the children at the back of the room. Teresa leaves the table and checks on a student. Teresa then picks up the completed math sheets from the bin and returns to the back table where she calls some more students to come and see her (See Appendix J).

As her children were working on their math worksheets, "Dorothy walks around the room while the children are working and helps them as they need it" (See Appendix F). In all these situations, teachers provided children opportunities for problem-solving dialogue.

Reflecting dialogue guidance. Reflecting dialogue was guidance that used questions to stimulate the children's thinking about a past lesson or experience. This was thinking that did not grow from current lessons but that was relevant to understanding it. Sometimes the teachers asked children to reflect on their own understanding of past experiences in preparation for the instructional lesson. At other times, the teachers had children reflect on past conversation or experiences. In addition, the teachers sometimes used reflecting dialogue to finish a particular activity with the children. The teachers used reflective thinking to give the children an

opportunity to connect the lesson at hand with their past experiences (See Appendices E, F, G, H, I, J, K, and L).

Examples of reflecting dialogue guidance. For instance before reading *The Keeping Quilt* to her class, Jenny asked them:

> 'Is history something that has already happened or something that hasn't happened yet?'…She asks the children to tell her what they think. A child says that history is something that has already happened. Jenny then asks the children about how the lives of pioneers were different from ours (See Appendix K).

She was having them consider what they already knew about quilts before listening to the story. Before Teresa began her math lesson on three-digit place value:

> Teresa asks the children about yesterday's math… Teresa asks a child to review what they did for a classmate who was absent. Teresa then asks the rest of the kids, if they remember what they did on the previous day in math. (See Appendix J)

Before reading "How the Stars Came to Be…" to her children:

> Dorothy asks them what they remember about folk tales. The children raise their hands and give details such as these are stories from the past. Dorothy reminds them about the story "Chicken Licken" and asks why that story was a folktale (See Appendix E).

Sometimes the teachers asked children to reflect on their own understanding of past experiences in preparation for the instructional lesson. For instance, Teresa began her lesson on sequence:

> She asks the class, 'Does it matter if you put on jeans or shoes first? Does it matter when I do the lunch report?' Teresa asks the children what would happen, if she didn't do the lunch report until late in the morning? The children laugh and say that the cafeteria wouldn't be happy with her. Teresa describes things that must happen in order as things that are in sequence (See Appendix I).

As part of her math lesson, "Jenny introduces the math game by asking how many children have ever played shuffleboard. Children raise their hands and briefly share experiences with shuffleboard sorts of games" (See Appendix L). While teaching her students about coins:

> Dorothy asks the children if they know whose head is on the coin. The children say that the head is that of George Washington. Dorothy points out that the head is positioned upside down in relationship to the picture on the other side of the coin. Dorothy asks what the opposite of head is, and the children reply, 'tail.' Dorothy has the children find the letters, 'USA,' and she asks if they know what those letter stand for (See Appendix F).

Dorothy was asking the children questions to discover what they already knew about coins.

Sometimes the reflecting dialogue was used to remind the children about how they were expected to behave in the classroom. For instance, before Jenny started her math lesson:

> Jenny asks them [the children] to list reasons for good listening at the carpet. She asks them how people will know that they are listening. The children answer that they will be still and watching Jenny with their eyes. She also asks them how they can be sure that everyone is able to see. The children answer by saying that when they stay seated they can be sure that everyone can see (See Appendix L).

Later before Jenny allowed the children to leave the group and play shuffleboard:

> Jenny asks the children if they should move if they don't like their spots. The children answer that they should not move. Then Jenny asks the children how they should get her attention if they have a problem. The children say that they will raise their hands (See Appendix L).

Before she had her students read, "Susan asks the children, 'What tool helps us read?' 'Fingers' the children say" (See Appendix G). In these situations the teachers were having children reflect on past conversation and experience with particular behaviors.

Sometimes the teachers used reflecting dialogue to finish an activity with the children. For example after Teresa and her children finished the standardized story comprehension test:

> Teresa then asks the children what they thought about the story….Teresa asks the class about stories they have read and which they liked better. A child answers, and Teresa asks the child to tell her why she liked the story. Teresa and the children talk for a few moments, and the children share their thoughts about the stories (See Appendix I).

Dorothy wrapped up reading the baby rattlesnake story by asking her students if they had ever acted or had siblings who acted like Baby Rattlesnake did in the story. "She asks the children if they have ever thrown a tantrum or have brothers or sisters who do that. After discussing tantrums, Dorothy introduces the children's writing assignment" (See Appendix E). The teachers used reflective thinking to give the children an opportunity to connect the lesson at hand with their past experiences.

Thinking dialogue guidance. The third kind of conversational guidance was that of thinking dialogue. This kind of guidance was intended to stimulate thinking about the current lesson rather than past experiences or previously learned material. The teachers used questions to stimulate and expand on their children's thinking about the material being taught (See Appendices E, F, G, H, I, J, K, and L).

Examples of thinking dialogue guidance. For instance after she has had the children reflect about their prior knowledge of money and guess the amount in each bag:

> Dorothy and the children then count the money in each bag together. The children realize that the bags have different numbers of coins, but the same amount of money. One child turns to a friend and says, 'I told you they were all the same.' Dorothy asks the children what coin could be substituted for the amount of money in each bag. The children name a quarter (See Appendix F).

Susan had her children close their eyes and pretend they were fish caught in a bucket. She asked them to tell her how they felt:

> A child says 'sad because my friends don't' care.' Susan asks if the child can think of a bigger word to describe how he feels. 'Scared,' the child, says. Susan asks him to describe why he is scared. Susan then says that 'deserted' is the bigger word she was thinking of. Susan asks the class, "What do you think the boys will do to you?' 'Put me in a fish tank,' one child says. 'Take me home and put me in a little fish tank,' another child says. 'Might let me go,' another child says. 'Put me on a hook and fish with me,' another child adds. Susan asks the children more questions. 'Could you survive without something to eat?' The children murmur, 'no' (See Appendix G).

As part of helping her children understand the baby rattlesnake story, "Dorothy and the children discuss activities that children and baby rattlesnakes (like the one in the story) must wait until they grow up to do" (See Appendix E). As part of her math lesson on two-digit addition, Jenny had given her children a hypothetical problem. She asked her students to solve it:

> Jenny then asks the children to share their answers and how they got them. One child says that she added 10+10+2. She explains that she knew that 10+10= 20 and that 10+2=12, so she added another 2. Another child says that he counted on the number grid. Jenny asks the children if it is okay that they got their answers differently from each other? The children say that it is (See Appendix L).

As she was helping her students take a standardized reading test:

> Teresa asks the class why the word, 'enormous' is underlined. The children raise their hands. Teresa pauses until hands stop going up and calls on a child. Teresa expands on the student's answer by asking questions about what the child thinks (See Appendix I).

To teach the children about three-digit numerical order, Teresa had them apply their prior knowledge of putting three-letter words into alphabetical order. She listed words and "a student puts the words in order, and Teresa asks how he did it. He says by looking at the first letter." Teresa gives the class some more words to put into alphabetical order and asks the students how they would do this" (See Appendix J). After discussing the process of putting words in order:

> She writes '476, 423, and 405.' Teresa asks how the class would put those numbers into order…Children raise their hands. Teresa writes down the first answer given by a student, 423, and she asks what the other students think**.** A student says that 405 should come first and T asks why. The student says because you look at the second digit. Teresa says that the child is right…(See Appendix J).

As part of her math activity of making open and closed shapes, "Susan and the children begin to talk about words that 'open and closed' letters make like 'go' and 'so' (See Appendix H). When While Jenny read *The Keeping Quilt* to her children:

> She stops and asks the children questions. For example, 'Was New York their first home?' 'No,' the children answer, 'It was Russia.' … [When] a couple in the

> story gets engaged, Jenny stops and asks the children what that means. 'They are going to get married,' some children answer (See Appendix K).

When Jenny finished the book, "She asks the children to summarize the story. One says that the quilt just keeps going in the family. Another child says that they just keep giving the quilt to their babies. Jenny listens to their answers" (See Appendix K). In each case, the teachers used questions to stimulate and expand on their children's thinking about the material being taught.

Guidance Patterns

As a guide for implementing developmentally appropriate practices in the primary grades, Bredekamp and Copple (1997) recommend the following instructional strategy:

> To help children learn and develop, teachers use a variety of active, intellectually engaging strategies, including posing problems or discrepancies, asking thought-provoking questions, adding complexity to tasks, and engaging in reciprocal discussion in which they take children's ideas seriously. Teachers also model, demonstrate, and explain and provide the information. Coaching, direct instruction, and other assistance that a child needs to progress (p. 165).

In addition Bredekamp and Copple (1997) recommend that:

> By observing and interacting with individuals and small groups during learning experiences, teachers maximize their understanding of the children's current capabilities and what each child is capable of doing with scaffolding or other assistance from an adult or peer (p. 167).

Each teacher included several instructional tasks as part of her lesson. She not only directed the children's behavior as to what they were supposed to do while completing each task, but she also attempted to facilitate their thinking through both visual aides as well as through dialogue with her. Furthermore, each teacher observed the children closely as they worked and created opportunities for problem solving dialogue. In addition, during the observed periods of whole group instruction each teacher used a blend of all nine forms of guidance (See Appendices E, F, G, H, I, J, K, and L).

These patterns resulted in a high degree of interaction between the children and the teacher that is consistent with an early childhood philosophy that children learn through meaningful interactions with the subject matter. By using rich patterns of guidance during whole

group instruction the teachers created opportunities for the children to connect the subject matter to themselves. The whole group instructional format in combination with a rich blend of guidance strategies forms a curricular hybrid that was common to all four classrooms.

Summary of Findings

All the individual answers given by the teachers to the interview questions reflected beliefs about appropriate activities for primary-aged children that are consistent with those of NAEYC. They favored active, hands-on activities that were meaningful to the children. They valued integrating the curriculum. The teachers were sensitive to the children's physical needs when planning the daily schedule. In addition they considered multiple intelligences as well a child's natural brain development when planning activities.

A theme in both the interview questions as well as in personal communication between the teachers and researcher was dissatisfaction with the curriculum. In particular, Susan, Dorothy, and Teresa expressed frustration with the rigidity of their school's curricular demands and frustration with the lack of appropriateness of the math and language arts curriculum they were expected to follow. Jenny expressed pressure from her principal to use workbook pages as well as parental pressure to keep spelling tests as part of her classroom instruction.

A curricular activity common to all four classrooms was that of whole group instruction for math and language arts. In addition a rich pattern of guidance that directed children's behavior, presented them with information, and engaged the children in verbal conversation was an instructional technique common to all the teachers. The use of so many kinds of guidance resulted in a high degree of interaction between the teacher and the children during each lesson. This rich interaction is consistent with that recommended by Bredekamp and Copple (1997) in their position statement for NAEYC on best practices for children in the primary grades. The combination of a whole group instructional format with the rich guidance strategies resulted in a curricular hybrid that was common to all four classrooms.

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CHAPTER FIVE
SUMMARY AND CONCLUSIONS

Review of Research

Research Problem

All early childhood teachers encounter varying degrees of support for their decisions about what constitutes developmentally appropriate practices. In the primary grades, however, teachers encounter challenges related to the very culture in which they teach (Cuban, 1993; Goldstein, 1997a; 1997 b). Because educational training for elementary school teachers has also differed from that of early childhood programs, teachers certified in early childhood education who work in the primary grades may find themselves without peer or administrative support for their practices (Beardsley, 1991; Bloch, 1991; White et al., 2001). Moreover, Beardsley, Goldstein (1997a; 1997b), and White et al. have found that parents of primary school-aged children have expectations for what they consider age-appropriate school work and often do not recognize developmentally appropriate activities as being educational. Nonetheless, according to Bolenbaugh (2000), Pelander (1997), and White et al., children in the primary grades benefit as much from individualized instruction and hands-on learning as do younger children. Currently, Gronlund (1995), Pelander, Perlmutter and Burrell (1995), and White et al. assert that educators are interested in facilitating the use of developmentally appropriate practices in the primary grades. Little is known, however, about the actual curricular practices of early childhood teachers working in the primary grades or about how best to support their use of developmentally appropriate practices.

Purpose of Study

The purpose of this study was to understand how early childhood teachers determine the best practices for their students in the primary grades by documenting the kinds of curricular activities they use with their children and the considerations they make in planning these activities. Three questions guided this research:

1. What actual activities do early childhood teachers working in public school primary grades use with their children?

2. How do they use their knowledge of developmentally appropriate practices when planning and implementing activities?
3. What influences their selection and implementation of curricular activities?

A better understanding of the influences on early childhood teachers' determination of best practices for their students in the primary grades may contribute to knowledge of better ways to support the use of developmentally appropriate practices with children these ages.

Literature Review

Cuban (1993) has well documented the historical difficulty of using child-centered curricular practices in a public school setting. In their study of developmentally appropriate practices in the primary grades of a public school, Buchanan et al. (1998) found that teachers whose classroom practices included more developmentally inappropriate ones tended to be those who not only had the most experience teaching in an elementary setting but also those whose professional training did not emphasize children's developmental needs. In addition, Buchanan et al. found that teachers using traditional methods tended to believe that the school culture as well as that of children's homes had a greater influence over the child's development than did their classroom practices.

Moreover, Buchanan et al. (1998) found that teachers who used more developmentally appropriate practices in their classrooms were those who were not only trained with a philosophy similar to that of early childhood, but also ones who believed that their classroom interactions could make a significant difference in a child's growth. In the follow-up study of those teachers identified by Buchanan et al. as using many developmentally appropriate practices, White et al. (2001) found that they shared some similar characteristics. Each viewed herself as a "competent, capable and professional." Each placed the welfare of her children above all other job considerations. Each expressed a belief in the efficacy of developmentally appropriate methods. Each demonstrated a positive attitude towards professional challenges. Finally, each asserted that all children are capable of learning. In summary, all of these teachers portrayed themselves as professionals who were not only capable of making significant curricular decisions for their children but were also responsible for the educational quality of their classroom practices.

In the primary grades, however, teachers are expected to follow a curriculum that is part of the whole school experience (Cuban, 1993). Each grade builds on the one before it. Each teacher shares her pupils not only with their families but also with other teachers in the school. Deviation from the standard curriculum potentially places children at risk for not being prepared to meet the expectations of the following grade and may elicit parental concern as well. In a public school setting, teachers act as mediators looking for common ground among the folk pedagogies held not only by themselves but also by the school and the families they serve. Cuban has shown that curricular hybrids in which teachers blend various instructional practices are a common response to the divergent beliefs held by the teachers themselves as well as by the school and children's parents about what the appropriate classroom experiences should be.

Research on teachers' use of developmentally appropriate practices in public school primary grades has shown that their curricular practices are often a mixture of ones that are both developmentally appropriate and inappropriate (Buchanan et al., 1998; Goldstein, 1997a). Regarding teachers' use of developmentally appropriate practices in the primary grades, Buchanan et al. wrote:

> In theory it is fairly simple and often useful to categorize instructional practices as 'teacher-directed' or 'child-initiated.' However, in practice, individual teachers occupy different positions along the continuum of teaching practice (Bredekamp & Copple, 1997; Wien, 1995). It seems that the majority of teachers typically use some combination of instructional techniques in their classrooms rather than adhere to one particular theoretical approach (Dale & Cole; Marcon, 1992). In their thorough review of research on developmentally appropriate practice, Dunn and Kontos (1997) report that only about one-fifth to one-third of the early childhood classrooms fully demonstrated developmentally appropriate practice (p. 460).

This finding is consistent with Cuban's (1993) assertion that historically teachers in public schools have typically used child-centered instructional practices in combination with traditional techniques. Consequently their teaching practices are best described as curricular hybrids reflecting a blend of instructional methods that are based on different views of knowledge and philosophies about how children learn.

Study Methodology

Data about the teachers' curricular activities were collected in three ways. First, the researcher spent a single, entire school day in each classroom recording observations of the teacher as she worked with the children. Second, at the end of each observation day, the researcher interviewed the teachers, asking each the same set of questions about the activities she uses with the children. Third, the researcher requested each teacher to provide a copy of her classroom schedule.

Analysis

Summary of Findings

All the teachers held views of how children learn that were consistent with an early childhood philosophy. In addition, they all expressed various degrees of frustration with the curriculum their schools expected them to follow. A curricular activity found in common to all four classrooms was that of whole group math and language instruction. In addition, each teacher was observed as using a rich blend of guidance strategies as part of her instruction. Because the whole-group, math, and language arts lessons followed a traditional, teacher-directed instructional approach (Cuban, 1993), and were combined with a rich pattern of guidance consistent with developmentally appropriate practices for the primary grades, the instructional activity was understood as an example of a curricular hybrid.

Interpretation

Each of the study participants expressed beliefs about the education of young children that are consistent with those of NAEYC (Bredekamp & Copple, 1997). In addition, they all shared professional frustrations related to the educational environments in which they taught. They were limited in providing the kinds of activities they stated that their children needed, by a lack of materials, fixed curricula, and a dearth of adult support.

The determination of a developmentally appropriate curriculum for children requires teachers to consider the home culture of their pupils as well as the children's personal and developmental needs. Children, however, are not only members of their home culture but also participants in the culture of their school. The curricular expectations of the school culture are an important influence on a child's development. Each grade builds on the one before. Teachers within a school are collaboratively educating children as they share pupils with each other and

collectively articulate grade level goals. This focus on accomplishing shared objectives is contrary to the individualistic philosophy of developmentally appropriate practice and yet an important consideration that teachers must make in determining best practices for children in the primary grades.

Given this tension between the teachers' personal educational philosophies and those supported by their schools, the hybrid was understood as representing a curricular compromise. The curricular hybrid found in common to all four classrooms was believed to reflect the teachers' efforts to mediate between their personal beliefs about what children need to learn and the beliefs of the schools they serve. They all used a traditional instructional format but infused it with teaching techniques that are appropriate for the age of their children.

Implications

The challenges faced by these teachers are similar to those that have historically been faced by teachers who attempted to implement child-centered methods into their classrooms (Cuban, 1993). Early childhood teachers working in the primary grades need support from the schools and families they serve, in order to implement the developmentally appropriate curriculum their children deserve. Furthermore, in determining appropriate practices for their children, these teachers are acting as decision makers in a setting that traditionally has not supported teachers in this role. History shows that they must not only become aware of their own folk pedagogies but also develop sensitivity and respect for those in the culture around them. Support for developmentally appropriate practices in public school primary grades requires negotiation with teachers, principals, and parents who are part of the community they serve.

In order to receive the support they need, early childhood teachers must be equipped not only with theory and research that supports their curricular practices, but also with an awareness of the historical context of child-centered methods in the development of the public schools. Only in the light of history can they fully appreciate the enormity of their task in using developmentally-based criteria for determining best practices for their children in a public school setting. Gronlund's (1995) suggestion that teachers attempting to use developmentally appropriate practices in the primary grades view themselves as being on a continuum captures the complexity of the decisions these teachers must make when mediating between their personal

beliefs and the expectations of their school culture. The history of teaching practices shows that curricular compromises as expressed in hybrids are a long-standing part of the reality of using child-centered methods in a public school setting (Cuban, 1993). The professional challenge facing early childhood teachers in public school primary grades is that of continuing to advance along the continuum toward including as many developmentally appropriate practices as they can.

Supporting teachers to reach the best compromise they can is essential for the spread of developmentally appropriate practices. Cuban (1993) has shown that, particularly in the elementary grades, some of the progressive, child-centered practices that were initially expressed in curricular hybrids have become an accepted part of the mainstream school culture. Cuban attributes this to the power of those teachers who believed enough in those instructional methods to make the most of whatever classroom freedom they had to implement them. Likewise, White et al. (2001) found that public school primary grade teachers using many developmentally appropriate practices in their classrooms shared the professional characteristics of believing not only in the efficacy of their methods but also in their power as educators to make a difference in the lives of their children.

Instilling early childhood teachers who take jobs in public school primary grades with this kind of professional identity and sense of responsibility for their classroom practices is essential for preparing them to meet the challenges of using these methods in a public school setting. It is vital that these teachers never underestimate the significance of even just partially implementing developmentally appropriate practices into their methods of instruction. Over time these efforts may contribute to lasting changes in the folk pedagogies held by parents, school administrators, and fellow teachers.

In his article, "Progressive Education in the 21st Century," Aldridge (2002) presents a summary of articles reviewed by advanced graduate students in a seminar class called "Dewey and the Early Childhood Curriculum." He summarizes:

> Students who took this class were somewhat surprised by how much of today's education research, practice and literature is rooted in the progressive education movement. While many teachers acknowledge the importance of the home and school connection, the salience of teacher and student collaboration, the virtues of

> the project approach, and the values of play, some are unfamiliar with the progressive educator who discussed all these issues a century ago. Why is it that large numbers of teachers and education majors are unaware that some of the 'new and innovative' practices have been around for so long? (p. 59)

Aldridge has asked an excellent question. Early childhood teachers who take jobs in public schools are entering cultures in which the dominant beliefs about learning have historically not supported child-centered instructional methods such as those advocated by developmentally appropriate practices. Given the educational significance of developmentally appropriate practices, can we afford not to acquaint early childhood teachers with the deep historical roots of these methods and the long fight to establish them as part of the public school curriculum? Curricular hybrids of traditional and child-centered instruction occur when teachers challenge the prevailing instructional expectations of parent and schools. Developmentally appropriate practices will never succeed in the primary grades of public schools unless teachers continue to implement them in the best way that they can. History has shown not only how formidable the task of using child-centered methods in the public schools is but also how significant each teacher's efforts are.

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APPENDICES

APPENDIX A
DOROTHY'S FIRST GRADE SCHEDULE

8:15-8:30	Big Four (morning review work)	
8:30-8:45	Calendar	
8:45-9:15	Spelling	
9:15-9:30	Bathroom Break	
9:30-10:30	Reading/Language Arts	*10:05-10:15 S.T.A.R Time
10:30-11:00	Centers/Science/Social Studies	
11:00-11:35	LUNCH	11:35-11:45 Bathroom Break
11:45-12:35	Math	
12:35-1:25	Related Arts	
	Monday- P.E.	
	Tuesday- Art	
	Wednesday- Computer	
	Thursday- Music	
	Friday- Library	
1:25-1:35	Snack	
1:35-2:00	Recess	
2:00-2:30	Phonics	
2:30-2:45	Finish any unfinished work from the day	
3:00	Dismissal of car riders	
3:05	Dismissal of bus riders	

APPENDIX B

SUSAN'S FIRST GRADE SCHEDULE

8:30-8:45	Morning Duties
8:45-10:30	Reading/Language Arts
10:30	Bathroom Break
10:45-11:30	Literacy Centers
	(Monday, Wednesday, Friday- Title I children leave for assistance)
11:35-12:05	LUNCH
12:10-1:10	Related Arts
	Monday- Guidance/Music
	Tuesday- Library
	Wednesday- Art
	Thursday- P.E.
	Friday- snack/Music
1:10-1:30	Math
1:30-2:30	Recess
2:00-2:30	Social Studies/Science
2:30-2:50	Read Aloud
2:50-3:00	Prepare to go home
3:00	Students dismissed by announcement

APPENDIX C

JENNY'S SECOND GRADE SCHEDULE

8:30-9:00	Journals/Reading Counts
9:00-9:30	Class Meeting/ Songs and Movement
9:30-10:15	Math
10:15-11:00	Shared Reading/Mini Skills Lesson/Reading-Writing Workshop
11:00-11:30	Recess
11:30-12:20	Reading-Writing Workshop
12:20-12:45	LUNCH
12:45- 1:00	Read Aloud
1:00-1:45	Theme Activity
1:45-2:00	Pack up to go home
2:00-2:50	Related Arts
2:55	Dismiss Students

APPENDIX D

TERESA'S SECOND GRADE SCHEDULE

8:30-9:00	Morning practice work
9:00-9:15	Monday- Spelling words
	Tuesday, Wednesday, Thursday and Friday- Language
9:15-9:45	Whole Group Reading
9:45-10:15	Small Group Reading or Practice Book
10:15-11:00	Math
11:00-11:35	Phonics, Spelling or Language
11:35-12:05	LUNCH
12:05-12:30	Finish Morning Work or Read Aloud
12:30-1:00	Monday- Outreach
	Tuesday- Counselor
1:00-1:30	Tuesday- Library
	Wednesday- P.E.
	Friday- Music
1:30-2:00	Monday- Music
	Tuesday- Computer Lab (Math),
	Wednesday- Computer Lab (Reading)
	Thursday- Art
	Friday- Library
2:00-2:30	Monday- P.E.
	Tuesday- Speech
2:30-2:50	Recess
2:50-2:55	Prepare for home
2:55	Car Riders Leave
3:00	Bus Riders are dismissed

APPENDIX E

DOROTHY: LANGUAGE ARTS GUIDANCE

Instructional Task One: Children listen to "How Stars Came to Be…"

10:20-10:30a.m. Dorothy tells the children that it is time to put the STAR books away. She asks the children to get their reading books from their desks [Instructional Task Behavior] and return with them to the carpet [General Classroom Behavior]. The children get their books and make a circle on the carpet. When the children are settled, [General Classroom Behavior] Dorothy asks them what they remember about folk tales [Reflective Dialogue]. The children raise their hands and give details such as these are stories from the past. Dorothy reminds them about the story "Chicken Licken" [Telling] and asks why that story was a folktale [Reflective Dialogue]. Some children begin to open their reading books, and Dorothy asks them to keep the books shut until they are ready to read [Instructional Task Behavior]. Dorothy reminds the children that folk tales include stories in which animals talk and that these stories may change as they are retold to other people [Telling]. Dorothy reads a story to the children, "How the Stars Came to Be" [Instructional Task]. The children sit quietly [Instructional Task Behavior] and listen [Instructional Task]. Dorothy stops frequently and asks the children questions about the story such as, "Why do you think the stones used for stars were jagged and not smooth?" The children share some ideas [Thinking Dialogue]. Dorothy asks the children to tell her about what pictures they have seen in the sky. The children name the constellations that they have seen [Reflective Dialogue]. Dorothy continues reading [Instructional Task]. She dramatically portrays the dialogue between two characters [Instructional Task]. The children begin to repeat certain phrases with her such as, "Coyote, where are you?" [Instructional Task Behavior].

10:30 - 10:40a.m. The children and Dorothy howl like coyotes [Instructional task behavior]. Dorothy asks the children questions about why certain things happened in the story [Thinking dialogue].

Instructional Task Two: Children read "Baby Rattlesnake" Story

Then, she asks the children to open their reading books to the "Baby Rattlesnake" folktale [Instructional Task Behavior]. Dorothy has the children look at the authors [Showing]. She points out that one name looks different from the kinds of names the children usually see. Dorothy also points out that one author has created the story, but it has been retold many times

and another person wrote it down. In addition, Dorothy points out the name of the illustrator to the children, [Showing and Telling] and they discuss what illustrating means [Reflective Dialogue]. Dorothy then asks the children for predictions about the story [Thinking Dialogue]. Some of the predictions make Dorothy ask if some of the children have read the story before. Some say they have [Reflective Dialogue]. Dorothy has the children look at the pictures to guess what the words on the page will say [Instructional Task]. She points out that the cactus means the story is set on a desert. Dorothy also shows the children that the first letter on each page is bigger than the other letters [Showing and Telling]. She explains that this is the style in which the story is written [Telling]. Dorothy and the children read the words aloud together [Instructional Task]. Dorothy stops to compare the baby rattlesnake to a baby human [Telling]. Dorothy and the children talk about activities that children and baby rattlesnakes (like the one in the story) must wait until they grow up to do [Thinking Dialogue]. Each new page Dorothy has the children look at the picture and guess what the text will say. For instance, she directs the children's attention to a picture of new snakes with baby rattlesnake [Instructional Task]. Dorothy has the children guess who these new characters may be [Thinking dialogue].
10:40 -10:50a.m. Dorothy asks the children to guess at the gender of the new characters, [Thinking Dialogue] and then to look at why they made that guess [Showing]. She and the children continue to read the text together [Instructional Task]. They stop and reflect on the text [Thinking Dialogue] by looking at the pictures [Showing]. Dorothy reminds the children that sometimes it is easier to follow the words, if they use their fingers to point to them as they read [Telling]. Dorothy and the children make sound effects together (SH, SH, SH) [Instructional Task]. They continue to predict what the words will say by looking at the pictures [Instructional Task]. Dorothy pauses to make sure the children understand some of the words [Problem Solving Dialogue]. Dorothy also stops to make comparisons between the baby rattlesnake's life and the children's lives [Telling]. She asks the children if, like baby rattlesnake, they have ever been given something that wasn't what they really wanted, but intended to make them feel better [Reflective Dialogue]. The children and Dorothy continue predicting the text by looking at the pictures [Instructional Task]. Dorothy asks the children what is happening in the picture and asks them to share how they know this by looking at the picture [Instructional Task]. For example, she asks them how the illustrator made it look like the snake was in pain. Dorothy asks the

children other questions such as, "What is the snake doing that is wrong?" The children respond [Thinking Dialogue]. Dorothy asks the children if they remember what the word "sob" means. The children share their definitions [Reflective Thinking]. Dorothy also discusses with the children what lesson is being taught in the story. She and the children compare the baby rattlesnake to children like themselves wanting to grow up before they are ready [Thinking Dialogue]. Dorothy and the children look at the authors again [Showing]. They discuss how the creator of the story is a Native American [Thinking Dialogue]. She reminds the children who Native Americans are [Telling] and asks them which group of Native Americans used to live in the area where the children live [Reflecting Dialogue]. They discuss the fact that the person who wrote the story is different from the person who created it [Thinking Dialogue]. Dorothy reminds the children that this is common feature of folktales [Telling]. The children ask how old the creator of the story is now, and they wonder if she is still alive. Dorothy says that probably she isn't, because she was quite old at the time the story was written down and people usually don't live much past age 100 [Problem Solving Dialogue].

10:50-11:00a.m. Dorothy explains to the children what tantrums are [Telling]. She asks the children if they have ever thrown a tantrum or have brothers or sisters who do that [Reflecting Dialogue].

Instructional Task Three: Writing about the "Baby Rattlesnake" Story

After discussing tantrums, [Thinking Dialogue] Dorothy introduces the children's writing assignment. She tells the children that they will write about the four main parts of the story at their desks [Telling]. She helps them think of the main parts by asking them to consider what the first important part of the story was. The children answer. Then, Dorothy asks them to consider what the last important part of the story was. She then asks the children to consider two things that happened in the middle that they think are important [Thinking Dialogue]. Dorothy gives them some examples [Telling]. The children go back to their desks [General Classroom Behavior]. Dorothy and I pass out white paper, and Dorothy asks the children to fold the paper into four parts [Instructional Task Behavior]. She shows them how to do this by pretending that the paper is bread [Showing and Telling]. Dorothy then draws a sample piece of folded paper on the board. She fills in the first square with the first part of the story for the children [Showing]. Dorothy then fills in the last square with the last part of the story for the children. She asks the

children to fill in the middle squares with words and pictures showing two main things that happened in the middle of the story [Instructional Task]. Dorothy tells the children that they may use their books [Instructional Task Behavior].

11:00 -11:10a.m. The children work on their pictures and ideas [Instructional Task]. The children begin to bring their work to Dorothy for her to see it. She asks some to write a sentence that will explain their pictures to her [Problem Solving Dialogue]. When children are finished, she asks them to put their work into a basket, so she may examine their work more closely later [Instructional Task Behavior].

APPENDIX F

DOROTHY: MATH GUIDANCE

Instructional Task Number One: Math Facts Flash Card Review

12:00-12:10p.m. When I return from making copies, the children have been quizzing themselves on math facts at their desks using flash cards. They use the cards to quiz each other [Instructional Task]. The children keep math fact cards in their desks. Each set of facts is related to the lesson they are currently doing. Dorothy had given them three minutes to drill themselves. A timer goes off indicating that the time is up, when I enter the room [Instructional Task Behavior].

Instructional Task Number Two: Math Review Worksheets

12:10 -12:20p.m. The first sets of math sheets that Dorothy gives the children math are a review of their recent work [Instructional Task]. These drill and review exercises are a part of the math curriculum. The children work on them quietly [Instructional Task Behavior]. Some ask for help with addition and Dorothy suggests that they put the big number in their heads and then count up as a way of adding the smaller number. She also suggests that they use their fingers [Problem Solving Dialogue]. I can see that many children are counting silently to themselves using their fingers as they work. I also notice that some children have their sheets folded [Instructional Task Behavior]. Dorothy walks around the room while the children are working and helps them as they need it [Problem Solving Dialogue]. As they finish, Dorothy collects the sheets [Instructional Task Behavior] and has the children go and sit on the carpet. When most children are on the carpet, Dorothy comes over and sits on the carpet with them [General Classroom Behavior].

Instructional Task Number Three: Coins

12:20p.m. -12:30p.m. Dorothy places three bags of pretend coins on the carpet. One bag contains 25 pretend pennies; one contains 5 pretend nickels; the other contains has 2 pretend dimes and a pretend nickel [Showing]. Dorothy asks the children which bag has the most money. The children answer after carefully inspecting each bag. They give different answers from each other [Thinking Dialogue]. Dorothy and the children then count the money in each bag together [Instructional Task]. The children realize that the bags have different numbers of coins, but the same amount of money. One child turns to a friend and says, “I told you they were all the same.”

Dorothy asks the children what coin could be substituted for the amount of money in each bag. The children name a quarter [Thinking Dialogue]. Then, Dorothy passes around a bag of pretend quarters. Each child takes one [Instructional Task Behavior]. When everyone has a quarter, Dorothy has the children look at the coins [Showing]. She points out the date [Showing and Telling]. Dorothy asks the children if they know whose head is on the coin. The children say that the head is that of George Washington [Reflective Dialogue]. Dorothy points out that the head is positioned upside down in relationship to the picture on the other side of the coin [Showing and Telling]. Dorothy asks what the opposite of head is and the children reply, "tail" [Reflective dialogue]. Dorothy has the children find the letters, "USA," [Instructional Task] and she asks if they know what those letter stand for [Reflective Dialogue]. Dorothy reminds them that a quarter is one fourth of a dollar [Telling]. Then, Dorothy and the children count together by adding quarters to make a dollar ("twenty-five cents, fifty cents, seventy-five cents, a dollar") [Instructional Task].

12:30p.m. -12:40p.m. Dorothy and the children sing the morning money song again [Instructional Task]. Then, Dorothy explains that they will play a game in which they fill cups with quarters until the cups reach a dollar [Telling]. She asks the children to count how much money is in the cup as they add their coins [Instructional Task]. Dorothy starts passing a cup around the circle [Instructional Task]. The children count, but some of them get mixed up. When they reach a dollar, the first cup is put down and another cup is started around [Instructional Task]. After all the cups have been filled, [Instructional Task] Dorothy has the children look at them and figure out the total amount of money in the cups [Showing]. Because some of the children are still confused, Dorothy takes out a little chalkboard and writes down the amounts that the children are adding to make a dollar [Problem Solving Dialogue]. Then, she passes the cups again [Instructional Task]. This time all the children can follow the counting. Then, Dorothy asks the children to return to their seats [General Classroom Behavior].

<u>Instructional Task Number Four: Math Worksheet</u>

She has a child pass out rulers, and she passes out the math sheets that I had copied [Instructional Task Behavior]. The children start the worksheet by drawing a line that should measure a certain length. They use their rulers to do this. Then, the children write their names on this line

[Instructional Task]. At this point, Dorothy tells the class that it is time for them to line up for related arts and that they'll finish when they return [General Classroom Behavior].

APPENDIX G

SUSAN: LANGUAGE ARTS GUIDANCE

Instructional Task Number One: Sight Word Tic Tack Toe Game

10:00-10:10a.m. When the girls have returned from the bathroom, [General Classroom Behavior] Susan tells the group that it is "no talking time," because she is going to give out directions. Susan divides the middle table and the class into two teams for this game [Instructional Task Behavior]. She writes tick -tack-toe lines on the board [Showing] and asks the first group if they want to be "x's" or "o's." They choose "-x's" [Instructional Task Behavior] and Susan shows them the sight word "way". The student on the first team cannot read the word, and Susan has the class say the answer. Susan shows the first member of the second team another sight word. The student reads it correctly and goes to the board and makes an "O" in a place on the tick-tack-toe board [Instructional Task]. The team is excited to score, and Susan shows them how they can clap by using their fingers [Instructional Task Behavior]. The children are very excited and do lots of "finger clapping." As the children get excited, Susan warns the teams that they will lose turns if they talk out of turn and cannot stay in their seats [Instructional Task Behavior]. The next word is "fish." The team misses this word. The next word is "way again. The team misses. The next word is "how." The team misses, [Instructional Task] and Susan sounds the word out for them [Problem Solving Dialogue]. The next word is "fish." [Instructional Task] Susan reminds the students that these words are in their homework-reading which they are supposed to study at home [General Classroom Behavior].

10:10-10:20a.m. The tic-tac-toe board is filled in [Showing] and neither team wins [Instructional Task]. Another board is drawn [Showing], so the class can still play [Instructional Task]. Susan wants everyone to have a turn [Instructional Task Behavior]. The next words are "six" and "how" and then "way" again [Instructional Task]. When children have difficulty, Susan has them sound the word out. One child tells another child on her team to put the sounds together. Susan responds to the first child by telling her not to put pressure on the child who is reading the word [Problem Solving Behavior]. One team wins this game, and Susan asks them to draw another tic-tac-toe chart on the board [Instructional Task]. Susan says "there's a hush in the room" [Telling]. She reminds the children to cheer quietly [Instructional Task Behavior]. The classroom door is left open as they play the game. I notice that the children who have missed

words are now getting them correct. Susan has the class do a "happy dance" for a child who gets a word correct [Instructional Task Behavior]. Susan then gives a child (who is a very advanced reader) a difficult word [Instructional Task]. The student teacher has suggested this word. The child reads "sea anemone," and Susan asks all the children to do a "happy dance" for him to celebrate his reading this word [Instructional Task Behavior].

Instructional Task Number Two: Reading "Little Fish" Story

Susan then asks the children to clear off their desks and to close their eyes. She has them put their heads on their desks [Instructional Task Behavior]. Susan asks them to picture that they are little fish swimming around in water. She asks them to pretend that they are the little yellow fish that was caught in the bucket by some children [Instructional Task]. Susan asks the children to raise their hands if they have a word that describes how they feel [Instructional Task Behavior]. A child says "sad," because my friends don't' care." Susan asks if the child can think of a bigger word to describe how he feels. "Scared" the child, says. Susan asks him to describe why he is scared [Thinking Dialogue].

10:20-10:30a.m. Susan then says that "deserted" is the bigger word she was thinking of [Telling]. Susan asks the class, "What do you think the boys will do to you?" "Put me in a fish tank." one child says. "Take me home and put me in a little fish tank." another child says. "Might let me go." another child says. "Put me on a hook and fish with me." another child adds. Susan asks the children more questions. "Could you survive without something to eat?" The children murmur, "no" [Thinking Dialogue]. Susan then asks the children get out their hard reading books from their desks. She has the students to turn to page 54 [Instructional Task Behavior]. Susan asks the children, "What tool helps us read?" "Fingers" the children say [Reflective Dialogue]. Susan asks different children to read the pages of the story aloud [Instructional Task]. Susan reminds them that these are the sight words they are studying [Telling]. Susan points out rhyming words to the children [Showing and Telling]. When the children misread words, Susan has them look at the text and think about the word again [Problem Solving Dialogue]. Susan remarks when a child reads with expression how well the child has read [Instructional Task Behavior].

10:30-10:40a.m. As the children are taking turns reading, Susan asks one child to "push another child's volume button" to have him speak little louder [Instructional Task Behavior]. Susan then

has the whole class read the last line of the story together on p. 78 [Instructional Task]. One child is on p. 87. Susan helps her and remarks that sometimes the pages are confusing [Problem Solving Dialogue]. Susan reviews information about the story with the children. She tells them that the story is fiction and explains why it is not non-fiction. She reminds them that fish swim in schools [Telling]. Susan asks the children if they liked the reading [Reflective Dialogue].

Instructional Task Number Three: Writing "F" Words

Susan then asks the children to close their books and put them into their desks [Instructional Task Behavior]. Susan says that they are going to talk about a special letter associated with "fish," the letter, "f" [Telling]. Susan puts "f" on the board [Showing]. The children list "f" words, "fish, fire truck, fox, feather, and family" [Instructional Task]. Susan asks the children to get out their journals [Instructional Task Behavior] and to write the five words under "f" and to illustrate one of the words [Instructional Task]. As the children get their journals out, [Instructional Task Behavior] Susan talks to them about "f" words [Telling]. Children begin to bring their notebooks to Susan to show her their work. At the back-table, some children are talking, and Susan asks them if they are having trouble getting along. A child starts to share their problem, and Susan reminds him that this is a problem for the classroom journal. Susan also reminds him that life is too short to fight about silly stuff [Problem Solving Dialogue]. Susan asks the children to put their journals away [Instructional Task Behavior]. One child asks her for help spelling "porcupine." Susan helps him and asks why he is writing that word. The child answers that it is the kind of fish that he is drawing [Problem Solving Dialogue].

Instructional Task Number Four: Listening to "Frank's Pants" and Finding "F" Words

10:40-10:50a.m. Susan asks the children to get out their floppy books. She tells the children to turn to "Frank's Pants," and tells them not to laugh [Instructional Task Behavior]. Susan points out the author and illustrator of "Frank's Pants" for the children [Showing and Telling]. She asks the children what job each does and the children answer [Reflective Dialogue]. Susan begins to read the story aloud to the children and asks for a "thumbs up" whenever she gets to an "f" word. S asks the children to go back to the beginning and asks for an "f" word as a way of reflecting on the reading [Instructional Task]. A mother comes into the room. Susan has the children turn to another page [Instructional Task Behavior] and look for "f" words [Instructional Task]. A child is out of his seat, and Susan asks him to go and move his bug

[General Classroom Behavior]. Susan asks the children to say the “f” words on that page [Instructional Task]. She then has the children close their books, [Instructional Task Behavior] and the Title I kids line up at the door [General Classroom Behavior].

APPENDIX H

SUSAN: MATH GUIDANCE

Instructional Task Number One: "Open and Closed" Game

1:20-1:30p.m. When everyone has returned from the bathroom, Susan asks them to sit in their seats [General Classroom Behavior]. Susan asks a child to pass out yellow paper, and she passes out yellow yarn to the children. Susan asks the children not to fold the paper or to tie the yarn as they are waiting for instructions [Instructional Task Behavior]. She then asks the children to push in their seats, stand up, form a circle and hold hands [General Classroom Behavior]. Susan tells the children that they are going to learn about open and closed [Telling]. She has a child crawl into the circle (as the children and Susan are holding hands), walk around the circle and look for a way out [Instructional Task]. Susan tells the children that they are now a closed figure. The child cannot get out of the circle, because they are all holding hands. She says that to escape the children will have to become an open shape by letting go of each other's hands somewhere [Telling]. Susan asks the children to "open" a place, and the child gets out. Susan then has the child try to get in to the circle [Instructional Task]. She tells the children that they are still closed [Telling]. The children clearly love this game!

Instructional Task Number Two: Making "Open and Closed" Shapes

1:30-1:40p.m. Susan then has the children get back into their seats [General Behavior]. She has the children fold the piece of paper and write "Open" and "Closed" on the top of the two sides [Instructional Task]. Susan has a child move his bug for interrupting the class [General Behavior]. Susan asks the children to put their names on the bottom of the paper [Instructional Task]. Susan models what she wants the children to do by working with her own sheet of paper [Showing and Telling]. She asks the children to get out their glue [Instructional Task Behavior]. She tells them that they will make a shape that is "open" under open and one that is "closed" under closed [Telling]. The children ask if they may make an open letter. Susan says they may [Problem Solving Dialogue] and she lists the open letters with the children [Reflective Dialogue]. Susan suggests that the children first make a design on the paper with their glue [Telling]. She continues working on her own paper with the children [Telling]. One child looks at Susan's work and says, "good job!" [Thinking Dialogue]. Susan encourages the children to

look at the letters on the wall to check whether it is open or closed [Telling]. She shows them her creation [Showing]. One child has finished, and Susan asks for a "thumbs up" from the other children, if they think the student has done it correctly. The children give the student a "thumbs up" [Instructional Task Behavior]. Susan and the children begin to talk about words that "open and closed" letters make like "go" and "so" [Thinking Dialogue].

Instructional Task Number Three: "Open and Closed" Math Worksheets

1:40-1:50p.m. Susan asks the children to get out their math workbooks and to put their glued shapes under their desks to dry [Instructional Task Behavior]. One child brings her math workbook to Susan, and Susan rips two pages out [Problem Solving Dialogue]. Susan asks the children to give her a "thumbs up" to show her when they are ready. Susan tells the children that they will miss some of their free center time, if they do not get their work done. Susan has them rip out the top page, the cowboy rope page, and put it on their desks and put their workbooks away [Instructional Task Behavior]. The children are supposed to color in closed shapes and circle the open ones [Instructional Task].

1:50-2:00p.m. Susan asks the children to look at the page with her [Showing] and all together they say what the shapes are [Instructional Task]. Susan then has the children turn the page [Instructional Task Behavior] and do the work on the other side. The children finish [Instructional Task]. Some children get up and are writing in the classroom journal [General Classroom Behavior].

APPENDIX I

TERESA: LANGUAGE ARTS GUIDANCE

Instructional Task Number One: Playing "Farmer in the Dell"

9:15-9:25a.m. Teresa asks the children to stand up and push their chairs into their desks. Teresa then asks different children to move to various places along the outside of the desks, until the children have made a circle around the desks [General Classroom Behavior]. Teresa asks the children what they are doing. The children say that they are playing "farmer in the dell." Teresa asks them more questions [Reflective Dialogue]. The children raise their hands to answer [General Classroom Behavior]. Teresa calls on children who give answers. Teresa expands on their answers each time [Reflective Dialogue]. A child goes to the middle of the ring. Teresa tells a student to turn the "way a clock" goes. The children begin to sing "Farmer in the Dell" and walk in a circle. At the end of the usual verses (Cheese verse), the children begin to add that the cheese takes a knife, the knife takes a cracker, the cracker takes a table, the table takes a saucer, the saucer takes a chair, the chair takes a napkin, the napkin takes a house…etc. [Instructional Task]. All the children are chosen as something [Instructional Task Behavior]. Teresa then compares this game to the "Turnip" story [Telling].

Instructional Task Number Two: How to Take Story Tests-Type I

Teresa has the children sit back down, get out their reading books and turn to a certain page. Teresa tells the children it is time for them to get back into their study position [Instructional Task Behavior]. A student corrects Teresa about the page number. Teresa acknowledges the correct number [Problem Solving Dialogue] and asks the students to turn to this page [Instructional Task Behavior]. She reminds the children that they should look for the page in their books by looking for one hundred's and then for the number 36. Teresa introduces the new activity by explaining that story tests are something "we have to do in second grade" [Telling]. Teresa puts reading questions on the overhead projector [Showing]. She asks a student to read the first question out loud [Instructional Task]. The student has trouble with the word, "world". He reads "would" instead. Teresa remarks that his word is very close to the correct word, and she asks him to look closely at what is written and think about the sounds in the word he has guessed. The student corrects himself. Teresa then helps him sound out the word, "enormous"

[Problem Solving Dialogue]. After finishing the sentence, Teresa has the student go back and read the whole sentence again [Instructional Task].

9:25-9:35a.m. Teresa asks the class why the word, "enormous" is underlined [Thinking Dialogue]. The children raise their hands. Teresa pauses until hands stop going up and calls on a child [General Classroom Behavior]. Teresa expands on the student's answer by asking questions about what the child thinks [Thinking Dialogue]. Teresa then explains to the class what a "synonym" is. She emphasizes the "s" sound as a way of remembering that synonyms mean the "same" as other words [Telling]. A student asks to go to the bathroom. Teresa explains to him that she sends them to the bathroom earlier in the day, so they will be in class to hear what she says. She allows the child to leave [General Classroom Behavior]. Teresa continues to ask the children leading questions about the reading passage helping them see clues for what the word "enormous" means [Thinking Dialogue]. One student pulls her hood around her face, but receives no attention for it [General Classroom Behavior]. Teresa begins looking at the answer possibilities with the students [Showing]. She reminds them that a machine grades this test and that they have to fill in a bubble [Telling]. The class answers question one. Teresa has another student read question #2 [Instructional Task]. Teresa asks which word is most important in the question, "Which animal was last to help the man pull the turnip?" [Thinking Dialogue]. Teresa explains why "last" is most important [Telling]. Teresa asks the children which takes more time a scribbled bubble or a neat bubble. The children answer "the same" [Reflective Dialogue]. Teresa encourages the children to blacken the bubbles carefully [Instructional Task Behavior]. Teresa then asks the children what they thought about the story [Thinking Dialogue]. A child leaves for the bathroom [General Classroom Behavior]. Teresa asks the class about stories they have read and which they liked better. A child answers and Teresa asks the child to tell her why she liked the story. Teresa and the children talk for a few moments and the children share their thoughts about the stories [Reflective Dialogue].

Instructional Task Number Three: Standardized Reading Comprehension Test

Teresa then puts a "fill in the blank" exercise on the overhead [Showing]. She has the children take turns reading sentences from the passage [Instructional Task]. Teresa tells the children that it is best to read the whole story before thinking about the answers to the questions [Telling]. She asks the children if the sentences made sense without the missing words [Thinking Dialogue].

9:35-9:45a.m. The children shake their heads "yes." Teresa explains that this is because their brains are already working. She tells them that their brains are already being smart without the answers. Teresa explains to the children that this is a better way to find the answers than starting with the answers [Telling]. Teresa then has students read the possible answers. [Instructional Task] Teresa asks the children to look at the possible answers and think about how they are alike. [Showing] Some children are looking in their reading books. Teresa notices this and asks the children to close their books and focus their attention on the overhead [Instructional Task Behavior]. Teresa tells the children that all the words refer to the fact of something belonging to a person or thing [Telling]. (The words are his, her, its, and their.) Teresa has the children look at the words and see that they refer to a male, female and thing. Teresa shows the children how they can use this information to answer question one and question two. She has them look at clues in the sentence that will tell them whether the missing word should refer to a male, female, thing or to many people [Showing]. Teresa then has the children try different words in the sentences and listen to the sentence to hear if the word sounds "right" [Instructional Task]. Teresa continues showing the class how the other words fit in the sentence [Showing and Telling].

Instructional Task Number Four: Spelling Review

Teresa then gets out the spelling words [Showing] and asks the children about rules for using double consonants [Reflective Dialogue]. Teresa asks a student about what double consonants are in a word on the over-head. The student answers that there is an "h" [Instructional Task]. Teresa seems concerned about his answer and asks him if this is what he sees. The student corrects himself [Problem Solving Dialogue]. The intercom goes off in the classroom and an announcement is made.

9:45-9:55a.m. Teresa asks the children how many sounds double consonants make [Reflective Dialogue]. The children raise their hands, and Teresa waits as some children are thinking [General Classroom Behavior]. She asks a student to answer and the child says that double consonants make one sound [Reflective Dialogue]. Teresa tells the class they will work on double consonants again [Telling].

Instructional Task Number Six: Discussion about Sequence

She asks them to put their reading books away, get out their workbooks and turn to p.46 [Instructional Task Behavior]. Teresa tells the class that, although she asked them to get their reading books out earlier, they will do reading later. Teresa starts this lesson by reminding the children what they did the day before [Telling]. She asks the class, "Does it matter if you put on jeans or shoes first? Does it matter when I do the lunch report?" Teresa asks the children what would happen, if she didn't do the lunch report until late in the morning? The children laugh and say that the cafeteria wouldn't be happy with her [Thinking Dialogue]. Teresa describes things that must happen in order as things that are in sequence. She tells the class that when things are in sequence, order is important [Telling]. Teresa then asks the children to get their reading books back out [Instructional Task Behavior]. She explains to the children that this is a brand new reading book and that she is teaching it for the first time. Teresa says that she will make herself a note about how to teach this lesson next year [Telling]. Some children ask what the sound is from across the hall. Teresa says that it is the laminator [Problem Solving Dialogue].

Instructional Task Number Seven: Sequence Worksheet

Teresa and the children then read the directions together. Teresa asks a child to read the directions for the workbook page, [Instructional Task] and she helps him with the word "flowchart" [Problem Solving Behavior]. Teresa has the children look at the pictures of turnips and look at the arrows [Showing]. The children are supposed to write their answers on the large turnip shapes [Instructional Task]. Teresa asks the children who pulled on the turnip first. The children answer "the old man" [Thinking Dialogue]. Teresa shows children how to write "the old man" by writing it on the overhead for them [Showing and Telling]. Teresa points out to the children that the blank is small, and that they will have to be careful to make the word fit. Teresa asks the children to turn to the next page where the old man pulls, [Instructional Task Behavior] and she asks the class who pulls next? They answer and write 'old woman" [Thinking Dialogue]. Teresa comments that people don't use the word "old woman" to refer to people anymore. She reminds the class that this is an old story written when people talked differently than we do today [Telling]. Teresa has the children turn the page [Instructional Task Behavior] and repeat the process [Instructional Task]. She asks who is next and the class answers, "the granddaughter" [Thinking Dialogue]. The children write the answer down [Instructional Task]

and Teresa begins to move around the room seeing what each child is doing. The Title I worker also moves around the room looking at papers [Problem Solving Dialogue]. Teresa tells the children that they may go ahead and turn the page to see the next answer [Instructional Task Behavior]. The next answer is "black dog." The children continue to work quietly [Instructional Task Behavior].

9:55-10:05a.m. The intercom goes off again and an announcement is made. Teresa continues to move around the room asking the children, "What's next?" The children tell her, and Teresa asks questions about the next answer, "the mouse." Teresa asks the children about whether the mouse was "gray or little"? The children answer that the mouse was just a mouse [Thinking Dialogue]. Teresa asks the children about the last blank they are to fill in [Showing]. Teresa directs their attention to the word, "they," and explains that this question isn't looking for another character, but refers to all of the characters**.** The word "they" is a clue word. Teresa reminds the children that "they" is a "snerk" word**,** because it sounds like "-ay" (as in "day"), but the word is spelled with an "-ey." Teresa says that under the last turnip is a question [Telling]. She asks the children if they have read it? Teresa asks the children what they think the people in the story learned [Thinking Dialogue]. Teresa reminds the children that she doesn't want them to "say" the answer but that she wants them to "write" it [Instructional Task Behavior]. Teresa tells the children to use the question to make an answer [Telling]. She shows them that the question is written, "What did they learn?" and that the answer will begin, "They learned." [Showing and Telling]. Teresa looks at the children's work [Problem Solving Dialogue]. A child asks Teresa a question. Teresa tells him that his question is about what the class is doing, and he needs to listen [General Classroom Behavior]. Teresa explains why the word "learn" must be written in the answer as "learned" [Telling]. Teresa tells the children to close their books, when they are finished. [Instructional Task Behavior]. A child asks Teresa how to spell a word, and Teresa tells him to write what he hears. She explains that this is how we learn to spell [Problem Solving Dialogue]. Teresa reminds the children that they are not finished until they have put periods at the end of each sentence [Instructional Task]. Teresa tells the children to put their workbooks and reading books away when they are done [Instructional Task Behavior].

APPENDIX J

TERESA: MATH GUIDANCE

Instructional Task Number One: Math Review

10:25-10:35a.m. Teresa asks the children about yesterday's math. Teresa asks a child to review what they did for a classmate who was absent. Teresa then asks the rest of the kids, if they remember what they did on the previous day in math [Reflective Dialogue]. Teresa asks the all the children to count from zero to nine [Instructional Task]. At nine, she says, "we run out of digits" [Telling]. Teresa points to the number line hanging on the wall above the overhead projector [Showing]. She shows them the sequence of zero to nine that continues across the number line. Teresa shows the children how after the number nine, the group of numbers changes [Showing and Telling]. She and the children count [Instructional Task].

10:35-10:45a.m. Teresa has a child count backwards. Then, she has all children count backwards [Instructional Task].

Instructional Task Number Two: Number Order (Place Value)

Teresa shows them how the pattern goes backwards and forwards and you can predict numbers by following the pattern [Showing and Telling]. Teresa tells the class they will all count to 1000 before the year is over. Teresa says that counting by 100's is easier than tens [Telling]. She writes the numbers, 1-9, [Showing] and shows the children that you say the digit plus the number [Showing and Telling]. A student goes to ask Teresa a question. Teresa asks her to sit down. [General Classroom Behavior] Teresa writes the words, "Cat, Egg, Dog" on the board [Showing]. She asks the children how they would put these words into "ABC" order. A student puts the words in order, and Teresa asks how he did it. He says by looking at the first letter [Thinking Dialogue]. Teresa then writes the words, "cat, cub, and cot" on the board [Showing]. She asks for someone to put these words into "ABC" order. Teresa asks the students how they would do this [Thinking Dialogue]. She explains that they would do so by looking at the second letter, since the first letter is the same for all words. Teresa makes a comparison to numbers. She tells the class that they must look in the middle of numbers when the first digits are all the same [Telling]. Teresa then writes the numbers "246, 531 and 146" on the board [Showing] and asks the class to put them in order. The class does this [Thinking Dialogue] and Teresa explains that for these numbers you only had to look at the first digit to determine which was higher.

[Showing and Telling] Then she writes "476, 423, and 405" [Showing]. Teresa asks how the class would put those numbers into order [Thinking Dialogue]. Teresa tells the children to remember the "c" words they put into "ABC" order earlier [Telling]. Children raise their hands. A student wants to leave for the bathroom, and Teresa tells him he must wait, because Teresa wants him to hear everything [Instructional Task Behavior]. Teresa writes down the first answer given by a student, 423, [Showing], and she asks what the other students think. A student says that 405 should come first and T asks why. The student says because you look at the second digit. Teresa says that the child is right, [Thinking Dialogue] and she expands on the answer to show the rest of the class why it is correct [Telling].

10:45-10:55a.m. Teresa then writes the number 475 [Showing] and asks which number is the hundreds, the tens and the ones [Thinking Dialogue]. She tells the children that this is what they will be doing on their worksheets [Telling]. Teresa writes the place value of each digit in the three digit number, 475, on the board. She underlines the "four" next to the word "hundreds", then the "seven" next to the word "tens" and finally the "five" next to the word "ones" [Showing]. Teresa then has the children read the number [Instructional Task] and asks how they could write it [Thinking Dialogue]. She shows them that "4 hundreds" is the same as "400" [Showing and Telling]. She asks what "7 tens" is and the class says "70." She then asks what "5 ones" equals, and the class says "5." Teresa asks the children, if they see that she has written the same number three different ways [Thinking Dialogue].

<u>Instructional Task Number Three: Place Value Worksheets</u>

Teresa then passes out math worksheets. She reminds the children that they are to work quietly [Instructional Task Behavior]. The children begin their work [Instructional Task]. Teresa leaves the room, and the Title I instructor helps the children. The children work quietly [Instructional Task Behavior]. The Title I instructor answers the children's questions.

10:55-11:05a.m. The Title I instructor tells Teresa that part of the worksheet didn't copy and it may be confusing to the children. Teresa has the children find page "24.3" by looking at the top of the pages. After the children find the page, [Instructional Task Behavior], she tells them that the "one hundreds" are clear but not the "tens." She suggests that the children trace the tens to make them clearer [Telling]. She then has the children make four circles to indicate the ones. The children continue to work [Instructional Task]. A child takes a question to Teresa.

Teresa and the Title I instructor check the sheets [Problem Solving Dialogue]. The children put their completed math into a plastic bin that is different from the bin into which they placed their morning work [General Classroom Behavior]. As children ask Teresa questions [Problem Solving Dialogue] the Title I instructor leaves the room. The children who are finished with the math sheet get books to read. Teresa asks them to put the books back and to pick up another math sheet.

Instructional Task Number Four: Worksheets/ Individualized Place Value Instruction

Teresa passes out some more worksheets for the children to do [Instructional Task Behavior]. The children continue working [Instructional Task].

11:05-11:15a.m. Children collect new worksheets as they finish their initial work [Instructional Task Behavior]. Teresa continues to walk around the room and monitor their work [Problem Solving Dialogue]. The new math sheet is a coloring sheet. Teresa meets with three students at the semicircular table and explains their work to them [Problem Solving Dialogue]. Other children continue to work quietly. They speak quietly to each other and themselves as they count on their fingers to figure the worksheets out. One child does the sheet by counting on the number line [Instructional Task Behavior]. Teresa continues to work with three boys at the back of the room [Problem Solving Dialogue]. She sends these children back to their seats and asks another group of children to come to the table [General Classroom Behavior]. Teresa directs some children to get the additional math work [Instructional Task]. She then works one-on-one with the children at the back of the room. Teresa leaves the table and checks on a student. Teresa then picks up the completed math sheets from the bin and returns to the back table [Problem Solving Dialogue], and she calls some more students to come and see her [General Classroom Behavior]. Teresa discusses the sheets with the students and has them read numbers to her. She listens and asks them questions [Problem Solving Dialogue].

11:15-11:25a.m. Teresa continues to call students to see her [General Classroom Behavior] as the other children work quietly [Instructional Task Behavior]. Teresa continues to review the pages with the students [Problem Solving Behavior]. Teresa has one page without a name on it. She asks the student who has not already been called to come see her.

1:25-11:35a.m. Teresa returns to the front of the room and asks the children to listen**.** The children have put their math away [General Classroom Behavior].

APPENDIX K

JENNY: LANGUAGE ARTS GUIDANCE

Instructional Task Number One: Review of History and Pioneers

10:00-10:10a.m. The children are sitting back on the carpet having put away their snacks [General Classroom Behavior]. Jenny asks them, "Is history something that has already happened or something that hasn't happened yet?" [Reflecting Dialogue]. She asks them to tell their neighbor, [Instructional Task] and she leaves the circle to get something. When she gets back she asks the children to tell her what they think. A child says that history is something that has already happened. Jenny then asks the children about how the lives of pioneers were different from ours [Reflecting Dialogue]. She asks them to "pair share" and then report to the group about what they could remember learning about pioneers [Instructional Task]. Then Jenny asks the children, "How did they get food?" [Reflecting Dialogue]. The children raise their hands. Jenny calls on one to give an answer, [General Classroom Behavior] and the child says, "They kill it." "That would be hard." Jenny says [Reflecting Dialogue]. Jenny then adds that the pioneers made a lot of things such as quilts. She reminds the children about the visitor they had the day before my visitor who talked to them about quilts [Telling].

Instructional Task Number Two: Reading "The Keeping Quilt"

She shows the children a book she is going to read to them called The Keeping Quilt [Showing]. The story is about Russian immigrants to New York. As Jenny reads, [Instructional Task] she stops and asks the children questions. For example, "Was New York their first home?" "No." the children answer. "It was Russia." [Thinking Dialogue] The speech children come back into the room. Jenny tells them to get their snacks and to join the class on the carpet [General Classroom Behavior]. When they are seated, Jenny tells them about the story she has been reading with the other children [Telling]. A couple in the story gets engaged. Jenny stops and asks the children what that means. "They are going to get married." Some children answer [Thinking Dialogue]. (As the story unfolds the quilt becomes a symbol of each family passing its customs onto the next generation.)

Instructional Task Number Three: Story Summary/ Modeled Writing

10:10-10:20 When Jenny finishes, she asks the children to summarize the story. One says that the quilt just keeps going in the family. Another child says that they just keep giving the quilt to their babies. Jenny listens to their answers [Thinking Dialogue] and says that she would like to write what the children are telling her [Telling]. She asks them to think of two things they have learned about quilts, either from the story or from the quilt speaker the other day**,** and share these things with their neighbors. The children begin to talk to each other [Instructional Task]. Jenny asks someone to share a fact about quilts with her [Thinking Dialogue]. She begins to write a sentence based on what the child has said [Showing]. When Jenny comes to a certain word, she asks the whole class to spell it with her [Instructional Task]. Jenny writes, "Quilts are made with lots of love" [Showing]. The class reads the sentence after she has written it on the dry erase easel [Instructional Task]. The next sentence that Jenny writes is, "they help people to remember other people in their family" [Showing]. Jenny stops because she tells the children that the way some of them are sitting, the others cannot see [General Classroom Behavior]. She then goes back to the sentence she has written and asks the children how the quilts help people remember people? The children share some ways [Thinking Dialogue]. Jenny writes, "Quilts are sometimes made with pieces of clothing." Next, Jenny writes, "Some quilts have shapes on them." "They keep people warm" [Showing]. Some children get up and get a drink from their water bottles. [General Classroom Behavior] Jenny continues to list what the children say to her. "They have designs on them." "People make quilts for others" [Showing].

APPENDIX L

JENNY: MATH GUIDANCE

Instructional Task Number One: Review of Two-Digit Addition

11:50-12:00p.m. The class is back inside and seated once again in the carpet [General Classroom Behavior]. Jenny asks them to list reasons for good listening at the carpet. She asks them how people will know that they are listening. The children answer that they will be still and watching Jenny with their eyes. She also asks them how they can be sure that everyone is able to see. The children answer by saying that when they stay seated they can be sure that everyone can see [Reflective Dialogue]. Jenny has placed a class number grid on the easel [Showing]. Jenny gives the children a hypothetical problem involving one of their classmates. She asks "if he ran 12 laps and then ran 10 laps how many total laps would he have run?" [Thinking Dialogue]. Jenny asks the children to talk to each other about the problem [Instructional Task]. After she has given them time to talk, she asks the children whether they will be adding, subtracting or multiplying to find the answer. "Sum" a girl answers. "Adding" Jenny says. "10+12" the girl says [Reflective Dialogue]. Jenny then asks the children to share their answers and how they got them. One child says that she added 10+10+2. She explains that she knew that 10+10= 20 and that 10+2=12, so she added another 2. Another child says that he counted on the number grid. Jenny asks the children if it is okay that they got their answers differently from each other? The children say that it is [Thinking Dialogue]. Jenny says that adding helps solve problems that you come across in life [Telling].

Instructional Task Number Two: Explanation of Shuffleboard Game

Jenny introduces the math game by asking how many children have ever played shuffleboard [Reflective Dialogue]. Children raise their hands [General Classroom Behavior] and briefly share experiences with shuffleboard sorts of games [Reflective Dialogue]. Jenny explains to the children how the game works [Telling]. She asks the children to tell her what "two digit number" means. They answer [Reflective Dialogue]. She goes on to tell them that on the shuffleboard piece of paper she is going to give them, a number is sometimes listed more than once. She tells them that this doesn't matter. They can still play the game [Telling]. Jenny asks them to get with their reading buddy to play the game [Instructional Task Behavior].

12:00-12:10p.m. Jenny shows them how to play the game [Showing]. She asks them to tell her what 15+15 is [Thinking Dialogue] and to put their fingers on their noses when they have the answer [Instructional Task Behavior]. A child says that the answer is 30. Jenny asks her to tell the class how she got that answer [Thinking Dialogue]. Jenny tells the children she will give them each their own penny, number grid and shuffle board [Telling]. She wants them to go to their buddy reading spots [Instructional Task Behavior]. Jenny asks the children if they should move if they don't like their spots. The children answer that they should not move. Then Jenny asks the children how they should get her attention if they have a problem. The children say that they will raise their hands [Reflecting Dialogue].

Instructional Task Number Three: Shuffleboard Game

They move to their different spots in the room [Instructional Task Behavior].

12:10-12:20p.m. The children go to their spots and begin to play the game [General Classroom Behavior]. I hear them discussing the problems with each other as well as the problem of some flicking the penny so far that if flies off the shuffleboard [Problem Solving Dialogue]. At 12:15, Jenny turns off the lights, and the children get quiet. She tells them that it is time to get their stuff for lunch [General Classroom Behavior]. She asks the groups to give her their pennies, grid and shuffleboards [Instructional Task Behavior]. The class lines up and leaves for lunch [General Classroom Behavior].

VITA

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