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A Historical Study of the Kindergarten and First Grade Programs at the Minot State University Laboratory School (1969 - 1990): A School Ahead of its Time

Valeria Noel Wax

A HISTORICAL STUDY OF THE KINDERGARTEN AND FIRST GRADE
PROGRAMS
AT THE MINOT STATE UNIVERSITY LABORATORY SCHOOL (1969 – 1990):
A SCHOOL AHEAD OF ITS TIME

by

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This dissertation, submitted by Valeria Noel Wax in partial fulfillment of the requirements for the Degree of Doctor of Philosophy from the University of North Dakota, has been read by the Faculty Advisory Committee under whom the work has been done and is hereby approved.

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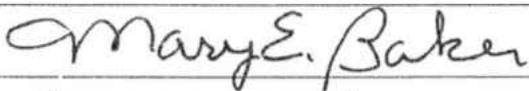
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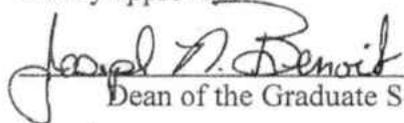
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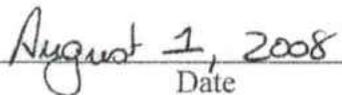   of its Time

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Finally, I want to say thank you to my family. They are the real reason I was able to continue and finally complete this dissertation and course of study.

Dedication

This dissertation is dedicated to the three people I cherish most:

In memory of my mother,
Valeria Elizabeth Wax.

To my father,
Joseph Wax.

and

To my daughter,
Kalindi Elizabeth Wax

ABSTRACT

This study uses archival sources and oral interviews to construct a history of the kindergarten and first grade programs at the Minot State University Laboratory School (MSU) from 1966 – 1990. The length of the study is based on the time the kindergarten was in existence at the MSU Laboratory School. The school was unique in North Dakota because it was the only laboratory in the state during this time period. A variety of educational methodologies and techniques were developed in an effort to improve instruction. It also developed and refined an individualized instruction program that was used with all children enrolled in the school.

The methodologies of archival research and oral interviews will give insight into how the programs functioned as well what philosophy was behind the procedures. This study will also examine the relationships between what was being done at the school and what was considered developmentally appropriate practices as described by the National Association for the Education of Young Children (NAEYC). This second purpose will be examined by charting the components the NAEYC position statement with major elements of schools and the principles of individualized instruction. The final discussion will center on this data and describe how the school functioned in a way that was consistent with developmentally appropriate practices.

CHAPTER ONE

INTRODUCTION

The roots of laboratory schools can be traced back to the normal school movement. Normal Schools were the first teacher training schools. Normal schools were considered model schools and used by their pre-professional teachers to observe and practice teaching methods (Altenbaugh & Underwood, 1990). These model schools were called laboratory schools, and they were operated by normal (teaching) schools and eventually colleges to ensure a venue for their pre-service teachers to practice before going out to teach in public school (Goodlad, 2000). Even though Horace Mann is credited with founding the first public normal school in 1839, it was Samuel A. Hall who opened the first private school for training teachers in Concord, Vermont, in 1823 (Spring, 1997). One of the aspects of the training school was a small population of children who were taught by teachers for demonstration and practice purposes (Wen-Ju, n.d.). Eventually Normal Schools were replaced by Teacher Colleges; they in turn were replaced by other colleges or universities (Altenbaugh & Underwood, 1990).

The University of Chicago was one of the more prestigious universities that had a model school. It became the Dewey Laboratory School in 1896 and even though there were training schools attached to a majority of normal schools, it is often considered the first true laboratory school (Harms & DePencier, 1996). The school was started as a way for American educational philosopher, John Dewey, to put his theories of teaching and

learning into practice (Harms & DePencier, 1996). As other laboratory schools came into existence, the mission of many laboratory schools changed. This is evident in the current description the Illinois State University Laboratory School (ISU Lab School). The school's mission was two-fold; the first goal was to educate pre-service and professional teachers; the second was to ensure that the students attending the laboratory school were given a high quality education even as they were involved in educational research (Illinois State University Laboratory Schools, 2000).

The Minot State Laboratory School (MSU Lab School), like the ISU Lab School, was founded to prepare future teachers (Cook, 1936; Stee, 1948). However, *The Philosophy of Teacher Education at Minot State Teacher College* (Minot State Teachers College, 1959) stated that the MSU Lab School was mainly a center for educational experimentation rather than teacher training, returning to the type of ion of other early laboratory schools. This document stated that the MSU Lab School mission was to work with teacher education issues and experiment with techniques and methods suitable for the social and educational needs of the North Dakota population.

Rationale

The University Laboratory School at Minot State University was one of several such schools that existed in North Dakota and followed the philosophy and educational experimentation developed by Dewey. Dickinson State University and the University of North Dakota were two other North Dakota institutions that had laboratory schools. 2Previous studies of the MSU Lab School include a history of the school from 1920 to 1936 (Stee, 1948) and several individual self-studies and action research conducted by

the staff, as well as an overview of the individualized instruction program from 1966 to 1988 (Wax, 1990).

The current study emanates from further research questions that were developed from the previous studies done by Stee (1948) and Wax (1990). The purpose of this study is to investigate the kindergarten and first grade programs using historical research to help record and describe events, projects, and learning environments present at the school during the time of its operation. These two grade levels were chosen for three reasons. First, the study will describe what the children's educational experiences were over a three year time period. Second, the similarities found in the first grade will help to describe the continuity of learning and teaching processes at the MSU Lab School. Third, the study will describe times when the kindergarten and first grade programs offered similar experiences.

Assuming that the MSU Lab School personnel were still following the educational philosophy of John Dewey, the kindergarten and first grade programs should show evidence of pedagogical experimentation by the staff as well as the programs meeting the educational needs of the students. Evidence of these educational behaviors and practices will be described by using historical research. Historical research is based on the idea that educational research is not laboratory-based because human variables cannot be manipulated in the same way inanimate variables can be (Giangreco & Taylor, 2003). Giangreco and Taylor state that the positive benefits of educational research are that it helps develop an understanding of context to describe how educational practices really work as well as to give a better understanding of educational conditions and

situations. Educational research is used to improve educational practices rather than provide an unchangeable truth (Giangreco & Taylor, 2003).

Hypothesis and Research Questions

Historical research is more than just relating the facts of the past. Historians try to interpret the past (Vers, 1996). History, while it has intrinsic value, must have a purpose for being; part of this purpose is to find new ideas (Barzun & Graff, 1992). Since finding new ideas often benefits from a hypothesis and good research questions, historical research, unlike some other types of qualitative research, has a hypothesis (Graham & Al-Krenawi, 2001).

Consistent with this perspective, a hypothesis and a series of research questions have been developed. This study will describe how the kindergarten and first grade programs at the MSU Lab School developed as well as what educational experimentation was attempted. Based on this description, the hypothesis is that the MSU Lab School was a school that developed practice and methodologies that are now considered common practices and that these practices were developmentally appropriate as defined by the National Association for the Education of Young Children (NAEYC).

Specific research questions related to this hypothesis include:

1. What were some of the best practices conducted by the faculty?

2. How did the kindergarten and first grade programs integrate the individualized instruction program?

3. Did the kindergarten and first grade programs at the MSU Lab School programs meet the criteria of developmentally appropriate practices even

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though these programs were in existence during the time the NAEYC was articulating their position on this philosophy?

Limitations

Even though the MSU Lab School was a kindergarten through sixth grade program, this study is limited to the history of the kindergarten and first grade programs at the MSU Lab School from its implementation in 1969 until the school closed in 1990. The school's organizational structure included individualized instruction. Discussion of individualized instruction will be limited to how it relates to the research questions because a study into this issue has been presented in other research by Wax (1990).

Basic Assumptions

School systems are seldom confronted with identical conditions when involved in curriculum innovations. Nevertheless, it is assumed that research regarding the kindergarten and first grade programs at the MSU Laboratory School will provide insights sufficiently universal to allow other school systems, both public and private, to profit from the discussion of the findings of the study.

Definitions

The definitions for this study are specific to the Minot State University Laboratory School. This list of definitions will not necessarily define the many terms that are in common educational use. They are based on the review of literature and the interview process.

Ability group – Homogeneous grouping of children based on an assessment of skills mastered or not mastered.

Anecdotal record – A record of what a student has said or done in a specific situation. An anecdotal record is used to assist in defining behavior patterns, personal development, interests, or attitudes (Morrison, 2004).

Conference– Meeting held between teacher and student(s) or teacher, student, and parent(s) to discuss student needs, goals, or present academic progress.

Developmentally Appropriate Practices:

. . .the outcome of a process of teacher decision-making that draws on at least

three critical interrelated bodies of knowledge: (a) what teachers know about how

children develop and learn; (b) what teachers know about the individual children

in their group; and (c) knowledge of the social and cultural context in which those

children live and learn (Bredekamp & Copple, 1997, p. vii).

Director – The main administrator at the MSU Lab School.

Family group – The multi-age grouping the MSU Lab School used when assigning children to a teacher. For instance, the two teachers of the primary teacher team would each have a combination of first and second graders in their classes.

Historic research – A qualitative research methodology that describes and interprets events from the past.

Individualized Education Program (IEP) – A written contract stating specific learning goals and objectives for a student based on student evaluation of educational needs. Teacher, student, and parent(s) collaborate in the development the IEP. The IEP becomes the instructional plan that will facilitate the student's needs. In the past it was also referred to as a personal education plan.

Individualized Instruction Program – A teaching method that bases the content, learning materials, tools, and rate of instruction on the individual learner.

Kindergarten- At MSU Lab School a two-tiered program for students aged four and five. The four-year-old children attended a half-day program in the mornings; the five-year-old children attended a half-day program in the afternoons.

Laboratory School – A teaching school attached to a college or university. Grade levels can be from pre-school through grade twelve.

Mainstreaming - The practice of placing a student with a disability into the least restrictive educational environment. This was the original term used by the MSU Lab School (Wax, 1990).

Mini-lab – A learning- experience that uses subtopics of a larger topic to help students develop a depth of understanding rather than a broad understanding.

Minot State University Laboratory School (MSU Lab School) – The experimental elementary school (K-6) located in the southwest corner of the Minot State University in Minot, North Dakota.

Multi-age grouping - Children of varying chronological ages are put together under the supervision of one teacher. The practice mimics the natural way learning occurs between siblings. The use of family-groups was one of the ways multi-age grouping was used at MSU Lab School.

Narrative report – A teacher's written accounts used to describe the strengths and weaknesses of an individual student's progress. It replaces the traditional report card.

Team-teaching – Two teachers coordinating instruction and activities in order to use the strengths of each teacher. Teachers work together rather than take turns teaching the same group of children.

Summary

Laboratory schools have developed many new ideas and methodologies for use by educators. The MSU Lab School was one such institution that presented new and effective techniques for teaching children. The information collected for this research should add to the historical record and strengthen the argument for developmentally appropriate practices in kindergarten and first grade.

CHAPTER TWO

RELATED LITERATURE

Introduction

The purpose of the related literature is to describe the primary changes in campus laboratory schools and to describe the research and evolution of developmentally appropriate kindergarten and first grade programs prior to and concurrent with the program development at the MSU Lab School. The chapter will be divided into three main sections to aid in the explanation and discussion of information. These sections will be as follows: laboratory schools, philosophical roots of developmentally appropriate practices, and developmentally appropriate practices.

Laboratory Schools

The first laboratory schools were an outgrowth of the training schools used by many normal and state teacher colleges. These first training schools were used to practice standard teaching methods (Altenbaugh & Underwood, 1990). This was evident in the description the Illinois State University Laboratory School (2000) had of its original two-fold mission. The first goal was to educate pre-service and professional teachers; the second was to ensure that the students attending the laboratory school were given a high quality education even while they were involved in educational research. While these goals remained important elements for laboratory schools, educational research became a

central purpose for laboratory schools. The MSU Lab School was involved in educational research during the time the kindergarten program was in existence.

Three laboratory schools will be described to frame a better understanding of how the MSU Lab School corresponded with other laboratory schools of the time. Three schools have been chosen for comparison: the University of Chicago Laboratory School (UCLS), the University of California Los Angeles University Corinne A. Seed Elementary School (UES), and the Minot State University Laboratory School. A look at these three schools will give needed historical and philosophical background for understanding the specific programs at the MSU Lab School.

The first school, UCLS, is important to the discussion because it sets the parameters for what a laboratory school was, and in many cases, what a laboratory school still is. The second school, UES, is important because it was the model used by the MSU Lab School for its individualized instruction program (Wax, 1990). This individualized instruction program was in use during the majority of the time the kindergarten program was in operation. The final school history to be discussed is the Minot State University Laboratory School. This will put the kindergarten and first grade programs into context in terms of the educational philosophy and community to which the students were exposed.

University of Chicago Laboratory School

The first modern laboratory school, the Dewey School, now known as the University of Chicago Laboratory School, was started in 1896 by John Dewey. It included both elementary and high schools. The purpose of this school was to give Dewey an opportunity to evaluate new pedagogical techniques and practices (Harms & DePencier, 1996). This was a shift in mission from earlier model schools. Model schools

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typically used accepted teaching techniques; learning was memorization and common exercises. Dewey believed that learning was a social process; students needed to work as members of a learning community. The learning community should be a model of larger, more real-life democratic communities. Lessons should be practical; students needed to be exposed to work that was in essence an extension of their life at home (Harms & DePencier, 1996). Arithmetic lessons should be related to actual problems that students might have in real life. Students were taken on field trips to learn about how different jobs or enterprises functioned.

Students were expected to experiment and develop their own interests based on the information they gathered as they studied traditional subjects. The students at the Dewey School were allowed to organize their own projects. Students worked in groups and did community service projects. Teachers made sure that the students were still involved in content information and skill development (Harms & DePencier, 1996).

Dewey was able to enunciate his philosophy for the UCLS with four points:

1. Students begin learning by experimentation and develop interests in traditional subjects to help them gather information.

2. Students are part of a social group in which everyone learns to help each other.

3. Students should be challenged to use their creativity to arrive at individual solutions to problems.

4. The child, not the lesson, is the center of the teacher's attention; each student has individual strengths that [sic] should be cultivated and developed (Harms & DePencier, 1996, p. 4).

Dewey's principles have been used by UCLS when developing and evaluating programs. Even though these principles were difficult to implement, the staff found that if they ensured that there was a sense of integration among activities, projects, and skill knowledge, it was easier to meet these principles (Harms & DePencier, 1996).

One example germane to this study was the Nursery School at UCLS. This program evolved from being a shared daycare to a developmentally appropriate program. The Nursery School started informally in 1916 by a group of mothers who brought their children to Scammon Garden to spend time in educational play and group activities (Harms and DePencier, 1996). The mothers developed a program and took turns teaching at the school. The Dewey School was asked to help with developing the program as well as giving the mothers information to help them teach better. By 1938, the Nursery School was officially attached to the University of Chicago. By then professional educators were in charge of the program. In 1955, the Nursery School became the third member of the University of Chicago Laboratory Schools, joining the other two university lab schools: the University Elementary School that started in 1896 and the University High School that started in 1903 (University of Chicago, 2005).

UCLA Corinne A. Seed University Elementary School

Another laboratory school important to the study is the UCLA Corinne A. Seed University Elementary School (UES). It was established in 1882 as a training school and is the only laboratory school in the study that has always been an elementary school program. John I. Goodlad, director of the school from 1960 until the1980s (History of Corinne A. Seed University Elementary School, n.d.), noted that updating content material did not necessarily improve the curriculum. The UES staff became aware of a

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need to diverge from traditional methods of teaching because it was difficult to place some older students on a level appropriate for their age and/or ability and because the static student membership lessened the amount of individual attention all children received (Goodlad, 1963). Changing what was taught or when it was taught did not seem to have the desired effect. Struggling students, older ones in particular, did not seem to make appropriate academic gains (Goodlad, 1963).

This articulation of need led to research that eventually became a program for individualized instruction. This program also fit into the school's philosophy that the greatest education problem was treating children as non-persons. Overemphasizing curriculum and standardized norms took the emphasis away from teaching children. It was important for teachers to remember that the students were the reason for teaching (Goodlad, 1963).

Madeline Hunter was the principal at UES from 1962 until 1982. She was able to encourage the staff at the school to develop a teacher decision-making approach to learning. While she was at UES she also developed methodologies to motivate students and to help them retain learning (History of Corinne A. Seed University Elementary School, n.d.). This included developing a lesson plan and a clinical supervision model that are still used by many educators today.

The UES program developed a non-graded and multi-aged grouping that included early childhood, lower, middle, and upper elementary phases; every phase had its own goals. While children remained in the school for the standard number of years, their placement in the phases could vary. These phases were multi-age groups for 50 – 130

students taught by teams of two to six teachers, student teachers, and aides (Hunter, 1971).

UES made efforts to ensure that the students in the school were randomly selected. Suburban and inner-city students from a variety of socio-economic levels were included because diversity was an important element for instruction at UES. It was the basis for the individualized instruction at UES because of the need to do valid research. Diversity was also valuable because it enriched the educational experience for all students (Hunter, 1971).

Following Hunter were Director Richard C. Williams and Principal Hal Hyman. Major experimental projects in the 1980s included investigation into school reform, participatory decision-making, and curriculum development. Another project that UES began to work with that is pertinent to this study was an extended day program. The idea was to design a model that integrated childcare with the school program that would help working families have another choice for caring for their children while the adult family members were at work (History of Corinne A. Seed University Elementary School, n.d.).

The staff at the MSU Lab School program adapted several of the UES methodologies including individualized instruction and multi-age grouping for use with their student population. Towards the end of the MSU Lab School's existence, there were plans underway to develop additional after-school as well as pre-school programs similar to the integrated childcare program being developed by UES.

Minot State University Laboratory School

The last laboratory school under discussion is the MSU Lab School. The school and university underwent a series of name changes starting in the 1920s. The MSU Lab

School was Model High School until the high school was closed in 1968. The name

Campus Laboratory School was used until 1987. Finally, the University Laboratory

School was used from the fall of 1987 until the school closed in 1990. The University

also underwent a variety of name changes: Minot State Normal School, Minot State

Teacher School, Minot State College, State University of North Dakota, and finally,

Minot State University. In order to simplify the discussion, the names Minot State

University Laboratory School and Minot State University will be used throughout the

study.

MSU Lab School was founded in 1920 as a model school. During the 1920s the

president of Minot State University, was able to reach an agreement with the Harrison

School District, a small school district outside the Minot School district. According to

this "gentleman's agreement," Harrison School District gave their school building to the

university as long as the district's students were allowed to continue attending the school

(A Short History of the MSC Campus Lab School, 1975). The building from the former

Harrison School District was used for the elementary students until it was razed in1964

(A Short History of the MSC Campus Lab School, 1975). A second school building was

built in 1931 (Cook, 1936). This second building was the one used during the time the

individualized kindergarten and first grade programs were in progress.

Like many other model schools, the purpose of the Model School was to prepare

college students to be teachers (Cook, 1936; Stee, 1948). By 1959, the main purpose had

changed. *The Philosophy of Teacher Education at Minot State Teacher College* (Minot

State Teachers College, 1959) asserted that the school was mainly a center for

experimentation rather than a training school. The school worked with teacher education

issues and experimented with pedagogy and methodology suitable for the social and educational needs of the North Dakota population.

During the first part of the school's history the student population included first grade through high school children. Model High School was closed in 1968 because of decisions made by the Board of Higher Education (J. Wax, personal interview, April 6, 2008). This change allowed the elementary school to use all three floors of the building.

While the MSU Lab School was transitioning from a 1 – 12 program to a K – 6 program, Howd and Brown (1970) conducted a national survey of laboratory schools. Howd and Brown polled laboratory school personnel to discover what they thought was indicative of their schools' missions. Data from their research showed the staff at the MSU Lab School considered four areas of their school's mission to be most important: (a) observation and demonstration, (b) pilot testing, (c) experimentation with learner-teacher activities, and (d) research. Leadership and participation of the staff were also considered important. The least important element of their mission was providing pre-service experience for pre-professional teachers. This survey demonstrated how important research was for the MSU Lab School. According to Howd and Boyd (1970), the teachers at MSU Lab School were encouraged to try new ideas to be tested or design projects to be studied. The author of the idea was then allowed to take the lead in the research and to get help from his/ her colleagues.

The commitment to research mentioned by Howd and Boyd was confirmed when the director of the school reassigned the first grade teacher,. Lola Dokken, to begin a new program, a two-tiered kindergarten program in 1969. Kindergarten-One (K-1) was for four-year-and-a-half-year old children. It met five days a week during a morning session.

Kindergarten-Two (K-2) was for five-and-a-half-year old children and met during an afternoon session that also met five days a week. The kindergarten programs were traditional programs until individualized instruction was integrated into the kindergartens in 1971.

The first grade program was also a traditional program until 1970 when the first grade teacher was hired to begin implementing individualized instruction at that level. The first grade was integrated into the ungraded family group system in 1982. At this time the first- and second-grade teachers became a teaching team that worked with 50 six to eight year-old children.

Educational research continued at the school, and the structure of the classrooms, from kindergarten through grade six, continued to change. The staff continued to experiment with curriculum and pedagogy until the MSU Lab School was closed by the University in 1990 due to decisions made by the University administration. The reasons have never been clear, even though the $50,000 cost for the university was not one of its largest budget line items (J. Wax, personal interview, April 6, 2008).

These three laboratory school programs give a sense of what was being practiced before and during the time that the MSU Lab School kindergarten and first grade programs were in operation. These schools had several commonalities; they were committed to improve educational practices, they were willing to try new or unconventional practices, the data collected from experiments was shared with other professionals, and most importantly, children were seen as the primary focus and the reason for the existence of the schools.

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Philosophical Roots of Developmentally Appropriate Programs

The NAEYC produced a position paper on developmentally appropriate practices in 1987 and revised it ten years later. The twelve principles of developmentally appropriate practices enunciated by Bredekamp and Copple (1997) are the basis of sound teaching and learning. Even though the term developmentally appropriate practices is a modern phrase, it could be argued that such practices began with other educators throughout history. While there are many historical figures who influenced developmentally appropriate practices, this study will briefly discuss five educators pertinent to the study: Johann H. Pestalozzi, Friedrich W. Froebel, Maria Montessori, Jean Piaget, and John Dewey. These researchers shared the practice of reforming the educational practices of their times. They have been chosen for several different reasons.

One reason Pestalozzi was chosen was that his earlier position in history allowed him to offer many new ideas for educating young children. Froebel and Montessori are significant because they developed archetypal early childhood program. Although Montessori is not considered developmentally appropriate by all educators, she is included because she was an educational pioneer that has had a lasting influence on early childhood education. A final reason to consider Pestalozzi and Froebel is that both influenced Dewey's philosophy of teaching and learning (Harms & DePencier, 1996). Dewey is significant, not just because of his development of the laboratory school, but because his philosophy of education has elements similar to the principles of developmentally appropriate practices. A brief thumbnail sketch of these five educators should help describe some of the philosophical and practical roots of developmentally appropriate practices.

Johann H. Pestalozzi

Johann H. Pestalozzi (1746-1827) believed it was necessary for children to have their basic emotional needs met before it was possible to have their intellectual needs met. Specifically, they need to have a sense of self-esteem and self-worth before they are capable of learning.

Pestalozzi began by making sure his students were emotionally secure; then he would begin with what he called object lessons. These object lessons helped children use their senses to learn. The teacher guided this sensory education. Children would study an object: its shape, quantity, number, and weight. Object lessons also included tracing and drawing exercises. Children might trace the outline of a rock or twig, draw a tree or cloud, or they might count how many leaves are on a branch. Exercises like these helped children to develop a concept of the object under study. Once the children understood the object well, it would be named. Pestalozzi was the first to take children on field trips to study nature, in order for them to work on object lessons (Gutek, 2005). Pestalozzi called this form, number, and name. It is after this kind of study that the children would be ready to learn to read, write, and do arithmetic using the materials from the object lessons. (Gutek, 2005).

One caveat Pestalozzi gave was that teachers could not rely on child-initiated learning only. Teachers must adjust the learning environment to encourage children to become involved with the learning process (Morrison, 2004). Pestalozzi recommended teachers observe their children and make adjustments to the environment (Henniger, 2002).

As well as observing children closely, there are four other important ideas of Pestalozzi which have influenced developmentally appropriate practices (Henniger, 2002, p. 42) . These include:

1. recognizing the potential of all children

2. developing important teacher-student relationships

3. encouraging peer relationships

4. experiencing learning via sensory experiences

Pestalozzi's ideas influenced other educators. One of the educators taught and influenced by Pestalozzi was Friedrich W. Froebel, the father of kindergarten (Henniger, 2002).

Friedrich W. Froebel

Friedrich Froebel (1782 – 1852) built on Pestalozzi's ideas as he developed his early childhood program he called "kindergarten." Kindergarten is a German word that translates as "children's garden." This term is reflected in a quotation from Froebel: "Children are like tiny flowers; they are varied and need care, but each is beautiful alone and glorious when seen in the community of peers" (Collected words of Friedrich Froebel, 2002 p.3). Both Pestalozzi and Froebel believed that learning was more than just teaching children information. They believed that children needed to be cared for as complete individuals. Froebel believed in the dignity of children. He was convinced that they had a right to be children and were not miniature adults (Morrison, 2009). Their emotional lives were important and their emotional needs had to be addressed before they could learn (Gutek, 2005).

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Pestalozzi and Froebel also agreed that activities were the best way for children to learn. Froebel became convinced that play was the activity most important to children. He felt that play expressed the inner life of children and gave them opportunities to socially interact. During play, children developed concepts by using toys as symbols and acting out scenarios (Gutek, 2005).

He believed that children had a right to play and that it would help children develop according to their own needs and nature (Morrison, 2009). However, Froebel also believed that play needed to be structured and purposeful. It was the duty of the teacher to observe children and guide them through play to help them become good members of society. Teachers accomplished this duty by giving attention to the classroom setting and by making sure that children were given the time to work with the sequence of activities that would help them learn.

Froebel used manipulatives he called gifts and occupations (Morrison, 2009). Gifts were reusable geometric solids that are used to help children discover their world. They included balls, cylinders, blocks, cubes, circles, rings, triangles, dowels and small malleable ball bearings. Occupations were single use materials that children could manipulate to help develop their imagination. They included molding clay, paper folding, painting, lacing, weaving, and stinging beads (Frobel Web, n.d.). Children used the gifts and occupations to help them be actively involved in play and work toward a better understanding of their world (Morrison, 2009).

Froebel's systematic development and use of the gifts, occupations, and observations of young children indicate that he was probably one of the first real child

development specialists (Morrison, 2009). This scientific study of how to best teach young children was carried even further by Maria Montessori.

Maria Montessori

Maria Montessori (1870 – 1952) studied Froebel's methods and agreed with his practice in several aspects. Both believed that education should be child-centered (Gutek, 2005). She also agreed with the premise that activity was important for children to learn, and the correct manipulatives would help children learn and develop. A third point on which she agreed with Froebel was that teachers were to act as guides and were in charge of preparing the learning environment (Montessori, 1912). All of this was part of educating the whole child (Montessori, 1912; 196).

Teachers also needed to be aware that child development is predictable. Montessori's scientific study of children led her to develop her theory of sensitive periods. Montessori explained that there are better times during development when children can learn specific skills. There were behavioral cues that would help teachers lead children to work with new ideas or skills (Montessori, 1912).

Montessori believed that children wanted to be involved in work, not play (Montessori, 1966). Montessori materials and structures were designed for young children to develop educational concepts as well as life skills. These materials and activities were developed to take advantage of the children's interests and abilities based on Montessori's theory of sensitive periods. Children were also taught that they were members of a community.

In the Montessori community, teachers are observers of children. Based on this, the environment can be changed to meet the children's needs. As teachers observe the

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children closely, they become aware of the activities and manipulatives needed to be brought into the environment that will help the children learn and discover (Montessori, 1912).

The environment was one of the significant aspects of the Montessori Method. One of Montessori's first undertakings was to remove the traditional desks in the classroom and put in child-sized furniture and tools (Montessori, 1912). She organized the environment so that it was attractive, structured, and orderly (Gutek, 2005).

Montessori organized children within the environment as well. This was so that the children could work in multi-aged groups (Turner, 1992). Her idea was to allow children to learn from one another.

Montessori was convinced that children were capable of high levels of concentration if they were truly interested in an activity, idea, or concept. She regarded children as capable of independent functioning when they are given more assistance at the beginning and slowly have the assistance removed once they become more competent (Gutek, 2005). This was part of the process of children's innate ability to teach themselves. Montessori believed that children were capable of working together and learning from and with each other in a learning community.

Jean Piaget

Jean Piaget (1896 – 1980) developed a theory of development that emphasizes how children learn through actively creating their own understanding. Experience is important for children's development. Piaget's ideas are important when considering developmentally appropriate practices because they help to define what that development is.

Piaget studied Montessori's methods and expanded on her theories on what was important for children's cognitive development. He agreed with Montessori's position that children needed personal experiences to develop intellectually. However, he differed with her in that he believed that play was important for learning (Mooney, 2000). Play can help children understand how objects and relationships work. The repetition and trial-and-error children employ during play allows them to process new ideas and information (Mooney, 2000).

Play is one tool children use as they develop through recognizable stages. All children go through the same stages but at varying rates. These stages represent qualitative changes in the way children think. During the time children are in kindergarten and first grade they are usually in the pre-operational or concrete operational stages. There are several characteristics of children in the pre-operational stage. They are still egocentric (Mooney, 2000) and governed by their perceptions (Eggan & Kauchak, 2004). They often believe events that are close in time or space must be related. They often over-generalize rules and are rapidly developing language skills (Eggan & Kauchak, 2004).

Children in the pre-operational stage need to have real experiences with real objects (Mooney, 2000). Field trips, class pets, or manipulating objects are better for young children than only viewing them in a book or on a computer screen.

As children grow into the concrete operational stage, they begin using logic for the first time. However, this logic often only operates within the confines of concrete experiences. Concrete experiences help children to mentally represent abstract concepts and principles (Eggan & Kauchak, 2004). As they are beginning to think abstractly, they

can begin to use symbols such as numbers and letters (Mooney, 2000). This change in cognitive ability allows them to begin to understand mathematics and reading.

John Dewey

The final educator under consideration is John Dewey (1859 – 1952). Dewey developed a philosophy of education that focused on children building community as they worked together to learn from and with each other. Dewey believed that school and society are so closely linked that he developed his laboratory school as a miniature democratic society (Gutek, 2005).

According to Dewey, democratic principles were important for a true community. Dewey felt teaching children in a democratic way helped children to understand that education is a part of life, not just a preparation for life. Education was seen as strongly integrated with real life (Harms & DePencier, 1996). A benefit to the community experience found in Dewey's lab school was that the democratic decision-making process used during cooperative learning experiences helped children develop the same kinds of skills they need as adults (Gutek, 2005).

True education was understood to be based on the experiences of the learner and to promote individual development through the intellectual process of problem solving. Collaborative groups of children would work on problem-solving activities. These group activities could involve thematic units, inquiry and discovery studies, or integrated studies. This sense of community improved learning and lessened the sense of personal isolation (Gutek, 2005). It also mimicked the adult world, so the learning activities would help prepare children for their adult life as well as keeping them engaged in an authentic educational experience (Gutek, 2005). The experience was an active learning endeavor

that used the children's instincts and skills as a starting point for community problem solving (Henniger, 2002).

The primary focus of Dewey's philosophy was to develop a democratic community. Henniger (2002) summarized other key points of Dewey's educational philosophy. Dewey considered education to be an integrated part of life. Education should not be disconnected from the real world. It is so relevant to the real world that is must occur within a social situation because the real world is based on social situations.

Another important goal of education is to ensure that social values are preserved. This is one reason the democratic process is so integral to Dewey's philosophy. If children are immersed in democratic processes as children, it will be second nature to them when they become adults.

Developmentally Appropriate Practices

The ideas of these five pioneers of developmentally appropriate practices are incorporated into the position statement of the NAEYC. The NAEYC developed its first position statement in 1987, revised it in 1997, and had a further draft revision in 2007. The 1997 position statement expressed twelve major components of developmentally appropriate practices (Bredekamp & Copple, 1997). These components are:

1. Domains of children's development physical, social, emotional, and cognitive- are closely related, development in one domain influences and is influenced by development in other domains.

2. Development occurs in a relatively orderly sequence, with later abilities, skills, and knowledge building on those already acquired.

3. Development proceeds at varying rates from child to child as well as unevenly within different areas of each child's functioning.

4. Early experiences have both cumulative and delayed effects on individual children's development. Optimal periods exist for certain types of development and learning.

5. Development proceeds in predictable directions toward greater complexity, organization, and internalization.

6. Development and learning occur in and are influenced by multiple social and cultural contexts.

7. Children are active learners, drawing on direct physical and social experience as well as culturally transmitted knowledge to construct their own understandings of the world around them.

8. Development and learning result from interaction of biological maturation and the environment, which includes both the physical and social worlds that children live in.

9. Play is an important vehicle for children's social, emotional, and cognitive development, as well as a reflection of their development.

10. Development advances when children have opportunities to practice newly-acquired skills as well as when they experience a challenge just beyond the level of their present mastery.

11. Children demonstrate different modes of knowing and learning and different ways of representing what they know.

12. Children develop and learn best in the context of a community where they are safe and valued, their physical needs are met, and they feel psychologically secure.

Conclusion

This review of literature has had two main purposes. The first purpose was to give a historical overview of three laboratory schools that are integral to the study of the early childhood program at MSU Laboratory School. The first laboratory school, the University of Chicago Laboratory School, founded by John Dewey, is the archetype. The UES at UCLA was also described because MSU used it as a model for its individualized instruction program. The MSU program was strongly influenced by what was being done at UES. Finally, a brief description of the MSU Lab School program was given. This gives perspective on what the educational atmosphere was like for the kindergarten and first grade programs at MSU Lab School.

The second purpose was to describe the philosophical roots of developmentally appropriate practices and five educators who influenced early childhood education. The educators were chosen because they were innovators in the fields of early childhood education and education in general. The number was purposefully kept small to help focus on the descriptors of developmentally appropriate practices listed by Bredekamp and Copple.

Pestalozzi was one of the first educators to emphasize teaching children rather than teaching the curriculum. This is one of the primary focuses of developmentally appropriate practices. Froebel was a student of Pestalozzi. As the "father of kindergarten," Froebel had a deep respect for the dignity of young children as well as a strong sense of how important play was in child development. Montessori looked at educating children from a scientific point of view. She wanted to meet the needs of the whole child. She was one of the first educators to make sure that the environment was

adjusted to make it easier for children to learn. Piaget described the various cognitive developmental stages children move through as they grow. His careful observations on children's behavior allow teachers to create environments and activities that improve children's learning. Dewey developed a philosophy of child-centered democratic society. Dewey did not see education as a preparation for life but a time when children were capable of defining and solving authentic problems to help them learn the skills they will need when they are adults. School was society in miniature.

The variety of information in this review of literature is broad enough to give the reader a sufficient overview of the history and philosophy of laboratory schools and developmentally appropriate practices. This allows the description of the MSU Lab School kindergarten and first grade programs to fit into a historical context.

CHAPTER THREE

METHODOLOGY

Several writers offer insight into the methodology of historical research. Three different methodologies will be described, and then a synthesis will be developed that will be used for the current study.

Heller and Wilson (1992) recommend the most detailed of the three methodologies. According to them historical research should have these nine elements: (a) title, (b) statement of the problem, (c) statement of research questions, (d) the significance of the study, (e) related literature, (f) sources (primary and secondary), (g) criticism of sources, (h) the narrative, and (i) a bibliography.

The methodology developed by Stankiewicz (1997) telescopes the process into three steps. First, the researcher must select topic. Second, the researcher must compile facts from primary and secondary sources by reading, interviewing, and documenting artifacts. The researcher must establish the authenticity and credibility of sources as well as prepare chronologies. Third, the researcher will write the narratives as a meaningful story that interprets the facts.

Sansone, Morf, and Panter (2004) describe their methodology by asking eight questions. (a) What real world events interest us? (b) What are the research questions?

(c) To which people do the questions apply? (d) What methodology will be used to gather data? (e) What conclusion can or cannot be drawn from the questions? (f) Is the original event better understood? (g) What are the next steps? (h) Are there new studies?

Design

All three methodlogies will be synthesized in order to formulate a new methodology for use with this study. Central to the study of history is the act of questioning. This series of questions will parallel the chapter structure of the study. This will be the basis for describing the methodology.

1. What real world event is interesting?

The researcher will select a topic, review related literature, and finally, describe the research problem.

2. What research questions will be asked?

The researcher will develop questions to be answered by the research. One important question that must always be included in this step is to clarify the significance of the study.

3. What methodology will be used to gather the data?

The researcher must determine which primary and secondary sources will be acceptable. The researcher will decide how to deal with missing and/ or conflicting data. Data from primary and secondary sources will be collected by reading, interviewing sources, and documenting artifacts.

4. How will the sources be evaluated?

The research will have to establish the authenticity and credibility of the sources. The researcher will choose the facts that will accurately describe the events and

then begin to prepare chronologies. Tools such as a timeline or charts may be used.

5. Is the original event better understood?

The researcher will write the narrative as a meaningful story which will interpret the facts. The researcher will determine what conclusions can or cannot be drawn form the research questions through the interpretation of the facts.

6. What are the next steps? Are there new issues?

At this point in the process the researcher will look for new issues or studies that can be attempted or how the present research could be expanded.

This methodology will help the researcher to focus on the main issues of the research process.

Historical research focuses on three main issues (Felt, 1976). The researcher needs to choose between conflicting information from different sources, determine what probably happened, and then explain possible causes of the events. Research begins with the collection, examination, and interpretation of primary and secondary sources (Vers, 1996). Primary resources will include archival materials such as school documents, personal documents, and interviews. Secondary resources may include related journal articles, biographic sketches, or second-hand accounts by qualified sources when primary sources cannot be found.

The data will be organized and analyzed using qualitative data analysis during and after it is collected. The researcher will discard unneeded information and describe in detail the anecdotes that best exemplify the issue under discussion (Bresler & Stroke, 1992). This thick description is typical of qualitative research (Crowell, 1998; Franklin &

Ballan, 2001). Content analysis will include putting data into categories and subcategories to find patterns (Thomlinson, 2004). Categories and subcategories are considered saturated after more than three examples (Stockrocki, 1997). As the research is coded, informal patterns and emerging concepts will become evident (Stockrocki, 1997). These patterns and concepts will be the basis of the narrative used to support or undermine the hypothesis.

Patterns are essential for historical research (Barzun & Graff, 1992). Patterns help one to organize and understand information. As the researcher sorts the data, evidence is chosen that will help develop a better understanding of the events.

Pattern making is sorting and selecting facts. Facts do not organize themselves (Barzun & Graff, 1992). The facts are chosen that agree with the evidence and then organized so that the reader can understand how they are related to each other and why they are significant (Barzun & Graff, 1992). The researcher will use and evaluate facts for their appropriateness, attempting to find useful generalizations (Bra~ ¹ell & Varkas, 2001).

Dependability, Credibility, and Bias

Dependability, credibility, and bias are the next issues to be discussed as part of the methodology. The terminology for historical research is different from quantitative research. Historical research considers dependability rather than reliability. Credibility and bias are considerations for historical research rather than validity that is an issue for qualitative research. How the researcher manages these issues is important to methodology of the study.

Reliability is often referred to as dependability in qualitative research because its definition and purpose differ slightly from quantitative reliability (Franklin & Ballan, 2001). Franklin and Ballan define dependability as the "attempt to account for changing conditions in their observations as well as changes in the design that occurs once they are collecting data in the field" (p. 274). Miles and Huberman (1994) give criteria for ensuring dependability:

1. Clear research question

2. Clear explanation of the researcher's role and status within the site

3. Findings meaningful in respect to their sources

4. Appropriate data collection

5. Insurance that data and coding are checked for quality

The researcher should continue to review these elements of the methodology to ensure that the research remains dependable. Finding enough data for the study could be a problem because the number of sources is small. Written records will be the main sources used. Interviews of staff members will be used to fill in missing data or clarify the written record. The use of written records should help improve the dependability of the data.

Validity is also an issue in qualitative research; however, in historical research it is often referred to as credibility (Franklin & Ballan, 2001). Credibility is concerned with the authenticity of the research findings. The process of triangulating data and organizing chronologies helps to determine whether the data are credible. Triangulating data will include using multiple sources to determine if the data is credible enough to include in the study. Data that is not credible will not be included in the study.

Bias is a major concern when confronting the credibility of research. Barzun and Graff (1992) define bias as uncontrolled interest. Bias is an issue because it affects cognition and memory (Franklin & Ballan, 2001). Researcher bias will be a serious consideration during this research since the researcher has a relationship to the former director. Information from the director will be triangulated and carefully corroborated before it is included in the study. Referential adequacy will also be considered when dealing with information from the director to help lessen any bias. Bias can be lessened by using structural corroboration and referential adequacy. Structural corroboration, or triangulation, lessens the effects of bias. This is cross-checking of sources of data and information with one another to search for agreement or the absence of agreement (Franklin & Ballan, 2001). Referential adequacy is using the data and findings to find features that might not be seen without the research. To do this, opposing data as well as corroborating data will be sought.

Bias is a particular concern this study because the researcher is an alumnus of the school, is on friendly terms with all of the participants, and is related to the former director of the school. Particular care will need to taken to lessen any bias, especially in respect to any information from the former director of the school. All statements from the director will be compared to statements of other participants as well as the written record in order to lessen the effect of any bias.

Another type of bias to be considered is consistency bias. Consistency bias happens when the individual replaces past feelings concerning an event with present feelings (Franklin & Ballan, 2001). The researcher will need to be aware that the participants that will be interviewed are former staff and administration. They may

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romanticize the events because of the time span and the circumstances surrounding the closure of the school. Triangulation and referential adequacy will be used to lessen this kind of bias as well.

Conclusion

Studying the history of the kindergarten and first grade programs at the Minot State University Laboratory School will need a research methodology that ensures that history is recorded and interpreted in a way that will permit the researcher to begin to understand the events of the past. The study also addresses the hypothesis that the kindergarten and first grade programs were experimenting with developmentally appropriate practices. The procedure outlined in this chapter will be used to meet this research goal.

CHAPTER FOUR

NARRATIVE

Philosophy

The Minot State University Laboratory School expressed its mission through two
pieces of discourse: a traditional philosophy statement and an explanation of its
educational commitments. The school's statement on its educational commitments and its
philosophy described how the school's stakeholders viewed children, learning, and
teaching. The school had a philosophy based on three major components: cooperation as
the basis of learning, multi-age groupings, and parent involvement. These three
components were supported by four educational commitments to intellectual, personal,
social, and physical development. The philosophy statement and its educational
commitments helped define the individualized instruction program at the MSU Lab
School.

Cooperation

The premise that "survival, as well as personal and economic success, is best
achieved through cooperation" was one of the hallmarks of the MSU Lab School
program and was mentioned in every yearly statement regarding the school's philosophy
(MSC Campus Laboratory School, 1973; Curriculum Themes, 1974- 1975; Curriculum
Overview, 1975-1976 [and continuing yearly until 1979-1980], unpublished documents).
This meant that learning was a community event and that learning was not just for self

development but that it was a benefit for both self and others. During a conversation with the director of the MSU Lab School, Joseph Wax, Ed.D., mentioned that the idea of cooperation in education was new at the time; many of his colleagues felt that competition was the driving force behind the learning process (J. Wax, personal communication July 27, 2007). Wax further explained this point of view in an article entitled "Competition: Educational Incongruity." (1975) The premise of this article was that, essentially, education is about us and not me. When we teach through competition, our students learn to compete and begin to treat others as unimportant and possibly as a threat.

There were a variety of methods that supported this philosophy of cooperation. The MSU Lab School replaced traditional letter grades with narrative report cards. Narrative report cards were written longhand by the teachers and did not use any kind of letter grades or percentages. This prevented comparison and competition for grades. Another change was that desks were removed from the classrooms; students worked together in small groups at tables and centers. The mini-labs also encouraged cooperation because the children worked in small, multi-aged groups. Mini-labs were weekly learning sessions that were started as an opportunity to teach children about topics of special interest. As the mini-labs evolved, the topics centered on science or social studies content. The students worked on projects cooperatively.

Family Groups

According to documents from the MSU Lab School, the first experience all people have with community is as a member of a family (Curriculum Themes 1974-1975, Parent Student Handbook, 1984-1985; Unpublished documents). The MSU Lab School

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used community and civilization as the basis when they organized their classrooms (Curriculum Themes 1974-1975, unpublished document). The legal precedence of "in locus parentis" was seen as a legitimate teaching/ learning structure (Parent Student Handbook, 1984-1985, unpublished document). During the 1974 -1975 school year multi-age groupings, called family groups, were being implemented in grades three through six and attempted to a lesser degree in first and second grade as well as in kindergarten and special education (Curriculum Themes 1974-1975, unpublished document). Multi-age groupings had been tried in the lower grades during 1972 – 1973 for teaching/ learning math and it had been deemed effective enough to continue its implementation at the MSU Lab School (Curriculum Themes 1974-1975, Unpublished document). It was decided to have the third- and fourth-grade students organized into two intermediate-level family groups, and fifth and sixth grade students organized into two upper- elementary level family groups. The first and second grade did not utilize the family grouping system until the fall of 1982. Special education students were mainstreamed into first, second and third grades. Four children with hearing impairments were mainstreamed into the K-1 program for one year in 1980. This project, though deemed successful, was not continued because the cooperating special education agency withdrew its support (J. Wax, personal communication, September 27, 2007).

Parents

The students' families were also an important element in the school's philosophy. Since the school was a state-run institution, enrollment was voluntary. Students were placed in the program because parents and families wanted them to be there. Parents were

encouraged to participate in several ways. There was a Parent-Teacher Association (PTA) which encouraged interaction between staff and parents (Parent Student Handbook, 1984 - 1985, Unpublished document). The PTA organized "room mothers" to help with some classroom activities such as parties and/or field trips. Parents also assisted in the classrooms as teacher aides. They did clerical work as well as working with students within the classroom (Staff meeting minutes, October 22, 1970, unpublished document).

Parents were able to confer with the teaching staff on a regular basis. Times were set aside specifically for parents and students to meet with teachers during and after school hours. Thursday conference times were set aside from 3:45 until 4:30 when parents were able to make an appointment to meet with a teacher regarding their child or any school-related concern (Parent Student Handbook, 1984 - 1985, Unpublished document). Formal parent-child-teacher conferences were held at the beginning of the school year for the parents and children to meet with the teacher to define the yearly learning goals for the student. During these conferences that lasted approximately 20 minutes, parents and students did most of the talking and explaining to the teacher (Parent Student Handbook, 1984 - 1985, unpublished document). There were also regularly scheduled parent-teacher conferences to keep parents informed of student progress. These meetings were held during the afternoon hours. There were typically two conferences for each student every year. Students were dismissed from school to allow these conferences to take place during the day (Staff meeting minutes, Unpublished documents).

Parents were encouraged to make appointments to visit the classroom. Parents were recruited to teach students a new skill or hobby during Friday mini-labs during the

1973-1974 school year (Staff Meeting minutes, 1973, unpublished document). Inviting parents to teach for an hour or an hour-and-half was one of the adaptations of the mini-lab program. During the 1973- 1974 year the teaching staff used the Friday mini-labs to teach special interests including hobbies and other skills. Practices like these were outcomes of staff discussions concerning ways to get parents involved in their children's education and with the school as a whole.

Because the MSU Lab School was an experimental school, whenever educational research was conducted, the parents were surveyed (MSU Campus Laboratory Self-study, 1976). These surveys had several purposes. Primarily, the surveys helped to validate the research. A secondary purpose of the surveys was that the surveys helped parents become aware of what the school was doing and allowed the school staff and administration to understand how their procedures were perceived by parents.

A final way parents were involved was through political action to help keep the school open. The North Dakota state legislature considered closing the MSU Lab School several times. It was seen as an expensive item in the Minot State University budget. Parents and alumni rallied in 1971, 1978, 1984, and 1989 to help keep the doors of the school open. Letter-writing campaigns and trips to the legislature were organized with the help of parents, staff, and administration. The school records had several copies of letters from parents and friends of the school sent to the school and to North Dakota legislators to offer support to the school during the 1987 legislative session. There was a committee chairpersons list for organizing support to keep the MSU Lab School. This included the names of the individuals in charge of the letter writing campaign, the phone tree, and the lobby campaign (Staff Meeting minutes; copies of letters; unpublished documents). This

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documentation supports the idea that many of the parents of the MSU Lab School students had a strong commitment to the school and its mission.

Educational Commitments

During the 1983–1984 school year, the MSU Lab School articulated a list of educational commitments which included intellectual, personal, social, and physical development (Commitments, 1984, unpublished document). The list of commitments for intellectual development stated that the school used family grouping a two- tiered kindergarten program, and a 1/ 2 grade family grouping in the early childhood program. The two year kindergarten program was to insure that young children were exposed to a significant variety of educational experiences that would allow a strong foundation for future learning (Commitments, 1984, unpublished document).

Intellectual Development

The most comprehensive detailed commitment statement was on intellectual development. Language in all its forms was a defined as a primary intellectual commitment (Commitments, 1984, unpublished document). Students were expected to become sophisticated users of language in all its forms: listening, speaking, reading, and writing. To ensure this actuality, MSU Lab School was committed to the use of many techniques and technologies. Computers were available to students as early as 1978 (Staff Meeting minutes, 1978) and in all of the classrooms, including the kindergarten classrooms by 1982 (Minot State College Campus Laboratory School AEES Self-Study 1983 – 1984). The library included a classroom-sized reference room, and the book stacks that replaced the original built-in locker of the former high school ran the length of

the third floor hallway. This unique arrangement made the library unavoidable and supported this commitment to reading both explicitly and implicitly.

Not only were the students involved in a standard curriculum that included language arts, math, science, social studies, art, music, physical education, and special topics of interest, they were also exposed to these curriculum areas through the use of a variety of educational methodologies (Commitments, 1984, unpublished document). The MSU Lab School used learning centers, small and large group instruction, and encouraged students to plan and implement their own learning projects. The use of these methodologies was integral to the individualized instruction program that was the center of the experience and experimentation at the University Laboratory School.

Personal Development

Personal development was also a commitment at The MSU Lab School. The whole child was the focus of a good education. Children needed to develop a positive self-image; this included focusing on physical, mental, social, and emotional concerns (Commitments, 1984, unpublished document). The expectation was to help students create an intrinsic sense of independent judgment and personal responsibility. Personal success included a cooperative model of learning and working as a member of a team. These skills were practiced in the classroom as well as through physical education and the music program. Personal skills were the foundation for social development.

Social Development

The commitment to social development was evident in how the school used an open space floor plan that permitted students to work together (Commitments, 1984, unpublished document). The school had a variety of spaces for large, small, and

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individual instruction. Another way social development was encouraged was through the use of cooperative methods of learning. Children were encouraged to find pleasure in learning through cooperation rather than competition. It was expected that students would develop a social consciousness that would incorporate the principles of justice and an awareness of the "brotherhood" of humankind (Commitments, 1984, unpublished document, p. 2). The commitment to social development was to help students understand how they were a member of a variety of communities from family, to school, to the wider community regardless of differences (Commitments, 1984, unpublished document)

Physical Development

Social development was followed by a commitment to the physical development of students. The health of the children was a concern. Health screenings were carried out by trained health care assistants and the college [sic] nurse. The nutritional needs of the students were met with a balanced school lunch and a daily milk break. The physical education curriculum and the environmental playground were designed to entice the children to use fine and gross motor skills and improve coordination. The environmental playground was a collection of logs, holes, mounds, caves and open spaces with grass (J. Wax, personal communication, September 27, 2007). This final commitment helped to provide a holistic education for the students of the University Laboratory School.

The staff and administration at the MSU Lab School believed that the best way to learn was in cooperation with others. Teamwork was to help students understand that knowledge is a shared commodity. The family was the model for developing the classroom structure. Children were encouraged to work in multi-age groups, mimicking the different ages found in children within families. Even though the kindergarten and

first grade were primarily self-contained, there were opportunities for the children to work in these groups. The idea of community continued with the way the parents of students were involved with their children's school and education. The faculty at MSU Lab School was committed to educating the whole child. This commitment included intellectual, personal, and social development. By clearly enunciating their philosophy and commitments, school personnel were able to develop complementary programs and curriculum.

Individualized Instruction

The MSU Lab School had a philosophy that allowed it to function as an experimental school. Along with its philosophy, there was a recognizable curriculum of instruction that followed the Department of Public Instruction guidelines as well as the North Central Area (NCA) accreditation requirements. When the MSU Lab School received the first of its ongoing accreditation, it was one of two such schools in the state (Staff Meeting minutes, 1975). The philosophy stated in the documents helped the staff focus on improving the curriculum as well as the overall program.

The central program at the University Laboratory School was the individualized instruction program. The sixteen principles of individualized instruction were explained by Edda R. Larimore, assistant principal in charge of curriculum for the 1966–1967 school year (1967a -1967b). These principles included:

1. Teachers cannot have preconceived idea: of what a child can or cannot do.

2. Each student is an individual, with a unique rate of growth.

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3. There is no one right set of information a child needs to learn or a time limit for it to be learned.

4. When a child realizes learning is important, learning will happen. The learning experience is personal.

5. A child can learn when given the independence under the proper environment.

6. The best evaluation consists of an individual child's feeling of satisfaction, acceptance and security.

7. Time limits for discovery and learning are an unnatural restriction.

8. Learning must be an integrated experience, not a series of unrelated facts.

9. Skill development is more important than content. Content is used to teach the skills. Content changes in time; skills do not.

10. A child must be given individual opportunities to observe, investigate, develop hypotheses, and discover.

11. A child's individual development of interests and personal potential is more important than content.

12. Individualized instruction is carefully planned and coordinated. The teacher is in control. It is not chaos. There is flexibility but not irresponsibility.

13. Individualized instruction uses many materials on
    many levels.

14. A teacher needs to be creative, sensitive, flexible,
    and capable of motivating students.

15. A child must feel secure to develop a positive self
    concept. Learning is a secure activity. The proper
    environment strengthens the child's self concept.

16. Professionals are cautioned not to accept or reject
    to experience it first hand.

The individualized instruction program was the foundation for the other projects and programs at the Lab School. The other research and projects were developed to further expand and improve the original individualized program archetype.

Kindergarten Program

The First Years

The kindergarten program started in 1969. This was a two-tiered program. The idea for the two year program came from an assessment of needs. Four-and-a-half-year-old children were part of the K-1 program. This program met in the mornings until 11:30 a.m. This was often the first school experience these children had. The K-2 program was for children one year older. The relatively stable student population allowed the MSU Lab School to use this two-year program to better prepare their young students for first grade.

The five-and-a-half year-old program (K-2) was established in order to prevent students from graduating from high school at too young an age. The anecdotal evidence

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suggested that students who graduated from high school before their peers tend to struggle in college. The staff and administration did not want to create a program that would lead to future failure (J. Wax, personal communication, October 4, 2007).

The four-and-a-half year-old program (K-1) was established because the research seemed to indicate that children were more physically and academically advanced than previous generations. They seemed more ready for an educational experience. For instance, many young children could read upon enrollment. (J. Wax, personal communication, September 27, 2007). This two-tiered program seemed to the director to have a ironic element to it. With the K-1 program the MSU Lab School was trying to educate a younger population, while at the same time the K-2 program was attempting to insure that the children were older when they finished the twelfth grade (J. Wax, personal communication, October 4, 2007).

The first kindergarten teacher was Lola Dokken. She had been the first grade teacher prior to her assignment to the kindergarten program. The focus of the kindergarten program under Dokken was to use play that would subsequently lead to discovery. The classroom was organized around a series of centers: alphabet, building block, physical activity, and story. There were no desks: instead there was a collection of chairs, tables, mats and manipultives (J. Wax, personal communication, September 27, 2007).

During the first year Dokken was asked what changes to the physical plant she would like to see. She requested an outside door for her classroom. This was possible because the kindergarten room was in the southeast corner of the first floor. A door on

the east side would have opened onto the playground (Staff Meeting Minutes, 1969). This was one physical change to the building that did not happen.

One of the focuses the MSU Lab School had during the 1971-1972 school year was how to develop a better report form. Dokken considered how to assess children in kindergarten. Dokken believed that any report on a child should be fitted to the child and that the child should not be fitted to the report. When writing about children, the teacher should give the parents an image of the activities and the objectives for the learning activities (Staff Meeting minutes, 1972). The final result of this project was a narrative report in which the teacher wrote information in sentence form rather than using letter grades. The process was time consuming, but the faculty believed it did a more accurate job of describing what the children knew and could do (Staff Meeting Minutes, 1973).

Change in Entrance Age

In the fall of 1978 the age for accepting students for kindergarten in North Dakota was changed from being four or five years old by December 31 to being four or five years old by August 31. This called for a change in the pedagogy used in the classroom. Dokken reported that four-year old children were different from children six months older. Although children were physically larger than they were thirty years earlier, they were also harder to manage than the four-and-a-half year olds she taught in previous years. They had fewer social skills; there was more pushing and more tears. Learning and mastering concepts took longer for younger children. Children needed more help with life skills such as dressing themselves or doing daily activities such as snack time (Staff Meeting minutes, 1979 & 1980). Dokken recommended taking more time to evaluate the children and using smaller groups when teaching new concepts or working on activities.

Dokken retired in the spring of 1980. Carol Corrigan, who had completed her pre-professional teaching with Dokken, was hired to take her place (C. Bellew, personal communication, May 26, 2008). During her first year Corrigan participated in a project that mainstreamed four hearing-impaired kindergarten students into a regular kindergarten classroom. Corrigan team taught with Barb Oynes, a hearing impaired specialist. The children with hearing impairments participated in as many activities as possible. However, their individualized education plans required that they receive specialized instruction in sign language and other curriculum material ("Staff Meeting minutes,"1981). This meant that the time all K-1 students had to interact with each other was limited. This was seen as one of the negative aspects of the experience. Another problem included poor communication between the team teachers during the school day. Corrigan believed that the physical setup of the classroom was the primary cause for the poor communication. The final negative was that there was not enough room for the number of students in the classroom.

There were several positive outcomes to the experience. The first positive was that all children showed educational growth. Additionally, all children successfully met the cognitive goals set for them and exhibited typical social growth for the school year. The staff also recognized that having children with disabilities in the classroom helped the students recognize the "normality" in all children. The final positive outcome of the experience was that the interaction and planning of two teachers was a benefit to all the children (Staff Meeting Minutes,1981). Though the experience was deemed a success, the students did not continue at the Lab School the following year because the chair of the

Special Education program withdrew support by withdrawing interns and supervision (J. Wax, personal communication, September 27, 2007).

Individualized Education Plans

One mandate of the 1984-1985 school year was the development of Individualized Education Plans (IEP) for all students. It was thought that since each student was being taught as an individual and that each was getting individual instruction, it made logical sense to have that plan recorded and described (Staff Meeting Minutes, 1985). The IEP was also an important tool for the gifted program (C. Bellew, personal communication, May 26, 2008). The sharing and discussion of various forms occurred throughout the school year. It was determined that the IEP would be made an addition to the report card (Staff Meeting Minutes, 1985). Some teachers referred to the reports as Individual Education Plans (IEPs), some referred to them as Personal Education Plans (PEPs), and others referred to them as Personal Education Reports (PERs). There was no indication that there ever was a final decision on which term to use. There were also a variety of forms that teachers used. These forms were shared during staff meetings and teachers used the form that was most appropriate for their students.

The IEP that Corrigan used included a list of goals for the student. She also would talk with the child about the information on the IFP before she would meet with the parents. The IEP had information on how and what the student was doing in school. Corrigan used daily observations sheets with a running log of checklists to gather information for the IEP for both sections of kindergarteners (Staff Meeting minutes, 1987). This use of IEPs allowed the teachers to focus on student needs, both in terms of individualized instruction and gifted education.

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Gifted Education

The gifted education program began after Dr. Warren Allen, chair of the Education Department, recommended that the MSU Lab School begin a program. The director was reluctant at first because what seemed like an elitist program was not compatible with the philosophy of education at the MSU Lab School. The director of the school did research and then developed a philosophy of education that fit into the school's philosophy (Wax, 1990). Giftedness was described as an attribute that all people have. Teachers help children to search out their individual giftedness. The MSU Lab School used the idea of multiple intelligences as described by Howard Gardner, rather than the older, more narrow definition of intellectual giftedness as described by the Stanford Benet IQ test. Gardner's theory included more intuitive ways to look at giftedness (Eggan & Kauchak, 2004). The seven types of intelligences included in Gardner's theory at that time included linguistics, logical-mathematical, spatial, musical, body-kinesthetic, interpersonal, and intrapersonal intelligences (Eggan & Kauchak, 2004). This newer, broader understanding of giftedness was consistent with the MSU Lab School mission and philosophy of education.

During the 1984-1985 school year the staff was mandated to incorporate the gifted program into all of the classrooms. The kindergarten and first grades were part of this mandate. The school psychologist, Russell Harth, and Patricia Swanson, an MSU Lab School teacher, developed a tool to help identify areas of giftedness. The pair identified four behaviors that they had determined were present in creative/gifted people. These behaviors were creativity, leadership, acquisition, and motivation (CLAM). From January through March, students in kindergarten through grade two participated in the

development of the CLAM: Indicators of Giftedness Inventory. The CLAM instrument was a series of forty questions that were answered, scored, weighed and graphed. The CLAM was administered three times for each student. The student, the teacher, and a parent each fill out the instrument to get a better description of the student's skills (Wax, 1990).

In the 1980s kindergarten teacher Corrigan integrated gifted education in the kindergarten classroom by having fifth and sixth grade students help to transcribe stories that the kindergarteners had written. College students helped with language arts and reading experiences. These older students helped the kindergarteners write stories, worked on plays, and other literacy activities. Corrigan developed reading pouches by making word cards that children could use to build sentences and eventually write stories with the sentences that the children had developed from the word cards. Book Bags, a take-home activity with books and activities, were also developed. Other materials used to enhance the gifted program in the kindergarten program was the use of a computer in the classroom and the use of learning centers for ensuring individual choice and growth (C. Bellew, personal communication, May 26, 2008).

The gifted program was used in a limited way during the school year because the individualized instruction program met the needs of most of the students. Students who needed the gifted program during the school year had an IEP written for them. One kindergartener was reading at an eighth grade level. He spent half an hour in the third floor library doing research. During this time he was supervised by the librarian, Karen Martin. His project was a study of Australia. He learned about the animals and places of

Australia. He even drew a map of Australia as part of the requirements to demonstrate what he had learned (C. Bellew, personal communication, May 26, 2008).

Kindergarten Summer School

The University Laboratory School ran a kindergarten program during the summer school session. Children in the summer program followed a program similar to the regular school year (J. Wax, personal communication, September 27, 2007). Dokken was in charge of the original summer kindergarten program. This kindergarten operated with the same methods as the standard kindergarten. In order to qualify for the summer school, children applied for summer school and the first twenty were accepted (J. Wax, personal communication, September 27, 2007).

The kindergarten summer program was also used as a lab for the Master of Science degree program in Early Childhood Education that Minot State University offered at that time. The staff at the MSU Lab School worked with graduate students grouped in cohorts. The graduate students worked in the classroom with the young children during the morning summer school session. The afternoons then focused on theory and methodology for the graduate students. In this way the summer school program helped to educate both young children and graduate students (C. Bellew, personal communication, May 26, 2008).

The program for the graduate students started with a three-day seminar. A nationally-known expert was brought in to lead the seminar. Then the professors and graduate students would implement what the expert had presented (C. Bellew, personal communication, May 26, 2008).

The summer school program for the kindergarten students was where the MSU Lab School ran the pilot program for the gifted program. The children who attended the summer gifted program were from all over the state. Eventually the gifted program was added to the other programs used at the MSU Lab School. (C. Bellew, personal communication, May 26, 2008).

Parents and students were treated in the same way during the summer session as they were during the regular school year. Parents and children were involved in planning for the summer session. Each child had an IEP that listed what topics they wanted to learn, what the results would look like, and how the children would show what they learned (C. Bellew, personal communication, May 26, 2008).

The schedule for the kindergarten portion of the summer school included a group learning time when the kindergarteners had a lesson. This was one way the professors and graduate students could demonstrate teaching a lesson. Then there were individual work times where the kindergarten students would work on projects that matched their IEPs. Professors from the college would come over to the kindergarten to work with the children. A math professor came to the school to help one student who was working on tenth-grade math skills (C. Bellew, personal communication, May 26, 2008).

At the end of each summer session there would be a talent show. Sections of the show included art and physical education. Children would display finished projects or demonstrate their new skills in some way. Art shows were a common activity and physical education could include activities such as a dance demonstration (C. Bellew, personal communication, May 26, 2008).

Environmental Playground

The environmental playground was a relatively small project. The idea was to create an outside area that used logs, recycled tires, and other materials to build structures for play and climbing (J. Wax, personal communication, September, 27, 2007). Along with the climbing structure, there was a sandbox for digging, building and other learning activities. (C. Bellew, personal communication, May 26, 2008). Safety and student opinion were considered during the construction of the playground. During a staff meeting it was decided to ask the students about some of the particulars being considered for the playground (October 6, 1975, Staff Meeting Minutes, 1975). Although the playground was small and unfenced, it was described as "excellent" because the "creative play equipment" allowed students to effectively use the space available (Minot State College Campus Laboratory School Self- Study 1976–1977, 1976, p. 242).

Expanding the Early Childhood Program

One final project that the kindergarten program was involved with was to begin to study the possibility of expanding the early childhood program. This idea was first mentioned in 1985.

Barbara Brown, a primary level teacher, and Carol Corrigan Bellew, the kindergarten teacher, were assigned to an Early Childhood Committee. The first report of the Early Childhood Committee mentioned four main goals (Early Childhood Report, 1985). The first goal was to follow the legislative early childhood day care licensing bills. The second goal was to develop ideas for a new early childhood center. This structure was to be an eight-sided building with a central area housing a central play area with a series of ten rooms around the perimeter. The third goal was to decide what educational

programs were to be added to the university's offerings. These programs included the following: infant stimulation, prenatal classes, language development, nursery school, pre-kindergarten, kindergarten day care, and an after school program. The final goal was to develop educational services such as parent workshops, teacher training-staff development, and a grandparent-senior citizens program.

During the 1986–1987 school year, the MSU Lab School early childhood committee made four recommendations (Staff Meeting Minutes, 1987). The first recommendation was to review early childhood courses at other universities to compare programs. The second recommendation the committee made was that the early childhood program and the classes at the MSU Lab School should be revamped. A third recommendation was that the MSU Lab School start a latchkey program for students who would otherwise be home alone after school. A final recommendation from the committee was to propose a series of parent workshops during the 1988–1989 school year. These workshops would be scheduled at regular intervals and cover a variety of topics. There was no indication in the written record that any of these suggestions were carried out in the last two years of the school's operation.

Apparently the early childhood program was put on hold after the spring of 1988 because it was not mentioned during the 1988–1989 school year. By late 1989 no mention of the extended early childhood program appeared in the documents. This could be caused by several possible reasons. During the 1988-1989 school year Susan Godsell was the new long-term substitute kindergarten teacher, replacing Carol (Corrigan) Bellew who was on maternity leave. Bellew resigned that spring and a new kindergarten instructor, Lois Burnes, was hired for the 1989 -1990 school year. This change in a key

position might have required that the expansion plans be put on hold until the new personnel was able to review the information and be prepared to be part of the discussion. There was also the difficult relationship between the university and MSU Lab School staff, making working together and getting inter-institutional support difficult. This relationship was mentioned in the staff meeting minutes periodically throughout the years. Not all members of the education department believed in the mission of any laboratory school and in particular, the MSU Lab School (J. Wax , personal communication, September 27, 2007). A final supporting cause for the early childhood expansion program to be ignored was the impending closure of the school. The MSU Lab School was a line item in the Minot State University budget. When cutting the budget became imperative, the University decided, with permission of the state legislature, to close the school and use those monies for other programs at MSU.

The last year of the kindergarten was the 1989–1990 school year. Lois Burnes was hired after Corrigan resigned ("Student/ Parent Directory,"1989/90). There is little in the record concerning new programs as the director was made aware during the fall term that the school would be closing.

Figure 1. Timeline of Major Events at MSU Lab School

Beginning in the fall of:

---1969---
    Kindergarten program started
       L. Dokken assigned to kindergarten
    First grade program implemented individualized instruction
       P. Swanson assigned to grade 1

---1970---
    School remodeled for individualized education

Figure 1. cont. Timeline of Major Events at MSU Lab School

---1971---
     First narrative reports developed
     Mini-labs began

---1972---

---1973---
     Mainstreaming project implemented in grades 1 – 3

---1974 ---
     Co'operation enunciated as part of educational philosophy
     Family grouping implemented in grades 3 – 6
     Mini-labs reorganized to support Science and Social Studies
     curriculum

---1975---
     Mainstreaming project moved to upper grades

---1976---
     Campus School self-study
     Environmental playground is implemented

---1977---

---1978---
     Change in school entrance age

---1979—
     NCA self-study
     Armstrong replaces Swanson in grade 1

---1980---
     Corrigan replaced Dokken in kindergarten
     Hearing impairment project
     Computer center added to library

---1981---

---1982---
     Grade 1 and 2 added to family grouping practice
     Evidence of computers in every classroom
     Brown joins Armstrong to create primary teaching team

Figure 1. cont. Timeline of Major Events at MSU Lab School

---1983---
        Articulation of educational commitments

---1984---
        Gifted program implemented school-wide
        First individual education plans instituted

---1985---
        Plans begin to expand early childhood program

---1986—
        Shaw replaces Brown on primary team

---1987---
        Frederickson replaces Shaw on primary team

---1988---
        Godsell long-term substitute for Corrigan
        Corrigan resigns

---1989---
        Burnes replaces Corrigan in kindergarten

---1990—
        School closed in spring

A Typical Day in Kindergarten

Corrigan was the kindergarten teacher from 1980 through 1988. She used play

and learning centers as the basis for her program. The morning session ran from 8:45

until 11:15 with the K-1 program. The afternoon session ran from 12:30–3:00 p.m. The

organization of the two sessions was basically the same. The differences were based on

content and students' needs. There were two separate curriculums for the two

kindergartens. The curriculum for K-2 was a continuation of the K-1 curriculum; it

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included more language arts, writing, phonics, and choral or echo reading (C. Bellew, personal communication, May 26, 2008).

The day began with the students taking care of their coats, boots, and other items brought to school. They checked their cubbies and then spent time at the center of their choice. After the bell rang, they began opening exercises; this would take about 15 minutes. The children would take attendance by flipping over their own name cards. Then they would do some academic work. K-1 might work on learning their colors, shapes, or letter names. The children in K-2 would work on more advanced skills including, phonics, sight words, or other reading skills. Usually there was some kind of concrete tool to teach the skill, such as a puppet or a game. The activities were designed so that children could participate and move about.

After the opening exercises, the children would have a learning activity. Both kindergartens had a theme that they were studying. The theme could last from one to three weeks. The themes were different for each kindergarten. There were several reasons for this. First, it insured that the curriculum was expanding as the children became more proficient. The second reason was that many children had younger siblings and Corrigan wanted to make sure that they had different experiences at school. The last reason for different themes was that the themes were chosen based on student interests.

After this instructional activity, the students would go to their tables and be involved in some kind of whole class activity, craft, or art that was related to the theme. Then they would move on to center time when they finished the activity. The children who were involved in the activity could choose to continue with the activity until they had finished (C. Bellew, personal communication, May 26, 2008).

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Center time lasted about twenty minutes. Some of the centers included a Wendy House (playhouse), blocks, computer, and cooking or store centers. Monday through Thursday the students worked at assigned centers. Friday the children were allowed to choose the center where they wanted to work. The kindergarten room was large enough to have five permanent centers. The centers were changed every two weeks to encourage learning. One of the centers would match the learning theme for the week. Not all materials were part of formal centers; simple materials, like puzzles, books, or markers could be taken out of storage. This way there could be as many as ten different activities happening in the room at any one time (C. Bellew, personal communication, May 26, 2008).

During center time children worked on social, physical, or academic skills. Most activities were concrete or involved manipulatives. No workbooks were used. It was during this time that Corrigan would work with individual students to review or practice the skill that child was learning at that center. If children needed special help with a subject, Corrigan could pull them aside and work on that specific need. This time was for slower developing children as well the more gifted students. Individual teaching was often done simply and quickly so that the teacher could move on to help the next child as well as allowing the children not to be disturbed from the work they were doing. Other times the teacher might take the whole 20 minutes with one student. For example, if a student was already reading, then the child might get an individual reading lesson (C. Bellew, personal communication, May 26, 2008).

Children were given space to learn and interact with one another as well as have time to themselves. The kindergarten room had a large homemade cube with holes on the

top and sides. Children could climb into or on the cube. It was not unusual to find a student in need of private time inside the cube (C. Bellew, personal communication, May 26, 2008).

Math time was next. The K-1 group started with ten minutes of math time and would slowly work up to 15 or twenty minutes; K-2 would be able to work up to thirty minutes. The skills differed with the age of the children. Like the language arts skills, math skills and requirements were simpler for K-1. Individual work with children was done during center time (C. Bellew, personal communication, May 26, 2008).

After math time was snack time. The parents would donate money for snacks and Corrigan would buy snacks that corresponded to the theme. During this time children had specific jobs to do for getting snack ready. Some would go to the school refrigerators to get milk, some handed out napkins or snack. Children were taught to be responsible for their job without teacher interference (C. Bellew, personal communication, May 26, 2008).

Story time was after snack. After listening to the story, children would be involved in some kind of activity. They might write a letter to the writer, make a list of new words, do a graphic organizer, or other language experience activity (C. Bellew, personal communication, May 26, 2008).

Monday through Thursday children would have music or physical education class. Both classes met two times each week. Friday was the one day a week children were scheduled to go outside for free play. There were also other occasions when the children would go outside. If the weather was pleasant or if there was an outside activity

that related to the weekly theme the children might go outside (C. Bellew, personal communication, May 26, 2008).

The final experience of the day was a recap of the events of the day. This event started by writing a language experience chart together that included the date and the weather. Then the children would write about what other important events had happened that day. Corrigan tried to include the children's names and other personal accomplishments so that the students would begin to recognize their names as well the names of their classmates. They would read the chart together, sing a good-bye song, and get ready to go home. The chart was immediately displayed in the hall so that parents could read about the events of the day, as well. Corrigan chose to do the chart at the end of the day to help children remember what had happened so that they could more easily remember and tell their parents about their day (C. Bellew, personal communication, May 26, 2008).

First Grade Program

The Beginnings

The first grade program at the MSU Lab School was self-contained at the beginning of its existence. Lola Dokken was the first grade teacher until she was asked to begin the kindergarten program in 1969. Then Patricia Swanson became the first grade teacher, a position she held until the spring of 1979 (P. Swanson, personal communication, October 1, 2007).

Individualizing and the beginnings of family grouping were supported by the changes in the physical design of the school. During the summer of 1970, the north side of the second and third floors was remodeled. The walls were removed and new sinks,

storage areas, carpeting and cupboards were installed (Grimes and Trudeau, 1978). The

first grade was on the northwest corner of the second floor. The second and third grades

were also located on the second floor. This large open configuration provided enough

flexibility for centers, mini-labs and, multi-age groups to work. Swanson spent the first

years in the new space developing the individualized instruction program (P. Swanson,

personal interview, Oct. 1, 2007).

Figure 2. List of Staff Members Mentioned in Study.

Warren Allen, Chair- Department of Education 1969 - 1987
Marlys Armstrong, 1st grade and primary (1-2) team, 1979 - 1990
Barbara Brown, primary (1-2) team, 1982 - 1986
Lois Burnes, kindergarten, 1989 - 1990
Carol Corrigan Bellew, kindergarten, 1980 - 1988
Lola Dokken, kindergarten, 1969 - 1980
Barbara Fredrickson, primary (grade 1-2) team, 1987 – 1990
Susan Godsell, kindergarten substitute, 1988-1989
Russell Harth, school psychologist 1983 - 1990
Ric Hovda, primary (grade 3) team 1972 – 1975
Karen Martin, librarian 1969 - 1990
Brenda Shaw, primary (grade 1-2) team, 1986 – 1987
Sandra Starr, music teacher 1969 - 1990
Patricia Swanson, 1st grade, 1969 - 1980
Joseph Wax, Director 1969 - 1990

Children with Disabilities Program

In 1973, the MSU Lab School started a mainstreaming program in grades 1-6

("Staff meeting minutes," 1973). Ralph Charley, a special educator, was hired to work

with a group of special education students. There were 10-15 Educable Mentally

Handicapped (EMH) students in the program. The MSU Lab School staff did not label

students by class so there was some discussion of how to refer to Charley's students. The

final decision was to use the teachers' last names to identify groups (Staff Meeting

Minutes, 1974).

In the fall of 1973 these children were divided between Charley (special education), Patricia Swanson (grade 1/ primary) and Marjorie Olson (grade 2/ primary) on the second floor of the MSU Lab School and Ric Hovda (grade 3/ primary) on the third floor. Each of the three primary teachers had four children with disabilities along with 21 typical students. Mr. Charley, the special education specialist, had three each from grade one, grade two, grade three and three students with disabilities for a total of twelve students. The students with disabilities were placed in the primary grades because if was felt that these children were an appropriate peer group for them.

The first year the mainstreaming project was not as successful as the staff had hoped; a large amount of time was spent dealing with inappropriate behavior and attempting to maintain an appropriate learning environment (Swanson, personal interview, October 1, 2007). Students did not make the kind of academic progress the teachers had expected. The first-grade teacher, Swanson, felt ill prepared to teach the special students she was assigned. Her concern was supported by Marjorie Olson, the second grade teacher. They believed that they had the more problematic students than other teachers. They also felt they needed more assistance from the special education specialist ("Staff Meeting minutes," 1974). Parents were also concerned about the learning environment; one parent had his/her child removed from the first grade program because he/she felt the child was not getting an adequate education (Swanson, personal communication, October 1, 2007). Even though the mainstreaming program in the first grade program was seen as less than successful by many of the teachers, it was determined that the experience for the children with disabilities and typically developing

children had enough merit to justify continuing the experiment for another year (Staff Meeting Minutes, 1974).

During the 1974–1975 school year, the mainstreaming program continued. By 1975 MSU Lab School received a grant to help support the mainstreaming project. This time the students were integrated with fourth and fifth graders so the original grades were no longer a part of the mainstreaming program.

Mini-labs

Mini-labs were first developed at the MSU Lab School during the 1971-1972 school year. The primary purposes of the mini-labs were to help students incorporate methods and techniques for every-day learning and to meet the individual leaning needs of the students. It was decided during several meetings that the mini-labs be restructured during the 1974–1975 school year to focus on these two curriculum areas (Wax, 1990). Mini-labs were primarily used by grades 1-6; K-2 participated only in a limited way with students who were deemed ready for the experience, and K-1 did not participate at all (Staff Meeting Minutes, 1975).

The planning for the mini-labs was done as a full faculty. The faculty would decide which themes or topics would be taught. Children were allowed to choose the mini-lab they wished to attend. When there were problems with the composition of the group membership, the teachers would help the students make alternative choices. There was a concern that having groups of children from 6-12 years old made some mini-labs inappropriate. Some mini-labs were designed for students working at a lower skill level; these min-labs did not have enough challenging material for the older students (Swanson, personal interview, October 1, 2007). In order to overcome this problem, the mini-labs

were then designed for lower and upper skill levels and subject matter (Swanson, personal interview, October 1, 2007).

There were two other major disadvantages to mini-labs. First, there was too great of an age range, ability range, interest levels and topic levels. Second, there was not enough clock time to pursue depth or breadth. The advantages were that there was time made for two subjects that were often overlooked, there was multi-age grouping, and the teachers were able to teach strengths or pursue and interest (Swanson, personal interview, October 1, 2007).

Despite the disadvantages there were kindergarten students who were ready to participate in the mini-labs. However, the kindergarten teacher, Dokken, reported that not all K-2 kindergarteners were ready for the experience (Staff Meeting Minutes, 1975). Those who were not ready for the experience stayed in the kindergarten classroom and were involved with developmentally appropriate activities.

For those K-2 students who did attend the mini-labs, the social studies curriculum seemed easier for them to understand and do than science. Another problem was that these young children were leaving their self-contained classroom to attend a multi-aged group activity. This was a new educational experience for them. Some of the difficulties reported included their insecurity about how to behave, not having any experience working in a large multi-aged group, and/or not understanding what was expected of them.

Math and Multi-age Grouping

Another curriculum area that used the same kind of multi-aged grouping as the mini-lab was the primary grade math program. This program began in 1976 ("Staff

Meeting minutes," 1975). The first and second grade students were put into heterogeneous multi-age math groups. After five years the program was evaluated. The second graders were helping first graders to follow the stated goals was one positive outcome. Both age levels liked working together and enjoyed having independent work time as well. Faculty members had diff ulty finding a negative result to the project. The only possible negative effect was that ome students ended up having the same teacher for two years in a row; an education l practice often referred to as looping. This experiment with team-teaching and multi-age grouping was deemed a success by the MSU Lab School staff. Because of the positive response to family grouping experiences, the first and second grade were completely integrated into the multi-age grouping program.

A Typical Day in First Grade

School started 8:30 a.m. Swanson would greet her students in the hall or as they entered the room. The day began officially with the students taking attendance and completing the attendance sheet. The purpose behind these activities was to teach responsibility a d basic math skills. This information was then taken to the office (P. Swanson, pe onal communication, November 1, 2007).

The first activity of the day was a language experience chart. Children began by rereading the chart from the previous day and then writing a new one. The chart activity used followed a pattern that would become more advanced as the year progressed. This was to teach proper grammar and writing mechanics (P. Swanson, personal communication, November 1, 2007).

The classroom was organized using stations and centers. The children had been taught how to use each center and were aware of the rules. The teacher monitored children as they worked. The teacher also utilized conferences. The conferences for the day were on the board so all parties were aware of the meetings (P. Swanson, personal communication, November 1, 2007).

There were a variety of activities that were used each day. Small group activities were based on individual needs and choices. The purposes of the small group activities were for skill development, subject lessons, or to introduce or enrich a lesson. Large group activities were based on requirements for grade 1, and included taking inventory of student skills, introducing, reviewing, reinforcing or other specifics needed for the larger group. Daily activities included math and reading/language arts times. These times were required, but children did work on these activities at the other times (P. Swanson, personal communication, November 1, 2007).

Block time was a required time when everyone spent time writing or reading. Children used either their own writing or trade books during this block reading time. At the beginning of the year the children wrote for only two or three minutes, by the middle of the year children were writing for a minimum of 15 minutes. Uninterrupted Sustained Silent Reading (USSR) was the time when all students spent time reading. Children could go anywhere to read. At the beginning of the year children read for only four or five minutes and gradually extended to 15 minutes by the middle of the year (P. Swanson, personal communication, November 1, 2007).

The individual conferences were planned by the teacher. There were at least two conferences for each child; one focusing on reading/language arts and the other on math.

During the reading conference, Swanson would listen to the child read, speak, and explain some of the material the student had read or written by him/herself. The math conference was similar in procedure and focused on math concepts and problem solving (P. Swanson, personal communication. November 1, 2007).

Conferences for small groups of children were planned when it seemed appropriate. The children in these groups had a shared need but were not necessarily at the same skill level. This was to improve and encourage group participation (P. Swanson, personal communication, November 1, 2007).

Reading was taught using the language experience approach based on the principles set forth by Jeanette Veatch. Students would have a word card box where they kept word cards. They also drew pictures, dictated stories, and eventually began to write their own stories. Children would spend time reading their stories. When students had mastered reading their stories, they would make small booklets out of them and then would take them home. One of the most obvious reading techniques used was the way the room was labeled. Almost everything was labeled, but not with a word. The labels were always done as sentences. This way the students were exposed to sight words, singular and plural words, good grammar, and sentence structure (P. Swanson, personal communication, November, 1, 2007).

Math was taught by using manipulatives to help children develop a strong sense of mathematics. Students worked individually or in small groups learning math concepts. The use of workbooks was limited to individual pages that could be used as reinforcement. Most children did not complete an entire book. Occasionally a child who wanted to have a daily written math assignment would be given an entire book to

complete during the course of the year (P. Swanson, personal communication, November 1, 2007).

There were some subjects where children met as a whole class. This included a daily half-hour music class with the music teacher every day and physical education class that met twice a week. Recess breaks included a 15-minute morning break and a 40-minute lunch break (P. Swanson, personal communication, November 1, 2007).

Materials used in the first grade classroom included a variety of math manipultives, puzzles, art supplies, trade books, maps, paper and other writing materials, individual copies of workbooks, alphabet cards, and games (P. Swanson, personal communication. November, 1, 2007).

Teachers in Grade One and Two

In 1979 Swanson was moved to the fifth- sixth grade team (Class Pictures, 1979-1980). From 1979 through 1982 Marlys Armstrong was the first grade teacher. By the fall of 1982 the first and second grade students were part of the family grouping system used in the school. There were two teachers who were the primary grade team. The teachers involved with the primary grade team included Marlys Armstrong from the fall of 1982 through the spring of 1990. Barbara Brown was on the team from 1982 until the spring of 1986. Brenda Shaw replaced Brown in the fall of 1986, and then Barbara Fredrickson replaced Shaw in the fall of 1987 and continued on the team until the school closed in 1990 ("Class Pictures," 1979-1980; 1980-81; 1981-82;
1982-83; 1983-84; 1984-85; 1985-86; 1986-87; 1987-1988; 1988-1989; 1989-1990).

Conclusion

The Minot State University Laboratory School worked on educational theory that could be translated into classroom practice. During the 22 years of the programs were in operation there were many changes to the kindergarten and first grade programs. The first changes included the start of the kindergarten and first grade programs. Individualized and gifted instruction were introduced into the kindergarten and first grade programs. Other projects developed at the MSU Lab School for these programs included integrating students with developmental disabilities and hearing impairments, narrative report cards, individualized instruction plans, mini-labs, and multi-age grouping.

These programs piloted projects and techniques that have become common in many PreK - 6 schools. Play and centers are used in many kindergartens and first grade classrooms. Differentiated instruction, the modern version of individualized instruction, is now used in many classrooms. The mainstreaming and hearing impairment projects at the MSU Lab School are now common and part of federal law; placing children in the least restrictive environment was part of the Individuals with Disabilities Education Act of 1990 (IDEA).

A philosophy of cooperation supported and permeated the research projects at the MSU Lab School. Students in groups and centers naturally cooperated as they worked. The overt use of multi-age grouping in the family groups and min-labs also encouraged students to cooperate. This philosophy is a strong indicator that the programs at the MSU Lab School were developmentally appropriate. The next section will organize the data to determine if the designation of developmentally appropriate is a good fit and if the study has answered the research questions.

CHAPTER FIVE

FINDINGS

Introduction

The kindergarten and first grade programs at the MSU Lab School employed many techniques and methodologies that are now considered developmentally appropriate practices. This chapter will examine whether the hypothesis is dependable and whether the specific research questions were answered.

The hypothesis is that the MSU Lab School was a school that developed practices and methodologies that are now considered common practices and that these practices were developmentally appropriate as defined by the NAEYC. The hypothesis is supported by three research questions. The questions to be answered are:

1. What was some of the best practices conducted by the faculty?

2. How did the kindergarten and first grade programs integrate the individualized instruction program?

3. Do the kindergarten and first grade programs at the MSU Lab School meet the criteria of developmentally appropriate practices even though these programs were in existence during the time the NAEYC was articulating their position on this philosophy?

The narrative will be compared to the questions to see if conditions existed at the MSU Lab School that would allow the hypothesis to be accepted. The first question to be

considered will be to look at the best practices conducted by the faculty and then to look at current educational literature to see if any of the practices are still in use today and if they are considered best practice.

The second question will consider whether or not the MSU Lab School used individualized instruction practices with the three youngest groups of students. A few examples will be discussed to illustrate the use of individualized instruction. Any instances where the practice was not used will also be discussed.

Then the last question will be the bulk of the discussion. The question is whether or not the kindergarten and first grade programs at the MSU Lab School were developmentally appropriate. Since the topic is quite broad the discussion will be divided into two major sections. Data will be coded to determine if there was a relationship between the different categories. Because of the nature and quantity of the data, information will be put into tables and then described in the text. The first half of the discussion will illustrate the relationship between the NAEYC position statement and the various elements of the MSU Lab School. The second half will compare the NAEYC position statement with the principles of individualized instruction. This second half of that discussion will take a more extensive examination of the relationship between these two positions. This is necessary because the issue of individualized instruction was the central focus at the MSU Lab School. The discussion that follows will give further insight into how the data serves to support the hypothesis and research questions.

Best Practices at the MSU Lab School

The first research question concerns the best practices done by the professional staff at the school. The narrative describes the kinds of projects that were attempted at

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the MSU Lab School. Current best practices includes differentiated instruction, adjusting and modify teaching methods and instruction to match the needs of the individual students or groups of students (Brietborde & Swiniarski, 2006). The best practices that were conducted are reflective of differentiated instruction including individualized instruction, multiple intelligences, mainstreaming, and the gifted program.

Individualized instruction matches the purpose and goals of differentiated instruction as described by Brietborde and Swiniarski (2006). The program at the MSU Lab School looked at all children as individuals with individual needs who worked together to share their learning experience and knowledge with their peers and others in their communities.

Mainstreaming, currently referred to as 'inclusion' (Essex, 2006, p. 95 - 96), was being practiced at the MSU even before the Education for all Handicapped Children Act of 1975 (PL 94-142) and the Individuals with Disabilities Education Act of 1990 (IDEA) were enacted. Although PL 94-142 was in operation at the time the hearing impairment project was in progress, the hearing impaired project demonstrated how well mainstreaming could work even with very young children.

The gifted program was developed to help students with other unique educational needs. This program was used with even the youngest students at the MSU Lab School. Working with gifted students is something every teacher still needs to consider when they plan for or organize students (Kellough & Jarolimek, 2008).

Other techniques used at the MSU Lab school during the 1970s and 1980s included the use of language experience activities, learning centers, and team teaching. The language experience approach was developed by Russell Stauffer in the later 1970s

and is still a suggested technique to help children make the connection between talk, writing, and reading (Hennings, 2002). Morrison (2009) mentions learning centers as a way for young children to be physically active in the learning experience. Team teaching is still a suggested method for teaching, especially when developing interdisciplinary thematic units (Kellough & Jarolimek, 2008).

Giving children an opportunity to have direct input in their educational program and the use of portfolio/narrative assessments are still being practiced in many schools today. Eggan and Kauchak (2004) explain that portfolios give students a chance to have explicit control over many choices of artifacts and assessments that go into their personal learning portfolios. Contemporary learning centers and teacher student cooperation, and some gifted programs allow children to continue to have a voice in their educational program (Kellough & Jarolimek, 2008).

The use of different learning spaces is evident in the typical classroom design for kindergartens. There are tables instead of desks as well as a variety of learning and play centers (Morrison, 2009).

One educational practice at the MSU Lab School that was not openly apparent in the current literature was the mini-lab. However, good teachers do consider student likes, dislikes, strengths, and deficiencies when planning units and activities (Kellough & Jarolimek, 2008), so it is conceivable that it is a technique that is still being use in contemporary classrooms, but under some other name or in collaboration with other techniques.

The multi-age grouping that was used at the MSU Lab School is not often seen in many classrooms except for Montessori schools and some preschools. The type of multi-

age interaction that typically appears in contemporary schools is more of a peer tutoring rather than a shared learning experience that was used at the MS Lab School.

Individualized Instruction in the Kindergarten and First Grade Programs

The individualized instruction program was integral to the identity of the school. The school used the same programs with the first grade students that were used with the older children with a few modifications.

A unique aspect to the program at the MSU Lab School was the two-tiered kindergarten. This fit into the individualized instruction program because it made school available to younger children so that their educational needs could be met at an earlier age.

The children in these programs were included in working with children with a variety of skills and developmental levels. The kindergarten and first grade both used the gifted program as well as being involved in a special education project. The first grade had the EMH program while the K-1 students had a one-year experience with students with hearing impairment in the classroom.

Other areas where the individualized instruction program was evident in the kindergarten and first grade programs included the use of centers and mini-labs. Children were able to make independent choices about where and what they would do during times set aside for learning.

The use of IEPs and narrative report cards were two other ways planning and evaluating individual activities and student progress. Even though the kindergarten teacher often had twice as many students as the other classroom teachers, these teaching

tools helped to ensure that the experiences in kindergarten and first grade remained individualized.

The one program of the individualized instruction where the younger students had limited participation was multi-age grouping. K-1 was not included in any kind of multi-age grouping during the length of the program and K-2 was only included in the mini-labs if it was deemed an appropriate activity for the children involved.

First grade was involved in multi-age grouping for math and mini-labs throughout the time the projects were used at the school. They were not added to the family grouping until 1982. However, during most of the time family groups were in place, the children in first grade were not involved.

These examples give support to the statement that the MSU Lab School included the first grade and kindergarten programs in the individualized instruction program that was central to the school's main research. Further discussion of how the individualized instruction and the other elements of the MSU Lab School will continue as the last research question is reviewed.

Developmentally Appropriate Practices

Relationship Between NAEYC Components and Elements of MSU Lab School

The last research question is concerned with how well the kindergarten and first grade programs at the MSU Lab School met the criteria for developmentally appropriate practices. The first part of the discussion will be concerned with how well the entire program at the MSU Lab School met the criteria.

Table 1 organized the components of the NAEYC position statement and the elements of the MSU Lab School. The components of the NAEYC revised position

statement written in 1997. The original NAEYC position statement was written in 1987, during the time the MSU Lab School was in operation. The elements of the MSU Lab School came from examining the study's narrative for key ideas and major projects in existence during the 22 years the programs were in operation.

There are eighteen elements of the MSU Lab School. The list includes:

1. Cooperation and community

2. Core curriculum

3. Environmental playground

4. Gifted education

5. Individualized instruction

6. Knowledge as a shared commodity

7. Language development

8. Learning is a process of proficient use of skills

9. Mainstreaming

10. Mini-labs

11. Multi-age grouping

12. Parent involvement

13. Social & personal development

14. Students' involvement in planning and implementing learning activities

15. Team teaching

16. Variety of instructional methodologies

17. Variety of learning spaces

18. Variety of learning communities

Table 1a. Relationships Between the NAEYC Components and the Elements of the MSU Laboratory School.

Components of NAEYC Position Statement	Elements of the Minot State University Laboratory School								
	1. Cooperation and community	2. Core curriculum	3. Environmental playground	4. Gifted education	5. Individualized instruction	6. Knowledge as a shared community	7. Language development	8. Learning a process of Proficient use of skills	9. Mainstreaming
1. Domains of children's development are closely related development in one domain influences and is influenced by development in other domains.			X		X			X	
2. Development a relatively orderly sequence, with later abilities, skills, and knowledge building on those already acquired.	X		X		X				
3. Development at varying rates and uneven within different areas of each child's functioning.				X	X				X
4. Early experiences have cumulative and delayed effects on individual children's development. Optimal periods exist for certain types of development and learning.		X			X				
5. Development proceeds in predictable directions toward greater complexity, organization, and internalization.		X		X	X		X	X	
6. Development and learning influenced by multiple social and cultural contexts.	X				X	X	X		

Table1. Relationships Between the NAEYC Components and the Elements of the MSU Laboratory School (cont.).

Components of NAEYC Position Statement	Elements of the Minot State University Laboratory School								
	10 Mini-labs	11. Multi-age grouping	12. Parent Involvement	13. Social & personal development	14. Student involvement in planning and implementing learning activities	15. Team teaching	16. Variety of instructional methodologies	17. Variety of learning spaces	18. Variety of learning communities
1. Domains of children's development are closely related development in one domain influences and is influenced by development in other domains.									
2. Development a relatively orderly sequence, with later abilities, skills, and knowledge building on those already acquired.									
3. Development at varying rates and uneven within different areas of each child's functioning.					X		X		
4. Early experiences have cumulative and delayed effects on individual children's development. Optimal periods exist for certain types of development and learning.					X				
5. Development proceeds in predictable directions toward greater complexity, organization, and internalization.									
6. Development and learning influenced by multiple social and cultural contexts.	X	X	X	X		X	X		X

Table 1. Relationships Between the NAEYC Components and the Elements of the MSU Laboratory School (cont.).

Components of NAEYC Position Statement	Elements of the Minot State University Laboratory School								
	1. Cooperation and community	2. Core curriculum	3. Environmental playground	4. Gifted education	5. Individualized instruction	6. Knowledge as a shared commodity	7. Language development	8. Learning seen as a process of becoming proficient in skills	9. Mainstreaming
7. Children are active learners, drawing on direct physical and social experiences as well as culturally transmitted knowledge to construct their own understandings of the world around them.	X	X	X	X	X	X	X	X	X
8. Development and learning result from interaction of biological maturation and the environment, which includes both the physical and social worlds that children live in.	X				X	X			X
9. Play is an important vehicle for children's social, emotional, and cognitive development, as well as a reflection of their development.			X		X	X	X		X
10. Development advances when children have opportunities to practice newly acquired skills as well as when they experience a challenge just beyond the level of their present mastery		X		X	X				
11. Children demonstrate different modes of knowing and learning and different ways of representing what they know.		X		X	X				X
12. Children develop and learn best in the context of a community where they are safe and valued, their physical needs are met, and they feel psychologically secure.	X				X	X			

Table 1. Relationships Between the NAEYC Components and the Elements of the MSU Laboratory School (cont.).

Components of NAEYC Position Statement	Elements of the Minot State University Laboratory School								
	10. Mini-labs	11. Multi-age grouping	12. Parent Involvement	13. Social & personal development	14. Student involvement in planning & implementing learning activities	15. Team teaching	16. Variety of instructional methodologies	17. Variety of learning spaces	18. Variety of learning communities
7. Children are active learners, drawing on direct physical and social experiences as well as culturally transmitted knowledge to construct their own understandings of the world around them.	X	X	X	X		X			
8. Development and learning result from interaction of biological maturation and the environment, which includes both the physical and social worlds that children live in.	X	X							X
9. Play is an important vehicle for children's social, emotional, and cognitive development, as well as a reflection of their development.				X			X	X	
10. Development advances when children have opportunities to practice newly acquired skills as well as when they experience a challenge just beyond the level of their present mastery		X							
11. Children demonstrate different modes of knowing and learning and different ways of representing what they know.					X		X		
12. Children develop and learn best in the context of a community where they are safe and valued, their physical needs are met, and they feel psychologically secure.	X	X		X		X			X

The elements of the MSU Lab School were coded and checked for patterns to see if there is a good fit between them and the twelve components of the NAEYC position statement (see pages 28 – 30). Then the data were described in terms of better fit, good fit, and weaker fit. The NAEYC components are listed starting with the ones that correspond with the elements of the MSU Lab better and continuing on through the ones that do not correspond as well.

Better Fit

There are two components that qualify as having better fit. They are as follows: (a) Children are active learners, drawing on direct physical and social experiences as well as culturally transmitted knowledge to construct their own understandings of the world around them, and (b) Development and learning result from interaction of biological maturation and the environment, which includes both the physical and social worlds that children live in, is the next component with better fit. These components have a correspondence level at 50% or better.

The best fit between the NAEYC components and the elements of MSU Labs school is that children are active learners, drawing on direct physical and social experiences as well as culturally transmitted knowledge to construct their own understandings of the world around them. There are fourteen elements of the MSU Lab School that fit with this component. These corresponding elements include: cooperation and community, core curriculum, environmental playground, gifted education, individualized instruction, knowledge as a shared commodity, language development, learning as a process of proficient use of skills, mainstreaming, mini-labs, multi-age grouping, parent involvement, social and personal development, and team teaching.

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These elements of the MSU Lab School relate to this NAEYC component because they all are degrees of physical or social environments where children are able to interact with people and objects around them to help them to learn about their world and to begin to have it make sense to them. Family is one cultural context for all of the children. Involving the parents helped children to bring a familiar social context from which they could draw.

Development and learning result from interaction of biological maturation and the environment, which includes both the physical and social worlds that children live in, is the next component with better fit. There are eleven elements that correspond. They are cooperation and community, individualized instruction, knowledge as a shared commodity, language development, mini-labs, multi-age grouping, parent involvement, social & personal development, team teaching, variety of instructional methodologies, variety of learning communities.

Children at the school were able to learn and interact in a range of behaviors that made it possible for them to interact in ways that promoted development while supported by the various programs and methodologies.

Good Fit

There are six components that qualify for this designation. To qualify as a good fit the NAEYC component had to have a correspondence percentage between 25% and 50%.

Play is the first component in this category. Play is an important vehicle for children's social, emotional, and cognitive development, as well as a reflection of their development. The corresponding elements are: environmental playground, individualized instruction, and knowledge as a shared commodity, language development,

mainstreaming, social and personal development, variety of instructional methodologies, and variety of learning spaces.

Play was evident in these elements. The children at the MSU Lab School were taught to cooperate as they learned. They were able to share information on a social level as they worked and play at learning centers or mini-labs.

Children develop and learn best in the context of a community where they are safe and valued, their physical needs are met, and they feel psychologically secure. This is the next NAEYC component. The eight elements of MSU Lab School that correspond include: cooperation and community, individualized instruction, knowledge as a shared commodity, mini-labs, multi-age grouping, social and personal development, team teaching, and variety of learning communities.

Community was evident at the school in the philosophical structures and the classroom organization. This community was then able to support the children's learning and development.

Development and learning result from interaction of biological maturation and the environment, which includes both the physical and social worlds that children live in, correspond to seven different elements of the MSU Lab School. The corresponding elements are: cooperation and community, individualized instruction, knowledge as a shared commodity, knowledge as a shared commodity, mainstreaming, mini-labs, mini-labs, and variety of learning communities.

As the children matured they were exposed to important ideas and a variety of situations that gave them the opportunity to be involved with an assortment of social experiences with different groups of people.

The next three NAEYC components each have five MSU Lab School elements that correspond to them. The first component is: development proceeds at varying rates from child to child as well as unevenly within different areas of each child's functioning. The corresponding elements of the MSU Lab School for this NAEYC component are: gifted education, individualized instruction, mainstreaming, students involvement in planning and implementing leaning activities, and variety of instructional methodologies

All of these elements demonstrate the ways the MSU Lab School found to meet the needs children had as they developed and learned at their own individual ways.

Development proceeds in predictable directions toward greater complexity, organization, and internalization, is the next NAEYC component. The five corresponding MSU Lab School elements consist of: core curriculum, gifted education, individualized instruction, language development, and learning as a process of proficient use of skills.

The core curriculum and the planning done by the teachers ensured that children were learning and that they were able to demonstrate their ability to use those skills in appropriate situations. The gifted and individualized instruction programs let children organize and internalize the skills and strategies that they had learned.

The last component with good fit is: children demonstrate different modes of knowing and learning and different ways of representing what they know. Elements that correspond include: gifted education, individualized instruction, mainstreaming, student involvement in planning and implementing leaning activities, and variety of instructional methodologies.

The children at the MSU Lab School were permitted to make choices and find the ways that they were able to learn best. One example was the way math was taught. Children were allowed to use whatever method worked for them to learn the skills and strategies. The ones that felt successful completing a worksheet were given worksheets to do. Those that wanted to work at the math center and complete the tasks could choose to work there.

Weaker Fit

Weaker fit is the final category of correspondence. There are four NAEYC components that fall into this category. These NAEYC components have less that 25% of the elements of the MSU Lab School that correspond to them

The first NAEYC component in this category is: development advances when children have opportunities to practice newly-acquired skills as well as when they experience a challenge just beyond the level of their present mastery. The four corresponding MSU Lab School elements are: environmental playground, gifted education, individualized instruction, and multi-age grouping.

The next NAEYC component in this category is: domains of children's development physical, social emotional, and cognitive are closely related, development in one domain influences and is influenced by development in other domains. The three corresponding elements of the MSU Lab School are: environmental playground, individualized instruction, and learning as a process of proficient use of skills.

Development occurs in a relatively orderly sequence, with later abilities, skills, and knowledge building on those already acquired is the next NAEYC component. There

are only three elements that correspond well to this component: core curriculum, environmental playground, and individualized instruction.

The last NAEYC component is: early experiences have both cumulative and delayed effects on individual children's development. Optimal periods exist for certain types of development and learning. The corresponding MSU Lab School elements are: core curriculum, individualized instruction, and students' involvement in planning and implementing leaning activities.

The relationship of these last three sets of NAEYC components and elements demonstrate how the students the opportunities to learn an develop as individuals because teachers were aware of what was appropriate for them

This comparison of the NAEYC components and the elements of the MSU Lab School demonstrates that the school was using developmentally appropriate practices from the late1960s until the school closed in 1990.

Relationships Between NAEYC Components and Principles of Individualized Instruction

The second half of the final research question concerns the individualized instruction program used by the teachers at the school. A primary reason for discussing the principles of individualized instruction and how it relates to developmentally appropriate practices becomes apparent when studying the patterns that developed. The only element that is corresponded to every NAEYC component was individualized instruction. Since individualized instruction is a significant concept with eighteen principles related to it, it is reasonable to examine its relationship to the NAEYC components further.

The process was similar to the one used for the comparison between the NAEYC component and the elements of the MSU Lab School. The information is recorded on Table 2. Next, the principles of individualized instruction were coded and checked for patterns to see if there was a good fit between them and the NAEYC components. Then the data was described in terms of better fit, good fit, or weaker fit. The NAEYC components are discussed starting with the ones that correspond with the principle of individualized instruction starting with better fit and continuing on through the ones with weaker fit..

Even though individualized instruction matched NAEYC components of developmentally instruction, it is interesting to note that the individual fit to specific principles of individualized instruction is not as good. This could be because the principles of individualized instruction are more specific in nature or that they relate to a specific NAEYC component of developmentally appropriate practices.

Better Fit

Using the same percentage for the principles of individualized instruction that was used for the elements of the MSU Lab School, better fit will have at least 50% of the principles of individualized instruction related to the NAEYC component. There is only one component that meets this requirement: children are active learners, drawing on direct physical and social experience as well as culturally transmitted knowledge to construct their own understandings of the world around them. The nine principles of individualized instruction that relate to this NAEYC component are:

1. Teachers cannot have preconceived ideas of what a child can or cannot do.

2. There is no one right set of information a child needs to learn or a time limit for it to be learned.

3. When a child realizes learning is important, learning will happen. The learning experience is personal.

4. A child can learn when given the independence under the proper environment.

5. Learning must be an integrated experience, not a series of unrelated facts.

6. A child must be given individual opportunities to observe, investigate, develop hypotheses, and discover.

7. A child's individual development of interests and personal potential is more important than content.

8. Individualized instruction uses many materials on many levels.

9. A child must feel secure to develop a positive self concept. Learning is secure activity. The proper environment strengthens the child's self concept.

This NAEYC component and related nine principles attempt to explain the learning experience from the children's view as well as the kind of environment that will enhance the learning experience by giving the children the psychological, cultural, and physical support they need. Some of the ways the MSU Lab School managed this was through the use of mini-labs, learning centers, and multi-age grouping. Children were also encouraged to some of their own course of study through the use of the parent-child-teacher conferences and IEPs.

Good Fit

The five NAEYC components that demonstrate good fit have a relationship to the principles of individualized instruction at a 25% to 50% level. The first NAEYC component under discussion in this category is that play is an important vehicle for children's social, emotional, and cognitive development, as well as a reflection of their development. This NAEYC component has six related principles. They are:

1. When a child realizes learning is important, learning will happen. The learning experience is personal.

2. Learning must be an integrated experience, not a series of unrelated facts.

3. A child must be given individual opportunities to observe, investigate, develop hypotheses, and discover.

4. A child's individual development of interests and personal potential is more important than content.

5. Individualized instruction uses many materials on many levels.

6. A teacher needs to be creative, sensitive, flexible, and capable of motivating students.

Play is one tool children use to learn. It is a personal experience that children use to integrate what they have learned as well as to observe, explore, and discover. Children can experiment with new ideas, concepts, and information in the kind of environment that will permit them to grow. Teachers prepare the appropriate environment by supplying a wide variety of materials and opportunities. At the MSU Lab School the teachers were constantly looking for new ways to provide the children with the tools they needed, This included the environmental playground, learning centers, writing and art supplies, as well

as other creative opportunities that would arise from conferences, IEPs, or other conversations with the children.

The next NAEYC component under discussion is: development proceeds at varying rates from child to child as well as unevenly within different areas of each child's functioning. The five related individualized instruction principles for this NAEYC component include:

1. Teachers cannot have preconceived ideas of what a child can or cannot do.

2. Each student is an individual, with a unique rate of growth.

3. There is no one right set of information a child needs to learn or a time limit for it to be learned.

4. Time limits for discovery and learning are an unnatural restriction.

5. Individualized instruction is carefully planned and coordinated. The teacher is in control. It is not chaos. There is flexibility but not irresponsibility.

The first four principles are logical pre-existing conditions that will ensure that the teacher is aware of the individuality involved in the learning experience. The fifth principle listed, that the experience is planned and coordinated may seem out of place, but it is not. Individualized instruction is flexible. The teacher must be organized and aware of the present level of functioning of the children as well as what skills or activities the children will need to have a successful learning experience. At the MSU Lab School the teachers planned and coordinated many learning activities including mini-labs and learning centers. The individual conferences that teachers had with students help

students to learn at their own rate and were flexible enough that children could learn what

they needed to learn at the rate that was comfortable for them.

Table 2. Relationships Between the NAEYC Components and the Principles of Individualized Instruction.

Components of NAEYC Position Statement	Principles of Individualized Instruction							
	1. Teachers cannot have preconceived ideas about what a child can or cannot	2. Each student is an individual with a unique rate of growth	3. There is no one right set of information a child needs to lean or a time limit for it to be	4. When a child realizes that learning is important, learning will happen The learning experience is	5. A child can learn when given the independence under the proper	6. The best evaluation consists of an individual child's feeling of satisfaction,	7. Time limits for discovery and learning are an unnatural restriction	8. Learning must be an integrated experience, not a series of unrelated facts
1. Domains of children's development are closely related development in one domain influences and is influenced by development in other domains.								X
2. Development a relatively orderly sequence, with later abilities, skills, and knowledge building on those already acquired.								
3. Development at varying rates and uneven within different areas of each child's functioning.	X	X	X				X	
4. Early experiences have cumulative and delayed effects on individual children's development. Optimal periods exist for certain types of development and learning.								
5. Development proceeds in predictable directions toward greater complexity, organization, and internalization.								
6. Development and learning influenced by multiple social and cultural contexts.								X

Table2. Relationships Between the NAEYC Components and the Principles of Individualized Instruction (cont.).

Components of NAEYC Position Statement	9. Skill development is more important than content. Content used to teach the skills. Content changes in time, skills do not.	10. A child must be given individual opportunities to observe, investigate, and develop hypotheses.	11. A child's individual development of interests and personal potential is more important than content.	12. Individualized instruction is carefully planned and coordinated. It is not chaos. There is flexibility but not irresponsibility.	13. Individualized instruction used many materials on many levels.	14. A teacher needs to be creative, sensitive, flexible, and capable of motivation students.	15. A child must feel secure to develop a positive self concept. Learning is a secure activity. The proper environment strengthens the child's self concept.	16. Professionals are cautioned not to accept or reject any educational innovation until they have had a chance to experience it first hand.
1. Domains of children's development are closely related development in one domain influences and is influenced by development in other domains.								
2. Development a relatively orderly sequence, with later abilities, skills, and knowledge building on those already acquired.	X			X				
3. Development at varying rates and uneven within different areas of each child's functioning.				X				
4. Early experiences have cumulative and delayed effects on individual children's development. Optimal periods exist for certain types of development and learning.		X		X				
5. Development proceeds in predictable directions toward greater complexity, organization, and internalization.								
6. Development and learning influenced by multiple social and cultural contexts.					X		X	

Table 2. Relationships Between the NAEYC Components and the Principles of Individualized Instruction (cont.).

Components of NAEYC Position Statement	Principles of Individualized Instruction							
	1. Teachers cannot have preconceived ideas about what a child can or cannot do.	2. Each student is an individual with a unique rate of growth	3. There is no one right set of information a child needs to lean or a time limit for it to be learned	4. When a child realizes that learning is important, learning will happen The learning experience is	5. A child can learn when given the independence under the proper environment.	6. The best evaluation consists of an individual child's feeling of satisfaction, acceptance and security	7. Time limits for discovery and learning are an unnatural restriction	8. Learning must be an integrated experience, not a series of unrelated facts
7. Children are active learners, drawing on direct physical and social experiences as well as culturally transmitted knowledge to construct their own understandings of the world around them.	X		X	X	X			X
8. Development and learning result from interaction of biological maturation and the environment, which includes both the physical and social worlds that children live in.								X
9. Play is an important vehicle for children's social, emotional, and cognitive development, as well as a reflection of their development.				X				X
10. Development advances when children have opportunities to practice newly acquired skills as well as when they experience a challenge just beyond the level of their present mastery					X	X		
11. Children demonstrate different modes of knowing and learning and different ways of representing what they know.	X					X		
12. Children develop and learn best in the context of a community where they are safe and valued, their physical needs are met, and they feel psychologically secure.				X		X		

Table 2. Relationships Between the NAEYC Components and the Principles of Individualized Instruction (cont.).

Components of NAEYC Position Statement	Principles of Individualized Instruction							
	9. Skill development is more important than content. Content is used to teach the skills. Content changes in time, skills	10. A child must be given individual opportunities to observe, investigate, and develop hypotheses	11. A child's individual development of interests and personal potential is more important than content	12. Individualized instruction is carefully planned and coordinated. It is not chaos. There is flexibility but not irresponsibility.	13. Individualized instruction used many materials on many levels.	14. A teacher needs to be creative, sensitive, flexible, and capable of motivation students	15. A child must feel secure to develop a positive self concept. Learning is a secure activity. The proper environment strengthens the child's self concept	16. Professionals are cautioned not to accept or reject any educational innovation until they have had a chance to experience it first hand.
7. Children are active learners, drawing on direct physical and social experiences as well as culturally transmitted knowledge to construct their own understandings of the world around them.		X	X		X		X	
8. Development and learning result from interaction of biological maturation and the environment, which includes both the physical and social worlds that children live in.					X	X		
9. Play is an important vehicle for children's social, emotional, and cognitive development, as well as a reflection of their development.		X	X		X	X		
10. Development advances when children have opportunities to practice newly acquired skills as well as when they experience a challenge just beyond the level of their present mastery		X						
11. Children demonstrate different modes of knowing and learning and different ways of representing what they know.						X		
12. Children develop and learn best in the context of a community where they are safe and valued, their physical needs are met, and they feel psychologically secure.		X				X		X

The next NAEYC component is that children demonstrate different modes of knowing and learning and different ways of representing what they know. The five related principles of this NAEYC component are:

1. Teachers cannot have preconceived ideas of what a child can or cannot do.

2. The best evaluation consists of an individual child's feeling of satisfaction, acceptance, and security.

3. A child must be given individual opportunities to observe, investigate, develop hypotheses, and discover.

4. A teacher needs to be creative, sensitive, flexible, and capable of motivating students.

5. Professional are cautioned not to accept or reject any educational innovation until they have had a chance to experience it first hand.

Because children have different modes of thinking they need to have opportunities to explore and study their world. This includes how the learning process is evaluated. It is important that evaluation be a safe experience that helps them to better express what it is they know in a form that makes sense to them. This is a child-centered educational process.

It is also important that teachers have a relationship with all of their children so that they know their children rather than using preconceived ideas. If teachers create learning environments that will help children discover how to learn; they will like their students, and will be willing to try innovative techniques

The MSU Lab School implemented child-centered processes whenever it was possible by creating learning centers, themes, and activities that let children find their own way to learn with the help of skillful, creative teachers.

The next NAEYC component in this category is that children develop and learn best in the context of a community where they are safe and valued, their physical needs are met, and they feel psychologically secure. Related principles of individualized instruction include:

1. When a child realizes learning is important, learning will happen. The learning experience is personal.

2. The best evaluation consists of an individual child's feeling of satisfaction, acceptance, and security.

3. A child's individual development of interests and personal potential is more important than content.

4. A teacher needs to be creative, sensitive, flexible, and capable of motivating students.

5. A child must feel secure to develop a positive self concept. Learning is a secure activity. The proper environment strengthens the child's self concept.

Creating a safe community where children can learn help ensure that children have the time to understand how important learning can be and can begin to take personal interest in their own learning and begin to develop their personal potential. As this personal interest grows it can be supported by helping them recognize and

develop their own interests in a situation that is flexible enough to meet the children's educational and personal needs.

The philosophical ideal expressed at the MSU Lab School features the idea that knowledge is a shared commodity. This idea that learning is about us, is a good foundation for creating the type of community where children can feel safe enough to learn and take risks.

The next NAEYC component under discussion is that development and learning result from interaction of biological maturation and the environment, which includes both the physical and social worlds that children live in. The four principles that will be considered are:

1. Each student is an individual, with a unique rate of growth.

2. When a child realizes learning is important, learning will happen.

The learning experience is personal.

3. Learning must be an integrated experience, not a series of unrelated facts.

4. A child must feel secure to develop a positive self concept. Learning is a secure activity. The proper environment strengthens the child's self concept.

Children grow, develop, and learn at their own rates. They need to be recognized as individuals. As they mature they begin to realize that learning is important and personal. Children will begin to integrate their learning by engaging in social and physical experiences that are part their world.

Children at the MSU Lab School were encouraged to find a personal learning experience. Two techniques used to create personal learning experiences included the

gifted program as well as using the ideas and interests of the children for the basis of study in mini-labs and other activities

Weaker Fit

The NAEYC components that have a weaker relationship with the principles of individualized instruction are at a 24% to 10% level. There are four components that meet these criteria. These components have two or three individualized instruction principles related to them.

Development and learning occur in and are influenced by multiple social and cultural contexts is a NAEYC component that has three related principles of individualized instruction. These related principles are:

1. Learning must be an integrated experience, not a series of unrelated facts.

2. Individualized instruction uses many materials on many levels.

3. A teacher needs to be creative, sensitive, flexible, and capable of motivating students.

These principles describe the conditions that exist within the social and cultural contexts. The principle that learning is an integrated experience includes the idea that the experience is integrated in the multiple social and cultural context as well as integrating information and ideas. This variety of contexts needs creative leadership so that the children will have all the materials that they need as they learn and develop.

Combining the use of themes, learning centers, and language experiences in combination was one way the MSU Lab School made the learning experience more

integrated and flexible. Children could use a variety of materials that could meet their needs on different levels.

Development advances when children have opportunities to practice newly-acquired skills as well as when they experience a challenge just beyond the level of their present mastery is the next NAEYC component. There three related principles of individualized instruction associated with it:

1. A child can learn when given the independence under the proper environment.

2. The best evaluation consists of an individual child's feeling of satisfaction, acceptance and security.

3. A child must be given individual opportunities to observe, investigate, develop hypotheses, and discover.

Children need time to practice new skills as they learn. They need an environment that will let them work on their own with the support of others who can help them. They will use many strategies to learn new skills including observation, investigation and discovery. Once they have met the challenge of mastering a new skill, the best way to assess includes a sense of satisfaction on the part of the children as well as feeling secure in their knowledge of the new skills.

When the MSU Lab School implemented the gifted program this was the process that was used by students and teachers to develop new projects. Other examples of this process included developing themed activities and mini-labs based on the individual interests of the students.

The next NAEYC component in this category is that development occurs in a relatively orderly sequence, with later abilities, skills, and knowledge building on those already acquired. Corresponding individualized instruction principles are:

1. Skill development is more important than content. Content is used to teach the skills. Content changes in time; skills do not.

2. Individualized instruction is carefully planned and coordinated. The teacher is in control. It is not chaos. There is flexibility but not irresponsibility.

The development of skills is important for development. Skills are more important than content. Teachers use content to teach the skills in a planned and organized way. The whole process typically proceeds in consistent manner.

The skills taught in the kindergarten and first grade programs at the MSU Lab School included the usual scope and sequence found in other programs, moving from simpler skills to more complex ones. In kindergarten the K-1 students worked on letter and number identification before they moved on to other more difficult skills.

Early experiences have both cumulative and delayed effects on individual children's development. Optimal periods exist for certain types of development and learning is the next NAEYC component under discussion. The two principles related to this component are:

1. A child must be given individual opportunities to observe, investigate, develop hypotheses, and discover.

2. Individualized instruction uses many materials on many levels.

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Children's development is affected by their experiences. Observation, investigation, developing hypotheses, and discovery are part of the early experiences of children. These experiences are supported by the use of many different materials that children can use in a variety of ways.

The next NAEYC component is that development proceeds in predictable directions towards greater complexity, organization, and internalization. The two principles of individualized instruction that relate are:

1. When a child realizes learning is important, learning will happen.
The learning experience is personal.

2. A child can learn when given the independence under the proper environment.

These two principles support the idea that children will internalize the need for learning and then will be able to learn. This developmental step is the beginning of the personal learning experience for children.

An example of this at the MSU Lab School would include the language program used in the first grade classroom. Children would start the year reading and writing a few minutes each day. By the end of the year, their proficiency had increased and they were reading and writing more complex material and for longer periods of time.

There is one NAEYC components left for discussion. The domains of children's development physical, social, emotional, and cognitive – are closely related, development in one domain influences and is influenced by development in other domains. The related principle of individualized instruction is that learning

must be an integrated experience, not a series of unrelated fact. Learning is best when it is integrated and connected to their real-life experience.

Teaching children how to be responsible at snack time or during opening exercises was important. They were able to take those skills and apply them to other areas of their lives. Other examples of this component at the MSU Lab School would be the way children in kindergarten would use the learning centers that were connected to the learning theme. They were able to interact with each other as well as be physically active.

This discussion of the fit between the NAEYC components of developmentally appropriate practices and the principles of individualized instruction was the second half of a discussion to determine if the kindergarten and first grade programs were using developmentally appropriate practices before and during the time the NAEYC first wrote its' positions statement on the subject. The lengthy discussion covering both the elements of the MSU Lab School and the principles of individualized instruction help to support the research question that the school did in fact meet the criteria for a developmentally appropriate practice.

Areas of Further Study

This study was a brief historical look at the kindergarten and first grade programs at the Minot State University Laboratory School. The study also reviewed how well the school's programs followed the National Association for the Education of Young Children's position on developmentally appropriate practices. There are other topics that were not discussed and could be used as further areas of study.

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The gifted program was used extensively during the summer school (C. Bellew, personal communication, May 26, 2008). The full development of the gifted program would be one area that could be studied. Gifted programs are more common now and understanding how one school designed their program could help other schools develop or improve their program.

Another area that could be examined is whether any of the activities or teaching methods used at the MSU Lab School are still in use in today's elementary schools. Are there some programs that were abandoned when the MSU Lab School was closed that could be valuable enough to be revived? Some of the new techniques used at the school included the two-tiered kindergarten, learning centers, mini-labs, family groups, and mainstreaming children with special needs.

Another study that could be conducted would be to interview students, parents, and teachers to determine what they felt were the most important contributions made by the MSU Lab School. A final suggestion could be to determine whether or not it would be possible to incorporate the contributions of the MSU Lab School into a modern school system.

Summary and Conclusions

The kindergarten and first grade programs at the Minot State University Laboratory School corresponded well to the components of the NAEYC position statement on developmentally appropriate practices. After describing some of the activities and practices at the school, the discussion moved to how well the programs exemplify developmentally appropriate practices. The Laboratory School elements, such as cooperation and community, knowledge as a shared commodity,

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mainstreaming, and varieties of instructional methodologies, spaces, and learning communities, do correspond to the NAEYC components of developmentally appropriate practices, including children as active learners, development and learning occur and are influenced by multiple social and cultural contexts, and that development and learning occur best in the context of communities where children feel safe and valued.

There were correlations among the NAEYC components and the principles of individualized instruction. The principles of individualized instruction were important to consider because they were the basis of the kindergarten and first grade programs at the Minot State University Laboratory School. Individualized instruction strongly supports the NAEYC components regarding children as active learners who draw upon their direct physical and social experiences as well as culturally-transmitted knowledge; children develop and learn best in communities where they are safe and valued, as well as development and learning occurring in and being influenced by multiple social and cultural contexts.

The MSU Lab School was a unique institution that tested many educational practices that are now considered best practices. A major program element was individualized instruction. Now referred to as differentiated instruction, it is used in many contemporary classroom. Another major classroom element is mainstreaming. It is now called inclusion and is mandated by federal law. Other common classroom techniques were used in the kindergarten and first grade programs before they were used in many other schools. Some of these techniques are learning centers, language experience activity, and the use of portfolios for assessment. This information

supports the hypothesis that the MSU Lab School was a school that developed

practices and methodologies that are now considered common practices and that these

practices were developmentally appropriately appropriate as defined by the NAEYC.

This effort to try new and innovative educational techniques and projects helps to

support the premise that the Minot State University Laboratory School was a school

ahead of its time.

INTERVIEW INFORMED CONSENT

Valerie Noel Wax is a PhD student at the University of North Dakota. She is doing a qualitative-historical study under the guidance of her advisor, Glenn Olsen, PhD. This study is part of the requirements for the doctoral dissertation. She is researching what the individualized education program was like in the kindergarten and first grade classrooms at the Minor State University Laboratory School. Participants will be interviewed about the kindergarten and first grade programs as well as the individualized education program. The interviews will last approximately two to three hours.

The researcher hopes that by describing the school's program it will benefit teachers and administrators of other kindergarten and first grade programs by demonstrating a unique way of teaching young children that is developmentally appropriate. The study may present ideas on how to improve existing program.

The former administrator and former teachers at MSU Laboratory School will be recruited for the study. There is a risk that the participants could be identified. The researcher will respect the confidentiality of the participants. Participants should understand that the names of the staff will be used in the final report because of the historical nature of the study. Because of the nature of the research and the small participant pool, the researcher cannot guarantee anonymity; however, the research will be the only one to be in possession of the research. All data will be triangulated to help improve the credibility of the study. This will also lessen the possibility that a participant's response could be recognized.

Consent forms and personal information will be kept separate from the research materials. All materials will be kept in separate locked boxes in the researcher's home and will be destroyed after the required three years.

Participation in the study is voluntary and there is no penalty for not participating or for withdrawing from the study. The participant may withdraw from the study by informing the researcher that s/he no longer wishes to continue. The participant may also ask to have the entire interview removed from the study. In the event that a participant withdraws from the study, the researcher is still obligated to retain the information with the rest of the research materials until it is all destroyed.

If the participant wishes, s/he may be informed of the findings by contacting the researcher. The participant will receive a copy of the consent form.

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If you have questions about the research, please call: Valerie Noel Wax at 701.483.6635 or 701.483.2424 or Dr. Glenn Olsen at 701.777.3145 or 701.777.3239. If you have any questions regarding your rights as a research subject, or if you have any concerns of complaints about the research, you may contact the University of North Dakota Institutional Review Board at 701.777.4379. Please call this number if you cannot reach research staff, or if you wish to talk with someone else. Thank you.

▪▪▪

I have read the above consent and agree to be interviewed for this study. I understand I will be given a copy of this consent form for my records.

_____   _____
            Signature of participant   Date

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