Augsburg University Idun

Theses and Graduate Projects

Winter 1-23-2007

Full-Day Kindergarten: The Families Perspective

Brandy Anfang *Augsburg College*

Follow this and additional works at: https://idun.augsburg.edu/etd Part of the Education Commons

Recommended Citation

Anfang, Brandy, "Full-Day Kindergarten: The Families Perspective" (2007). *Theses and Graduate Projects*. 682. https://idun.augsburg.edu/etd/682

This Open Access Thesis is brought to you for free and open access by Idun. It has been accepted for inclusion in Theses and Graduate Projects by an authorized administrator of Idun. For more information, please contact bloomber@augsburg.edu.

Full-Day Kindergarten: The Families Perspective

Brandy Anfang

Submitted in partial fulfillment of the requirements for the degree of Master of Arts in Education

Augsburg College Minneapolis, MN

ABSTRACT

Full-Day Kindergarten: The Families' Perspective Brandy Anfang January 23, 2007 Action Research Project

The purpose of this study is to investigate why parents choose full-day kindergarten programs over half-day kindergarten programs. Five parents of full-day kindergartners elected to participate in this study. Interviews were conducted with each of the five parents in either their home or a local establishment in the spring of 2006. Interviews with their children were also conducted during the child's school day.

Parents stated two major factors in deciding which kindergarten program to enroll their child in: daycare and academics. Parents felt that having their child in one location all day, would be a better alternative than bussing them to daycare for the other half of the day. While daycare was a concern for the parents, they also cited concerns about giving their child an extra advantage going into first grade. The parents concluded that building the child's self-confidence early in education would help foster life long learning.

MASTER OF ARTS IN EDUCATION AUGSBURG COLLEGE MINNEAPOLIS, MINNESOTA

CERTIFICATE OF APPROVAL

This is to certify that the Action Research Final Project of

| Brandy | Anfana | |
|--------|--------|--|
| Name | J | |

has been approved by the Review Committee, and fulfills the requirements for the Master of Arts in Education degree.

| Date of Symposium: | June | 2006 | |
|--------------------|--------|------|--|
| Date Completed: N | 1ay 20 | 07 | |

•

Committee:

| commute. | | |
|----------|-------------|--|
| Ausar | E. O. Conno | |
| , , | (Advisor | |
| Grital | hen Driving | |

Reader

Acknowledgements

I would like to thank my husband, Jake Anfang. He has been by my side since I first decided to return to school. He has been supportive from the beginning and has allowed me to focus on my schooling even when it interfered with family priorities.

I would also like to thank the newest addition to our family, our baby girl, Katelyn. She has given me the motivation to keep working on this research. Hopefully, when she is ready to go to kindergarten, the things I have learned will help us make the right decision for her kindergarten education.

I would also like to thank all the educators that I have had at Augsburg College. They have all made me what I am today. I thank all of them for advice and counsel during my years at Augsburg.

To the staff and parents of the Chaska Kindergarten Center, they opened the doors and allowed me into their lives and for that I am truly grateful. Everyone was so willing to help and share their stories with me throughout my student teaching and my research project.

iii

ABSTRACT

Full-Day Kindergarten: The Families' Perspective

Brandy Anfang

January 23, 2007

Action Research Project

The purpose of this study is to investigate why parents choose full-day kindergarten programs over half-day kindergarten programs. Five parents of full-day kindergartners elected to participate in this study. Interviews were conducted with each of the five parents in either their home or a local establishment in the spring of 2006. Interviews with their children were also conducted during the child's school day.

Parents stated two major factors in deciding which kindergarten program to enroll their child in: daycare and academics. Parents felt that having their child in one location all day, would be a better alternative than bussing them to daycare for the other half of the day. While daycare was a concern for the parents, they also cited concerns about giving their child an extra advantage going into first grade. The parents concluded that building the child's self-confidence early in education would help foster life long learning.

iv

Table of Contents

| Introduction | 1 |
|-------------------------------------|----------|
| Literature Review | |
| History of Kindergarten | |
| Kindergarten in the United States | 5 |
| Quality Kindergarten Programs | |
| Kindergarten Readiness | |
| Research Supporting Full-Day Progra | ams 20 |
| Research Not Supporting Full-Day Pr | ograms22 |
| Methodology | |
| | |
| Participants | |
| Family Descriptions | |
| Data Gathering | |
| Data Analysis | |
| Results | |
| Daycare | |
| Academic Achievement | |
| Transportation | |
| Kindergarten Readiness | |
| Summary | |
| Conclusion & Recommendations | |
| | |
| | |
| | |

List of Tables

- Table 1. State Kindergarten Statistics
- Table 2. Appropriate Practices for Kindergarten Classrooms
- Table 3. Five-Year Olds' Development Chart
- Table 4. State Kindergarten Requirements
- Table 5. Minnesota State Kindergarten Standards
- Table 6. All-Day Kindergarten Daily Schedule
- Table 7. Half-Day Kindergarten Daily Schedule

List of Figures

- Figure 1. Percent of kindergartners enrolled in a full-day or half-day program from 1967-2004.
- Figure 2. Percent of Kindergartners that are enrolled in full-day and half-day programs by school type (2004).
- Figure 3. Percent of Kindergartners that are enrolled in full-day and half-day programs by school type (2004).
- Figure 4. Percent of Kindergartners that are enrolled in full-day and half-day programs by economic status (2004).

Introduction

Kindergarten education has changed in the recent decades. In the beginning of kindergarten history, it was predominately in the half-day format and not a state requirement. Today, kindergarten is offered in both the half-day and a full-day format. More and more states are changing kindergarten requirements and realizing its importance in a child's education. States are beginning to mandate attendance, offerings and curriculum.

Friedrich Froebel is considered to be the "Founder of Kindergarten." He designed kindergarten in Germany in 1837 to provide a less formal educational setting providing children environments that include practical applications and direct use of manipulatives (Smith, 2005). The first kindergarten in the United States was in the mid 1850's in Watertown, Wisconsin. Boston and St. Louis both opened kindergartens shortly thereafter.

Kindergarten began in a half-day format. Today, many kindergartens are still half-day. However, a growing trend in kindergarten is extending the half-day program into a full-day program. Approximately 50% of all kindergartners are enrolled in a full-day program. Currently, less than half of all states require kindergarten at all and two of those -- West Virginia and Louisiana -- require full-day attendance (ECS, 2005).

Full-day kindergarten has become an important issue for schools.

Requirements differ at the state level as to what individual school districts

must offer (see table 1).

| Table 1. | State | Kindergarten | Statistics |
|----------|-------|--------------|------------|
| | | | |

| State Kindergarten Requirements | # of States |
|---|-------------|
| Number of states that require at least half- day kindergarten | 42 |
| Number of states that require attendance at least half-day kindergarten | 13 |
| Number of states that require districts to offer full-day kindergarten | 9 |
| Number of states that require children to attend a full-day program | 2 |
| Number of states that don't require any kindergarten program | 8 |

Source: Education Commission of the States

Funding for these programs is limited. Some states offer incentives for districts to offer full-day programs. Most states have no clear funding plan for the full-day program. Research has found full-day kindergarten programs are preferred by both parents and educators (Rafoth, Grimes & Buzi, 2004).

Full-day programs allow for more time to develop educational skills as well as building social skills. Current research has shown that children in full-day programs have higher reading and math scores, higher self-esteem and greater creativity (Rafoth, Grimes & Buzi, 2004).

While there has been research conducted regarding the benefits of fullday kindergarten programs, there has been little done to understand why parents choose a full-day program. Such information could potentially aid legislators and school administrators in providing greater incentives to districts to offer full-day kindergarten programs, or at least, require all students attend a kindergarten program. By identifying the characteristics that provide a deeper learning experience in full-day programs, startup fullday programs may become more successful.

This research proposes to investigate why parents decide to send their child to the full-day kindergarten program and what benefits parents feel their child is receiving by attending a full-day program. This research will also investigate what children like about full-day kindergarten.

Literature Review

This literature review is divided into the following sections: history of kindergarten, kindergarten in the United States, quality kindergarten programs, kindergarten readiness, research supporting full-day programs, and research not supporting full day program.

History of Kindergarten

Fredrick Froebel (1782-1852) is credited with opening the first kindergarten in Germany in 1837. Kindergarten comes from the combination of two German words meaning children and garden. Froebel believed that learning happened in environments that included practical work and the use of materials. He also felt that the role of kindergarten was to bring students to God. He felt children's unity with God could be enhanced through self-expression and harmonious living with one another (Seefeldt & Wasik, 2002).

Froebel's kindergarten was for children under six years of age. He divided these children into three groups: infancy, early childhood, and childhood. Froebel believed that children learned through play and activities. His kindergarten was comprised of signing, dancing, gardening and what are called "gifts and occupations." Froebel's gifts were toys and he believed children could obtain educational benefits through playing them. These gifts included: building blocks, origami papers, clay and other manipulatives

designed to enhance the learning environment. Occupations included the act of folding, cutting, modeling, etc (Seefeldt & Wasik, 2002).

Kindergarten in the United States

Kindergarten was first introduced in the United States in the late 1840's. According to Watson, 1997, it took 25 more years before kindergarten classes started showing up in communities. In the 1860's, lower class children in St. Louis were often forced to leave school and begin working by the age of 10. This brought more emphasis on children beginning their educational experience at a younger age.

The first kindergarten was opened by Susan Elizabeth Blow in St. Louis in 1873. She implemented many of Froebel's theories throughout the curriculum. She would teach kindergarten in the morning and teach potential teachers in the afternoon. By 1883, every public school in St. Louis had a kindergarten program (Watson, 1997).

It wasn't long after the first kindergartens opened that opposition arose to the methods used in the kindergarten classroom. Issues that arose during this early time and some that are still being asked today include: How old should children be entering kindergarten? What is the cost of kindergarten programs? Should the schools use public money for these programs? What methods do American's value? This opposition led to legal

action that changed the entrance age to five and implemented a quarterly fee (Beatty, 1995).

National Association for the Education of Young Children

In 1926, the National Association for Nursery Education was established to organize nursery schools in the United States. The intention of this organization was to help build a framework for nursery schools and early child care programs. By the 1950's, this organization had grown from 25 members to over 5,000 by consolidating state and local organizations into one national organization. In 1964, the National Association for Nursery Education reorganized and became what is known today as the National Association for the Education of Young Children (NAEYC).

The National Association for the Education of Young Children has become the national leader for setting standards, helping families and educators, providing resources and communicating the importance of early childhood programs (NAEYC, 2006). The NAEYC governs issues ranging from childbirth through age eight.

The NAEYC's mission is to "serve and act on behalf of the needs, rights and well-being of all young children with primary focus on the provision of educational and developmental services and resources (NAEYC, 2006)." The NAEYC plans to accomplish its mission by recruiting individuals into the organization who are committed to excellence in early education programs,

improving practices, providing better working conditions in early childhood environments, and striving to create a better system of education for young children.

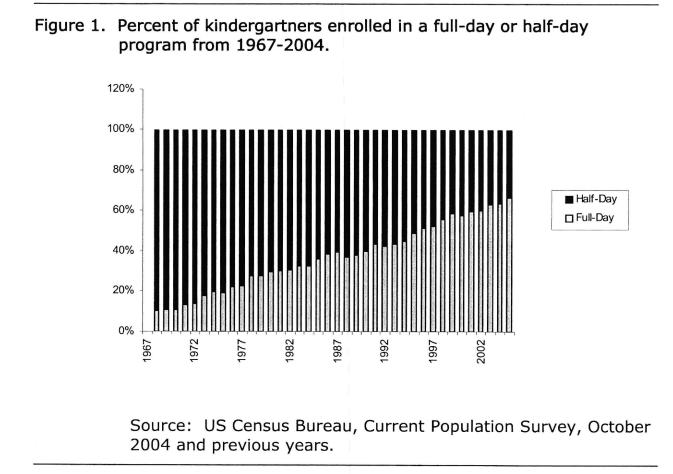
The NAEYC has strong beliefs about early childhood education. They believe that children should feel safe in their early childhood setting and they should have access to materials that are appropriate for students of that age group. The organization also believes that children should have well-trained staff for the program in which they are teaching and an environment that is conducive to all individuals regardless of their individual needs. Another belief is that educators should be fairly compensated and have the resources to further educate themselves. Also, families should be able to access affordable early childhood programs in their communities and be an integral part of their child's learning. The NAEYC also believes that everyone, including local and state governments, should work together to ensure early childhood programs are held accountable for educating our youth (NAEYC, 2006).

Kindergarten Statistics

In the United States, full-day kindergarten is growing in popularity. In 1967, only 10% of kindergarten students were enrolled in a full-day program. By the mid 80's, enrollment had jumped to nearly 35% of all

kindergarten students. In 2004, roughly 67% of all kindergarten students

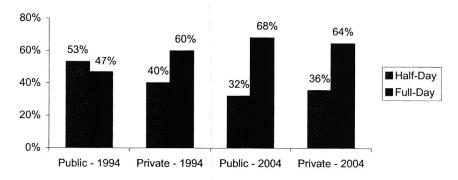
were in a full-day program (see figure 1).



The characteristics of children that comprise full-day programs vary by race, sex, religion, economic status, city type, and type of school. The National Center for Education Statistics (NCES) is the primary federal department responsible for collecting and analyzing education related data. Federal, state and local governments use this data to plan funding for schools. The NCES also provides information on early childhood education. The Early Childhood Longitudinal Study, Kindergarten Class of 1998-99 (ECLS-K) is an ongoing research study that focuses on children's early school experiences starting with kindergarten and continuing through 12th grade. The ECLS-K provides data on children's status at entry to school, their transition into school, and their progression through 12th grade (NCES, 2006).

According to ECLS-K, private school and public school children are just as likely to be enrolled in full-day kindergarten as their counterparts. This has not always been the case. Only ten years ago, 60% of private school children were enrolled in a full-day program versus only 47% of public school children (see figure 2).

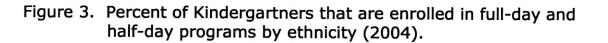
Figure 2. Percent of Kindergartners that are enrolled in full-day and half-day programs by school type (2004).

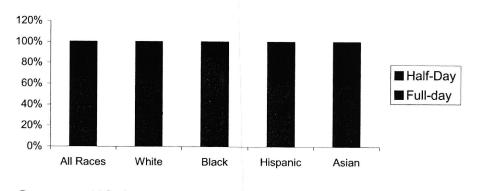


Source: US Census Bureau, Current Population Survey, October 2004 and previous years.

In both private and public school environments, African-American children are more likely to be enrolled in full-day program than either

Caucasian, Hispanic or Asian children (see figure 3). Overall, 85% of black children attend a full-day program compared to only 65% of Caucasian children, 63% of Hispanic and 60% of Asian. These percents hold fairly consistently across private and public schools. African-American kindergartners are a little less likely to be enrolled in a full-day program in private schools versus public schools (90% vs. 85%). Caucasian, Hispanic and Asian kindergartners are a little less likely to be enrolled in full-day programs in public schools versus private schools. The statistical difference is very minimal.



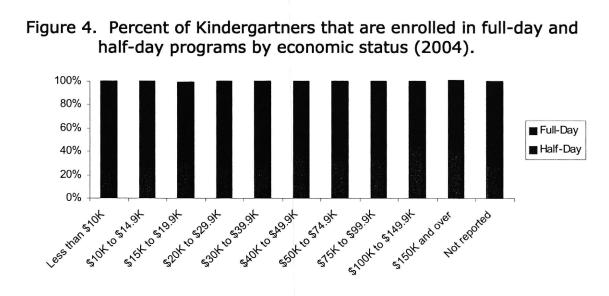


Source: US Census Bureau, Current Population Survey, October 2004 and previous years.

Income level does not play a significant role in whether or not kindergartners are enrolled in a half-day or full-day program (see figure 4).

Many schools offer scholarships for disadvantaged students to help pay for

any extra tuition that might be necessary.



Source: US Census Bureau, Current Population Survey, October 2004 and previous years.

The US Department of Education has left the responsibility of mandating kindergarten programs to the individual states. Therefore, not all states mandate kindergarten. Currently, only 42 states require districts to offer at least a half-day kindergarten program. Of those 42 states, only 13 states require that children actually attend. Requirements and offerings vary between states, districts and types of schools. Refer to appendix A for a complete list of state kindergarten guidelines.

Quality Kindergarten Programs

A quality kindergarten program is one in which all children are provided with developmentally and appropriate learning environments (see table 2). Small group activities, teacher-directed activities and childdirected activities are all necessary to ensure an excellent kindergarten program for all students. The following list of appropriate practices in an early childhood setting for five year olds was adapted from Bredekamp and Copple (1997).

| The What | The How |
|--|--|
| Educators help create a sense of community within the classroom. | Educators help establish friendships and relationships between children and adults. Educators should help students develop self- confidence in the learning and provide tasks in which children can be successful. Educators should design instructional activities based on the various levels and backgrounds of the students. |
| Educators create an environment that fosters learning and development for all children. | Educators should create an environment that allows children to be creative and explore. Environments should be conducive to all children and allow flexibility for different learning abilities and backgrounds. Children should feel safe and protected in this environment. Careful consideration to the daily schedule should be made to ensure children are getting enough play, rest and nutrition throughout the day. Learning experiences should be relevant to the child's own life using materials to help foster their learning. Activities are chosen to help children plan, think, choose their own learning and work with others. Educators should help motivate children to succeed and inspire them to be creative. Educators also aid in the development of social skills and self-control by modeling correct social behaviors. |

Table 2. Appropriate Practices for Kindergarten Classrooms

| The What | The How | |
|---|---|--|
| Educators should also be using appropriate curriculum. | Curriculum should be integrated within several subjects or developmental areas. Children should be able to connect the curriculum to their own lives and experiences. Curriculum should be understandable for the age level and written in a language that is appropriate for the child. Educators should use techniques that are appropriate to the child's developmental stage, including activities that utilize both gross-motor and fine-motor development skills. | |
| Educators should observe and assess all children's development. | Educators should adapt the curriculum to meet the needs of all children. Educators should communicate with parents about any concerns. | |
| Educators should have an open door policy with parents to ensure that the child's needs are being met. | Open communication, collaboration and feedback are important to establishing a great parent-educator relationship. | |
| Educators should be qualified to teach the appropriate level of student. | Program policies are in place to ensure the best environment for learning. | |

As society and technology change, how we teach kindergarten and what is appropriate today will further evolve. Children are more exposed to the real world through media and other channels than they were a decade ago. In addition, the various backgrounds of students have increased over the years. Educators consistently encounter children from diverse backgrounds especially related to ethnicity, socio-economic status, and linguistics. There has also been a shift in recent years for children in special education to receive as much of their instruction as possible in a regular education classroom. All these changes have forced today's educators to create curriculum that can be interpreted by many different children. Educators need to know the strengths and weaknesses of their students and families and adjust activities where necessary (Hatch, 2005).

Kindergarten Readiness

What makes a five year old not only ready for kindergarten, but for a full-day of education? Are they ready? What do we know about the development of children that supports sending our children to kindergarten for a full-day? These are questions that parents should be asking themselves when deciding whether a full-day or half-day program is right for their children.

Readiness is described as being prepared or, in this case, ready to learn both physically and emotionally. Young children can change drastically within weeks or months. Some concepts are easier to learn at specific ages or after other acquired knowledge has been learned. Even the way children play is determined by where they are developmentally with the fine-motor and gross-motor skills. Table 3 illustrates where kindergarten aged children are developmentally.

There are three main theories about kindergarten readiness: maturational, behaviorist, and constructivist. The maturational theory suggests that children will learn as they develop if given the time. G. Stanley Hall and Arnold Gesell developed the maturational theory in the early 20th century (Weber, 1969). Their ideals eventually replaced those of

Fredrick Froebel and were the main kindergarten philosophy for many years until the next theory emerged that believed children's behavior is already determined on a fixed timetable of events.

| Developmental Skill | Descriptions |
|----------------------------|--|
| Gross-Motor | Walks backwards, skips and runs Jumps over objects, walks on a balance beam Hops, jumps several steps, climbs, swims, & ride bikes High energy levels, never tired, seeks active games |
| Fine-Motor | Hits nail head with hammer, uses scissors and screwdrivers Uses keyboard Completes 15 piece puzzle, builds 3-dimensional block structures Dresses up dolls and assembles and disassembles objects Knows right and left Copies shapes and puts them together to form drawing, draws people, prints letters and name Dresses self effortlessly |
| Language and Communication | Vocabulary of 5,000-8,000 words Uses complex sentences Takes turns in conversations Shares experiences verbally Remembers lines of poems, TC shows or movies Uses pitch and infliction when speaking Uses nonverbal gestures Can tell and retell stories Shows growing speech fluency |
| Social and Emotional | Enjoys dramatic play with others Cooperates Understands rejecting others Enjoys others and will joke and tease to gain attention Shows less physical aggression, will instead use verbal abuse Follows instructions, may lie if not following orders Dresses and eats with minimal supervision. |

Table 3. Five Year Olds' Developmental Chart

*Source: Developmentally Appropriate Practice in Early Childhood Programs, 1997.

Maturation

As the child develops, their behavior becomes more complex. Growth and maturation are connected to each other. They believed that growth happens in sequential stages in all children, regardless of cultural, social, or economic backgrounds (Seefeldft & Wasik, 2002). In recent years, many critiques have called attention to this theory citing that it cannot apply to all children. Children are different and they come from different backgrounds that can influence their development. When initial testing of this theory was conducted, Gesell was studying Caucasian, middle class families. As the population of the United States school age children shifts, it would be interesting to see if the same results would be found.

Behaviorism

Completely opposite of the maturational theory of development, is the behavioral theory of development. While maturational theory believes that development is established within the individual, behavioral theory suggests that development comes externally rather than internally. B.F. Skinner is probably the most well known behaviorist. His ideas consisted of reinforcing desired behaviors. If a child performs a behavior, good or bad, it should be followed up with a response from the reinforcer, consequently, the behavior would likely happen again (Seefeldt & Wasik, 2002).

Edward Thorndike also contributed to behavior theory with his stimulus-response theory. In short, Thorndike believed that if a child had a negative or positive feeling after a behavior, it would determine whether or not the child would repeat the behavior. For example, if a child followed instructions and was praised by the teacher verbally, the child would most likely repeat that behavior the next time. On the other hand, if a child was doing something that was inappropriate and the teacher verbally scolded him, the child would most likely not repeat the behavior.

Constuctivism

The constructivist theory differs from maturational and behavioral theories by trying to further explain the complexities of human development. Constuctivism does not look at the individual and the environment separately, but examines development as the interaction between those two forces. Learners create their own knowledge by building on what they already know. The teacher creates an environment where the student can direct their own learning. Piaget is arguably the theorist who initiated much of the work on constructivist theory. He believed that children learned by interacting with their environment. Piaget thought that as children interacted with their environment, they develop concepts that are stored in their brain. The concepts continue to build onto each other to form more complex structures. The concepts are stored in the child's brain to be used

at different times throughout life. For example, a child may learn how to grab and shake a favorite toy. Having built that concept with the toy, the child will then learn to use that same concept in a different situation, perhaps with a glass or plate. Transferring one concept to another situation is what Piaget coined assimilation. If that same child attempts the same concept with something larger, the child may need to adapt to the new object. The child may not be able to grab and shake the new object and may have to grab and hold. Piaget termed this accommodation. Piaget also believed that we all have to adapt and through that adaptation we continually learn new things.

Piaget also identified four different stages of development: sensorimotor, preoperational, concrete operations, and formal operations (Piaget, 1969). Sensorimotor is the first stage of development that lasts until two years of age. In this first stage, a child is most likely going to repeat things that they find interesting. They will eventually move toward making interesting things last longer and eventually, by age two, they are solving simple problems. The preoperational stage lasts until the child is about seven years old. Children are able to pretend and have mental pictures. They are communicating and often view the world from their own point of view. Once a child can decenter, they move to the next stage. For example, in this stage, a child will look at two glasses filled with liquid. One glass is very tall and skinny, the other is short and really fat. The short

glass will contain more liquid, but the child will reply that the tall one has more liquid because it is taller. The next stage that a child will enter is the concrete operational. This stage lasts until about age eleven. In this stage, a child will know that four marbles in a line are the same as four marbles scattered. In this stage, a child will also learn how to group objects by characteristics. The last stage is the formal operations stage. In this stage, the child, around 12 years old, is beginning to have adult style thinking. The child is thinking in the abstract and is able to solve complex problems using logic (Boeree, 2006).

Vygotsky and Dewey also contributed to the constructivist theory. Vygotsky believed there were two developmental stages: one where the child can do problem solving independently and one where the child needs guidance (Seefeldt & Wasik, 2002). Dewey had similar beliefs, but he did not use the term constructivism. He coined his theory experimentalism. He believed that children learn through experience.

Maturation, behaviorism and constructivism all contribute to the kindergarten class of today. All provide unique ways of looking at childhood development and help educators to tailor classroom curriculum to best meet the needs of the children they teach.

Research Supporting Full-Day Programs

Hough and Bryde (1996) investigated the benefits and weaknesses of full-day kindergarten compared to half-day kindergarten. They sampled six full-time kindergarten and seven half-day schools, chosen by the Springfield, Missouri, Public Schools. They used a matched-pairs design. Students were compared based on geographical location, school size and socioeconomic status. A variety of quantitative and qualitative methods were used. Researchers conducted a hundred and fifty, hour-long observation for twenty-five classrooms. Focus groups were conducted with seven full-day students. Seven full-day teachers completed forty-five minute focus group. Report cards from all students included were sampled. Four hundred and seven parents and teachers completed a survey questionnaire. A student norm-referenced achievement test was administered to all kindergarten students in the sample classes. The researchers conclude that children attending full-day programs are provided a wider range of benefits than those that attend half-day programs.

Alber-Kelsay (1998) examined the effects of full-day kindergarten using reading achievement levels in first grade. The study examined children in an upper-middle class community in East Brunswick, New Jersey. The study used four sections of the "standardized" portfolio: Sight Development, Development Spelling Assessment, Running Record and a Reading Readiness Inventory (Alber-Kelsay, 1998). The assessment was

completed in the fifth month of first grade. Four classrooms participated. The researcher found that full-day kindergartens did achieve higher in first grade than their counterparts in the half-day program. Overall, she found that full-day kindergartners scored an average of 6.34 points higher in such tests.

An investigation by da Costa and Bell (2000) examined actual and perceived benefits of full-day kindergarten in terms of growth in play, problem solving, language, literacy and socioemotional development. Two kindergarten classes (one full-day and one half-day) were chosen to participate in this survey based on size and similar families served in an inner city in Western Canada. Interviews were conducted with both teachers, students' report cards were analyzed, and Clays Observation Survey was administered to students in February and in June. The survey assessed the development of non-readers and emergent readers in various subtests. Anecdotal comments in report cards and interviews were analyzed for emergent themes. Quantitative data was compared using ANCOVAs corresponding to the Clay Observation Survey. Significant differences were found in reading achievement between full-day kindergartners and half-day kindergartners. The research also indicates the full-day programs might be more beneficial for students of lower socioeconomic status and educational family backgrounds due to an increase in social and educational experiences.

Hildebrand (1997) compared the relative effects of half-day, extended day and full-day kindergarten in reading, writing, math and social behaviors in a Midwest, middle-class community. All kindergartners from the district in the 1992-93 school year participated in this study. Forty-seven students attended the full-day program and forty-four attended the half-day program. Kindergartners averaged 5.7 years of age. The kindergartners were administered the Test of Early Reading Ability-2 in October and April. The test assessed children on different literacy skills. The subjects were also administered the Test of Mathematics Ability in October and April. The test used manipulatives and pictures to assess children's ability in mathematics. In April, teachers rated the students' social ability using the Elementary Behavior Scale. This test measures classroom behaviors. Subjects were also administered the Concepts of Writing exam in October and April to assess the subjects' ability to construct meaning from alphabetic symbols. In the spring, an early childhood rater observed the classrooms to assess the developmentally appropriate practices. The researcher concluded the covariance of the full-day group scored significantly higher in reading, with no significant difference in math and writing.

Research Not Supporting Full-Day Programs

Nunnelley (1996) investigated students in Title I programs to determine if full-day programs greatly increased these students scores over

their peers in half-day programs. All students were from a low-income area in Indiana, and were enrolled in Title I programs. The principal investigator of the parent coordinator contacted randomly selected parents to discuss the risks and benefits of participating in this study. Parents signed a release and participated in an interview. Nine children participated in the study from the full-day program and ten participated from the half-day program. The researcher used the Early Childhood Environment Rating Scale to establish similar curriculum in the sample classrooms. In September and May, the teachers administered the Developmental Checklist of The Work Sampling System. The test measures expectations around developmentally appropriate activities in seven domains. Teachers also used The Peabody Picture Vocabulary Test. Demographic and attendance data was collected as well as library use and parental meeting attendance. This study concluded there weren't any significant differences in Title I students participating in full-day or half-day kindergarten programs.

A lot has been studied regarding kindergarten programs in the United States. Whether or not full-day programs or half-day programs are the right solution for children depends upon whom you talk to. While research shows both sides, all children are different and develop differently and should be viewed uniquely when making a decision about the type of kindergarten program that suits their needs and abilities.

Methodology

<u>School</u>

This research sampled one full-day kindergarten class with approximately twenty students. The full-day kindergarten class was chosen based on my previous relationship with the school, Chaska Kindergarten Center. The specific kindergarten classroom was chosen based on my relationship with the classroom teacher.

The Chaska Kindergarten Center, located in a mid-western suburb, is comprised of kindergarten students only. There are approximately 600 kindergarteners who attend the kindergarten center every year. All kindergartners in the entire district attend this school. In Minnesota, kindergarten attendance is not mandatory. However, children must be at least five years old by September 1st if they elect to attend kindergarten. The kindergarten center offers families the option of either a full-day kindergarten program is chosen, parents pay a supplemental fee for the other half of the day. The Chaska Kindergarten Center only provides oneway transportation for students in the full-day program. Parents must find alternate transportation for the other way.

The State of Minnesota has developed specific standards in education for kindergarten. Appendix B specifies the standards for kindergarten from the Minnesota Department of Education. Even though there are specific

kindergarten standards, there are differences between the full-day and the half-day kindergarten programs. In the full-day program, kindergartners are given specialist time. During that time, they work with a teacher who specializes in physical education. The half-day program does not receive this same component. The daily schedules for both the half-day and the full-day program are outlined in appendix C.

This research topic was selected based on my previous experience in the kindergarten setting. I conducted my student teaching in the half-day kindergarten program at the Chaska Kindergarten Center. At the time, the school was expanding their full-day program due to a significant increase in demand. The Chaska Kindergarten Center has been having an issue with keeping up with the demand. A lottery system was put into place to allow all families an equal opportunity to obtain space in the full-day program.

Parents were first notified about the full-day kindergarten program the year prior to their child attending kindergarten through their preschool, the school newspaper, or from word of mouth.

The Chaska Kindergarten Center welcomed all interested parents to a meeting in the spring informing parents about the full-day kindergarten program. Answers to parents' questions were addressed at this meeting as well as an explanation as to how to get their child enrolled in the full-day program.

In this meeting, a lot of parents were concerned about the program. As one mother said, "the parents were very opinionated and wanted a lot." The Chaska Kindergarten Center does offer before and after school daycare programs and while that helped many parents with the transportation issues, not all children could be enrolled in this after school program.

After considerable consideration by the Chaska Kindergarten Center, all families requesting full-day programming were provided the opportunity. Staffing and organizational changes were made to accommodate the growing desire of families to enroll in the full-day program.

<u>Participants</u>

All students from the selected kindergarten class were asked to participate in the research project. A consent form and a letter detailing the research project were sent home to all kindergarten parents. Over a period of three weeks, signed consent forms trickled into my home mailbox. Once the signed consent forms were received, telephone calls were made to each parent to set up a times and locations for the interviews. Of the twenty families, only five families volunteered for the research project. All five families were interviewed.

Interviews were usually conducted in the evening. Some interviews were conducted in the families' homes, others in restaurants, and some at their child's extracurricular events. All interviews were recorded with the

permission of the family. In all cases, I spoke with the mother of the family. Most of the mothers were in their mid to late thirties. The families were Caucasian and with both the biological mother and father living in the home. The children all had at least one brother or sister living in the home. All of the families were from a mid to upper economic background.

After the family interviews were conducted, an interview was conducted with the teacher of these students and the students themselves. Several observations of the full-day classroom and of the half-day setting were also conducted.

<u>Family Descriptions</u>

The Goodrich's have two children. Beth is five and enrolled in the fullday program at the Chaska Kindergarten Center. Her little brother, 2, is currently staying home with their mother, Mabel.

The Goodrich's consider their family to be in an upper economic bracket. Both biological parents are living in the house. The father works full-time out of the house and Mabel is transitioning between full-time out of the house work to becoming a consultant and starting her own business.

The Goodrich's have a huge support network in the neighborhood and within their extended family. They often take family vacations with their neighbors as well as have many family outings in the neighborhood. The neighborhood also provides Beth with lots of children to play with.

The Mainor family has two boys. Noah, 6, is enrolled in the full-day program at the Chaska Kindergarten Center. His brother, 4, is younger and stays at home with the boys' mother, Abby, all day. The Mainor family considers their economic background to be "a little on the high side." Both biological parents live in the home.

Noah has been diagnosed with autism. Prior to kindergarten, Noah had predominately stayed home with his mother. He did attend preschool a couple of days per week for a few hours.

Noah did not show any interest in learning prior to kindergarten. Abby was concerned about which kindergarten would be best for him. Regarding the full-day program, Abby was concerned, "I really didn't think that he could handle it." She talked with teachers, observed classrooms, and even talked with the district autism specialist.

Social skills are hard for Noah. In preschool, it took Noah an entire year to learn the names of his classmates. Even with academic skills, it takes Noah a "little longer and he needs to hear it more than once."

The Simpson family has two daughters. Mary, 6, is enrolled in the fullday program at the Chaska Kindergarten Center. Prior to kindergarten, Mary would stay home with her mother and attend preschool 3 days a week for a couple of hours. Their other daughter, Emma, 8, was not given the option of full-day kindergarten. Both biological parents live in the home. The Simpson's consider them to be in the upper middle class economic

bracket. Beth is a stay at home mother. In the Simpson neighborhood, there are a lot of families with children that act as a support network for Beth. Beth also has a lot of family members in the area.

Laura Johnson is a full-day kindergarten teacher at the Chaska Kindergarten Center. Her daughter, Sue, is enrolled in the full-day program at the Chaska Kindergarten Center. Both biological parents live at home. Sue also has a brother who lives in the home. He did not attend the full-day program, Laura adds, "If it would have been (offered), he probably would have been in all day also."

Prior to kindergarten, Sue was enrolled full-time in daycare with preschool in the mornings. She is a very talkative little girl. The Johnson's don't have many children Sue's age in the neighborhood. Laura has thirteen brothers and sisters in the area, but few with children Sue's age. Daycare was her outlet to play with kids. The daycare provider was an in-home provider and when the facility would close, Sue would sometimes come to school and hang out in the classroom.

The Lewis family lives in an older neighborhood. Martha Lewis' daughter, Cindy, who is 5, is enrolled in the full-day program at the Chaska Kindergarten Center. Her older brother, 9, also attended kindergarten at the Chaska Kindergarten Center, but did not have the option of attending the full-day program as it was not offered.

In the Lewis family, both biological parents live in the house and work full-time. They are from a middle class economic background. There are a lot of children in their neighborhood and Cindy has lots of family members in the area to provide support.

Prior to kindergarten, Cindy attended an in-home daycare. Since both parents work full-time having full-day coverage with as few transitions as possible was very important.

Data Gathering

Using qualitative research methods (Mills, 2003), parents were interviewed in a location of their choice regarding their decision to send their child to full-day kindergarten. Qualitative research is usually used in smaller research settings. This type of research focuses on why things are the way they are and in the case of this research project, why parents are making the decisions they are making. Qualitative research uses face-to-face interviews, observations, and recordings to document the data used to develop theory.

In-depth interviews were conducted with each of the participating families including parents and children (Taylor & Bogdan, 1984). In-depth interviews allowed for a more unstructured environment where sensitive and confidential information could be shared (Research Solutions, 2006). Openended questions were used to allow participants increased flexibility with

their responses. Parents and children met with me one-on-one to discuss my research project.

The interview questions included, but were not limited to: "What factors affected your decision to enroll your son or daughter in the full-day program?" "What were your expectations going into the school year?" "At this point in the school year, how would you describe the program?" "Would you recommend to others the full-day program?" "Do you think the full-day program is for all children?" As the interviews progressed, follow-up questions were asked based on parents' responses to gain a better understanding of the families' situation when making their kindergarten program decision.

The children were also interviewed during class hours on a video camera. Students were asked questions including: "What do you like about going to school all-day?" "What don't you like about going to school all day?" "Do you have any friends who go to half-day kindergarten?"

<u>Data Analysis</u>

Data was analyzed using grounded theory. Interviews were transcribed and coded to discern common themes. Grounded theory is the discovery of theory from data (Glasser and Strauss, 1967). Meaning, all theories were derived directly from the interviews that were conducted with participants. After analyzing all the interview transcriptions for common

themes, the dominant themes were sorted and further analyzed and compared among the families. Those dominant themes, themes that seemed to appear in interviews with all or a majority of the families, are the substance of this research project. The dominant themes were then expanded upon and researched further.

<u>Results</u>

After compiling and analyzing all the data recorded from the interviews with the five families that chose to participate, several themes began to emerge. Daycare is a major concern for the majority of the families. Ensuring that their children will be taken care of for the entire day with few or no mid-day transitions is a top priority. Another theme continuously mentioned throughout the interviews was the concept of greater academic achievement. Parents thought a full-day of kindergarten instruction would better prepare their child for first grade. Unique to the Chaska Kindergarten Center, is the concern for transportation. Currently, students' in the full-day program only have transportation provided one way. With many families working far from the home and school, this caused significant issues with getting children to or from school. Whether or not a five year old is ready for such a long and intense day is also a concern for the families. Most families cited that they weren't sure if all children could handle the day and they really analyzed their own child's maturity to determine the best program.

The following is an in-depth examination into each of these themes and what parents had to say regarding these important topics.

<u>Daycare</u>

For most families, daycare is an important issue. Where should I send my child? Who should watch my child? Does it work with my schedule? How does the child handle all these transitions? These are all important questions for today's families. For some families, full-day kindergarten programs can alleviate some of the stress that accompanies daycare issues.

I spoke with five families two of whom had a parent who did not work outside the home and was the primary daycare provider. The initial reasons for selecting a full-day kindergarten program differed between the two different types of families: those whose children needed some sort of daycare program and those whose children did not. In this section, I will reference the parents that do need daycare assistance.

Mabel Goodrich was very easy to speak with and she did not hesitate to let me know that "my first priority for deciding on all day kindergarten was to make sure that she (Beth) would be covered while I worked full-time if that was the case." When Mabel first made the decision to send Beth to full-day kindergarten, she "was actually working a full-time job and so I was between working full-time, becoming a consultant, starting my own business and I didn't know if I was going to be working full-time and I needed to have the full-time care for her."

According to Mabel, "Alphabet Junction (daycare center) was where she was. I guess they bus the half-day kindergartners back and forth. So I

would have done that. But that was certainly not my first choice." Mabel was concerned about all the transitions that Beth would have in one day. Mabel's choices were to have her stay in one place the whole day or transition between two different places. It seemed like a better fit for Beth to have the least number of transitions in the day. When it came down to making the decision, Mabel replied, "Really it came down to making sure that she would be somewhere all day while I worked."

Daycare support was not the primary reason the Lewis family chose to utilize the program, but it was a major concern. "Both Dave and I work daytime hours and we didn't want to take her to daycare and then have her bused for half-day and then bused back home. We take her to school. She goes to school in the morning. She goes to Club Care in the afternoon and we pick her up from Club Care and she comes home. It is just a nicer transition." Martha Lewis considered other options for her daughter as well. Her other options were to send her to half-day and to daycare for the other half day or "we actually considered all day kindergarten through the Catholic school downtown." But after a cost analysis, "it would have been more expensive to do that."

The Johnson family is unique to this study. Mrs. Johnson is a teacher in the full-day program at the Chaska Kindergarten Center. Daycare was not the primary reason that the Johnson family chose the full-day program; however, it was a concern since both parents worked full-time. Laura really

"wanted her (Sue) next to me" for one year and since Laura is a teacher at the Chaska Kindergarten Center, she understood the benefits of the full-day program.

I went into this study thinking that daycare was the primary reason that most people chose the full-day program over the half-day program. And while my sample size is small, I didn't find that to be the overriding factor. While it was discussed in all my interviews, half of the sample did not need to provide daycare for their child due to their own family situations. Those that did not need to provide care had other reasons for sending their child to the full-day program. The other half of the research sample did need to consider what they would do with their child if he or she were not in a full-day program. They would need support to care for their child the rest of the day.

Academic Achievement

Current research suggests there are academic gains in the full-day program above those in the half-day program. In the full-day program, students are spending more time on academic skills. The amount of time that is spent on one skill in the half-day class could double in the full-day program. In response to increasing demands to show adequate yearly progress in reading and math scores in third grade, schools are moving

toward longer kindergarten days to provide more preparation for students (ECS, 2005).

All five families interviewed did cite greater academic opportunities as a primary reason for selecting the full-day program. All families felt that their child would benefit from the extra time spent on developing their skills.

From Beth Simpson's point of view, "I felt like the half-day was a little bit of a glorified preschool." Beth felt that Mary would be "more advanced because of having all that extra time" in a full-day environment where there is more time spent on building those academic skills. She added, "It seems like they have more time to do different things and again there is more variety." Beth remembers from the full-day kindergarten presentation, the school administrators said "by January they were already where the half-day kids will be in May."

Beth has also noticed some differences in the academic achievement between her two daughters. "Mary is already doing stuff that Sarah (her older daughter) didn't do until first grade." She does acknowledge, "there is such a difference in personalities with my kids and being the second child...It's hard to say if it's the all-day or not."

When deciding on the full-day program for Noah Mainor, a lot of care and consideration went into this decision. Abby Mainor visited different classrooms, spoke with the autism specialist and sought a lot of advice on the subject. The district autism specialist "really thought that Noah could

handle it (the full-day format)", so they decided to try it always keeping in mind that if it didn't work, they could switch him to the half-day program.

The full-day program is working very well for Noah. According to Abby, "he needs time and he needs reinforcement." With all the extra time in school, Noah is getting the time he needs to really think about things. Abby is "amazed at the math skills that he is picking up and the reading he is already doing." Prior to school, Noah didn't "really show any interest and I tried with him, but he put the brakes on. So it has been really good."

The Goodrich family started the program with the primary focus of it being a substitute for daycare. In her previous daycare environment, there were some academic benefits, but very little. Mabel felt, "there wasn't enough variety. They didn't really have an outdoor play area. It was like they spent the whole day in the exact same room." Mabel really felt Beth could benefit from the extra instruction of the full-day program. Mabel was actually surprised by how well her daughter had progressed so far, "she is already reading me first stage books." Mabel was "impressed with the amount of learning time they're getting."

When the time comes to make the kindergarten program choice for their son, the Goodrich family will base their choice more on the academic gains rather than on the daycare support. When asked about her son's future, Mabel replied, "I would want him to have the same kind of start."

Laura Johnson has been a teacher at the Chaska Kindergarten Center for several years. Every year she sees the benefits of the full-day program among the children. Writing is one area with the greatest academic gains. There is a noticeable difference between the full-day students and the halfday students. Laura explained to me, "Writing is one of the big ones. I see more than in the half day. As far as being able to write phonetically, maybe they write three words. You get your half-day kids there but I believe I've gotten my all-day kids to paragraphs." After seeing and believing in the full-day program, Laura didn't hesitate enrolling her child in the full-day program. Laura "liked the structure of all-day and the learning going on all day. I just liked how she would learn something all day and interact with kids her own age."

Since Laura is also a teacher of the full-day program, she also was able to cite specific examples of greater academic achievement such as the writing. She also identified children who are more likely to succeed in the full-day program, "they have to want to be there and ready to learn at all times." She also added, "Some of mine that are at a higher level are adjusting better to the all-day program. Probably because they don't struggle with it if they understand most of the concepts."

I asked Laura to explain to me exactly what the children are getting in the full-day program as compared to the half-day. Laura replied:

Probably just more of things. I know in the half-day, we usually do a theme. You take the theme and you do an art or math on that topic. You might be able to throw a little language arts and maybe a little extra math and get that in. While in the all-day, you get to do the math curriculum and you get to do the language arts. So it's like you get to do all the things all the time, not just putting them here and there in the half-day.

I also asked her if she felt the half-day children were more at a disadvantage than the full-day kids. Laura didn't think so, " you're getting more, but if you take the objective that you have to get them to learn, you're giving them more ways to learn it and more exposure in the all-day, but you still have to get them to learn it in the half-day. So you focus more on that in your short time. In all-day you just have more time."

Since Cindy did not show any interest in academics, Martha Lewis chose the full-day program to help stimulate her. "She liked to have stories read to her but had no interest in writing her name, learning how to say the alphabet, colors, numbers, or anything like that. I was kind of concerned." Martha felt "all-day kindergarten would give her a little bit of an extended day to learn the concepts and focus on it." In the end, the Lewis' found out that Cindy was "actually pretty interested in it (academics)." Martha added, "She is just not interested in spitting out the material. For that opportunity, we thought it was the perfect thing for her."

The children realized they were learning in kindergarten a variety of different things. One little boy explained to me how he is "learning stuff that you could really use." He went on to say that he "liked spelling words and math." Another little girl explained to me about stations, "It's really fun in stations. You get to do different things. There is a thing...we are at beauty (station theme, things that are beautiful). Well, we don't actually learn stuff, we just make stuff." So, maybe they all did not realize they were learning while they were playing.

The all-day kindergarten receives something called specialist time, which is not offered to the half-day students. Here is what one child had to say about specialist time, "Specialist is when we go with Ms. Smith and we do some activities. This week, we are doing soccer. Sometimes we do tag. We play dance tag. We play freeze tag. We play flower tag and we play leap frog tag." Another student added, "We play tag and all kinds of cool stuff."

All of the families interviewed recognized the academic gains that were possible in a full-day setting. If academics weren't their primary decision making factor, it was their second. The parents believed their children would not be as far along as they were without the additional instruction time and the extra cost of the program was worth the head start their children received.

Transportation

Another important issue with these families was transportation. Currently at the Chaska Kindergarten Center, parents of full-day students are bussed one way and the parents are responsible for finding alternate transportation for the other way. Because of the way the school is structured, depending on where you live, the bus will either pick you up in the morning or drop you off at night. All children in the district go to the same kindergarten center. Some cities in the district are enrolled in the morning half-day program and others are enrolled in the afternoon half-day program. Therefore, when a family chooses the full-day program they will either get transportation to or from school depending on where they live. School begins at 8:40 and ends at 3:10. This poses a problem for many working families. Most parents start work prior to 8 am and work until after 5 pm.

According to Beth Simpson, "I have to drive Mary to school every morning, that was a huge issue for most people because they needed bus transportation or they needed some other way (to pick up their child) because they had to be at work."

The Chaska Kindergarten Center does offer a before and after school program for those children who cannot be picked up or taken home in either the morning or afternoon. Unfortunately, only a limited number of students can utilize this program.

The issue of transportation was a major concern for a lot of parents at the initial informational meeting. At that time, they were told that the daycare option would be available, but only a small percentage of children would be able to utilize it. Of the five families I interviewed, all the families whom needed their children in the program were able to use it.

This program benefited the Goodrich family, "I enrolled her in Club Care. I needed to have that backup in case I was working full-time. That goes until 6 pm and I usually try and pick her up if I am not working somewhere between 3:30 and 6:00."

The Lewis family also utilized the program for their daughter. Martha explained to me, "We take her to school. She goes to school during the day. She goes to Club Care in the afternoon and we pick her up from Club Care and she comes home. It's just a nicer transition."

The parents I interviewed who used Club Care felt that having the option of their child staying at the school was a better option than having them bussed somewhere else for a few hours.

One concern regarding transportation was the length of the bus ride. According to Abby Mainor, "It just works out that we are the first pick up and the last stop and it's a twenty-five minute bus ride. And I didn't think he (could handle it). I thought he was going to get to school and he was just going to be through the roof. I just decided no, but it's tough because he still asks about it."

Transportation was an inconvenience for the parents interviewed. However, it appeared all families were working around whatever problems they faced. I asked one girl how she felt about going to school all-day and she responded, "I would rather go to half-day because then I could ride the bus."

<u>Kindergarten Readiness</u>

Are five years olds ready for a full-day of instruction? Nothing in my literature review suggested five year olds could not handle the full-day program provided the kindergarten curriculum was designed specifically for their developing bodies and minds. I spoke with the families about whether or not all kindergartners should be in the full-day program and if they thought most kids would be ready for it.

Mabel Goodrich felt her daughter was "very mature. She really is selfpossessed. She is not one of those kids who has a short attention span or runs around with a lot of energy she needs to work off. She has always been one that would just sit down and play at the table for several hours. So she stays focused a lot more than a lot of five year olds." Mabel didn't think that the format would work for everyone, "I don't know emotionally and chronologically from a development standpoint if most five year olds are ready for all-day like that." When asked about whether she will send her son next year, she hesitated, and stated she didn't "know if it would be the

same experience for him because he does have a short attention span and he is more immature for his age than she is."

Abby Mainor felt her son was better prepared for first grade, "his body would be more prepared for it (first grade)." She is "really nervous about the transition to first grade. But I think since he has been in all-day that is really going to be a huge, huge help. First grade is going to be a whole new ball game with those bigger kids."

Laura Johnson, who also teaches the full-day program, finds that "some are ready and some just aren't ready to be there that long." She feels that the child's maturity level plays a huge role in whether or not a child is ready for the full-day kindergarten program. She explains "it's more about their social skills if they are successful at all-day."

Since social skills seem to play a part in the success of the child in a full-day program, I asked the children about their social skills. One child responded, "I am not so good at jobs, because I am slow. I never get any playtime. But I just have to focus, but I can't focus because I am just so happy. I just like to say other things." Another child, when questioned about friends, responded, "They are all my friends." Another responded, "Everyone (is my friend)."

All the families interviewed hesitated to say that the full-day kindergarten program was for every child. Most families felt if the day could be shortened from six and a half hours down to about four hours, more

children would be ready and could benefit from the extended day. Laura Johnson, a teacher at the Chaska Kindergarten Center would like to see the all-day program a little shorter. Laura explained to me that, "two and a half hours is too quick, you're kind of rushed, but six and a half gets a little long. By the afternoon you start seeing behaviors and where they can't focus as well." She added, "Some are ready and some just aren't ready to be there that long."

Chaska Kindergarten Center teacher, John Carlson, spoke recently with the Chanhassen Villager regarding full-day kindergarten:

Children come in at different levels. We teach to each of them, but there are some things to look at when choosing the best program for your child. Each program has transitions. There's group time, snack time and outside time. They have to put things away, get in line or sit and listen to a teacher for 10 minutes at a time. The difference between programs is the number of transitions a child has to perform in full-day...Self-skills are important. They'll have to go the bathroom or dress themselves more often in full-day.

<u>Summary</u>

Daycare, academics, transportation and readiness are all concerns for today's kindergarten families. This research was conducted in a suburb of a growing US city where the commute and work hours are growing. Daycare

is a very important topic for today's families that must be considered when any decision is being made. The families in this research only represented a small majority of the many different family situations in America. Ensuring that a child will have care outside of school is not to be taken lightly. These families all had to find solutions that would ensure their child would be properly cared for. In some instances, the children had mom to come home to. In other cases, the child could attend an after school program or play in her mother's classroom. Whatever the situation, the families in this study looked to find ways for their children to have the least amount of transitions throughout the day when making their decision between the all-day kindergarten program and the full-day program. In some cases, this was the overriding factor in choosing the full-day program.

Parents want their kids to excel. The parents in this study were not any different. The parents sampled knew the benefits of attending an allday program. They cited over and over again how much extra time the children received to master tasks. They saw the dramatic improvement in their own child's academic ability. They felt that this would help give them the confidence they needed going into first grade.

Transportation is an important issue with the Chaska Kindergarten Center. Currently, parents have to provide their child's own transportation for at least one direction. As parents commute further and further to work, this poses a significant issue. The families I sampled have been able to make

alternate arrangements utilizing the Club Care program provided by the school if additional daycare is needed. Other families have a parent at home to pick the child up. Since space is limited in the after school program, many families have to find alternative solutions to the transportation issue.

While the families interviewed were supportive of the full-day program, they still weren't sure if all children would be successful in this format. The families examined their own children to determine maturity level, academic level, and social level when making this important decision in their child's education. Jeannie Hanzlik, an all-day teacher at the Chaska Kindergarten Center, spoke with the Chanhassen Villager regarding the all-day program, "We believe one program is not better than the other. But your child may be better suited with one of the programs." The principal, Jim Miller, adds, "Every child is different with a wide range of abilities."

Conclusion & Recommendations

This research study was designed to discover how families of full-day kindergarten children viewed the full-day program. I expected to learn that more of the families used the full-day program as a substitute for a day care provider, but that was not the case. I discovered the families are much more aligned with the academic piece of the additional instruction. Parents want their children to exceed and to have a head start going into kindergarten. The parents noticed how much their children learned compared to where they were at the beginning of the year and compared to their siblings.

Parents who felt their children were ready for a full-day environment cited their children as being more mature and ready. They all researched the program to see what would be expected in the curriculum. Some families even consulted specialists in the district to make sure their child could handle the additional time.

All of the parents interviewed were really happy with the Chaska Kindergarten Center. They could not speak more highly of the school. When asked how to improve, most of the families fumbled for words. The families love the environment, commenting on how safe the kindergartners felt there and how great it was the principal is primarily focused on only kindergartens. They felt this really ensured the needs of their children were being met.

The families studied were very similar in economic, social and cultural backgrounds. Further research should be conducted with families of different backgrounds to determine if any of these ideas presented in this research study could be generalized to a larger audience.

Recommendations

All of the families had specific recommendations for making the Chaska Kindergarten Center better than it already is. One thing most of the parents wanted to see was to add a foreign language into the curriculum. As Mabel Goodrich puts it, "It's important for the kids to have an appreciation of diversity and differences in the world and it broadens their horizons to appreciate other cultures. So I think it is good to learn a foreign language."

Another issue that parents mentioned frequently was the length of the day. Full-day students stay at school for six and a half hours. Half-day students are only there for two and a half hours. Most parents felt a slightly shorter day, one that would be accessible to all students would be more beneficial. For five and six year olds, they felt the day was a little too long. With a shorter day, increased busing would be needed. However, in this district, that would be an addition to the transportation system now. All schools in the district use the same buses for transportation. The schools' start and end times are staggered for this method to work.

I think it would be beneficial if there were additional guidance around full-day kindergarten program readiness. Schools should develop a tool to help parents identify characteristics in their own child that may signify success in a full-day program. Many teachers cited social skills as an indicator of possible success in the full-day kindergarten program. If parents could evaluate their child to determine the correct kindergarten program, fewer kids would fail in kindergarten. Children placed in a full-day program who are not yet ready for it, could possibly fail. As a result, they may have less self-confidence going into the first grade and fail. If those children were placed in a half-day kindergarten class and were successful, they might have more self-confidence in first grade and in turn, remain a successful student.

Referring back to table 3, if social skills do impact the success of a fullday kindergartner, we should ensure parents are familiar with the activities that a five-year old can do. In a full-day setting these activities are performed multiple times throughout the day. Being successful at these routine skills may correlate to success in a full-day program.

Building a solid kindergarten curriculum was also highly recommended. When asking the children what they like about kindergarten, one girl said, "I have the same answer for my mom and my dad. I like the playground a lot." Another boy responded, "Recess." Throughout the interviews with the kids, playing kept coming up over and over. One little girl responded, "We

play all day. We learn all day. Its like, when we do our jobs, we're playing stuff." It is important to get the correct balance of physical activity and mental stimulation. The kindergarten curriculum should be designed to foster both areas of growth.

At the Chaska Kindergarten Center there is limited space for full-day kindergarten. Therefore, a lottery was instituted to determine which children could enroll in the program and which children could not. I believe there are academic, as well as other benefits to the full-day program. It would be nice to see all children who wanted to enroll in the program be allowed to attend the full-day program. To do this, more space, teachers and funding would be required. At the Chaska Kindergarten Center, parents supplement the cost of their child attending the full-day program; therefore, making it not accessible to all children. Currently, there is legislation to provide full-day funding for all kindergarten students in the State of Minnesota. In Minnesota, only 31% of kindergartners attend full-day kindergarten compared to 63% nationally (Education Minnesota, 2007). It is time for kindergarten education to become a priority in the State of Minnesota.

Self-Reflection

As I reflect back on the past two years, I am reminded of a roller coaster ride I took as a child. At times the ups and downs seemed like mountains and at others times like small hills. The process for this research was broken down into many smaller parts, or hills. The roller coaster slowly cranks up the hill and then quickly zooms down. That is how I equate this project. There have been times when I just didn't think that I would ever make it to the top of the hill. Then the roller coaster would send me on the fast track only to get slowed down on the next hill.

The biggest obstacle of this journey was the birth of my daughter. The pregnancy in the middle of my research really slowed the roller coaster as it was going up the largest hill. Thankfully, after she was born the roller coaster reached the peak of the mountain and I started to zoom back down the track.

There were smaller obstacles to overcome as I moved around the track. The IRB was a grueling process that was both frustrating and rewarding. It was frustrating how precise everything had to be, but rewarding because it helped me to learn new skills, patience and perseverance. When I found out I was pregnant, I wanted to make sure the majority of the work had been completed prior to delivery. I was working two jobs and attending school. In the beginning all my focus had to be in getting passed the IRB phase, especially since the IRB committee had

limited meeting times. Once the IRB was approved, I quickly sped down the roller coaster track until the next hill came lurking around the corner, the symposium. The final presentation had to be completed during one of two symposiums in the year. The second symposium was scheduled around my due date and I knew that would by pressing my luck if I tried to be ready for that one. I was currently working two jobs during this time, but I had to get my thesis close enough to completion in order to participate in the first symposium. Luckily, I did get all my research conducted and the paper written in a very rough draft form in time to present at that first symposium. After my presentation, I felt, once again, a sense of zooming down another hill on the roller coaster ride.

For the next couple of months, my roller coaster went very slowly. At the very end of a roller coaster ride, there is always the flat part of the track where the cars go really slow before pulling into the dock. For me, this part of the ride took the longest. It wasn't until after my child was born that I picked up a little speed to finally park the roller coaster in the dock and get off the ride.

I have never worked on a project that demanded as much time or effort. This project taught me how to stay focused, or when the focus seemed to diminish, how to refocus and how to reenergize. It was a long, grueling process. Looking back, I believe it has made me a better person. I have certainly learned a lot about families and kindergarten.

I also learned a lot about myself. Had there been more strict deadlines, I probably would have gotten this thesis completed a long time ago. However, since there weren't any hard deadlines, other things in my life kept taking priority. I needed more structure. I need someone to keep telling me to keep going. In the end, my mother and mother-in-law helped me by setting deadlines. If I met their deadlines a fabulous reward was waiting for me. I didn't hit their deadlines, it was a little unrealistic since I was caring for a newborn, but it did motivate me and I ended up not surpassing their timeline by too much.

I also felt a tremendous amount of guilt because I still had this almost completed thesis sitting in my office. The paper and the research were all completed, I just need to make some revisions and publish it in order to get my degree. The guilt of being so close and not getting it done, helped me start back up and finish it.

The roller coaster ride has now pulled into the dock and I am ready to get off. I have enjoyed the ride, even during the most challenging of times. There were times when I just wanted to jump off in the middle of the ride, but I knew that I would regret that for the rest of my life.

When my daughter turns five and we are discussing her options for kindergarten, what I have learned here will help us make the right decision for her. I had no idea there would be so many issues to consider when deciding which kindergarten program to send her. To be honest, I always

thought I would send her to full-day simply because my husband and I both work full-time. We would need to know that she is being taken care of all day. After completing this research project, I now know I would not use that reasoning as my sole rationale for sending her to the full-day program. My husband and I will have to sit down and evaluate how ready she is both emotionally, socially, and cognitively.

References

Alber-Kelsay, K. (1998) Full-Day Kindergarten vs. Half-Day Kindergarten: The Outcome of First Grade Reading Achievement. *Kean University.* May 1998.

Beatty, B. (1995). *Preschool education in America: The culture of young children form the colonial era to the present.* New Haven, CT: Yale University Press.

Boeree, George. (2006) *Jean Piaget.* Retrieved on May 28, 2006 from <u>http://www.ship.edu/~cgboeree/piaget.html</u>

BredeKamp, S., Copple, C., (1997) *Developmentally Appropriate Practices in Early Childhood Programs.* Washington, D.C.: National Associations for the Education of Young Children.

Bryde, S., Hough, D. (1996). The Effects of Full-Day Kindergarten on Student Achievement and Affect. *Annual Conference of the American Educational Research Association.* New York, NY. April 8,1996.

da Costa, J., Bell, S. (2000) Full Day Kindergarten at an Inner City Elementary School: Perceived and Actual Effects. *Annual Conference of the American Educational Research Association.* April 24, 2000.

Education Commission of the States. (2005) *Kindergarten.* [On-line]. Available: <u>http://www.ecs.org/html/issue.asp?issueid=77&subissueid=0</u>

Education Commission of the States. (2005) *Full-Day Kindergarten: A Study of State Policies in the United States.* [On-line]. Available: <u>http://www.ecs.org/clearinghouse/62/41/6241.pdf</u>

Education Minnesota. (2007) *Education Minnesota Identifies Legislative Priorities for '07*. [on-line]. Available: http://www.educationminnesota.org/index.cfm?PAGE ID=17499

Friedbauer, C. (2007, January 18). First Test: half-day or full-day kindergarten. <u>Chanhassen Villager</u>, pp7.

Glasser, B.G., Strauss, A.L. (1967) *The Discovery of Grounded Theory: Strategies for Qualitative Research*. NY: Aldine DeGrugter.

Hatch, J. (2005) *Teaching in the New Kindergarten*. Canada: Thomas Delmar Learning.

Hildebrand, Charlene. (1997) Effects of All-Day, and Half-Day Kindergarten Programming on Reading, Writing, Math, and Classroom Social Behaviors. *Elementary and Early Childhood Education*.

Mills, Geoffrey E. (2003) *Action Research: A Guide for the Teacher Researcher.* New Jersey: Merrill Prentice Hall.

National Association for the Education of Young Children. (2006). *History of NAEYC.* Retrieved on May 14, 2006 from http://www.naeyc.org/about/history.asp

National Association for the Education of Young Children. (2006). NAEYC: Mission and Goals. Retrieved on May 14, 2006 from http://www.naeyc.org/about/mission.asp

National Center for Education Statistics. (2006) *Full-day and Half-Day Kindergarten in the United States: Findings from the Early Childhood Longitudinal Study, Kindergarten Class of 1998-99.* Retrieved on May 9, 2006 from http://nces.ed.gov/pubs2004/2004078.pdf

Nunnelley, J. (1996). The Impact of Half-Day versus Full-Day Kindergarten Program on Student Outcomes: A Pilot Project. *Indiana University Southeast.* March 1996.

Piaget, J. & Inhelder, B. (1969). *The Psychology of the Child*. New York: Basic Books.

Rafoth, Mary Ann, Grimes, Sara, Buzi, Beth. (2004). *Kindergarten – Full Versus Half-Day: Information for Parents and Early Childhood Educators.* Retrieved May 13, 2006 from http://www.naspcenter.org/assessment/kindergarten_ho.html

Research Solutions. (2006). *Indepth-Interviews.* Retrieved December 31, 2006 from <u>http://www.researchsolutions.co.nz/in_depth_interviews.htm</u>

Seefeldt, C., & Wasik, B. (2002). *Kindergarten*. New Jersey: Merrill Prentice Hall.

Smith, Mark. (2005). *Fredrick Froebel*. Retrieved on May 9, 2006 from <u>http://www.infed.org/thinkers/et-froeb.htm</u>

Taylor, S.J & Bogdan, R. (1984). *Introduction to Qualitative Research Methods: A Search for Meaning*. New York: John Wiley & Sons.

U.S. Bureau of the Census. (2006). S*chool Enrollment*. Retrieved on May 13, 2006 from <u>http://www.census.gov/population/www/socdemo/school.html</u>

Watson, Bruce. (1997). *Kindergarten.* Retrieved on May 14, 2006 from <u>http://www.geocities.com/Athens/Forum/7905/fblkind.html</u>

Weber, Evelyn. (1969). *The Kindergarten*. New York: Teachers College Press.

Appendices

Appendix A

| Table 4. | State | Kindergarten | Requirements |
|----------|-------|--------------|--------------|
| | | | |

| State | Kindergarten Entrance Age | Kindergarten Offered | Kindergarten Attendance | Full-Day Kindergarten Offered | Full-Day Kindergarten Attendance |
|---------------|------------------------------|-------------------------|----------------------------|-------------------------------------|--|
| Alabama | 5 by 9/1 | Mandatory | Permissive | Mandatory | Permissive |
| Alaska | 5 by 8/15 | Permissive | Permissive | Permissive | Permissive |
| Arizona | 5 by 9/1 | Mandatory | Permissive | Permissive | Permissive |
| Arkansas | 5 by 9/15 | Mandatory | Mandatory | Mandatory | Permissive |
| California | 5 by 12/2 | Mandatory | Permissive | See Note 1 | See Note 1 |
| Colorado | Not Specific | Mandatory | Permissive | Permissive | Permissive |
| Connecticut | 5 by 1/1 | Mandatory | Mandatory | Permissive | Permissive |
| Delaware | 5 by 8/31 | Mandatory | Mandatory | Permissive | Permissive |
| Florida | 5 by 9/1 | Mandatory | Permissive | Permissive | Permissive |
| Georgia | 5 by 9/1 | Mandatory | Permissive | Mandatory | Permissive |
| Hawaii | 5 by 12/31 | Mandatory | Permissive | Permissive | Permissive |
| Idaho | 5 by 9/1 | Permissive | Permissive | Permissive | Permissive |
| Illinois | 5 by 9/1 | Mandatory | Permissive | Permissive | Permissive |
| Indiana | 5 by 7/1 | Mandatory | Permissive | Permissive | Permissive |
| Iowa | 5 by 9/15 | Mandatory | Permissive | Permissive | Permissive |
| Kansas | 5 by 8/31 | Mandatory | Permissive | Permissive | Permissive |
| Kentucky | 5 by 10/1 | Mandatory | Permissive | Permissive | Permissive |
| Louisiana | 5 by 9/30 | Mandatory | Mandatory | Mandatory | Mandatory |
| Maine | 5 by 10/15 | Mandatory | Permissive | Permissive | Permissive |
| Maryland | Not Specific | Mandatory | Permissive | Permissive | Permissive |
| Massachusetts | Not Specific | Mandatory | Permissive | Permissive | Permissive |
| Michigan | 5 by 12/1 | Permissive | Permissive | Permissive | Permissive |
| Minnesota | 5 by 9/1 | Mandatory | Permissive | Permissive | Permissive |
| Mississippi | 5 by 9/1 | Mandatory | Permissive | Mandatory | Permissive |

| State | Kindergarten Entrance Age | Kindergarten Offered | Kindergarten Attendance | Full-Day Kindérgarten Offered | Full-Day Kindergarten Attendance |
|------------------|------------------------------|-------------------------|----------------------------|-------------------------------------|--|
| Missouri | 5 by 8/1 | Mandatory | Permissive | Permissive | Permissive |
| Montana | 5 by 9/10 | Mandatory | Permissive | Permissive | Permissive |
| Nebraska | 5 by 10/15 | Mandatory | Permissive | Permissive | Permissive |
| Nevada | 5 by 9/30 | Mandatory | Mandatory | Permissive | Permissive |
| New Hampshire | Not Specific | Permissive | Permissive | Permissive | Permissive |
| New Jersey | 4-6 | Permissive | Permissive | Permissive | Permissive |
| New Mexico | 5 by 9/1 | Mandatory | Mandatory | Permissive | Permissive |
| New York | Not Specific | Permissive | Permissive | Permissive | Permissive |
| North Carolina | 5 by 10/16 | Mandatory | Permissive | Mandatory | Permissive |
| North Dakota | 5 by 9/1 | Permissive | Permissive | Permissive | Permissive |
| Ohio | Not Specific | Mandatory | Mandatory | Permissive | Permissive |
| Oklahoma | 5 by 9/1 | Mandatory | Mandatory | Permissive | Permissive |
| Oregon | 5 by 9/1 | Mandatory | Permissive | Permissive | Permissive |
| Pennsylvania | Not Specific | Permissive | Permissive | Permissive | Permissive |
| Rhode Island | 5 by 9/1 | Mandatory | Mandatory | Permissive | Permissive |
| South Carolina | 5 by 9/1 | Mandatory | Mandatory | Mandatory | Permissive |
| South Dakota | 5 by 9/1 | Mandatory | Permissive | Permissive | Permissive |
| Tennessee | 5 by 9/30 | Mandatory | Mandatory | Permissive | Permissive |
| Texas | 5 by 9/1 | Mandatory | Permissive | Permissive | Permissive |
| Utah | 5 by 9/2 | Mandatory | Permissive | Permissive | Permissive |
| Vermont | 5 by 1/1 | Mandatory | Permissive | Permissive | Permissive |
| Virginia | 5 by 9/30 | Mandatory | Mandatory | Permissive | Permissive |
| Washington | 5 by 8/31 | Mandatory | Permissive | Permissive | Permissive |
| West Virgina | 5 by 9/1 | Mandatory | Mandatory | Mandatory | Mandatory |
| Wisconsin | 5 by 9/1 | Mandatory | Permissive | Permissive | Permissive |
| Wyoming | 5 by 9/15 | Mandatory | Permissive | Permissive | Permissive |

Source: Data compiled form the Education Commission of the States, 2006.

1. CA EDUC § 46111 states that no kindergarten student should be kept in school for more than four hours a day, exclusive of recesses, except for pupils in Early Primary Programs. Early Primary Programs are defined as "an integrated, experiential, and developmentally appropriate educational program for children in preschool, kindergarten, and grades 1 to 3, inclusive, that incorporates various instructional strategies and authentic assessment practices, including educationally appropriate curricula, heterogeneous groupings, active learning activities, oral language development, small-group instruction, peer interaction, use of concrete manipulative materials in the classroom, planned articulation among preschool, kindergarten and primary grades, and parent involvement and education."

Full-day kindergarten is prohibited in one section of the education code and allowed in another. CA EDUC § 46111 prohibits kindergarten from exceeding four hours (excluding recesses) unless children are participating in an Early Primary Program as allowed under CA EDUC § 8970-8974. CA EDUC § 8973 specifically states that kindergarten may exceed four hours if the program is not longer than the other primary grades and if there are opportunities for both active and quiet activities.

Appendix B

Table 5. Minnesota State Kindergarten Standards

<u>Art</u>

Standard: The student will understand and use artistic processes to create, perform, and interpret art works in at least two of the three arts areas required to be offered by a school from the following: dance, music, theater, and visual arts.

Benchmark:

A. DANCE. The student will:

- 1. understand the elements of dance, including action, space, time, and energy;
- 2. understand the characteristics of dance from a variety of cultures and historical times;
- 3. use basic movement skills in musical or rhythmic contexts; and
- 4. create and perform sequences of movement with a beginning, middle, and end to communicate a story, life experience, theme, or idea.
- B. MUSIC. The student will:
 - 1. understand the elements of music, including melody, rhythm, harmony, dynamics, tone color, texture, and form;
 - 2. understand the characteristics of music from a variety of cultures and historical times;
 - 3. sing a varied repertoire of songs in a group;
 - improvise and compose on classroom instruments to communicate an idea;
 - 5. play simple rhythms and melodies on classroom instruments; and
 - 6. read and write music using a system of notation.
- C. THEATER. The student will:
 - 1. understand the elements of theater, including plot, theme, character, language, sound, and spectacle;
 - 2. understand the characteristics of theater from a variety of cultures and historical times;
 - 3. use movement, sound, and language to create images and express ideas;
 - 4. create characterizations of animals, objects, or shapes; and
 - 5. communicate a story and character using voice, movement, costume, and props.
- D. VISUAL ARTS. The student will:

- 1. understand the elements of visual art, including color, line, shape, form, texture, and space;
- 2. understand the characteristics of visual art from a variety of cultures and historical times;
- 3. use the tools, basic skills, and techniques of at least three different mediums; and
- 4. create original works of art to communicate ideas.

Language Arts

- A. Strand: Reading and Literature
 - 1. Sub-Strand: Word Recognition, Analysis, and Fluency

Standard: The student will understand and apply knowledge of the sounds of the English language (phonemic awareness) and of the sound-symbol relationship (phonics).

Benchmarks:

1. See, hear, say and write the basic sounds (phonemes) of the English language.

- 2. Match consonant and short vowel sounds to appropriate letters, say the common sounds of most letters, and begin to write consonantvowel-consonant words.
- 3. Identify and name uppercase and lowercase letters of the alphabet.
- 4. Identify beginning consonant sounds and ending sounds in singlesyllable words.

5. Identify, produce and say rhyming words in response to an oral prompt.

6. Read 10 high-frequency words.

2. Sub-Strand: Vocabulary Epansion

Standard: The student will use a variety of strategies to develop and expand reading, listening and speaking vocabularies.

Benchmarks:

- 1. Use words to describe and name people, places, and things.
- 2. Use words to describe location, size, color, shape and direction.
- 3. Use words to describe actions.
- 4. Use context to predict and infer word meanings.
- 5. Learn new words through explicit instruction.

3. Sub-Strand: Comprehension

Standard: The student will listen to and understand the meaning of text.

Benchmarks:

1. Demonstrate literal comprehension by asking and answering questions about narrative and informational text.

- 2. Make predictions from illustrations and story content.
- 3. Write or draw a response that demonstrates comprehension.
- 4. Relate texts to prior knowledge and experiences.
- 4. Sub-Strand: Literature

Standard: The student will read or listen to a variety of texts.

Benchmarks:

- 1. Listen to and understand the meaning of texts representing a variety of genres (such as poetry, folk tales, drama, fantasy, realistic fiction, informational and biographical texts) from America, as well as from other countries.
- 2. Identify main characters and story events and actions.
- 3. Retell familiar stories using beginning, middle and end.
- 4. Respond to literature using details from the story to make personal connections.
- 5. Listen to and look at literature for personal enjoyment.
- B. Strand: Writing
 - 1. Sub-Strand: Types of Writing

Standard: (Writing is addressed in the "Word Recognition, Analysis and Fluency" section.)

2. Sub-Strand: Elements of Composition

Standard: (Standards under this heading may be locally determined.)

- 3. Sub-Strand: Spelling, Grammar, and Usage
 - Standard: The student will begin to recognize correct spelling and punctuation.

Benchmarks:

- 1. Use a period after sentences when prompted.
- 2. Use knowledge of basic phonics to spell.
- 4. Sub-Strand: Research

Standard: (Standards under this heading may be locally determined.)

5. Sub-Strand: Handwriting and Word Processing

Standard: The student will form letters and numbers.

Benchmarks:

1. Correctly form many of the uppercase and lowercase letters of the alphabet, monitor and discuss the differences.

- 2. Correctly write the numbers zero through nine.
- 3. Write left to right and top to bottom.
- 4. Print his/her first and last names.
- C. Strand: Speaking, Listening and Viewing
 - 1. Sub-Strand: Speaking and Listening

Standard: The student will communicate effectively through listening and speaking.

Benchmarks:

1. Participate in and follow agreed-upon rules for conversation and formal discussions.

- 2. Follow two-step directions.
- 3. Attend to and understand the meaning of messages.
- 4. Communicate needs, feelings and ideas to peers and adults.
- 5. Recite and respond to poems, rhymes and songs.
- 6. Respond orally to language patterns in stories and poems.
- 7. Use voice level appropriate for language situation.
- 8. Ask and respond to questions.
- 1. Sub-Strand: Viewing

Standard: The student will become familiar with the structure of printed material.

Benchmarks:

1. Follow print (words and text) from left to right and top to bottom.

2. Turn pages sequentially from front to back.

Mathematics

- A. Mathematical Reasoning
 - 1. Sub-Strand: Mathematical Reasoning

Standard: Apply skills of mathematical representation, communication and reasoning throughout the remaining four content strands.

Benchmarks:

- 1. Create and solve word problems using actions, objects, words, pictures, or numbers.
- 2. Estimate and check that answers are reasonable.
- 3. Explain to others how a problem was solved.
- B. Number sense, Computation and Operations
 - 1. Sub-Strand: Number Sense

Standard: Represent quantities using whole numbers and understand relationships among whole numbers.

Benchmarks:

- 1. Count forward to 31, backward from 10.
- 2. Count the number of objects in a set and identify the quantity.
- 3. Compare the number of objects in two or more sets.
- 4. Given a number, identify one more or one less.
- 2. Sub-Strand: Computation and Operations
 - Standard: Add and subtract whole numbers up to 6 in real-world and mathematical problems.

Benchmarks:

- 1. Recognize the number of objects up to 6, without counting.
- 2. Add and subtract whole numbers up to 6, using concrete objects.
- C. Patterns, Functions & Algebra
 - 1. Sub-Strand: Patterns and Function

Standard: Sort, classify and compare objects based on their attributes. Understand simple repeating patterns.

Benchmarks:

1. Sort objects in a set by one attribute such as size, shape, color or thickness.

2. Identify an object that does not belong in a set.

3. Recognize, describe and extend repeating patterns involving up to three elements using objects, pictures, sounds or movements.

2. Sub-Strand: Algebra

Standard: (Standards under this heading may be locally determined.)

- D. Data Analysis, Probability and Statistics
 - 1. Sub-Strand: Data and Statistics

Standard: Depict data with objects and pictures

Benchmarks:

1. Represent data about classmates or their surroundings by using objects or pictures.

2. Sub-Strand: Probability

Standard: (Standards under this heading may be locally determined.)

E. Spacial Sense, Geometry and Measurement

1. Sub-Strand: Spacial Sense

Standard: Understand meaning of terms used to describe location and placement of objects.

Benchmarks:

1. Locate and describe placement of objects with terms such as: on, inside, outside, above, below, over, under, beside, between, in front of, behind, next to, top, bottom.

2. Sub-Strand: Geometry

Standard: Sort two- and three-dimensional shapes.

Benchmarks:

- 1. Sort two- and three-dimensional shapes according to their geometrical attributes.
- 3. Sub-Strand: Measurement

Standard: Understand terms and comparative language used in various measurement situations. Identify tools to measure time. Identify coins.

Benchmarks:

- 1. Compare and order objects by length, weight, volume, temperature or size and use appropriate vocabulary such as longer than, holds more, smaller.
- 2. Know that clocks and calendars are instruments to measure time.
- 3. Recognize the following coins: penny, nickel, dime and quarter.
- 4. Compare and order events based on time and use appropriate vocabulary such as yesterday, today or tomorrow to describe relative time.

Science

- A. History and Nature of Science
 - 1. Sub-Strand: Scientific Inquiry

Standard: The student will raise questions about the natural world.

Benchmarks:

1. The student will observe and describe common objects using

simple tools.

- B. Earth and Space Science
 - 1. Sub-Strand: The Water Cycle, Weather and Climate

Standard: The student will observe weather changes.

Benchmarks:

- 1. The student will describe daily and seasonal changes in weather.
- C. Life Science
 - 1. Sub-Strand: Diversity of Organisms

Standard: The student will understand that there are living and nonliving things.

Benchmarks:

- 1. The student will compare and contrast living and nonliving things.
- 2. The student will know simple ways that living things can be

grouped.

- 2. Sub-Strand: Human Organisms
- Standard: The student will understand that people have five senses that can be used to learn about the environment.

Benchmarks:

1. The student will observe and describe the environment using the

five senses.

United States History

- A. Family Life Today and in the Past
 - Standard: The student will understand how families live today and in earlier times, recognizing that some aspects change over time while others stay the same.

Benchmarks:

1. Students will compare family life in his or her community from earlier times and today.

2. Students will compare family life in at least three distant places and times.

3. Students will compare technologies from earlier times and today, and identify the impact of invention on historical change.

B. Famous People and Events in US History

Standard: The student will recognize people and events that made significant contributions to U.S. History.

Benchmarks:

1. Student will know individuals and groups associated with key turning points in U.S. History.

C. Many Peoples and Cultures Meet in the Making of North America

Benchmarks:

- 1. Students will understand that large and diverse American Indian nations were the original inhabitants of North America.
- 2. Students will demonstrate knowledge of European exploration and settlement of the North American continent and the resulting interaction with American Indian nations.

Standard: The student will demonstrate knowledge of the people who settled in North America.

<u>Appendix C</u>

| 10010 01 | The bay kindergarten bany Schedule |
|----------|---|
| Time | Activity |
| 8:40 | Settling In |
| 9:00 | Opening |
| 9:15 | Language Arts |
| 9:30 | Jobs |
| 10:00 | Specialist (Physical Education) |
| 10:30 | Bathroom Break |
| 10:50 | Finish Jobs, Self-Directed Learning, Snack |
| 11:25 | Lunch/Recess |
| 1:00 | Sharing |
| 1:15 | Math: Whole Group |
| 1:30 | Math: Journal/Activity |
| 2:00 | Literacy Centers |
| 2:30 | Outside, Self-Directed Learning, Milk Break |
| 3:00 | End of Day Story and Closure |
| 3:10 | Dismissal |
| | |

Table 6. All-Day Kindergarten Daily Schedule

Table 7. Half-Day Kindergarten Daily Schedule

| lime | Activity | | |
|------------|------------------------|--|--|
| 8:40/12:40 | Settling In | | |
| 8:55/12:55 | Opening | | |
| 9:05/1:05 | Language Arts | | |
| 9:30/1:30 | Large Motor Activity | | |
| 9:50/1:50 | Self-Directed Learning | | |
| 10:50/2:50 | Closure | | |
| 11:10/3:10 | Dismissal | | |