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Curriculum Leadership as Perceived by North Dakota Elementary Principals and Teachers

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CURRICULUM LEADERSHIP AS PERCEIVED BY NORTH DAKOTA ELEMENTARY PRINCIPALS AND TEACHERS

by

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This dissertation, submitted by Jean M. Hall in partial fulfillment of the requirements for the Degree of Doctor of Education 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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Signature Jean M. Hall

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ABSTRACT

This study examined the emphasis North Dakota elementary principals gave to selected curriculum leadership practices. Principals' perceptions were compared with teachers' perceptions of principals as curriculum leaders. Information was also sought concerning how well these principals believed they were prepared to carry out the practices of curriculum leadership. Forty curriculum leadership practices were identified and listed as part of the domains of Curriculum History, Curriculum Philosophy, Curriculum Design, Curriculum Development, Curriculum Assessment/Evaluation, and General Issues of Curriculum.

Data were collected by obtaining responses to two survey instruments, one mailed to the 326 North Dakota elementary principals and one mailed to two teachers from each of the principal's schools. Fifty-six percent of the principals responded, and 43% of the teachers responsed. This was less than the 60% response rate identified by the investigator as adequate and is a limitation of the study. Demographic questions were included in the surveys. Data for answering the research questions were analyzed by utilizing *t* tests, One Way Analysis of Variance (ANOVA) with Tukey's HSD (Honestly Significant Difference), or Pearson correlation coefficients to ascertain whether differences or relationships existed. The probability for significance for all inferential tests was set at the .05 level.

The fact that curriculum does not have a widely accepted definition adds to complexity and diversity in the field. This may explain why elementary principals in North Dakota did not believe they were very well prepared in the task of curriculum leadership. However, principals consistently rated themselves higher on emphasis given to curriculum leadership practices than did teachers. Significant differences were found in 11 of the 40

comparisons between male and female principals, and female principals were higher on all 11 curriculum leadership practices. Another finding showed that the level of emphasis increased as the level of education increased. The number of years experience as an elementary principal did not make a significant difference on emphasis given to curriculum leadership practices. A correlation existed between level of preparation on emphasis given to curriculum leadership practices for all 40 curriculum leadership practices.

Recommendations were given for further study and for action by appropriate groups. To have improved curriculum, it appears principals need additional education in curriculum areas.

CHAPTER I

INTRODUCTION

"Principals must take a central role in curriculum matters" (Murphy, 1990, p. 4). Pajak and McAfee (1992) believe that to function effectively, principals need a broad knowledge of curriculum and its organization, along with certain relevant attitudes and skills. "The heart of any school is the curriculum," and "as authority and responsibility for curriculum are returned to the building, principals will have to cultivate skills in curriculum development" (Reavis, 1990, p. 40). To be an effective curriculum leader, a principal must understand the curriculum process and practices and be able to help teachers understand and develop curriculum (Kanpol & Weisz, 1990; Reavis, 1990; Tanner, 1987).

Tanner and Tanner (1990) contend that history is important because it provides a sense of movement over time and a perspective to determine the nature, direction, and extent of progress along with setbacks. An examination of the history of school curriculum is important "so as to make contemporary ideas and developments in the curriculum field more comprehensible" (Tanner & Tanner, 1990, p. xiv). However, many curriculum reform proposals pay little or no attention to previous efforts. Curriculum improvement is approached by each new group of "reformers" as though current problems have never been recognized before (Hughes, 1994; Tanner & Tanner, 1990). Experience is, in a sense, a part of history. Experience means "the efforts of educational leaders to improve the curriculum over the years. Experience enables us to avoid past mistakes and do better in like circumstances the next time" (Hughes, 1994, p. 188). If the lessons of the past are learned and if administrators/curriculum leaders are properly trained and are provided the

resources and support that are needed, the prospects for progress are promising (Tanner & Tanner, 1990).

The principalship is one of the most important administrative positions in the field of education. As administrators, the principals must be leaders and managers. As leaders, principals must "work to change goals, policies, and procedures in response to or in anticipation of internal (organizational) and/or external (environmental) concerns, issues, or problems"; as managers, principals must "maintain a productive status quo; they conserve useful and facilitative policies and procedures" (Hughes, 1994, p. 33).

> While the duties and expectations of principals have continued to grow and increase in complexity, the twin expectations that principals must serve as instructional leaders and managers of the school have been firmly rooted in the minds of school superintendents and school board members since the early 1900s. (Blumberg & Greenfield, 1986, p. 10)

Hughes related a story that began in Denver in the 1920s where the superintendent "developed a plan for curriculum revision . . . that involved teachers in preparing courses of study that were tested experimentally" (p. 191). "Once the Denver pattern caught on, it was obvious that specialists, other than the superintendent, would be needed to manage the process, and it was for the purpose of training such specialists that the curriculum field was created" (Cremin, 1961, p. 213).

Sava (1989) reported that "today's principal is better educated and better prepared than ever before" (p. xii). However, principals reported they lack the time, training, and authority necessary to be instructional leaders (Pajak & McAfee, 1992; Smith & Andrews, 1989). Goodlad (1984) claimed that principals' detachment from curriculum is due to the fact that few of them have been prepared for instructional leadership. Leithwood (1990) also contended that the lack of "know-how" causes principals to avoid instructional leadership activities. Wootton, Reynolds, and Gifford (1980) claimed that "principals, like most professionals, give more attention to that which they feel most comfortable and for which they have been best prepared"; consequently, "the development of curriculum . . .

receives limited attention from administrators" (pp. 20-21). Howell (1981) claimed that instructional leadership is being compromised generally in favor of office mandates. He also noted that elementary principals in his study, by their own choice, spent an overall 15% of their time managing the cafeteria. Howell also found that out of 30% of principals' time spent in the instructional leadership role, 20% was spent on supervision.

It was apparent in the literature that principals generally have not chosen to concentrate on curriculum for decades. Effective principals function as instructional leaders, whereas "leadership provided by the typical principal is largely administrative [managerial]" (Leithwood & Montgomery, 1982, p. 322). Keefe (1987) reported that as personal skills diminish and university training becomes dated, school administrators "grow uncomfortable with the responsibilities of real instructional leadership and concentrate more on the mundane tasks" (p. 50). Although principals have identified curriculum to be an important target area, the activities, tasks, and practices they carry out have been limited.

In the 1990s and into the 21st century, school leaders must be prepared to be curriculum leaders in a fast paced, fast changing, complex, technological society. Schools must change to meet the changing social, political, and economic needs of society.

Need for the Study

As the effective schools literature of the 1970s and 1980s clearly established, the principal is the school's most important figure (Goodlad, 1984; National Association of Elementary School Principals, 1990a). During a review of the literature, it was clear that more was written about the principal as an instructional leader (a supervisor of teachers) and as a school manager in the studies of school administration than about the principal as a curriculum leader. Yet, a principal's leadership was viewed as crucial in the establishment and maintenance of a quality school curriculum. The processes of curriculum design, development, and implementation were identified as essential in this effort. Curriculum

revision was identified as necessary and inevitable. Behar and Ornstein (1992) declared that processes and decision making in curriculum should be based on objective and quantifiable criteria, so clarifying the behaviors and activities of effective curriculum leaders was necessary. An extensive review of the literature helped the investigator identify curriculum leadership domains and practices held appropriate for effective curriculum leaders.

Purpose of the Study

The purpose of this study was to examine the emphasis North Dakota elementary principals gave to specific curriculum leadership practices and how the principals' perceptions differed from teachers' perceptions on emphasis given to curriculum leadership practices. In addition, information was sought concerning how well principals believed they were prepared to carry out curriculum leadership practices. Secondary purposes of this study were to determine if there was a relationship between curriculum leadership practices and perceived level of preparation in the principal group, to determine whether there was a significant difference between levels of education on emphasis given to curriculum leadership practices in the principal group, to determine whether there was a significant difference between genders on emphasis given to curriculum leadership practices, to determine whether there was a significant difference between groups based on number of years experience as an elementary principal on emphasis given to curriculum leadership practices in the principal group, and to determine whether there was a significant difference between principals in schools of differing size on emphasis given to curriculum leadership practices.

Delimitations

The following delimitations pertain to this study:

1. Only full-time elementary public school principals in the state of North Dakota were included in this study.

2. Only two classroom teachers in each of the principal's schools were included in this study.

3. The questionnaire was not a standardized instrument. The instrument was developed by the investigator with the assistance of a jury of experts.

4. The sample size was small enough to produce volunteer bias.

Assumptions

The following assumptions were made:

1. The respondents answered the survey questions as accurately and truthfully as possible.

2. Elementary principals in North Dakota take curriculum leadership responsibilities in their schools.

3. North Dakota elementary principals possess varying degrees of ability as curriculum leaders due to differences in their educational administration preparation programs and their experience.

4. The practices and activities of curriculum leadership, as outlined in this study, are recognized as essential elements of curriculum leadership by principals and teachers.

5. Teachers know what principals do.

Definitions

Curriculum design is "the outcome of a process by which the purposes of education are linked to the selection and organization of content" (Longstreet & Shane, 1993, p. 57). Generally, curriculum design consists of four components: (a) purposes, aims, goals, or objectives; (b) content--static or dynamic; (c) learning experiences and instructional methodologies; and (d) evaluation of curricular outcomes. Four conceptions of curriculum design related to the selection of content include (a) society-oriented, (b) child-centered,

(c) knowledge-centered, and (d) the eclectic. Design elements include scope, sequence, articulation, balance, consistency, interrelatedness, and integration (Longstreet & Shane, 1993; Ornstein & Hunkins, 1993).

> It might also be considered a carefully conceived plan that takes into account what its creators want done, what subject matter will be used, what instructional strategies will be used, and how the designer will determine the success or feasibility of the design. (Behar, 1992, pp. 7-8)

Diagnosis of need, organization of subject matter, learning experiences, methodologies, and evaluation are related tasks of curriculum design (Doll, 1992).

Curriculum development is planning (assessing needs and setting goals and objectives); implementing (selecting and organizing content and learning activities/experiences); and evaluating the curriculum, including what various people, processes, and procedures will be involved (Cawelti & Reavis, 1980; Oliva, 1992; Ornstein & Hunkins, 1993).

Curriculum evaluation is the assessment of programs, processes, and curricular products (material). Curriculum evaluation includes instructional evaluation, which is an assessment of the student's achievement, the instructor's performance, and the effectiveness of a particular approach or methodology (Oliva, 1992).

> Curriculum history is the process of describing, analyzing, and interpreting past curriculum thought and practice. Like history, it is a chronicle record of past events that may be represented by a narrative and/or an analysis of past events. By analyzing the past and the origins of curriculum, educators can better understand the present. A study of curriculum history can reveal insight and approaches to problems that relate to similar present day issues. (Behar, 1992, p. 6)

Curriculum implementation is "the task of transforming curriculum plans into classroom action" (Oliva, 1982, p. 25). "The process of implementation is developmental and occurs at different levels. Successful implementation of a curriculum, regardless of its design, rests on delineating at the outset of the development process the stages necessary for implementation" (Ornstein & Hunkins, 1993, p. 297). The curriculum plans must

address the needs and support mechanisms and resources necessary for carrying out the intended actions.

Curriculum leader is one who guides the design, development, improvement, implementation, and evaluation of curriculum.

> Curriculum philosophy is defined as a set of values, beliefs, and/or a particular orientation that determines an individual's broad view of a subject. It guides students, teachers, and schools in both teaching and learning. Inquiry into educational philosophy suggests a general view of students and society, as well as curriculum. Educational philosophy leads to a determination of educational theory, educational aims, and curriculum development and design. Curriculum philosophy helps educators answer value-laden questions and make decisions among many choices. (Behar, 1992, p. 4)

The literature identifies five educational philosophies: (a) perennialism, (b) essentialism, (c) progressivism, (d) reconstructionism; and (e) existentialism (Doll, 1992; Longstreet & Shane, 1993; Ornstein & Hunkins, 1993).

Curriculum practice is a statement that describes the activities within the domains of knowledge that help define what curriculum workers do (Behar, 1992; Behar & Ornstein, 1992).

> Domains of knowledge are ways of structuring the "knowledge base" of a field of study or a professional discipline. They are important content areas within a discipline that researchers and text authors examine in an attempt to further the field of knowledge. (Behar, 1992, p. 3)

Domains of knowledge in curriculum "represent broad conceptualizations of curriculum that yield specific curriculum activities" (Behar, 1992, p. 3). Six domains of knowledge were considered for this study: (a) Curriculum History, (b) Curriculum Philosophy, (c) Curriculum Design, (d) Curriculum Development, (e) Curriculum Assessment/Evaluation, and (f) General Issues of Curriculum.

Elementary schools are those schools containing grades K-6 or grades 1-6.

General issues of curriculum are those curriculum practices that are not addressed under one of the other domains covered in this study.

Subsystems of curriculum include the following: (a) Instruction is teaching directed by curriculum (guided teaching) (English, 1987); (b) supervision refers to a general leadership function that coordinates and manages those school activities concerned with learning (Wiles & Bondi, 1991); and (c) evaluation refers to the assessment of programs, processes, and curricular products (material).

Potential Benefits of the Study

The findings of this study may have implications for higher education in the preparation programs for school administrators. Filling out the questionnaire may cause individual principals to reexamine their roles as school administrators and result in personal and professional growth plans. Other groups which may benefit from the results of this study include the North Dakota LEAD Center, the North Dakota Department of Public Instruction, the North Dakota Council of School Administrators, the North Dakota Association of Elementary School Principals, school superintendents, the North Dakota School Boards Association, local school boards, and similar organizations in other states, as they examine the data and consider the implications for the work they do with principals.

Research Questions

The following questions were used to guide the research in this study:

1. How much emphasis did North Dakota elementary principals give to the practices of curriculum leadership as perceived by elementary principals?

2. How much emphasis did elementary principals give to the practices of curriculum leadership as perceived by elementary teachers?

3. How well did elementary principals perceive they were prepared to carry out the practices of a curriculum leader?

4. Is there a significant difference between elementary principals and elementary teachers on perceptions of emphasis placed upon principals' curriculum leadership practices?

5. Is there a relationship between emphasis given to curriculum leadership practices and perceived level of preparation in the principal group?

6. Is there a significant difference between levels of education on emphasis given to curriculum leadership practices in the principal group?

7. Is there a significant difference between male and female principals on emphasis given to curriculum leadership practices?

8. Is there a significant difference between groups based on number of years experience as an elementary principal on emphasis given to curriculum leadership practices in the principal group?

9. Is there a significant difference between principals in schools of differing size on emphasis given to curriculum leadership practices?

Order of Presentation

Chapter I has presented a description of the dissertation topic. A review of the literature is presented in Chapter II. In Chapter III, the methodology of the study is described. Chapter IV provides the presentation and analysis of the research. Chapter V presents the summary, findings, conclusions, and recommendations of the study.

CHAPTER II

REVIEW OF RELATED LITERATURE

The purpose of this chapter is to present a review of the literature and research related to the principal as a curriculum leader. The first section is an overview of the historical perspective of curriculum. In the second section, a review of the historical evolution of the principalship is presented. The third section presents a review of the principal as a curriculum leader. The fourth section is an examination and review of curriculum leadership domains and practices. The fifth section addresses how teachers view principals as curriculum leaders. The sixth section reviews principals' preparation to be curriculum leaders, and the seventh section discusses principals as curriculum leaders in the 21st century.

Historical Perspective of Curriculum

According to Tanner and Tanner (1980), the concept of curriculum is implicit even in the earliest educational prescriptions and programs of civilized societies dating back to the concerns of Aristotle about what things to teach. "By studying the background and history of American education and those civilizations which influenced it, we can better understand the forces underlying the educational emphases and the implications for curriculum content" (Wootton et al., 1980, p. 1). In more modern times, researchers have suggested that the history of curriculum in America is the history of American education and schooling, while many others argue that defining curriculum is not that simple.

> The difficulties in defining curriculum are comparable to those of defining a human being rather than defining a human body. The definitions of a human being are broad, dynamic, operational, and often controversial, while those of a body are specific, static, and tangible. The meanings and connotations of curriculum are analogous to the definitions of a human being. (Shepherd & Ragan, 1992, p. 1)

But, regardless of the controversy over the definitions of curriculum, an analysis of the concept of curriculum reveals the profound changes that have occurred during the 19th and 20th centuries concerning the role of the school in our society, conceptions of the learner, and the nature of knowledge (Tanner & Tanner, 1980).

"The modern elementary curriculum has evolved over the past 200 years from a narrow curriculum devoted to the teaching of reading, writing, and arithmetic to a broad program encompassing not only basic skills, but a variety of learning experiences" (Wiles & Bondi, 1993, p. 246). Because schools have been considered as instruments for social change, "schools often become battlegrounds for diverse groups with conflicting interests" (p. 246). By studying the history of elementary schools in America, it was evident that elementary schools have been responding to social change for decades.

Tanner and Tanner (1990) contended that "curriculum history is useful because of the enduring character of many of the old ideas" (p. 6).

> Without it (curriculum history) we could not obtain full pictures of our contemporary problems; if no one could find out what transpired before, we would reinvent the pedagogical wheel without realizing that there are successful and unsuccessful educational models. (Tanner & Tanner, 1990, p. 7)

Therefore, understanding the history of curriculum is useful for both scholars and practitioners (Glatthorn, 1987a). According to Zais (1976), many curriculum scholars believed that the "bandwagonism" (p. 22) and hit-or-miss methods that characterized the curriculum field are due partly to its failure to give attention to the historical framework out of which curriculum problems arose. It appeared as though many curriculum reform proposals paid little or no attention to previous efforts (Tanner & Tanner, 1990). Curriculum reformers approached recurring problems in curriculum improvement as though no one had looked at them before (Goodlad, 1966; Hughes, 1994; Tanner & Tanner, 1990). Tanner and Tanner (1980) claimed that "American educational history is replete with instances where old educational models are treated as new" (p. 193).

Knowledge of and use of curriculum history in this country was limited (Zais, 1976), although interest in the history of curriculum is on the rise (Tanner & Tanner, 1980). Tanner and Tanner (1990) pointed out that "there is a failure to build on curriculum work done in the past"; hence, "the continuity between past and present has too often been a tale of repeated mistakes" (p. 30), rather than the developmental process that it should be. Ornstein and Hunkins (1993) stated many other reasons to have an understanding of the history of curriculum:

1. The development of ideas in education is part of our intellectual and cultural heritage.
2. Our notion of an educated person (or professionally literate person) is too narrow and technical; we need to expand the idea that an educated person (or professional person) is one who is steeped in an understanding in the humanities and social sciences, which stems from history.
3. A discussion of various theories and practices in education requires an understanding of historical (as well as philosophical, psychological, and social) foundations.
4. An understanding of historical foundations in education helps us integrate curriculum, instruction, and teaching.
5. History can be studied for the purpose of understanding current pedagogical practices.
6. In developing a common or core curriculum, an historical perspective is essential.
7. With an historical perspective, curriculum specialists can better understand the relationship between content and process in subject areas.
8. Through the use of history, especially case examples, we have more opportunity to add a moral dimension to our academic education.
9. The history of education permits practitioners to understand relationships between what students have learned (past) and what they are learning (in the present).
10. The study of education history is important for its own theoretical and research purposes. (p. 75)

A brief review of the historical background and evolution of curriculum was necessary to comprehend contemporary ideas and developments in the field of curriculum. Ornstein and Hunkins (1993) explained:

> Because many scholars in the field of curriculum often lack historical perspective, they rely on the history of American education to analyze the heritage of our curriculum. By analyzing the first 200 years (or more) of curriculum, we can view curriculum primarily in terms of evolving subject matter or content and the dominant philosophy of perennialism. Not until the rise of progressivism, followed by the early period of behaviorism and scientism in education (the use of empirical methods, analysis of human behavior, and generalisms), did attention in the curriculum field expand to include principles of curriculum development. (p. 68)

Tanner and Tanner (1980) contended that "although avoidance of past failures is reason enough for the study of predecessor models and movements in the curriculum field, there is another reason: the prosperity of curriculum as a field of study" (p. 194).

Many of the distinguishing features of a certain "period" of time had their origins long before the period in which they were evident, and many of them continued beyond the date suggesting the end of a period. The effort to assign certain developments to specific periods of time suggested that there were distinct periods.

The Colonial Period (1607-1775)

The historical foundations of curriculum were firmly laid in the educational experiences of colonial Massachusetts (Ornstein & Hunkins, 1993; Tanner & Tanner, 1990; Wiles & Bondi, 1993; Zais, 1976).

> When the British established colonies in America between 1607 and 1733, they transplanted three major types of education from Europe: the church-state type, found in New England; the parochial school type, established in Catholic Maryland and Protestant Pennsylvania; and both private and charity education, commonplace in certain southern colonies, notably in Virginia. (Doll, 1989, p. 9)

During the early years of the Virginia settlement, education was in the hands of ministers for the purposes of maintaining discipline and order and controlling the Native Americans (Spring, 1990). Massachusetts was settled mainly by Puritans who adhered to strict religious orthodoxy. Since they believed that it was through the Bible that God spoke to

man, it was essential that every member of the community be able to read the Bible. Spring wrote that the Puritans' "purpose in teaching reading and writing was to ensure not only that individuals read the Bible and religious tracts but also that they become good workers and obey the laws of the community" (p. 6). In response to the Puritans' concern for religion and the ability to read, the Massachusetts legislature passed a law in 1647 that became well known as the "Old Deluder Satan" Act. The major purpose of this act was to insist that teachers teach children to read the Bible.

> This law has become famous because it required communities to establish and support schools. Specifically, the law required any community having at least 50 households to appoint a teacher to provide instruction in reading and writing and any community of 100 or more households to establish a grammar school. (Spring, 1990, p. 7)

"Reading, therefore, was the most important subject, followed by writing and spelling, for purposes of understanding the catechism and common law" (Ornstein & Hunkins, 1993, p. 68). This early colonial law provided for schools like the Dame School and the Latin Grammar School.

The Dame School was run by a woman in her own home who taught some basic elements of reading and writing to neighborhood children. Although 17th-century school laws did not recognize girls at all (the interpretation of the word "children" meant "boys"), girls did attend the dame schools where they were taught some reading, cooking, and sewing. Tanner and Tanner (1990) wrote that the chief elements in a girl's curriculum were "piety, modesty, gentleness, and household economy, which they could have learned at home" (p. 34).

Although women were considered to be subservient to men and dependent on them, "they still had to assume responsibility for their own salvation" (Spring, 1990, p. 26). This created a dilemma regarding the education of women. Spring went on to explain:

> The education of women was undertaken purely for purposes of religious control, but, ironically, even though women were considered the weaker sex with regard to intellectual capacities, they not only assumed responsibility for teaching reading

> within the household but also functioned as neighborhood teachers in the dame schools and, during the summer, in district schools of New England. (p. 26)

The main curriculum objective of the Latin Grammar School was to produce God-fearing Christians who also learned Latin and Greek. An additional curriculum objective was to produce citizens capable of self-government (Tanner & Tanner, 1990; Wiles & Bondi, 1993; Zais, 1976). Ornstein and Hunkins (1993) described the curriculum of the colonial schools as follows:

> The curriculum of the colonial schools was a traditional curriculum, stressing basic-skill acquisition, timeless and absolute values, social and religious conformity, faith in authority, knowledge for the sake of knowledge, rote learning, and memorization. It was based on the notion of child depravity (children were born in sin, play was idleness, and child's talk gibberish), and thus the teacher needed to apply constant discipline. (p. 69)

Many historians have argued that the New England educational system was structured to protect the prevailing class system by providing a class system of education (Pulliam, 1987; Spring, 1990). Spring explained it this way:

> Reading and writing schools, which the majority of the school-going population attended, provided an authoritarian education and taught only the skills necessary to read and understand religious and civil decrees. On the other hand, grammar schools and Harvard College trained society's future leadership by providing education in the classics. (pp. 12-13)

Ornstein and Hunkins (1993) noted that "in the middle colonies, unlike New England, no common language or religion existed, therefore, no single system of schools could be established" (p. 69) and that in the Southern colonies, education was viewed as being aristocratic and educational decisions were left to the families (Pulliam, 1987).

In the middle colonies, New York was home to a significant, diverse population. To meet the particular needs of several religious and ethnic interests and avoid major clashes over the curriculum of schools, "English colonial policy involved a certain degree of respect for religious and ethnic differences which allowed for the development of more diversity in educational content and institutions" (Spring, 1990, p. 15). However, in

Pennsylvania, "colonial policy viewed education as a means of establishing the superiority of one ethnic group over another" (p. 15). Spring further claimed:

> [It was important to understand] at this point in the history of education that this method of instruction and content were part of a world view whose adherents believed the good society could be achieved only through obedience to the word of God. In other words, educational practices were consistent with the philosophy and organization of society at the time. (p. 10)

Education was seen as important to the early colonists, but an organized system of schooling had not yet emerged. However, leaders began viewing education as a useful tool for governing society, so organized systems of schooling began to appear. The content of schooling during this period indicated how thoroughly a society's traditions, culture, and social philosophy influenced the character of its schools' curricula.

The National Period (1776-1876)

The period from 1776 to the mid-19th century became known as the National Period. A new wave of immigration was permeating the colonies, and the Revolutionary War had ended. Although educators were dreaming of schools "as institutions for creating the perfect society" and "the general population began to realize the value of learning as a tool for gaining independence, not just for instilling subservience" (Spring, 1990, p. 31), "the period from the outbreak of the war in 1775 until the beginning of our national government in 1789 was calamitous for educational opportunity" (Tanner & Tanner, 1990, p. 31). After the war, society rapidly changed, but the curriculum remained stationary.

> Part of the failure of the schools was a result of older methods and approaches to education and schooling, which were no longer able to fulfill the complex and changing needs of the industrial and urban society that was beginning to emerge in Massachusetts as well as in other parts of the country during this period. (Button & Provenzo, 1989, p. 105)

This stagnation resulted in many schools closing and increased illiteracy. Tanner and Tanner (1990) and Doll (1989) contended that the continued use of the curriculum of the colonial school period failed to meet the needs of a society undergoing rapid economic, political, and social change.

A new mission for education was emerging. "The post-Revolutionary period brought several developments that influenced anew the curricula of American schools" (Doll, 1989, p. 10). Land was set aside for schools in each township with the passage of the Ordinance of 1785, and as people moved around the territories, they took with them a dominant pattern of schooling, mainly that of the New England district school, thus providing the basis for eventual establishment of the free public school (Doll, 1989).

The early 19th century was a time of political consciousness for Americans. Doll (1989) claimed that an important aspect of this nationalism was patriotism or love of country. Many leaders of the time began to link free public schooling with the ideas of popular government and political freedom (Doll, 1989; Ornstein & Hunkins, 1993). Aiken (1992) stated that "the founding fathers saw the need to build a nation of good citizens who could share a common culture and a republican form of government" (pp. 44-45). Tanner and Tanner (1990) agreed that "cultural change resulted in demands for a broader school curriculum" (p. 51). The curriculum of the Latin Grammar School did not meet the needs of the youth in the city nor those on the frontier.

In spite of the increased availability of schooling and secularization, the majority of the elementary and grammar schools of this era provided a college preparatory curriculum for wealthy boys. The Quakers were an exception. According to Tanner and Tanner (1990), the Quaker leaders conducted schools for girls, as well as boys, and where poor children could attend free of charge. The Quaker theme during the 18th century was that "women, blacks, and Indians should be educated on an equal level with whites and males" (Tanner & Tanner, 1990, p. 35) and the curriculum was constant. However, not everyone agreed that this formalized educational process provided learning that was beneficial. In 1744, Canassatego, a member of the Iroquois Confederation, turned down an offer from the commissioners of Maryland and Virginia to send any more of their young men to

William and Mary College. Canassatego (as cited in Nerburn & Mengelkoch, 1991) spoke eloquently:

> You who are so wise must know that different nations have different conceptions of things. You will not therefore take it amiss if our ideas of the white man's kind of education happens not to be the same as yours. We have had some experience of it.
>
> Several of our young people were brought up in your colleges. They were instructed in all your sciences; but, when they came back to us, they were bad runners, ignorant of every means of living in the woods, unable to bear either cold or hunger. They didn't know how to build a cabin, take a deer, or kill an enemy. They spoke our language imperfectly.
>
> They were therefore unfit to be hunters, warriors, or counsellors; they were good for nothing.
>
> We are, however, not the less obliged for your kind offer, though we decline accepting it. To show our gratefulness, if the gentlemen of Virginia shall send us a dozen of their sons, we will take great care with their education, instruct them in all we know, and make men of them. (pp. 13-14)

The Common School Crusade/Universal Education (1820-1920)

The pursuit for universal education, or what was commonly known as the common school movement, represented the pinnacle of struggle during the decades of the 1830s and 1840s (Aiken, 1992; Ornstein & Hunkins, 1993; Spring, 1990). However, this education movement lasted until the 1920s and greatly influenced our present system of universal education.

"The common school was established in 1826 in Massachusetts, when the state passed a law requiring every town to choose a school board to be responsible for all of the schools in the area" (Ornstein & Hunkins, 1993, p. 78). In 1837, the Massachusetts legislature established the first state board of education and placed the public common schools under a single authority. This movement was led by Horace Mann, who was a member of the Massachusetts legislature and later became the first Massachusetts Commissioner of Education. He received much support from the public by appealing to the various factions of society.

> To enlist the business community, Mann sought to demonstrate that education would make workers more diligent and more productive; to enlist the upper classes, he established the stewardship theory--that the public good would be enhanced by

> public education: schools for all children would create a stable society in which people would obey the laws and add to the nation's political and economic well-being; to the workers and farmers, Mann suggested that the common school would be the great equalizer--a means of social mobility for their children; and to the Protestant community, he argued that the common school would assimilate ethnic and religious groups, promote a common culture, and help immigrant children learn English and the customs and laws of the land. (Ornstein & Hunkins, 1993, p. 78)

Although the establishment of school districts and school boards differed from state to state, the symbol of the common school flourished on the frontier. Here, more than any other area, the school was seen as a symbol of equality where the common person's children could learn the three R's. On the frontier, the school also became the center of activity in the community. Religious services were also sometimes held in the schoolhouse. These schools were supported and controlled by the local communities and later by the states. "The traditions built around the common school--the idea of neighborhood schools, local control of schools, and government support of schools--took a firm hold in America and greatly influenced our present system of universal education" (Ornstein & Hunkins, 1993, p. 79).

As common schools expanded, the elementary curriculum began to evolve and expand. Curriculum was considered to be "progressive" in nature. Ornstein and Hunkins (1993) discussed the evolvement of elementary school curriculum this way:

> There was no agreement on an appropriate or common curriculum for the elementary school. The trend, throughout the nineteenth century, was to add courses to the essential or basic subjects of reading, spelling, grammar, and arithmetic. Religious doctrine changed to "manners" and "moral" instruction by 1825; the subject matter of textbooks was heavily moralistic (one reason for the popularity of McGuffey), and teachers provided extensive training in character building. By 1875 lessons in morality were replaced by courses in "conduct," which remained part of the twentieth century curriculum. The traditional emphasis on curriculum was slowly altered, as more and more subjects were added--including geography and history by 1850; science, art (or drawing), and physical education by 1875; and nature study (or biology and zoology), music, and home and manual training by 1900. (p. 79)

For the most part, public education was nonsectarian by this time, and the earliest compulsory attendance laws were being passed (Wiles & Bondi, 1993; Zais, 1976). While

the elementary curriculum could be characterized as nonsectarian, it was by no means to be considered secular. Religious overtones continued to be predominant in public school education during this period.

At no other time in the history of American education has there been such an extensive debate about the meaning and goals of education. The social, political, economic, and religious groups that influenced these times were many and varied. In particular, the years from 1876 to 1929 witnessed the expansion of the United States in business and industry, in territory, and in influence on world affairs (Shepherd & Ragan, 1992). This rapid expansion created the need for reform in all areas, especially education. "Democratic ideals combined with the demands of a rapidly expanding industrial system encouraged the Common School Revival" (Button & Provenzo, 1989, p. 120). Spring (1990) contended that "what was different about the common school movement was the establishment and standardization of state systems of education designed to achieve specific public policies" (p. 73). Spring outlined three distinct aspects of the common school movement that made it different from past educational developments:

1. The educating of all children in a common schoolhouse: a school that was attended in common by all children and in which a common political and social ideology was taught.

2. The idea of using schools as an instrument of government policies: schools were to be a direct linkage between government education policies and the solving and control of social, economic, and political problems. The common school was to be the panacea for society's problems.

3. The creation of state agencies to control local schools. This was necessary if schools were to carry out government social, political, and economic policies. (p. 74)

In addition, there were different historical interpretations regarding the purpose of education. Some regarded the common school era as a debate between the Republicans/Whigs, as conservatives, and the Democrats, as liberals. Others argued that

common schools were established to protect elite religious and economic positions in society.

> [Nonetheless], the leaders of the Common School Movement saw education as a means of reforming American culture; however, in doing so, they failed to realize that they were promoting a philosophy that was specifically their own, rather than one that was universally held. (Button & Provenzo, 1989, pp. 120-121)

Historians contended that these various debates helped in understanding not only the common school movement but also the current debates about schooling.

The importance of the common school movement was summarized by Button and Provenzo (1989) as follows:

> The significance of the Common School Movement ultimately lies in the patterns that it set for the subsequent development of education in the United States. The roles now defined for teachers and administrators within the school system, the relationship of the school to the family and to minority groups, systems of finance and administration clearly have their roots in the Common School Movement. (p. 121)

Glatthorn (1987a) believed that the major publications of this period were the reports of two committees established by the National Education Association (NEA): the Committee of Ten, appointed to make recommendations for the high school curriculum, and the Committee of Fifteen, appointed to make recommendations for elementary curriculum and instruction. "The committee's recommendations were reported in the NEA's 1895 report" (Glatthorn, 1987a, p. 36). Glatthorn (1987a) described the recommendations in the report as follows:

> Grammar, literature, arithmetic, geography, and history were seen as the central subjects for training the mind—and clear separation of those subjects was essential. The following subjects were to be taught every year, from first to eighth: reading; English grammar (except in the eighth year); geography; natural science and hygiene; general history; physical culture; vocal music; and drawing. Handwriting was to be taught in the first six years; and spelling lists, in the fourth, fifth, and sixth. Latin was to be introduced in the eighth year, and manual training (for boys) and sewing and cooking (for girls) in the seventh and eighth. In mathematics, arithmetic was to be studied in the first through the sixth years, followed by algebra in the seventh and eighth. The ultimate impact of the Committee of Fifteen report was to sustain a somewhat fragmented and subject–centered curriculum. (pp. 36-37)

"Schools between the 1870s and the early 1900s were the result of a generation of reformers who wished to spread the virtues of public schooling to all children" (Cuban, 1979, p. 166). Two of the movements that had profound national impact on curriculum during this era were explained by Cuban (1979) as follows:

> Corporate Industrialism: The image of the factory and the related values of efficiency, order, worker obedience, and standardization of a finished product surfaced in the curriculum of schools. School administrators spent much time preparing uniform guides for teachers. This concern for uniformity and efficiency was known as "scientific management."
>
> Progressivism: The expansion of the school's role beyond the academic and moral into an all-embracing concern for the entire child's welfare became a firmly imprinted ideal. Progressivism cast the teacher into a role where he or she had to be an artist of consummate skill, knowledgeable in his or her field, trained in the science of pedagogy, and imbued with a desire for social improvement. (pp. 146-148)

School leaders embraced the practices and principles of "scientific management" as the grand panacea to rapidly increasing problems that came from unprecedented growth in school size, curricular demands, and student enrollments. Prescribed routines, expectations, and methodologies provided the control and uniformity that was demanded by "efficient" institutions and helped to remedy the problems of an inconsistent and ill-trained teaching force in the schools. As progressivism evolved in the initial decades of the 1900s, curriculum expanded, the use of I.Q. tests increased, ability grouping was widespread, and "specialists" joined the teachers in working with children. While the primary determinant of curriculum change was social change, Cuban (1979) identified some external and internal forces that brought continuity and stability to curriculum:

> The primary determinant that might explain puzzling continuities in curriculum was the socializing functions of schools. In addition, there were a number of external instruments, such as accrediting agencies, national tests, and legislation that reinforced school socialization and thereby strengthened curriculum continuity.
>
> There were also internal forces that stabilized curriculum. Such school organizational traits as rationality, loosely coupled structures, teaching as an occupation, and the classroom as a workplace help explain those stubborn continuities and classrooms' seeming invulnerability to change. (p. 187)

Modern American Education (1920-Present)

Pulliam (1987) noted that "intellectual and cultural historians argue that life conditions have major effects on the attitudes, values and beliefs of all people" (p. 118). This statement was significant in light of the subsequent changes in the focus of education throughout this era.

The decade of the 1920s "was marked by the emergence of the curriculum as a field for systematic study in the United States" (Tanner & Tanner, 1990, p. 199). "Those who grew up in the 1920s held establishment values which were influenced by World War I, prohibition, and the Model T Ford" (Pulliam, 1987, p. 118). Although liquor and jazz created significant excitement for young people, close family ties and patriotism still dominated the nation. Education remained conservative, and particular attention was paid to the curriculum of the elementary school. Tanner and Tanner (1990) characterized the turning point for the "new" education this way:

> Social purpose perished with the war. In the 1920s the philosophical gap was filled by rampant individualism, rationalized by the new Freudian psychology. Individualism in the 1920s was manifested by protest and a search for self. Both had an enormous impact on pedagogical philosophy, particularly at the elementary-school level. The result was the child-centered school. (p. 148)

It must be noted, however, that the new movement was taking place in private and university laboratory schools, although "throughout the 1920s, public schools tended to adopt progressive pedagogical innovations on a makeshift basis" (Tanner & Tanner, 1990, p. 149). Miller and Seller (1985) characterized curriculum during the 1920s and 1930s based on Franklin Bobbitt's position that "the curriculum should prepare students for all the activities they may encounter in daily life and that the curriculum should consist of activities that can readily be identified and measured" (p. 39).

Glatthorn (1987a) found that "funding for education increased four-fold: between 1910 and 1930, it rose from $426 million to $2.3 billion—and illiteracy fell from 7.7 to 4.3

percent" (p. 37). These figures supported the notion by some writers that when the amount of money spent on education goes up, learning also increases.

"By the 1930s the economic crash had taken place and the nation was in the Great Depression: there was mass unemployment, soup lines, and social unrest" (Pulliam, 1987, p. 118).

> Many school systems simply shut down because there was no money to pay teachers: at one point Chicago owed its teachers $20 million and the Health Department estimated that 20 percent of the children attending school were suffering from malnutrition. (Glatthorn, 1987a, p. 37)

In response to the resulting needs of children and demands of society, the 1930s became the era of real progressive education, radical school reform, and social reconstruction (Glatthorn, 1987a; Pulliam, 1987). For progressive educators, the child was the center of the curriculum. Glatthorn (1987a) described progressivism this way:

> Such a view has clear implications for both the process and the content of the curriculum. In using a curriculum-development process, child-centered curriculum workers begin by determining the child's interests, assured that any desired content can be linked with those interests. The arts are emphasized, since the nurturing of creativity is paramount and divisions between the several subjects are minimized or ignored completely. (p. 38)

Tanner and Tanner (1990) discussed social reconstruction and its relationship to curriculum:

> In times of crisis the schools are inevitably put in the position of being held responsible both for the crisis itself and for finding a solution. In the 1930s educators found themselves depicted by leftists as tools of capitalism and therefore responsible for existing conditions. From the right came the accusation that educational theorists were plotting to overthrow the government by pedagogical means—a curriculum calculated to make children enemies of the present social order. . . . Educational theorists regarded the curriculum as not only a way out of the Great Depression but as the means for preventing future social and economic crises. (p. 216)

However, by the mid-1930s, curriculum development for social reconstruction was superceded by the need to bridge the gap between the curriculum and the problems and

needs of Depression youth. This problem was approached through the goals of competence and civic responsibility.

Tanner and Tanner (1990) also held that, for educators, one felicitous outcome of the Depression "was that it provided a badly needed sense of direction for curriculum development" (p. 216). It was also during this decade that "the study of curriculum achieved independent status with the organization of the Society for Curriculum Study in 1932 and the establishment of the department of curriculum and teaching at Columbia's Teachers College in 1938" (Tanner & Tanner, 1990, p. 198).

During the 1940s, the foremost interest was keeping the United States safe from the Germans and the Japanese. World War II touched every family, and patriotism continued to permeate the culture (Pulliam, 1987). "Education turned back to the basics and the G.I. Bill increased enrollment in colleges" (Pulliam, 1987, p. 118). "The dominant motive in education during this time was economic recovery and the war effort" (Shepherd & Ragan, 1992, p. 34). This decade was the beginning of broad fields of curriculum, departmentalization, and nongraded schools.

By 1950, the baby-boom children were entering elementary school, and schools became overcrowded, teachers were in short supply, and teachers' pay was not keeping pace with the cost of living. The Supreme Court ruled that public school segregation was unconstitutional and the Korean War began. Sputnik was launched into space in 1957 by the Soviet Union, and the race for space began in the schools of the United States.

The dominant motives in education during this period were "accommodation to rapid change" (Shepherd & Ragan, 1992, p. 36) and "interest in the developmental abilities and needs of youth, and a concern with conformity as an educational goal" (Glatthorn, 1987a, p. 49). One of the most frequent charges at this time was that elementary schools were neglecting the fundamentals.

> The early years of the 1950s had been marked by several ill-tempered attacks on progressive education by such critics as Albert Lynd and Arthur Bestor; both authors published in 1953 rather vitriolic diatribes against what they considered to be the evils of progressive education. (Glatthorn, 1987a, p. 61)

Glatthorn went on to say that these assaults, along with other criticism, resulted in the collapse of progressivism. Nevertheless, this period saw a growth in kindergartens and in providing special educational programs for exceptional children. Practical skills and knowledge that had immediate value for the student were emphasized, and "schools were encouraged to develop core curricula that would minimize subject-matter distinctions and integrate learnings around major themes and issues" (Glatthorn, 1987a, p. 52).

Because of the pedagogical "soul-searching" that resulted from the Soviet space launch, scholars began developing and implementing plans to transform the curriculum (Glatthorn, 1987a). The 1960s became known as the era of innovation in elementary curriculum. "Many of the innovations dealt with organizational changes such as non-gradedness, open classrooms, and team teaching" (Wiles & Bondi, 1993, p. 249).

> By the end of the 1960s more than $200 million in federal funds had been invested in curriculum making—and most of that developmental work was in the hands of scholars eager to produce what some unfortunately called "teacher proof" curricula. (Cuban, 1979, p. 61)

"The 1960s also saw rapid economic growth, the space program, computers, assassinations and Viet Nam" (Pulliam, 1987, p. 119). Pulliam stated, "Education became focused on school integration, equal opportunity, and the needs of the culturally different child" (p. 119).

Inflation and a weaker economy were prevalent during the 1970s, and "many people began to fear a return of the conditions of the Great Depression of the 1930s" (Pulliam, 1987, p. 119). Violence was rampant. Wives had to enter the work force to improve the family income. Drug abuse and alcoholism became pervasive, especially among students. This "counterculture" rejected the values of work and punctuality. "Richard Nixon and Watergate caused the erosion of respect for government, while the

people began to distrust motives of oil companies and other industrial corporations" (p. 119). Pulliam reported that "educators concentrated on computer-assisted instruction, a relevant curriculum, and compensatory education for the culturally deprived" (p. 119).

Glatthorn (1987a) claimed that this period was a time "of experimentation in an attempt to develop child–centered schools and programs. The experimentation took three related but different forms: alternative schools, open classrooms, and elective programs" (p. 67). By the mid–1970s, "the American people were tired of violence, of experimentation, and of protest—and yearned for peace, stability, and traditional values" (Glatthorn, 1987a, p. 75).

A conservative reaction usually follows periods of unrest, conflict, and wars. It is no wonder then that the 1980s saw the beginning of "another back to basics movement, with demands for an elementary curriculum emphasizing reading, writing, and arithmetic" (Wiles & Bondi, 1993, p. 249). Conservatives wanted an end to social reconstruction, and opposition to spending for welfare was extensive. Price (1990) described the tone of the 1980s this way:

> Impatience and amnesia ruled the day during the Eighties. New criticisms were leveled at schools, and proposed cures cropped up before earlier ones could be absorbed, much less implemented. The "get-tough" push for minimum student competence and teacher accountability quickly overshadowed the effective schools movement. No sooner were teachers castigated for failing to impart basic skills than they were also upbraided for shortchanging students on critical thinking skills. (pp. 242-243)

Pulliam (1987) declared that "education moved back to the basics with major interest focused on tests of accountability and training for jobs" (p. 119).

> Those espousing such a conservative educational view essentially argued that the chief function of the school was to transmit the culture and to prepare students for their roles in a technological society; in accomplishing such a mission, the curriculum should emphasize the scholarly disciplines, should be characterized by intellectual rigor, and should be closely monitored for its effectiveness. (Glatthorn, 1987a, p. 76)

Broad–based research efforts got underway to identify the key elements of "effective" schools. The rallying cry was for a more challenging curriculum, particularly in science, math, and the area of critical thinking. Wiles and Bondi (1993) characterized the elementary curriculum in many districts in the late 1980s in the following manner:

1. A return to single series texts in reading
2. An emphasis on mastery of skills in reading, grammar, and computation
3. Established writing programs for all students
4. Mandated instructional time for reading and mathematics, for example, 60 minutes daily for reading, 45 minutes for writing, and 60 minutes for mathematics
5. Pupil progression plans (often dictated by legislation) that required diagnosis, instruction in certain skills, and evaluation of each student before promotion to the next grade level
6. A reduction in time devoted to science and social studies instruction. In many cases, instructional time in art and music was reduced
7. Curriculum management plans that included the use of skill continuums and instructional activities designed to teach identified skills in a systematic and sequential manner
8. Extensive skill grouping within individual classrooms and across classes within a grade level
9. Less emphasis on affective activities
10. A "packed" school day, especially for students requiring remediation. Almost every minute of the day was devoted to direct instruction designed to improve test scores. (p. 244)

By the late 1980s, the days of experimentation and innovations in programs, time schedules, and organizational patterns were gone, replaced by a more rigid standardized school (Wiles & Bondi, 1993).

> The elementary school of the 1990s has been characterized as a "full–service school" as it copes with increasing numbers of children from single-parent homes, crack babies attending school for the first time, mobility of parents, increasing cultural diversity, and children from impoverished families. Elementary teachers are "all things to all children." (Wiles & Bondi, 1993, p. 244)

As the diversity of student populations continued to grow in the elementary schools, many favored achievement grouping and tracking for the gifted as an answer to meet the needs of all students (Wiles & Bondi, 1993).

The 1990s began as the decade of technology; e-mail and the World Wide Web became commonplace. The revolution in education included initiatives in professional development for teachers, parent involvement, teacher preparation programs, early childhood education, authentic assessment, collaborative inquiry, and standard setting.

> The shape of the elementary curriculum of the 1990s has already been determined by radical changes in parenting, new job opportunities for adults, and other societal changes leading to the need for schools to provide a myriad of services that used to be offered by other agencies and institutions. (Wiles & Bondi, 1993, p. 250)

Historical Evolution of the Principalship

"The literature on educational administration is conspicuously barren in historical accounts of the origin and development of our leading officers in public-school administration" (Pierce, 1935, p. v). In order to develop a base for generalization regarding the professional status of modern administrative officers in public schools, particularly elementary principals, a review of the origins and evolution of the role of the principalship was necessary. As a result, Pierce undertook a doctoral investigation which traced the evolutionary development of the public school principal.

> The forces which gave rise to the development of the earliest professional powers and duties of principals are even stronger and more essential today than they were at the time lay officers of boards of education began to seek professional assistance in the organization, administration, and supervision of local schools by turning to superior teachers and clothing them with certain administrative responsibilities too technical for laymen satisfactorily to perform. The further evolution of the professional responsibilities of principals occasioned by the rapid growth of cities and the development of the city superintendent of schools provides the immediate historical background of the modern principalship, without which a full appreciation of the professional status of the principal would be scarcely possible. (pp. v-vi)

Historically, the role of the elementary principal had experienced a rather gradual and continuous process of change and adaptation. In the early 19th century, during the

common school movement, school reformers believed that "standardization of the organization of education was required to ensure that the schools taught a common moral and political philosophy" (Spring, 1990, p. 116). In response, supervision of instruction became an important function. Schools began to have persons in charge who were called headmasters, principal teachers, or headteachers. "Principal Teacher was a common designation for the controlling head of the school in the early reports of school boards, indicating that teaching was the chief duty" (Pierce, 1935, p. 11). Lay school boards still administered the school, while the principal teachers performed numerous clerical duties and were placed in charge when board members were away (McCurdy, 1983). However, the headteacher's primary expertise lay in teaching, not managing.

"The term 'Principal' appeared in the Common School Report of Cincinnati as early as 1838, and Horace Mann referred to a 'male principal' in his annual report of 1841" (Pierce, 1935, p. 11). Pierce found that "prior to the middle of the eighteenth century, and for some years thereafter, grammar-school principalships were held by men. Women were limited to positions as principals of primary schools or girls' departments of grammar schools" (p. 152). "The emerging pattern in nineteenth-century education, which reflected more general social patterns, was for men to manage and women to teach" (Spring, 1990, p. 116). In the common school system, women were to be nurturing, moral, and loving teachers, guided and managed by men who held the positions of authority. Tyack (1974) cited John Philbrick's description of the arrangement among staff members that he proposed in 1848 when he opened the Quincy School in Boston: "Let the Principal or Superintendent have the general supervision and control of the whole, and let him have one male assistant or sub-principal, and ten female assistants, one for each room" (p. 45).

"The emerging hierarchical system of supervision and administrative control made possible a uniform system of education" (Spring, 1990, p. 116). The responsibility for supervising teachers and overseeing the curriculum shifted from boards to superintendents

to principals, whose teaching duties were all but phased out (Houts, 1975; Howell, 1981; McCurdy, 1983; Pierce, 1935; Spring, 1990). The duties of principals during the period 1853 to 1900 were recounted by Pierce as follows:

> During the period 1853-1900, 79 administrative duties were prescribed for principals. Of the 79 duties, 32, or 40.5 percent, were concerned with organization and general management; 12, or 15.2 percent, with equipment and supplies; 11, or 13.9 percent, with office duties; 10, or 12.7 percent, with pupil personnel; 6, or 7.6 percent, with building and grounds; and 8, or 10.1 percent, with miscellaneous activities. (pp. 33-34)

"The closing decades of the nineteenth century found the principal in large cities well established as the recognized administrative head of his school" (Pierce, 1935, p. 39).

As the country grew, the schools got larger, and a complex set of ethnic, social, and economic factors contributed to complex problems in schools. As bigger schools began to replace the one-room schoolhouse, the principal teacher started to take on more of the administrative duties of the school and was less involved with direct classroom instruction. As a result, school boards began turning over administrative duties to full-time professionals. According to Pierce (1935), the following factors contributed to the development of the 1935 public school principalship:

> the rapid growth of cities, the grading of schools, the consolidation of departments under a single principal, the freeing of the principal from teaching duties, the recognition of the principal as the supervisory head of the school, and the establishment of the Departments of Elementary-School and Secondary-School Principals within the National Education Association. (p. 7)

By the early 20th century, elementary principals had three distinctive roles: (a) organization and management of the school, (b) supervision of instruction and staff development, and (c) interpreting the work of the school to the community (Blumberg & Greenfield, 1980; Pierce, 1935). Blumberg and Greenfield (1980) noted that "the role evolved from that of a principal-teacher performing numerous clerical tasks to the prototype of the modern day principal who usually does little or no teaching and is concerned primarily with administrative, supervisory, and community relations activities" (p. 12).

> [In the early 1900s], many research findings reported in professional journals were written by professors, principals, and superintendents deeply committed to making the principalship into a professional position. Professionalism was associated with teacher supervision, curricular involvement, and taking initiative—not writing reports, hiring janitors, or ordering toilet paper. (Cuban, 1988, pp. 59-60)

In his study, Pierce (1935) substantiated six main supervisory activities of principals: "1) classroom visitation, 2) teachers' meetings, 3) tests and measurements, 4) instruction in methods, 5) pupil adjustment, and 6) teacher rating" (p. 57). Prior to 1900, supervisory duties were conducted by groups of laymen who were considered to be the "learned" men of the town. Pierce continued:

> Two factors which greatly influenced supervision by the principal in the years around 1920 were the prestige given to intelligence tests and achievement tests in the World War, and the formation of the Department of Elementary School Principals. The former resulted in putting into the principals' hands tools for making scientific studies of his supervisory problems; the latter provided a stimulus for making the studies and a medium for publishing results. Principals, as a consequence, were able to base procedures on factual data to an extent not previously possible, and their supervision for the first time assumed the characteristics of a science. (p. 81)

Results of studies completed as early as 1920 indicated that principals believed they spent too much time on clerical tasks and administrative duties and wished they could spend more time on supervision (Cuban, 1988). Blumberg and Greenfield (1980) reported that, in 1959, a "large-scale systematic study of school principals began with the initiation of the National Principalship Study at Harvard University" (p. 25). The study looked at principals' background, experience, use of time, and other similar factors. Subsequent studies in the mid-20th century concentrated on demographic characteristics of principals such as age, sex, race, and formal training. However, these studies yielded little information about how principals influenced the instructional process or how principals applied leadership skills.

Pierce (1935) examined several annual reports for his study and found that in Philadelphia and Cleveland, between 1900 and 1912, women outnumbered men as principals of elementary schools. However, Pierce also discovered the following:

> In St. Louis, during the period 1902-1916, men outnumbered women in elementary principalships by two to one. In 1912, the number of men who were principals of Class A schools was 42, and the number of women was 11, but in Class G, the lowest class of schools according to size and salary, there were 11 women and no men. (p. 172)

Since that time, there have been dramatic shifts in the sex ratio among elementary school principals. Gross and Trask (1976) described the trend in this manner:

> In 1928 the majority (55%) of the administrators of public primary schools were women; three decades later, in 1958, the proportion of women in the elementary principalship had dropped to 38%. By 1971, only 21% of elementary school principals were women. (p. 3)

This downward trend was perplexing, since 85% of American elementary school teachers were women. Gross and Trask (1976) offered the following explanations for this state of affairs:

1. Outright discrimination against women in promotion practices and official policies of many school districts.

2. Informal male preference policies of school boards that were based on the belief that more men were needed in elementary schools where the teaching force was dominated by women.

3. An overreaction by school boards to one of the major criticisms to which elementary schools were exposed to in the sixties: boys lacked male role models and authority figures.

4. That colleges and universities that prepare educational administrators have shown little concern for the sex imbalance in the principalship and other educational administrative positions. (pp. 3-4)

Hallinger (1992) recounted the evolution of the principalship over the past 30 years by describing three roles played by principals: "the principal as programme manager, instructional leader, and transformational leader" (p. 35). "The predominant role enacted by American principals, from the 1920s until the 1960s, was one of administrative manager" (p. 35). During this period, national concern was directed toward educational equity, school consolidation, the profession's emulation of corporate management, and the

political nature of public schools. It was evident that the domains of the instructional arena were not of primary concern (Hallinger, 1992).

A new role was articulated for principals during the 1960s and 1970s, as the responsibility for managing federal and state government sponsored and funded programs for disadvantaged and special needs children was implemented. Programs such as Title I or Chapter I, Title IX of the Elementary and Secondary Education Act, and Public Law 94-142 (now called the Education for All Handicapped Act) increased. Racism and equal access to educational opportunities were also major issues that impacted the principalship. Hallinger (1992) described the principal's role this way:

> During these decades, American principals assumed a new set of change implementation functions that ranged from monitoring compliance with federal regulations to assisting in staff development and providing direct classroom support to teachers. In contrast to their earlier role, which was oriented to maintaining the status quo, programme/curriculum management was *implicitly* oriented towards school improvement and change. (p. 36)

Since these categorical programs and curriculum reforms and innovations were formulated by policy makers outside of the schools, the principal's role was limited to implementing and managing external solutions to local problems. As a result, principals demonstrated a greater concern with meeting criteria for compliance than with educational improvement (Hallinger, 1992).

"By the mid-1980s, professional norms deemed it unacceptable for principals to focus their efforts solely on maintenance of the school or even on programme management" (Hallinger, 1992, p. 37). The new educational standard for principals was instructional leadership (Murphy, 1991). In contrast to the program manager, the principal, as instructional leader, was viewed as the primary source of knowledge for coordination of the school's curriculum, supervision of classroom instruction, and educational program development (Hallinger & Murphy, 1985; Leithwood & Montgomery, 1982). However, the predominant conceptions of schooling taught to principals during the 1980s assumed

that the practices of effective leadership could be standardized and controlled by policy makers outside of the school. Hallinger noted that "while instructional leadership demanded a new focus and set of work activities from the principal, the role conceived for the principal was still inherently managerial in nature" (p. 38). In other words, the focus was still on meeting criteria for compliance rather than educational improvement for students.

The school of the 1990s is now being viewed "as the unit responsible for the *initiation* of change, not just the *implementation* of changes conceived by others (the predominant view during the 1970s and 1980s)" (Hallinger, 1992, p. 40). It has been implied that the framework for school leadership must be expanded to include not only the principal but teachers, parents, students, and members of the community. Based on these perspectives, Hallinger cited a new role for principals called "transformational leadership."

While the leadership imagery of the 1980s emphasized the centrality of the principal's role in coordinating and controlling curriculum, the transformational leader of the 1990s is referred to as "leading from the back of the band" (Hallinger, 1992, p. 41). These changes in practice for principals are more dramatic than the instructional leadership pressures of the 1980s. Are principals prepared to embrace the role of the transformational leader? Hallinger stated that "school leaders will need a greater tolerance for ambiguity" (p. 45). Principals must be willing and able to focus on the complex issues of curriculum and instruction which are characterized by high levels of uncertainty. Principals who are poorly equipped to deal with this complexity will, more than likely, continue to manage rather than lead and will continue to implement rather than initiate. Leadership programs must prepare and assist principals in finding ways to reconcile the strong leader imagery with the transformational notions inherent in real change. In this way, principals will respond "to changing normative expectations, while at the same time limiting the erosion of traditional notions of schooling and leadership" (p. 46).

The Principal as Curriculum Leader

Historically, it appears as though the roles of American school principals have remained relatively stable over the past century. However, Wimpelberg (1987) maintained that the role of curriculum leader is the least understood and most overlooked of all the many roles that exist in the field of education. Researchers have found that what is critically lacking in the effective leadership literature is a clear understanding of the relationship between the principal and the curriculum (Garner & Bradley, 1991; Kanpol & Weisz, 1990; Pajak & McAfee, 1992). Furthermore, Garner and Bradley contended that "the curriculum and the principal's defined role in the curriculum are vital components of an effective school" (p. 419). "The responsibilities of principals as leaders of their schools and as leaders of curriculum are inseperable" (Pajak & McAfee, 1992, p. 21). According to Goodlad (1984), the principal is the crucial player in the curriculum scheme. The building principal is one of the key individuals (if not the key individual) in any curriculum work (Ornstein & Hunkins, 1988; Zenger & Zenger, 1982). "Whether the chief administrator of the school, the principal, serves actively as curriculum leader or passively by delegating leadership responsibilities to subordinates, curriculum development is doomed to failure without his or her support" (Oliva, 1992, p. 106).

The principal must assume the leadership function and serve as facilitator in the curriculum process. Rossow (1990) claimed that school principals found it difficult, if not impossible, to be an effective leader without a thorough grasp of the curriculum. The effective school principal must have an understanding of the foundation of curriculum, how it can be organized, how to involve people in the process, and how to evaluate the product of the process (Hallinger, 1992; Hallinger, Murphy, Weil, Mesa, & Mitman, 1983; Rossow, 1990). In supervising the development and implementation of the curriculum, the proficient principal serves in the following ways:

- Applies the community's values and goals . . .
- Encourages faculty input and involvement in continual review and monitoring of the curriculum to ensure that the appropriate scope, sequence, and content are followed . . .
- Demonstrates knowledge of curriculum materials and their relationship to program goals and objectives . . .
- Seeks appropriate resources of time, money, personnel, and materials to support the identified curriculum . . .
- Assures that a multicultural, nonsexist, and developmentally appropriate program is provided for each child . . .
- Encourages students and staff to participate in co-curricular activities that enhance and complement what is learned in the classroom. (National Association of Elementary School Principals, 1991, p. 10)

To date, most of the research on instructional leadership has focused on the instructional aspects of teaching and learning. Understanding of the curricular functions of instructional leadership has lagged behind (Murphy, 1990). Goodlad (1984) concluded that "as a long-term student of curriculum reform, there has not been intensive, sustained attention to the content of elementary and secondary education for some time" (p. 290). Principals have identified curriculum to be an important target area; however, the activities, tasks, and practices they carry out related to curriculum have been limited. "Although the role of the principal as instructional leader is a current and growing emphasis, instructional and curriculum development do not head the list of priorities of many school principals" (Oliva, 1992, p. 107). Ornstein (1994) reported that principals are in the best position to make curriculum changes and that they may see themselves as leaders in this area, but they are burdened by routine administrative and supervisory matters. Pajak and McAfee (1992) found that "even outstanding principals place somewhat less importance on their involvement with curriculum than on other aspects of their jobs" (pp. 21-22). Murphy (1990) also claimed that "insufficient attention has been devoted to the curricular dimensions of the instructional leadership role of principals" (p. 1). The literature

supported the notion that the generalist-managerial role of the principal must give way to one oriented toward curriculum to ensure high quality instructional leadership (Stronge, 1993).

"Data concerning the supervision of various subjects of the curriculum by the principal during the last half of the Nineteenth Century are very meager" (Pierce, 1935, p. 65).

> The only sources of information regarding subject supervision by principals were reports of associate and district superintendents, and even these contain statements of what principals, in the opinion of the Superintendents, should do rather than what the principals themselves actually planned and practiced. (Pierce, 1935, p. 66)

During the period from 1875 to 1900, principals were considered very effective if they kept their teachers uniformly covering the materials of the prescribed courses of study, which had, most likely, been constructed by the principals.

> The role of principals in revision and construction of courses of study was more limited in the years following 1918 than in previous periods, owing undoubtedly, to the growing conception that curriculum making was a process demanding co-operative effort of all workers in a school system and advice of professional experts in curriculum construction from outside the system. (Pierce, 1935, p. 205)

Nevertheless, the period from 1925 to the present portrayed the trend of cooperative effort and recognition of the principals' leadership in the curriculum process.

The professional careers of many school principals have been laden with crisis-prone and crisis-driven problems. "Curricular matters are rarely of crisis proportions, therefore they have taken second or third place to other things" (Goodlad, 1984, p. 137). Goodlad (1979) stated:

> Crisis management, public relations, pupil transportation, and the lunch program seem to dominate the daily program. Most of the time, these areas show immediate results. But the improvement of curriculum and instruction calls for delayed gratification. The signs of progress are not easily detected. It is possible to spend weeks and even months on matters of curriculum and instruction without the satisfaction of feeling that one has accomplished something. (p. 98)

Howell (1981) has attributed this limited attention to curriculum to the PHD (Piled Higher and Deeper) phenomenon whereby "innovative instructional leadership is shelved and replaced by the realities of personal survival and crisis management" (p. 333). In particular, principals viewed themselves as spending too much time in clerical work, routine administration, report writing, and attending meetings called by others; they reported too little time spent on educational leadership, general planning, supervision, and curriculum development (Blumberg & Greenfield, 1980; Garner & Bradley, 1991; Houts, 1975).

> Surveys of principals conducted during the 1970s found that a majority of American principals continued to believe that they *should* function as instructional leaders; however, they were acutely aware of the gap between this professional expectation and the reality of school administration. (Hallinger, 1992, p. 44)

Nevertheless, a number of writers have pointed out that many principals used management chores as an escape from curriculum leadership.

"The test of a school's philosophy is its curriculum in action and the philosophy of the school is made instrumental through the curriculum" (Tanner, 1987, p. 34). As a curriculum leader, the principal must have a vision encompassing the curriculum as a whole, and this sense of vision must be shared by the professional staff (Rutter, Maughan, Mortimore, & Ouston, 1979; Tanner, 1987). The curriculum leadership provided by a principal affects every student and teacher in his or her school. As a part of their effective schools research, Ubben and Hughes (1992) asserted:

> A school is as good or bad, as creative or sterile, as the person who serves as the head of that school. The principal is the one person in a school who oversees the entire program. The principal is in the best position to provide the necessary sense of direction to various aspects of the school. Research has shown that effective principals have a clear sense of purpose and priorities and are able to enlist the support of others toward those goals. (p. 123)

Tanner (1987) declared that to regard curriculum determination as a policy matter beyond the purview of the school administrator and teacher is to diminish their professional role. The responsibility for curriculum development and improvement rests with the

professional staff of the school. The principal is the person responsible for marshalling the professional staff and resources of the school in order for curriculum development and improvement to occur (Kanpol & Weisz, 1990; Tanner, 1987). "Older studies referred to the legal authority of the principalship as a power in effecting change. The newer view is attending to the principals' lack of expertise, which impedes their ability to make wise decisions about curriculum" (McNeil, 1985, p. 264).

Oliva (1992) declared some of the factors that lead principals away from spending time on instructional (curriculum) leadership:

> the priority that the higher officers place on efficiency of operation, limitations placed on principals' fields of operation by teachers' organizations, and preservice programs for administrators that stress business and personnel management, minimizing curriculum and instructional development. (p. 107)

Principals interested in becoming curriculum leaders must find the time to update themselves on current content in the field and organizational and methodological trends. However, knowledge is not enough. Hallinger (1992) claimed that "even when principals are armed with a more powerful knowledge base, significant adaptations must occur *in the workplace* before we can expect to see persisting changes in administrative practice" (p. 39). Provision must be made in the local context to enhance and support principals' new skills in the instructional leadership domains. In addition, principals must have a clear vision and a systematic plan for actualizing curriculum leadership (Keefe, 1987). "Perhaps, if the nation's commitment to the principal as an instructional leader persists for another generation, we will begin to see more significant changes in professional practice" (Hallinger, 1992, p. 39).

An Examination and Review of Curriculum Leadership Domains and Practices

Garner and Bradley (1991) maintained that in order to clarify the role(s) of principals in curriculum, curriculum must be defined. However, researchers have agreed

that no single definition is accepted among practitioners of the field because of the complexity, diversity, and volatility of the topic (Doll, 1992; Glatthorn, 1987a; Longstreet & Shane, 1993; Ornstein & Hunkins, 1993; Rossow, 1990; Shepherd & Ragan, 1992; Zais, 1976). Since the late 19th century, the definition of curriculum has been altered in response to social forces and expectations for the school (Glatthorn, 1987a; Wiles & Bondi, 1993).

> One reason for the confusion is that much of the curriculum involves values, choices, and options, as well as personal reflection and various views (or perspectives) in different contexts. Hence, our values, choices, and reflective processes lead to competing versions of the good curriculum and the appropriate domains of curriculum. (Ornstein & Hunkins, 1993, p. 19)

In other words, the elements of curriculum stem from a philosophical decision about the purpose of schooling.

Beauchamp (1975) determined that a theoretical base was necessary to lend systematic meaning to the practices of curriculum. Beauchamp reported that "the first serious effort to bring together ideas about curriculum theory was a conference held at the University of Chicago in 1947" (p. vii). It was felt that having a sound theoretical base would limit the trial-by-error and additive approach to curricular innovation that was prevalent during this decade. In addition, the subject matter of curriculum theory would constitute the identification of events or practices associated with decisions about curriculum, the use of curriculum, the design of curriculum, the development of curriculum, the philosophy of curriculum, the history of curriculum, and the evaluation of curriculum.

Behar and Ornstein (1992) defined curriculum from a theoretical base of systems and domains in the field "as well as practices that help define the field" (p. 33). Domains "represent ways of structuring the knowledge base of a field of study and establishing modes of inquiry" (p. 36). The curriculum practices "represent the behavior and activities

that help define what curriculum workers do in the real world of planning, implementing, or evaluating the curriculum" (p. 33).

> Whereas the foundations of curriculum represent the external boundaries of the field, the domains of curriculum define the internal boundaries, or accepted knowledge, of the field, and although curriculum specialists generally agree on the foundation areas, they often do not agree on what represents the domains or common knowledge of curriculum. (Ornstein & Hunkins, 1993, p. 15)

Behar (1992) found, in her research, that there was a scarcity of research studies that have investigated domains of knowledge in curriculum.

Ornstein and Hunkins (1993) stated that "it is important to establish a framework for conceptualizing the domains of curriculum--that is, the significant and indispensable curriculum knowledge necessary to conduct research and make theoretical and practical decisions about curriculum" (p. 16). Although there appeared to be a general lack of consensus in the literature concerning the domains of curriculum, Ornstein and Hunkins (1993) stated the following:

> Linda Behar was the first to establish an empirical format for identifying *curriculum domains* (broad areas of knowledge based on the most influential curriculum textbooks over a 20-year period) and *curriculum practices* (precise activities teachers and curriculum specialists engage in while inquiring about, planning, or implementing the curriculum). (p. 16)

Behar (1992) identified about 49 curriculum practices and categorized them and used them to define and support the existence of nine curriculum domains: (a) curriculum philosophy, (b) curriculum theory, (c) curriculum research, (d) curriculum history, (e) curriculum development, (f) curriculum design, (g) curriculum evaluation, (h) curriculum policy, and (i) curriculum as a field of study. However, Ornstein and Hunkins (1993) concluded that the only agreed-upon domains among scholars and practitioners were curriculum development and curriculum design--the technical aspects of curriculum construction. In Behar's work, each of the nine domains were defined by three or more curriculum practices. "The curriculum practices were representative of the kinds of activities performed by curriculum specialists, including teachers, principals, coordinators, and

directors of curriculum" (Behar & Ornstein, 1992, p. 34). Behar and Ornstein claim that the domains represent the broad content areas of knowledge that practitioners (curriculum leaders) should know and be able to utilize in actual situations while the practices coincide with the specific roles and tasks of the curriculum leader.

Teachers' Views of Principals as Curriculum Leaders

The research of Smith and Andrews (1989) indicated that teachers' perceptions of the school principal as an instructional leader was the most powerful determinant of teachers' satisfaction with their own professional role. These writers claimed that to be considered effective the principal must be perceived as possessing knowledge and skill in curriculum matters so that teachers perceive that their interaction with the principal will lead to improved instructional practices.

In a survey conducted with 82 elementary school administrators in Texas public schools, Seifert and Beck (1981) found that "principals see themselves as instructional leaders, but 246 teachers (three of them teaching under each principal in our survey) view their administrators less as instructional leaders than as managers" (p. 528). In a similar study, Cawelti and Reavis (1980) found that "only 28 percent of 357 teachers in seven urban school districts rated curriculum services high, compared to 34 percent of the supervisors and 41 percent of the principals from these urban districts" (p. 237). Berlin, Kavanagh, and Jensen (1988) developed a 17-item survey instrument for superintendents, principals, and teachers to determine the principal's function in curriculum and instructional leadership. These authors reported that teachers seemed "to feel that principals spend more time on the school plant (item 5) than they should—presumably keeping principals from performing more important tasks" (p. 45). The results of the Berlin et al. (1988) survey also indicated that "the teachers feel strongly that principals don't do what they should often enough" (p. 49).

Additional research over the last decade has consistently shown that teachers do not perceive principals as instructional leaders; nor do principals usually function in this way. While interviewing principals, Blumberg and Greenfield (1980) found that "the essence of their own role definition was that it was proactive and their position was that they were educational leaders" (p. 236). However, Blumberg and Greenfield continued to write that "our experience was that the incidence of actualizing this proactive stance was not a common one" (p. 236). These combined findings revealed a general trend:

> Those reference groups farthest from teachers regarded the adequacy of services more favorably than did the teachers themselves. It appears that in most districts where studies have been completed on this topic, only about one-fourth to one-third of the teachers felt their curriculum needs were being met. (Cawelti & Reavis, 1980, p. 237)

Preparation of Principals to be Curriculum Leaders

Pierce (1935) found that data concerning the academic qualifications of early principals were scant. However, it did appear that many of the principals in the 19th century, particularly in the eastern part of the United States, were ministers or men trained in that field. Pierce reported:

> Examinations designed to test the academic knowledge of candidates were introduced at an early stage by many city-school boards and that Cincinnati, in 1838, had two grades of certificates, the "first principal's certificate" and the "second principal's certificate." Ten years later, the certificates were known as the "Male Principal's Certificate" and the "Female Principal's Certificate." (p. 153)

Examinations included many and various subject areas, and failure in one area meant failure of the entire examination. "By 1864, the passing mark for the principal's certificate was set at seventy percent" (p. 154). It was interesting to note that principals in Philadelphia in 1870 could qualify for three levels of certificates from a single examination. Other factors which determined the level of certification of a potential principal were age, years of teaching experience, and the type of school the candidate graduated from: the Central High School or the consolidated schools. In 1895, in Chicago, "the Board of Education delegated to the Superintendent the power, subject to Board approval, to examine, select,

assign, and transfer principals and other candidates for positions in the educational department" (p. 157). Nonetheless, Pierce found that "the greatest advance in the certification of principals in the last quarter of the Nineteenth Century was the requirement of professional study in addition to the subject-matter knowledge previously demanded" (p. 158). By the turn of the century, Pierce found that the following requirements in the state of New York indicated marked progress over the standards previously demanded for elementary principals' certificates:

> To be eligible for the elementary-school principals' certificate, the applicant, in addition to passing the examination, was required to have one of the following qualifications:
>
> a) Graduation from a recognized college or university, and two years of professional study in a university department of education or normal school, together with at least three years of successful experience in teaching or supervision subsequent to graduation.
>
> b) Graduation from a college or university, together with at least five years' successful experience in teaching or supervision subsequent to graduation.
>
> c) A New York State certificate granted subsequent to 1875, together with eight years' experience in teaching or supervision immediately preceding the principal's examination (not valid in Manhattan, the Bronx, or Brooklyn).
>
> d) Ten years' experience or supervision in city public schools immediately preceding the examination. (In Manhattan and the Bronx, a course of two years in pedagogy, or two sessions of not less than six weeks in a university or normal school, was also required.) (p. 161)

The preceding requirements marked a significant expansion of the standards for acquiring principals' certificates and are similar, in many respects, to the requirements of the present day. In addition, Pierce found, in the first annual report of the City Superintendent of Schools of the city of New York in 1899, that candidates for the elementary principal's certificate had to write for three hours on the history and principles of education, which covered such topics as the aims of education; imitativeness during preschool age; formation of habits; uses of induction and deduction in teaching; apperception and its relation to lesson plans; the views of Spencer as to "what knowledge is of most worth" (p. 162); and influences of Rousseau, Pestalozzi, Froebel, Spencer, and Plato. Moreover, the examination in methods of teaching was also three hours in length and covered such topics

as rating of teachers, helping young teachers, methods of punishment, school programs, heating and ventilation, promotions, and correction of common faults in classroom teaching. Pierce reported that, by 1911, "the policy of giving candidates who were on the eligible lists for principalships apprentice training as assistant-principals until they were appointed was explained and the advantages were indicated" (p. 199). This practice, or something similar, has been reinstated in many university programs of educational administration across the country in recent times.

Goodlad (1979) discussed two eras of university preparation programs for school administration:

> The nature of the two eras of school administration is faithfully reflected in university preparation programs for school administrators. In the first era, experienced superintendents and principals joined the college of education faculties, usually on a part-time basis or during the summer, to meet the burgeoning demand for courses in educational administration. They taught rather practical matters pertaining to school organization, personnel policies, budgeting, and curriculum development. Charismatic leaders of a few school districts thought to have outstanding programs were in high demand for these purposes. In effect, they taught the accumulated wisdom of practical experience. The second era in the 1950s and 1960s saw the increased infusion of the behavioral sciences into most professional schools and their preparation programs. (p. 98)

Houts (1975) reported that preparation programs for principals had undergone little change over the years, which was a clear indication of the low priority placed upon the principalship.

While many principals aspire to enacting a conception of themselves as curriculum leaders, relatively few appear satisfied that they are performing well in this area, and many recognize they lack the skill and knowledge needed to be effective in this domain (Blumberg & Greenfield, 1980; Hallinger, 1992). Hallinger stated that "the *problem of school leadership* was framed by policy makers in terms of inadequate principal expertise in curriculum and instruction" (p. 38). In 1984, the National Association of Elementary School Principals (NAESP) sought to identify the basic characteristics of first-rate elementary and middle schools (National Association of Elementary School

Principals, 1991). The base of this analysis was comprised of two fundamental propositions that research has repeatedly demonstrated:

- First, that children's early school years are crucial to their long-term success in education (and indeed in life), and
- Second, that as the school's leader, the building principal is the single most important figure in determining the effectiveness of those years. (Lincoln & Sava, 1991, p. v)

Given these facts, it is imperative that elementary principals be capable and effective and "that they possess the appropriate personal characteristics and aptitudes and that their professional preparation programs be relevant and effective" (Lincoln & Sava, 1991, p. v). Pajak and McAfee (1992) also believed that "principals can function most effectively as curriculum generalists and need a broad knowledge of curriculum and its organization, along with certain relevant attitudes and skills" (p. 22). Pajak and McAfee further concluded that "principals' attitudes appear to have an enormous impact in shaping academic programs and determining the success or failure of innovative curricula" (p. 27). Lincoln and Sava went on to say, "Most principal preparation programs are designed to provide a sound base of knowledge about school administration. They too often fall short, however, in translating such knowledge into identifiable actions in the school" (p. v).

Blumberg and Greenfield (1980), in their findings for the preparation and training of principals, "found little to suggest that university graduate training had much direct or observable influence on any of these men and women" (p. 256). These authors further contend that more attention should be given to the qualitative character of people's experience as a teacher, a graduate student, or an administrator rather than only to the quantitative focus of number of advanced degrees, grade point averages, and number of credit hours. In addition, if principals are to work well with adults in face-to-face situations, "then provisions have to be made for principals and aspiring principals to work at tasks and activities that offer them the chance to acquire and practice the requisite

interpersonal and problem-solving skills" (Blumberg & Greenfield, 1980, p. 260). In other words, the training, education, and selection of principals should be a balance between formal and informal training and education.

"The heart of any school is the curriculum and as authority and responsibility for curriculum are returned to the building, principals will have to cultivate skills in curriculum development" (Reavis, 1990, p. 40). However, in most cases, curriculum continues to be determined by editorial staffs and writers of publishing houses and those who chose to buy their books. Goodlad (1984) concluded, "In an earlier study of educational change and school improvement, . . . most of the school principals of the participating schools lacked major skills and abilities required for effecting educational improvement" (p. 306). Houts (1975) reported that the preservice training of principals has been scant in preparing them for the role of intellectual leader. Yet, the principal is being viewed increasingly as the key person in school improvement (Goodlad, 1984; Murphy & Hallinger, 1987). Houts indicated the feelings of almost all of the participants who met at the Belmont Conference Center in Maryland in February 1975:

> Principals should exercise an educational leadership role to a far greater extent than they presently are and spend much less time on managerial and housekeeping tasks . . . however, it is fair to say that the majority of principals feel uncomfortable and inadequate in the role of educational leader. (pp. 67-68)

Houts reported that those at the conference felt that a reexamination of the preparation of principals was imperative. Pajak and McAfee (1992) maintained that professional preparation programs for principals typically include only a brief introduction to curriculum. Murphy and Hallinger analyzed several administrator training programs and found that required courses in the area of curriculum were scant. Oliva (1992) reported that "better programs are needed to prepare curriculum leaders and planners" (p. 568).

Efforts by school districts and by professional preparation programs to intervene more deliberately in the processes by which administrators learn their roles promise the

possibility of increasing their capability to be effective in leading and managing instruction (Greenfield, 1987). Goodlad (1979) claimed that while most university programs for the preparation of school administrators require courses pertaining to management, courses pertaining to curricular and instructional improvement often are optional. "Moreover, there is little guarantee that curriculum specialists who graduate from a program know how to develop, implement, and evaluate a curriculum" (Ornstein, 1986, p. 75). The curricula of education programs are, in many cases, governed by credentialing requirements of the state or various organizations (Cooper & Boyd, 1987). Goodlad (1984) claimed:

> Schools of education would compete in the marketplace, as do schools of management, to build a reputation for quality of program, in contrast to using conformity with usually outmoded credentialing requirements as the mark of success. Quality of all school education programs is more likely to be enhanced when curricula are planned separately from rather than governed by credentialing requirements. (p. 307)

University professors can and should make a contribution to remedying the curriculum problem.

> But few are equipped by preparation, interest, perspective, or temperament to be very useful, especially over the long term. University professors are far more adept at the work of advancing knowledge than that of humanizing knowledge, the central task of both curriculum development and teaching. (Goodlad, 1984, p. 292)

Ornstein and Hunkins (1993) commented on the problem in this way:

> The fact that curriculum lacks certification in most states (specified or professional requirements) adds to the problem of defining and conceptualizing the field and agreeing on curriculum courses at the college and university level. Even when curriculum course titles are similar, wide differences in content and level of instruction are common. Although there are many good curriculum programs at the university level, there is little guarantee that curricularists who graduate from a program know how to develop, implement, and evaluate curriculum--or that they can translate theory into practice. Some curriculum students may not have taken courses in development, implementation, or evaluation (especially students in administration), whereas others may have taken several. (p. 22)
>
> In addition, the field is open to several interpretations by the experts themselves--what curriculum should encompass, what knowledge is of tangible substance, and what content and experiences are essential. (p. 23)

Ornstein and Hunkins (1993) explained that "opinions about what curriculum knowledge is essential vary from one scholar to another and from one textbook writer to

another" (p. 19). This lack of consensus left a gap in the framework for conceptualizing a knowledge base. "Knowledge bases provide a theoretical framework that is comprised of essential knowledge, established and current research findings, and sound practices to provide a structure for making informed decisions" (Ornstein & Hunkins, 1993, p. 43). Behar (1992) found that the identification of domains of knowledge and subsystems of curriculum represented a potential knowledge base of curriculum practices that appeared to be lacking in research studies. In addition, Behar used the domains of knowledge and subsystems of curriculum to identify the most influential textbooks in curriculum by surveying a selected sample of participants chosen from the population of the Professors of Curriculum. Behar suggested that the knowledge base of curriculum practices identified in her investigation might influence design and delivery of professional education programs.

Principals as Curriculum Leaders in the 21st Century

Murphy and Hallinger (1987) claimed that the school reform movement of the 1980s and the efforts to develop more competent school leaders have facilitated the creation of new approaches to professional inservice and preservice training programs. There is little question that principals must change the way they do business in the 21st century, and "preparation programs for 21st century elementary . . . principals must accommodate the needs and demands of a rapidly changing society" (National Association of Elementary School Principals, 1990a, p. 19). One of the problems of change, as described by Leithwood, Begley, and Cousins (1992), is "gap reduction between the nature of school leadership which will contribute productively to future schools and the nature of current school leadership" (p. 1). Northern and Bailey (1991) described a rationale for change this way:

> Futuristic thinking of principals as instructional leaders is required for education in the 21st century. As information bases increase at an astounding rate, as more and more students enter schools at risk, and as political, social and technological systems change radically, traditional educational structures are rapidly becoming dysfunctional. (p. 25)

Murphy and Hallinger outlined 10 deficiencies that must be addressed if administrator training programs are to meet the demands for improvement in a new era of administrative practice:

Content Issues

1. Need for a stronger knowledge base
2. Need for theory that reflects the realities of the workplace
3. Need for content derived from research on factors that contribute to important organizational outcomes, especially indicators of student progress
4. Need for greater emphasis on managing technical core operations
5. Need for a greater emphasis on skill-based instruction

Process Issues

6. Need to bring the training process more in line with the conditions and milieu of the workplace
7. Need for better instruction
8. Need to view administrators as adult learners
9. Need to emphasize more thoroughly the principles of effective change and staff development
10. The need to connect theory and practice. (pp. 253-257)

Some writers asserted that future principals must be "sensitive to the changing demographic conditions in American society, to implications for principal preparation reflected in effective schools research, and to identified as well as projected concerns about current and future schooling" (National Association of Elementary School Principals, 1990a, p. vii). Northern and Bailey (1991) outlined seven "critical characteristics" for principals who wish to survive as instructional leaders in the 21st century:

1. Visionary leaders who know where they are, where they want to go, and how they are going to get there.
2. Strategic planners who know how to develop long- and short-term goals and objectives for the organization and its members.

3. Change agents who have a working knowledge of the change process.

4. Communicators who use an array of interpersonal skills as they work with staff, students, parents, and the community.

5. Role models who practice what they preach. Principals must not only communicate the vision, but they must live the vision.

6. Nurturers who ensure that working and learning environments are healthy and productive and will nurture leadership training and skills in all members of the school.

7. Disturbers who must take strong stands against traditional curriculum and the status quo which has never served students well. (pp. 25-27)

> Graduate schools of education must join with local school districts and NAESP [National Association of Elementary School Principals] and other professional organizations to assure that graduates in elementary and middle school administration have been trained in such a manner as to effectively cope with the demands and challenges of the 21st century. (National Association of Elementary School Principals, 1990a, p. 16)

The focus must be on such topics as the early identification of aspiring principals, shared curriculum planning to ensure that principal preparation programs remain current, and the improvement of certification standards. Principal preparation programs must ensure that the principals of tomorrow have a sound knowledge base in the area of curriculum and how curriculum relates to instruction and supervision. State administrator organizations have developed principal leadership academies to help meet the need for professional development of principals. However, Marsh (1992) found that few administrators leave the staff development centers and inservice programs with the instructional leadership skills needed for meaningful improvement. This problem may be the result of a conflict between the organizational context, program governance, and goals of the development centers and those of the school leaders.

Hallinger and Wimpelberg (1992) contend that ambiguity exists concerning school leader professional development centers because of a lack of understanding of the organizational and programmatic differences among the programs and that these differences are characterized by the diversity of the sponsoring agencies. Active providers of

professional training services for school leaders include state education departments, school districts, professional associations, intermediate education agencies, research and development laboratories and centers, and universities (Murphy & Hallinger, 1987). Hallinger and Wimpelberg described the various roles of some of the sponsoring agencies this way:

> State education departments developed centralized leadership academies in response to legislative pressures for school reform and accountability. The state leadership academies represented a vehicle for disseminating state reform priorities and programs and for developing administrators' skills for tackling school improvement. The chartered purpose of state-directed efforts, with their genesis in reform legislation, is frequently to change the behaviors and job practices of school administrators to conform with a state vision of the *effective administrator*. School administrators are often viewed as passive recipients of programs defined by others.
>
> Concurrently at the local level, groups of principals began to form professional development centers to meet their needs for professional support, growth, and development. In all (local) centers with which we are familiar, the focus has been on priorities that principals themselves have identified. These needs include professional renewal, reduced isolation, and assistance in addressing specific, school-related problems. Administrators may serve in an active advisory capacity or, in some cases, have full authority and responsibility over policy and program development with staff assistance. (pp. 4-6)

Regardless of what approach is taken by the professional development centers, Hallinger and Wimpelberg claimed that information is lax concerning the degree to which the stated goals of these organizations are attained. Also, Hallinger (1992) proposed that greater resources be allocated for coaching and on-site assistance, which are considered to be necessary ingredients for change at the local level.

The National Association of Elementary School Principals (1990a) presented five recommendations for preparation programs for elementary and middle school principals to help prepare them for school leadership in the 21st century:

> Recommendation 1: Strengthen Prerequisites for Entry into Principal Preparation Programs: . . . a sound liberal arts background, a solid background in the teaching and learning processes, and a thorough understanding of child growth and development . . . and successful teaching [experience]

> Recommendation 2: Strengthen Collaboration Among Colleges and Universities, Local School Districts, Professional Administrator Associations, and State Education Agencies: . . . [all] stakeholders [should be involved] in the process
>
> Recommendation 3: Leadership Talent Must Be Identified Early and Its Development Nurtured: [assessment programs, mentor relationships, and support systems are examples of ways to help aspiring principals]
>
> Recommendation 4: Generic Preparation Programs Should Be Modified to Provide Greater Specialization Opportunities for Elementary and Middle School Principals
>
> Recommendation 5: Require Institutions to Make Significant Levels of Commitment to the Preparation of Principals. (pp. 19-23)

It must be noted that the need is not for increased numbers in the field but for quality and effectiveness. The future training of principals as curriculum leaders must look to "modify the system, to make training more rigorous, more interesting, more enticing, and more integrated with real school problems" (Cooper & Boyd, 1987, p. 22).

Recent expectations of principals as curriculum leaders have created incompetence among some who have chosen to stop learning. Leithwood et al. (1992) offered this enlightening reflection of the development of expert leadership for the future: "When planned change is defined as a process of reducing the gap between current and desired states, sometimes you have to run hard to stay in the same place" (p. 11). *Proficiencies for Principals* notes:

> No administrator preparation program could assure lifetime proficiency. Acquired knowledge and skills must be continually modified and refined so as to respond to the ever-changing needs of students, staff, and the community. Truly proficient principals never stop learning and striving and growing. (National Association of Elementary School Principals, 1991, p. 19)

Leithwood et al. sum it up this way: "There is no final destination--there is only the journey" (p. 255), and only those who consider the role a priviledge should take on the responsibility.

This chapter has provided an examination of the literature and research covering six major areas: (a) Historical Perspective of Curriculum, (b) Historical Evolution of the Principalship, (c) The Principal as Curriculum Leader, (d) An Examination and Review of

Curriculum Leadership Domains and Practices, (e) Teachers' Views of Principals as Curriculum Leaders, (f) Preparation of Principals to be Curriculum Leaders, and (g) Principals as Curriculum Leaders in the 21st Century. Chapter III presents a description of the methodology used to conduct this study. The chapter outlines and explains the information about the development of the instrument, the population studied, the method used to collect the data, and the data analysis used in this study.

CHAPTER III

DESIGN AND METHODOLOGY

Chapter I provided an overview of this study, including information and general procedures for the study. This chapter presents the description of the research design and methodology and is divided into four sections: (a) Population/Sample, (b) Survey Instruments, (c) Data Collection Procedures, and (d) Statistical Treatment of the Data.

The purpose of this study was to examine the emphasis North Dakota elementary principals gave to specific curriculum leadership practices and how the principals' perceptions differed from teachers' perceptions on emphasis given to curriculum leadership practices. In addition, information was sought concerning how well principals believed they were prepared to carry out curriculum leadership practices. Secondary purposes of this study were to determine if there was a relationship between curriculum leadership practices and perceived level of preparation in the principal group, to determine whether there was a significant difference between levels of education on emphasis given to curriculum leadership practices in the principal group, to determine whether there was a significant difference between genders on emphasis given to curriculum leadership practices, to determine whether there was a significant difference between groups based on number of years experience as an elementary principal on emphasis given to curriculum leadership practices in the principal group, and to determine whether there was a significant difference between principals in schools of differing size on emphasis given to curriculum leadership practices.

The following questions were used to guide the research in this study:

1. How much emphasis did North Dakota elementary principals give to the practices of curriculum leadership as perceived by elementary principals?

2. How much emphasis did elementary principals give to the practices of curriculum leadership as perceived by elementary teachers?

3. How well did elementary principals perceive they were prepared to carry out the practices of a curriculum leader?

4. Is there a significant difference between elementary principals and elementary teachers on perceptions of emphasis placed upon principals' curriculum leadership practices?

5. Is there a relationship between emphasis given to curriculum leadership practices and perceived level of preparation in the principal group?

6. Is there a significant difference between levels of education on emphasis given to curriculum leadership practices in the principal group?

7. Is there a significant difference between male and female principals on emphasis given to curriculum leadership practices?

8. Is there a significant difference between groups based on number of years experience as an elementary principal on emphasis given to curriculum leadership practices in the principal group?

9. Is there a significant difference between principals in schools of differing size on emphasis given to curriculum leadership practices?

Population/Sample

The population of principals for this study was comprised of all persons designated as elementary principals by the North Dakota Department of Public Instruction. The sample of teachers consisted of two teachers from each principal's school. The investigator mailed the survey instrument to the identified groups. The names, addresses, titles, and

school districts of the elementary principals were obtained from the North Dakota Department of Public Instruction as mailing labels. The two teacher survey instruments were mailed to each principal's school addressed to First Grade Teacher and Fourth Grade Teacher, Second Grade Teacher and Fifth Grade Teacher, or Third Grade Teacher and Sixth Grade Teacher. The investigator had no control over how the teacher surveys were distributed in schools with multiple grades at one level. Care was taken to ensure an even distribution of surveys to teachers at each grade level by repeating the pattern: First and Fourth, Second and Fifth, and Third and Sixth as the mailing labels were being made. Using these procedures, the investigator mailed survey instruments to 326 principals and 652 teachers.

Survey Instruments

To gather data for this study, the investigator designed two survey instruments. The instruments were designed to obtain demographic information about the respondents (elementary principals and teachers) and to ask questions that would discern perceptions of respondents regarding the practices of elementary principals as curriculum leaders.

The practices, related skills, and knowledge compiled for the investigation were determined by a review of the related literature, including the professional standards of educational administration pertaining to curriculum which have been adopted by the National Policy Board for Educational Administration (NPBEA) and the National Council for the Accreditation of Teacher Education (NCATE). Standards and proficiencies adopted by the National Association of Elementary School Principals (NAESP) were also reviewed by the investigator. Behar (1992) identified nine curriculum domains in her study at Loyola University in Chicago and identified three or more curriculum practices in each domain. Six domains were adopted for this study. They are identified specifically later in this section. Twenty-three practices were adopted from Behar's study and were included in the instruments as curriculum leadership practices 1-12, 15, 16, 25, 26, and 28-34. In

Behar's study, the "practices were quantified through formal reliability and validity procedures" (Behar & Ornstein, 1992, p. 34).

> Of the original 77 items in Behar's (1992) study, 69 curriculum practices (90%) remained at the conclusion of this study. These items were those that demonstrated acceptable levels of internal consistency, and had an alpha coefficient of at least .20. (Behar & Ornstein, 1992, p. 133)

The survey instrument used in this study consisted of two parts. In Part I, respondents were asked to provide personal demographic data. The principals provided information regarding total number of years in education, total number of years as an elementary principal, gender, school size, and level of education. Teachers provided information regarding total number of years as an elementary teacher, level of education, whether or not they were active in curriculum development/renewal efforts at the school level, to whom they looked for curriculum leadership, and whether or not they considered their principal to be a curriculum leader.

In Part II of the survey instrument, participants were asked to respond to several practices identified as competencies for successful performance in a curriculum leadership role. The curriculum leadership practices were categorized into six of Behar's domains: (a) Curriculum History, (b) Curriculum Philosophy, (c) Curriculum Design, (d) Curriculum Development, (e) Curriculum Assessment/Evaluation, and (g) General Issues of Curriculum. The principal respondents were asked to relate how much emphasis they gave to practices in their curriculum leadership efforts as a principal. They were also asked to relate how well they believed they were prepared to carry out each practice. The teachers were asked to rate the degree of emphasis they perceived was given to each practice by their principal in his or her curriculum leadership effort.

Respondents rated the practices of curriculum leadership using a five point Likert-type scale where a rating of 1 indicated NO EMPHASIS and a rating of 5 indicated MAXIMUM EMPHASIS. If the teacher who received the instrument was a first-year

teacher who had never taught before, he or she was instructed to give the survey to another teacher at his or her school who taught at the same grade level: primary grades (K-3) or upper grades (4-6). If the teacher was an experienced teacher but was new to the building, or if the principal was new to the building, the teacher was instructed to respond to the survey by thinking of the principal he or she had last year. In addition, the principal respondents also used a five point Likert-type scale to rate how well they believed they were prepared to carry out each practice. A rating of 1 indicated NOT PREPARED and a rating of 5 indicated WELL PREPARED.

Data Collection Procedures

Prior to mailing the survey instrument, the investigator received approval for the study from the Institutional Review Board at the University of North Dakota. The University of North Dakota policy and principles on the use of human subjects required that any behavioral research which involved the use of humans as subjects be approved by this board.

The data for this study were collected in September 1995 by mail. The investigator obtained the data using a survey instrument that was mailed to 326 North Dakota elementary principals and 652 teachers. The investigator established 60% as an adequate response rate for the study.

The following steps were followed to secure the data necessary for this investigation:

1. The investigator mailed a cover letter with a short explanation of the study and the survey instrument, which was returned to the Bureau of Educational Services and Applied Research at the University of North Dakota, to 326 North Dakota elementary principals. (See Appendix B.)

2. The investigator mailed a cover letter with a short explanation of the study and the survey instrument, which was returned to the Bureau of Educational Services and

Applied Research at the University of North Dakota, to two teachers from each principal's school. (See Appendix C.)

3. At the end of a three-week waiting period, the investigator mailed a postcard, as a reminder, to those individuals who failed to return the instrument after the first mailing. (See Appendix D.)

4. After two additional weeks, a second cover letter and survey instrument were mailed to those individuals who did not respond to the first two mailings.

The surveys were printed on 11 x 17 paper that was folded to resemble a pamphlet. The surveys were then refolded by the respondents, with the return address and postage showing, and mailed back. They were printed on colored paper. An identification number was used to identify the survey to make it possible to follow up with those who had not responded. Confidentiality was ensured by the fact that the mailing was handled by an outside source.

Statistical Treatment of the Data

This study was analyzed in nine parts as follows:

Part I was a descriptive analysis of the principal data, using mean values and standard deviations, for the perceived emphasis given by the principal to the practices of curriculum leadership of the six domains of the survey: (a) Curriculum History, (b) Curriculum Philosophy, (c) Curriculum Design, (d) Curriculum Development, (e) Curriculum Assessment/Evaluation, and (f) General Issues of Curriculum.

Part II was a descriptive analysis of the teacher data, using mean values and standard deviations, for the perceived emphasis given by the principal to the practices of curriculum leadership of the six domains of the survey: (a) Curriculum History, (b) Curriculum Philosophy, (c) Curriculum Design, (d) Curriculum Development, (e) Curriculum Assessment/Evaluation, and (f) General Issues of Curriculum.

Part III was an analysis of the data, using mean values and standard deviations, regarding how well North Dakota elementary principals perceived they were prepared to carry out the practices of a curriculum leader.

Part IV was an analysis of the data for significant differences between elementary principals and elementary teachers on perceptions of emphasis placed upon principals' curriculum leadership practices.

Part V was an analysis of the data for correlations between emphasis given to curriculum leadership practices and perceived level of preparation in the principal group.

Part VI was an analysis of the data for a significant difference between levels of education on emphasis given to curriculum leadership practices in the principal group.

Part VII was an analysis of the data for a significant difference between male and female principals on emphasis given to curriculum leadership practices.

Part VIII was an analysis of the data for a significant difference between groups based on number of years experience as an elementary principal on emphasis given to curriculum leadership practices in the principal group.

Part IX was an analysis of the data for a significant difference between principals in schools of differing size on emphasis given to curriculum leadership practices.

Chapter III provided a discussion of the methodology for executing this investigation. Chapter IV includes presentation and analysis of the data of the study.

CHAPTER IV

ANALYSIS OF THE DATA

The data from this study were used to determine how much emphasis the principals gave to specific curriculum leadership practices, to determine how much emphasis the teachers perceived was given to each curriculum leadership practice by their principal, and to determine how well the principals felt they were prepared to carry out each practice. In addition, the investigator examined the difference between principals and teachers on perceptions of emphasis placed upon principals' curriculum leadership practices, the correlation between emphasis given to curriculum leadership practices and perceived level of preparation in the principal group, the difference between levels of education on emphasis given to curriculum leadership practices in the principal group, the difference between male and female principals on emphasis given to curriculum leadership practices, the difference between groups based on number of years experience as an elementary principal on emphasis given to curriculum leadership practices in the principal group, and the difference between principals in schools of differing size on emphasis given to curriculum leadership practices.

Analyses were carried out for each curriculum leadership practice to describe findings, to determine correlations, and to find differences. Analysis of the data involved tables generated by the entire sample delineating mean values and standard deviations for research questions one through three; delineating mean values, *t* values, and probability for research question four; delineating correlation and probability for research question five; and delineating mean values, *F* ratios, and *F* probabilities for research questions six through nine. Significant differences within groups tested using the *F* ratio were

determined by using a Tukey multiple comparisons procedure to assess for paired differences. The level of significance for all inferential tests was set at .05.

Principals were asked to rate 40 practices of curriculum leadership. The 40 curriculum leadership practices were arranged by domains of knowledge in curriculum. Six domains of knowledge were considered for this study: (a) Curriculum History, (b) Curriculum Philosophy, (c) Curriculum Design, (d) Curriculum Development, (e) Curriculum Assessment/Evaluation, and (e) General Issues of Curriculum. For general discussion purposes, this investigator decided to discuss the curriculum leadership practices with the five highest and five lowest mean values.

General Description of the Data

In this chapter, the investigator reports the analyses of the data which were compiled from the responses to a questionnaire sent to elementary school principals and a questionnaire sent to elementary classroom teachers in each principal's school in North Dakota. The demographic characteristics of the elementary principals and teachers who responded to the questionnaire are presented in Appendix A of this study. The following data are organized and introduced in the order of the research questions listed in Chapter I.

Analysis of Data for Research Questions

1. How much emphasis did North Dakota elementary principals give to the practices of curriculum leadership as perceived by elementary principals? The data in Table 1 present the mean values and standard deviations for emphasis given to each curriculum leadership practice by members of the principal group who responded to the questionnaire. These data are presented for each curriculum leadership practice for the total number of responses from the principal group. Data in the table are presented in the order in which the curriculum leadership practices appeared on the questionnaire. The data in Table 2 present the curriculum leadership practices with the five highest and five lowest mean scores.

Table 1

Means and Standard Deviations for Amount of Emphasis Elementary Principals Gave to the Practices of Curriculum Leadership as Perceived by Elementary Principals

Curriculum leadership practice	M	SD
CURRICULUM HISTORY		
1. Describe past curriculum thought and practices.	3.27	.82
2. Interpret past curriculum practices.	3.23	.82
3. Provide a chronology of important events in curriculum.	3.06	1.09
4. Examine forces that inhibit curriculum innovations.	3.39	.94
CURRICULUM PHILOSOPHY		
5. Create collaboratively a clearly stated philosophy of learning which is widely known.	3.71	.87
6. Determine an orientation to curriculum.	3.49	.96
7. Support a curriculum that reflects and supports the school's mission.	4.34	.78
8. State the purposes of education (the schools of thought to which the faculty, parents, and students subscribe).	3.96	.82
9. Elaborate on the theory of curriculum.	2.99	.95
CURRICULUM DESIGN		
10. Attempt to define what subject matter will be used.	3.94	.94
11. Permit curriculum ideas to be carried out.	4.40	.69
12. Integrate careful planning.	4.13	.80
CURRICULUM DEVELOPMENT		
13. Organize and involve teachers, parents, students, and other personnel to work on curriculum development.	4.11	.95
14. Conduct needs analyses.	3.71	.95
15. Decide on the nature and organization of curriculum.	3.63	.84
16. Determine procedures necessary for a curriculum plan.	3.76	.94
17. Consider the community's values, goals, social needs, and changing conditions in curriculum development.	4.01	.85
18. Align (establish links among) the curriculum content, the teaching materials, the teaching strategies, and the assessment instruments.	3.93	.88
19. Design a curriculum review cycle.	3.84	1.08
20. Demonstrate knowledge of curriculum materials and their relationship to program goals and objectives.	3.89	.82
21. Address state and federal policies and mandates and national goals and standards in the development of curriculum.	3.90	.93
22. Design curriculum and instruction appropriate for varied teaching and learning styles including specific student needs based on gender, ethnicity, culture, growth level, social class, and exceptionalities.	3.89	.93
23. Base curricular decisions on research, theory, and informed practice.	3.73	.89
24. Monitor technological developments and their implications for curriculum.	3.76	.91

Table 1--Cont.

Curriculum leadership practice	M	SD
CURRICULUM ASSESSMENT/EVALUATION		
25. Facilitate faculty input and involvement in continual review, revision, and improvement of the curriculum.	4.31	.74
26. Provide information about the effectiveness of teaching practices on student performance.	3.96	.76
27. Determine whether actions yielded predicted results.	3.57	.83
28. Utilize multiple indicators such as norm-referenced tests (Iowa Basics, CTBS, etc.), criterion-referenced tests (testing what is taught), and teacher observations and reports in the assessment of curriculum.	4.05	.85
29. Measure discrepancies between predetermined objectives and outcomes.	3.37	.95
30. Judge worth of instructional methods and materials.	3.97	.80
31. Determine desired outcomes of instruction.	3.85	.87
32. Determine effectiveness of curriculum content.	3.90	.80
33. Determine criteria to measure success of curriculum improvement plan.	3.63	.90
34. Ascertain whether outcomes are the result of the planned school curriculum.	3.41	.96
35. Identify the strengths of curriculum content.	3.96	.82
GENERAL ISSUES OF CURRICULUM		
36. Secure appropriate resources of time, money, personnel, and materials to support the development of curriculum.	3.84	.96
37. Secure appropriate resources of time, money, personnel, and materials to support the implementation of curriculum.	3.88	.92
38. Establish appropriate governance structures for curriculum development and approval.	3.56	.95
39. Interpret and communicate school district curricula.	3.82	.92
40. Have knowledge of and understanding of the political influences on curriculum.	3.53	.96

Principals rated their perceptions of the emphasis they gave to curriculum leadership practices on a five point scale, with five being high. The highest mean rating was 4.40. The lowest mean rating was 2.99. No other mean score reported by principals was below 3.00. Seven curriculum leadership practices had a mean score above 4.00, while one curriculum leadership practice had a mean score below 3.00.

The data in Table 2 show that principals perceived themselves as giving the most emphasis to "permit curriculum ideas to be carried out," while they gave the least emphasis to "elaborate on the theory of curriculum." The five highest rated practices belong to the domains of Curriculum Design, Curriculum Philosophy, Curriculum Development, and

Curriculum Assessment/Evaluation. The five lowest rated practices belong to the domains of Curriculum Philosophy, Curriculum History, and Curriculum Assessment/Evaluation.

Table 2

Five Highest and Lowest Means and Standard Deviations for Amount of Emphasis Elementary Principals Gave to the Practices of Curriculum Leadership as Perceived by Elementary Principals

Curriculum leadership practice	M	SD
Highest Emphasis		
11. Permit curriculum ideas to be carried out.	4.40	.69
7. Support a curriculum that reflects and supports the school's mission.	4.34	.78
25. Facilitate faculty input and involvement in continual review, revision, and improvement of the curriculum.	4.31	.74
12. Integrate careful planning.	4.13	.80
13. Organize and involve teachers, parents, students, and other personnel to work on curriculum development.	4.11	.95
Lowest Emphasis		
9. Elaborate on the theory of curriculum.	2.99	.95
3. Provide a chronology of important events in curriculum.	3.06	1.09
2. Interpret past curriculum practices.	3.23	.82
1. Describe past curriculum thought and practices.	3.27	.82
29. Measure discrepancies between predetermined objectives and outcomes.	3.37	.95

2. How much emphasis did elementary principals give to the practices of curriculum leadership as perceived by elementary teachers? Teachers were asked to rate 40 practices of curriculum leadership for perceived emphasis by their principals. The 40 curriculum leadership practices were arranged by the six domains of knowledge in curriculum as listed in the beginning of this chapter. The data in Table 3 present the mean values and standard deviations for perceived emphasis given to each curriculum leadership practice by elementary principals as perceived by elementary teachers in their schools. These data are presented for each curriculum leadership practice for the total number of responses from the teacher group. Data in the table are presented in the order in which the

curriculum leadership practices appeared on the questionnaire. The data in Table 4 present the curriculum leadership practices with the five highest and five lowest mean scores.

Table 3

Means and Standard Deviations for Amount of Emphasis Elementary Principals Gave to the Practices of Curriculum Leadership as Perceived by Elementary Teachers

Curriculum leadership practice	M	SD
CURRICULUM HISTORY		
1. Describe past curriculum thought and practices.	2.89	1.18
2. Interpret past curriculum practices.	2.89	1.20
3. Provide a chronology of important events in curriculum.	2.85	1.23
4. Examine forces that inhibit curriculum innovations.	2.89	1.22
CURRICULUM PHILOSOPHY		
5. Create collaboratively a clearly stated philosophy of learning which is widely known.	3.16	1.32
6. Determine an orientation to curriculum.	3.03	1.24
7. Support a curriculum that reflects and supports the school's mission.	3.76	1.19
8. State the purposes of education (the schools of thought to which the faculty, parents, and students subscribe).	3.55	1.22
9. Elaborate on the theory of curriculum.	2.77	1.24
CURRICULUM DESIGN		
10. Attempt to define what subject matter will be used.	3.08	1.26
11. Permit curriculum ideas to be carried out.	3.91	1.09
12. Integrate careful planning.	3.23	1.30
CURRICULUM DEVELOPMENT		
13. Organize and involve teachers, parents, students, and other personnel to work on curriculum development.	3.39	1.40
14. Conduct needs analyses.	2.96	1.35
15. Decide on the nature and organization of curriculum.	2.99	1.21
16. Determine procedures necessary for a curriculum plan.	3.13	1.26
17. Consider the community's values, goals, social needs, and changing conditions in curriculum development.	3.32	1.27
18. Align (establish links among) the curriculum content, the teaching materials, the teaching strategies, and the assessment instruments.	3.00	1.25
19. Design a curriculum review cycle.	2.86	1.33
20. Demonstrate knowledge of curriculum materials and their relationship to program goals and objectives.	3.22	1.22
21. Address state and federal policies and mandates and national goals and standards in the development of curriculum.	3.42	1.33
22. Design curriculum and instruction appropriate for varied teaching and learning styles including specific student needs based on gender, ethnicity, culture, growth level, social class, and exceptionalities.	3.07	1.32

Table 3--Cont.

Curriculum leadership practice	M	SD
23. Base curricular decisions on research, theory, and informed practice.	3.04	1.23
24. Monitor technological developments and their implications for curriculum.	3.20	1.29
CURRICULUM ASSESSMENT/EVALUATION		
25. Facilitate faculty input and involvement in continual review, revision, and improvement of the curriculum.	3.50	1.31
26. Provide information about the effectiveness of teaching practices on student performance.	3.17	1.28
27. Determine whether actions yielded predicted results.	2.96	1.21
28. Utilize multiple indicators such as norm-referenced tests (Iowa Basics, CTBS, etc.), criterion-referenced tests (testing what is taught), and teacher observations and reports in the assessment of curriculum.	3.52	1.28
29. Measure discrepancies between predetermined objectives and outcomes.	2.84	1.16
30. Judge worth of instructional methods and materials.	3.13	1.21
31. Determine desired outcomes of instruction.	3.03	1.22
32. Determine effectiveness of curriculum content.	3.09	1.24
33. Determine criteria to measure success of curriculum improvement plan.	2.88	1.24
34. Ascertain whether outcomes are the result of the planned school curriculum.	2.90	1.19
35. Identify the strengths of curriculum content.	3.10	1.23
GENERAL ISSUES OF CURRICULUM		
36. Secure appropriate resources of time, money, personnel, and materials to support the development of curriculum.	3.12	1.30
37. Secure appropriate resources of time, money, personnel, and materials to support the implementation of curriculum.	3.08	1.30
38. Establish appropriate governance structures for curriculum development and approval.	2.96	1.21
39. Interpret and communicate school district curricula.	3.19	1.25
40. Have knowledge of and understanding of the political influences on curriculum.	3.36	1.24

A comparison of the data in Table 3 with the data in Table 1 shows that teachers systematically perceived principals' emphasis on curriculum leadership practices lower than did principals. A visual examination of these data show that the mean scores of teacher ratings were approximately one point below the principal ratings on a five point scale.

The data in Table 4 show that teachers perceived their principals as giving the most emphasis to "permit curriculum ideas to be carried out," while they perceived their principals gave the least emphasis to "elaborate on the theory of curriculum." The five highest rated practices belong to the domains of Curriculum Design, Curriculum Philosophy, and Curriculum Assessment/Evaluation. The five lowest rated practices

belong to the domains of Curriculum Philosophy, Curriculum Assessment/Evaluation, Curriculum History, and Curriculum Development.

Table 4

Five Highest and Lowest Means and Standard Deviations for Amount of Emphasis Elementary Principals Gave to the Practices of Curriculum Leadership as Perceived by Elementary Teachers

Curriculum leadership practice	M	SD
Highest Emphasis		
11. Permit curriculum ideas to be carried out.	3.91	1.09
7. Support a curriculum that reflects and supports the school's mission.	3.76	1.19
8. State the purposes of education (the schools of thought to which the faculty, parents, and students subscribe).	3.55	1.22
28. Utilize multiple indicators such as norm-referenced tests (Iowa Basics, CTBS, etc.), criterion-referenced tests (testing what is taught), and teacher observations and reports in the assessment of curriculum.	3.52	1.28
25. Facilitate faculty input and involvement in continual review, revision, and improvement of the curriculum.	3.50	1.31
Lowest Emphasis		
9. Elaborate on the theory of curriculum.	2.77	1.24
29. Measure discrepancies between predetermined objectives and outcomes.	2.84	1.16
3. Provide a chronology of important events in curriculum.	2.85	1.23
19. Design a curriculum review cycle.	2.86	1.33
33. Determine criteria to measure success of curriculum improvement plan.	2.88	1.24

3. How well did elementary principals perceive they were prepared to carry out the practices of a curriculum leader? Principals were asked to rate their perceived preparation to carry out the 40 practices of curriculum leadership. These curriculum leadership practices were arranged by the six domains of knowledge in curriculum. The data in Table 5 present the mean values and standard deviations for how well principals perceived they were prepared to carry out the practices of a curriculum leader. These data are presented for each curriculum leadership practice for the total number of responses from the principal group. Data in the table are presented in the order in which the curriculum leadership

practices appeared on the questionnaire. The data in Table 6 present the curriculum leadership practices with the five highest and five lowest mean scores.

Table 5

Means and Standard Deviations for How Well Elementary Principals Perceived They Were Prepared to Carry Out the Practices of a Curriculum Leader

Curriculum leadership practice	M	SD
CURRICULUM HISTORY		
1. Describe past curriculum thought and practices.	3.16	.95
2. Interpret past curriculum practices.	3.12	.93
3. Provide a chronology of important events in curriculum.	2.99	1.02
4. Examine forces that inhibit curriculum innovations.	2.92	.98
CURRICULUM PHILOSOPHY		
5. Create collaboratively a clearly stated philosophy of learning which is widely known.	3.26	.93
6. Determine an orientation to curriculum.	3.08	.94
7. Support a curriculum that reflects and supports the school's mission.	3.61	1.04
8. State the purposes of education (the schools of thought to which the faculty, parents, and students subscribe).	3.39	1.01
9. Elaborate on the theory of curriculum.	2.93	1.01
CURRICULUM DESIGN		
10. Attempt to define what subject matter will be used.	3.40	.92
11. Permit curriculum ideas to be carried out.	3.65	.98
12. Integrate careful planning.	3.47	1.03
CURRICULUM DEVELOPMENT		
13. Organize and involve teachers, parents, students, and other personnel to work on curriculum development.	3.46	1.06
14. Conduct needs analyses.	3.09	1.07
15. Decide on the nature and organization of curriculum.	3.21	.96
16. Determine procedures necessary for a curriculum plan.	3.24	1.05
17. Consider the community's values, goals, social needs, and changing conditions in curriculum development.	3.38	.98
18. Align (establish links among) the curriculum content, the teaching materials, the teaching strategies, and the assessment instruments.	3.27	1.09
19. Design a curriculum review cycle.	3.25	1.15
20. Demonstrate knowledge of curriculum materials and their relationship to program goals and objectives.	3.34	1.06
21. Address state and federal policies and mandates and national goals and standards in the development of curriculum.	3.28	1.14
22. Design curriculum and instruction appropriate for varied teaching and learning styles including specific student needs based on gender, ethnicity, culture, growth level, social class, and exceptionalities.	3.21	1.04

Table 5--Cont.

Curriculum leadership practice	M	SD
23. Base curricular decisions on research, theory, and informed practice.	3.35	1.00
24. Monitor technological developments and their implications for curriculum.	2.78	1.15
CURRICULUM ASSESSMENT/EVALUATION		
25. Facilitate faculty input and involvement in continual review, revision, and improvement of the curriculum.	3.57	.99
26. Provide information about the effectiveness of teaching practices on student performance.	3.37	1.01
27. Determine whether actions yielded predicted results.	2.92	.96
28. Utilize multiple indicators such as norm-referenced tests (Iowa Basics, CTBS, etc.), criterion-referenced tests (testing what is taught), and teacher observations and reports in the assessment of curriculum.	3.42	1.04
29. Measure discrepancies between predetermined objectives and outcomes.	2.88	1.02
30. Judge worth of instructional methods and materials.	3.33	1.02
31. Determine desired outcomes of instruction.	3.26	1.01
32. Determine effectiveness of curriculum content.	3.22	.95
33. Determine criteria to measure success of curriculum improvement plan.	2.94	1.02
34. Ascertain whether outcomes are the result of the planned school curriculum.	2.84	.91
35. Identify the strengths of curriculum content.	3.24	1.02
GENERAL ISSUES OF CURRICULUM		
36. Secure appropriate resources of time, money, personnel, and materials to support the development of curriculum.	3.02	1.09
37. Secure appropriate resources of time, money, personnel, and materials to support the implementation of curriculum.	3.02	1.09
38. Establish appropriate governance structures for curriculum development and approval.	2.93	1.06
39. Interpret and communicate school district curricula.	3.19	1.12
40. Have knowledge of and understanding of the political influences on curriculum.	2.90	1.08

Principals rated their perceptions of their level of preparation to employ curriculum leadership practices on a five point scale, with five being high. The highest mean rating was 3.65. The lowest mean rating was 2.78. The five lowest rated perceptions of preparation for employing curriculum leadership practices were compressed on a five point scale between 2.78 and 2.92. Thirty of the curriculum leadership practices were rated between 2.92 and 3.46.

Table 6

Five Highest and Lowest Means and Standard Deviations for How Well Elementary Principals Perceived They Were Prepared to Carry Out the Practices of a Curriculum Leader

Curriculum leadership practice	M	SD
Highest Emphasis		
11. Permit curriculum ideas to be carried out.	3.65	.98
7. Support a curriculum that reflects and supports the school's mission.	3.61	1.04
25. Facilitate faculty input and involvement in continual review, revision, and improvement of the curriculum.	3.57	.99
12. Integrate careful planning.	3.47	1.03
13. Organize and involve teachers, parents, students, and other personnel to work on curriculum development.	3.46	1.06
Lowest Emphasis		
24. Monitor technological developments and their implications for curriculum.	2.78	1.15
34. Ascertain whether outcomes are the result of the planned school curriculum.	2.84	.91
29. Measure discrepancies between predetermined objectives and outcomes.	2.88	1.02
40. Have knowledge of and understanding of the political influences on curriculum.	2.90	1.08
27. Determine whether actions yielded predicted results.	2.92	.96

The data in Table 6 show that principals perceived themselves as being most prepared to carry out the curriculum leadership practice of "permit curriculum ideas to be carried out," while they perceived themselves as being least prepared to "monitor technological developments and their implications for curriculum." The five highest rated practices belong to the domains of Curriculum Design, Curriculum Philosophy, and Curriculum Assessment/Evaluation. The five lowest rated practices belong to the domains of Curriculum Development, Curriculum Assessment/Evaluation, and General Issues of Curriculum. Three of the five lowest rated curriculum leadership practices belong to the Curriculum Assessment/Evaluation domain.

4. Is there a significant difference between elementary principals and elementary teachers on perceptions of emphasis placed upon principals' curriculum leadership

practices? The data in Table 7 present the mean values for principals and for teachers and the *t* value and probability to determine if there is a difference between principals and teachers on their perceptions of emphasis the principals placed upon curriculum leadership practices. These data are displayed for each curriculum leadership practice for the total number of responses received from the principal group and the teacher group.

Table 7

Means, *t* values, and Probabilities for Differences between Elementary Principals and Teachers on Perception of Emphasis Placed upon Principals' Curriculum Leadership Practices

Curriculum leadership practice	Principals M	Teachers M	*t* value	*p*
CURRICULUM HISTORY				
1. Describe past curriculum thought and practices.	3.27	2.89	3.66	<.001
2. Interpret past curriculum practices.	3.23	2.89	3.27	.001
3. Provide a chronology of important events in curriculum.	3.06	2.85	1.88	.061
4. Examine forces that inhibit curriculum innovations.	3.39	2.89	4.61	<.001
CURRICULUM PHILOSOPHY				
5. Create collaboratively a clearly stated philosophy of learning which is widely known.	3.71	3.16	4.87	<.001
6. Determine an orientation to curriculum.	3.49	3.02	4.25	<.001
7. Support a curriculum that reflects and supports the school's mission.	4.34	3.76	5.76	<.001
8. State the purposes of education (the schools of thought to which the faculty, parents, and students subscribe).	3.95	3.55	3.88	<.001
9. Elaborate on the theory of curriculum.	2.99	2.77	2.08	.038
CURRICULUM DESIGN				
10. Attempt to define what subject matter will be used.	3.94	3.08	7.82	<.001
11. Permit curriculum ideas to be carried out.	4.40	3.91	5.31	<.001
12. Integrate careful planning.	4.13	3.23	8.29	<.001
CURRICULUM DEVELOPMENT				
13. Organize and involve teachers, parents, students, and other personnel to work on curriculum development.	4.11	3.38	6.09	<.001
14. Conduct needs analyses.	3.72	2.96	6.49	<.001
15. Decide on the nature and organization of curriculum.	3.63	2.99	6.18	<.001
16. Determine procedures necessary for a curriculum plan.	3.76	3.13	5.68	<.001
17. Consider the community's values, goals, social needs, and changing conditions in curriculum development.	4.01	3.32	6.32	<.001
18. Align (establish links among) the curriculum content, the teaching materials, the teaching strategies, and the assessment instruments.	3.93	3.00	8.59	<.001

Table 7--Cont.

Curriculum leadership practice	Principals M	Teachers M	*t* value	*p*
19. Design a curriculum review cycle.	3.84	2.86	8.24	<.001
20. Demonstrate knowledge of curriculum materials and their relationship to program goals and objectives.	3.89	3.22	6.47	<.001
21. Address state and federal policies and mandates and national goals and standards in the development of curriculum.	3.90	3.42	4.20	<.001
22. Design curriculum and instruction appropriate for varied teaching and learning styles including specific student needs based on gender, ethnicity, culture, growth level, social class, and exceptionalities.	3.89	3.06	7.28	<.001
23. Base curricular decisions on research, theory, and informed practice.	3.73	3.04	6.41	<.001
24. Monitor technological developments and their implications for curriculum.	3.76	3.20	5.06	<.001
CURRICULUM ASSESSMENT/EVALUATION				
25. Facilitate faculty input and involvement in continual review, revision, and improvement of the curriculum.	4.31	3.50	7.43	<.001
26. Provide information about the effectiveness of teaching practices on student performance.	3.96	3.17	7.39	<.001
27. Determine whether actions yielded predicted results.	3.57	2.96	5.90	<.001
28. Utilize multiple indicators such as norm-referenced tests (Iowa Basics, CTBS, etc.), criterion-referenced tests (testing what is taught), and teacher observations and reports in the assessment of curriculum.	4.05	3.52	4.83	<.001
29. Measure discrepancies between predetermined objectives and outcomes.	3.37	2.84	5.09	<.001
30. Judge worth of instructional methods and materials.	3.97	3.13	8.16	<.001
31. Determine desired outcomes of instruction.	3.85	3.03	7.76	<.001
32. Determine effectiveness of curriculum content.	3.90	3.09	7.76	<.001
33. Determine criteria to measure success of curriculum improvement plan.	3.63	2.88	6.93	<.001
34. Ascertain whether outcomes are the result of the planned school curriculum.	3.41	2.90	4.81	<.001
35. Identify the strengths of curriculum content.	3.95	3.10	8.15	<.001
GENERAL ISSUES OF CURRICULUM				
36. Secure appropriate resources of time, money, personnel, and materials to support the development of curriculum.	3.84	3.12	6.32	<.001
37. Secure appropriate resources of time, money, personnel, and materials to support the implementation of curriculum.	3.88	3.08	7.12	<.001
38. Establish appropriate governance structures for curriculum development and approval.	3.56	2.96	5.58	<.001
39. Interpret and communicate school district curricula.	3.82	3.19	5.80	<.001
40. Have knowledge of and understanding of the political influences on curriculum.	3.53	3.38	1.37	.172

The data in Table 7 show that out of 40 curriculum leadership practices compared, 38 are significant at the .05 level and 37 of those are significant beyond the .01 level. The data also show that principals consistently rated themselves higher on emphasis given to principals' curriculum leadership practices than did teachers. The largest discrepancies are indicated where the *t* values are in the 7's and 8's.

The data in Table 8 display the 10 curriculum leadership practices with the greatest discrepancies between principals' and teachers' perceptions of emphasis given to curriculum leadership practices by principals.

Table 8

Means and *t* values for the Ten Practices with the Largest Discrepancies between Elementary Principals and Teachers on Perception of Emphasis Placed upon Principals' Curriculum Leadership Practices

Curriculum leadership practice	Principals M	Teachers M	*t* value
18. Align (establish links among) the curriculum content, the teaching materials, the teaching strategies, and the assessment instruments.	3.93	3.00	8.59
12. Integrate careful planning.	4.13	3.23	8.29
19. Design a curriculum review cycle.	3.84	2.86	8.24
30. Judge worth of instructional methods and materials.	3.97	3.13	8.16
35. Identify the strengths of curriculum content.	3.95	3.10	8.15
10. Attempt to define what subject matter will be used.	3.94	3.08	7.82
31. Determine desired outcomes of instruction.	3.85	3.03	7.76
32. Determine effectiveness of curriculum content.	3.90	3.09	7.76
25. Facilitate faculty input and involvement in continual review, revision, and improvement of the curriculum.	4.31	3.50	7.43
26. Provide information about the effectiveness of teaching practices on student performance.	3.96	3.17	7.39

The 10 practices with the largest discrepancies belong to the domains of Curriculum Design, Curriculum Development, and Curriculum Assessment/Evaluation. Six out of the 10 practices with the largest discrepancies belong to the domain of Curriculum

Assessment/Evaluation. Principals rated themselves higher than did teachers on all 10 curriculum leadership practices.

5. Is there a relationship between emphasis given to curriculum leadership practices and perceived level of preparation in the principal group? The data in Table 9 present the correlation coefficients for emphasis given to curriculum leadership practices and perceived level of preparation in the principal group using the Pearson correlation. The data are displayed for each curriculum leadership practice for the total number of responses received from elementary principals.

Table 9

Correlation between Emphasis Given to Curriculum Leadership Practices and Perceived Level of Preparation in the Principal Group

Curriculum leadership practice	Correlation	*p*
CURRICULUM HISTORY		
1. Describe past curriculum thought and practices.	.414	<.001
2. Interpret past curriculum practices.	.396	<.001
3. Provide a chronology of important events in curriculum.	.520	<.001
4. Examine forces that inhibit curriculum innovations.	.560	<.001
CURRICULUM PHILOSOPHY		
5. Create collaboratively a clearly stated philosophy of learning which is widely known.	.429	<.001
6. Determine an orientation to curriculum.	.558	<.001
7. Support a curriculum that reflects and supports the school's mission.	.326	<.001
8. State the purposes of education (the schools of thought to which the faculty, parents, and students subscribe).	.423	<.001
9. Elaborate on the theory of curriculum.	.529	<.001
CURRICULUM DESIGN		
10. Attempt to define what subject matter will be used.	.313	<.001
11. Permit curriculum ideas to be carried out.	.371	<.001
12. Integrate careful planning.	.437	<.001
CURRICULUM DEVELOPMENT		
13. Organize and involve teachers, parents, students, and other personnel to work on curriculum development.	.318	<.001
14. Conduct needs analyses.	.471	<.001
15. Decide on the nature and organization of curriculum.	.454	<.001
16. Determine procedures necessary for a curriculum plan.	.413	<.001

Table 9--Cont.

Curriculum leadership practice	Correlation	*p*
17. Consider the community's values, goals, social needs, and changing conditions in curriculum development.	.338	<.001
18. Align (establish links among) the curriculum content, the teaching materials, the teaching strategies, and the assessment instruments.	.460	<.001
19. Design a curriculum review cycle.	.451	<.001
20. Demonstrate knowledge of curriculum materials and their relationship to program goals and objectives.	.424	<.001
21. Address state and federal policies and mandates and national goals and standards in the development of curriculum.	.484	<.001
22. Design curriculum and instruction appropriate for varied teaching and learning styles including specific student needs based on gender, ethnicity, culture, growth level, social class, and exceptionalities.	.325	<.001
23. Base curricular decisions on research, theory, and informed practice.	.618	<.001
24. Monitor technological developments and their implications for curriculum.	.317	<.001
25. Facilitate faculty input and involvement in continual review, revision, and improvement of the curriculum.	.394	<.001
26. Provide information about the effectiveness of teaching practices on student performance.	.404	<.001
27. Determine whether actions yielded predicted results.	.437	<.001
28. Utilize multiple indicators such as norm-referenced tests (Iowa Basics, CTBS, etc.), criterion-referenced tests (testing what is taught), and teacher observations and reports in the assessment of curriculum.	.494	<.001
29. Measure discrepancies between predetermined objectives and outcomes.	.576	<.001
30. Judge worth of instructional methods and materials.	.427	<.001
31. Determine desired outcomes of instruction.	.486	<.001
32. Determine effectiveness of curriculum content.	.507	<.001
33. Determine criteria to measure success of curriculum improvement plan.	.470	<.001
34. Ascertain whether outcomes are the result of the planned school curriculum.	.395	<.001
35. Identify the strengths of curriculum content.	.312	<.001
GENERAL ISSUES OF CURRICULUM		
36. Secure appropriate resources of time, money, personnel, and materials to support the development of curriculum.	.359	<.001
37. Secure appropriate resources of time, money, personnel, and materials to support the implementation of curriculum.	.331	<.001
38. Establish appropriate governance structures for curriculum development and approval.	.535	<.001
39. Interpret and communicate school district curricula.	.514	<.001
40. Have knowledge of and understanding of the political influences on curriculum.	.513	<.001

The data in Table 9 show that all 40 curriculum leadership practices exhibited a positive correlation for emphasis given to curriculum leadership practices and perceived level of preparation in the principal group. Principals who perceived themselves to be well prepared also perceived that they carried out curriculum leadership practices.

6. Is there a significant difference between levels of education on emphasis given to curriculum leadership practices in the principal group? Analyses of variance among the mean rating scores of the criteria value for the three groups of level of education were performed. The data in Table 10 compare the mean cluster ratings on the emphasis given to curriculum leadership practices and level of education in the principal group. Mean values, *F* ratios, and *F* probabilities are shown. These data are displayed for each curriculum leadership practice for the total number of responses received from the principal group.

A comparison between groups was performed using a Tukey multiple comparisons procedure to assess for paired differences. The data in Table 11 present the 11 curriculum leadership practices that show significantly different pairs at the.05 level.

The data in Table 11 show that significant differences existed for nine of the curriculum leadership practices between principals who possessed a bachelor's degree and those who possessed a master's degree. Curriculum leadership practice 23, "base curricular decisions on research, theory, and informed practice," was significantly different between principals who possessed a bachelor's degree and those who possessed a specialist or doctoral degree and between principals who possessed a master's degree and those who possessed a specialist or doctoral degree.

7. Is there a significant difference between male and female principals on emphasis given to curriculum leadership? Analyses of variance between the mean value ratings of curriculum leadership emphasis for the gender of principals were performed. The investigator wished to examine whether differences by gender existed. The data in Table 12 compare the mean value ratings on the emphasis given to curriculum leadership practices

Table 10

Means, *F* Ratios, and Probabilities for Differences between Levels of Education on Emphasis Given to Curriculum Leadership Practices

Curriculum leadership practice	Bachelor plus M	Master M	Specialist/Doctoral M	*F* ratio	*p*
CURRICULUM HISTORY					
1. Describe past curriculum thought and practices.	3.02	3.36	3.35	3.09	.048
2. Interpret past curriculum practices.	2.92	3.36	3.23	5.24	.006
3. Provide a chronology of important events in curriculum.	2.94	3.10	3.11	.40	.672
4. Examine forces that inhibit curriculum innovations.	3.31	3.37	3.71	1.15	.318
CURRICULUM PHILOSOPHY					
5. Create collaboratively a clearly stated philosophy of learning which is widely known.	3.47	3.77	4.00	3.01	.052
6. Determine an orientation to curriculum.	3.23	3.61	3.44	2.67	.072
7. Support a curriculum that reflects and supports the school's mission.	4.21	4.37	4.56	1.42	.245
8. State the purposes of education (the schools of thought to which the faculty, parents, and students subscribe).	3.78	4.02	4.06	1.66	.193
9. Elaborate on the theory of curriculum.	2.76	3.08	3.13	2.19	.115
CURRICULUM DESIGN					
10. Attempt to define what subject matter will be used.	3.82	3.97	4.06	.63	.533
11. Permit curriculum ideas to be carried out.	4.22	4.46	4.50	2.12	.123
12. Integrate careful planning.	3.96	4.21	4.06	1.82	.165
CURRICULUM DEVELOPMENT					
13. Organize and involve teachers, parents, students, and other personnel to work on curriculum development.	3.92	4.17	4.31	1.60	.204
14. Conduct needs analyses.	3.43	3.84	3.75	3.25	.041

Table 10--Cont.

Curriculum leadership practice	Bachelor plus M	Master M	Specialist/Doctoral M	*F* ratio	*p*
15. Decide on the nature and organization of curriculum.	3.55	3.69	3.50	.69	.501
16. Determine procedures necessary for a curriculum plan.	3.61	3.81	3.88	.91	.404
17. Consider the community's values, goals, social needs, and changing conditions in curriculum development.	3.90	4.05	4.00	.58	.563
18. Align (establish links among) the curriculum content, the teaching materials, the teaching strategies, and the assessment instruments.	3.88	3.96	3.94	.13	.877
19. Design a curriculum review cycle.	3.51	4.00	3.75	3.68	.027
20. Demonstrate knowledge of curriculum materials and their relationship to program goals and objectives.	3.78	3.94	3.94	.69	.504
21. Address state and federal policies and mandates and national goals and standards in the development of curriculum.	3.78	3.91	4.19	1.22	.297
22. Design curriculum and instruction appropriate for varied teaching and learning styles including specific student needs based on gender, ethnicity, culture, growth level, social class, and exceptionalities.	3.90	3.86	4.06	.32	.730
23. Base curricular decisions on research, theory, and informed practice.	3.54	3.74	4.25	3.92	.022
24. Monitor technological developments and their implications for curriculum.	3.53	3.81	4.13	3.11	.047
CURRICULUM ASSESSMENT/EVALUATION					
25. Facilitate faculty input and involvement in continual review, revision, and improvement of the curriculum.	4.20	4.35	4.31	.65	.523
26. Provide information about the effectiveness of teaching practices on student performance.	3.88	3.96	4.25	1.48	.230
27. Determine whether actions yielded predicted results.	3.59	3.58	3.50	.07	.928
28. Utilize multiple indicators such as norm-referenced tests (Iowa Basics, CTBS, etc.), criterion-referenced tests (testing what is taught), and teacher observations and reports in the assessment of curriculum.	4.20	4.00	3.88	1.33	.268

Table 10--Cont.

Curriculum leadership practice	Bachelor plus M	Master M	Specialist/Doctoral M	*F* ratio	*p*
29. Measure discrepancies between predetermined objectives and outcomes.	3.27	3.42	3.38	.45	.641
30. Judge worth of instructional methods and materials.	3.92	4.01	3.81	.53	.587
31. Determine desired outcomes of instruction.	3.82	3.89	3.69	.44	.643
32. Determine effectiveness of curriculum content.	3.86	3.92	3.94	.12	.889
33. Determine criteria to measure success of curriculum improvement plan.	3.29	3.74	3.88	5.32	.006
34. Ascertain whether outcomes are the result of the planned school curriculum.	3.24	3.50	3.31	1.24	.292
35. Identify the strengths of curriculum content.	3.86	4.02	3.81	.92	.401
GENERAL ISSUES OF CURRICULUM					
36. Secure appropriate resources of time, money, personnel, and materials to support the development of curriculum.	3.57	3.96	3.88	2.81	.063
37. Secure appropriate resources of time, money, personnel, and materials to support the implementation of curriculum.	3.59	4.00	3.94	3.51	.032
38. Establish appropriate governance structures for curriculum development and approval.	3.12	3.77	3.44	8.65	<.001
39. Interpret and communicate school district curricula.	3.51	3.97	3.71	4.70	.010
40. Have knowledge of and understanding of the political influences on curriculum.	3.10	3.69	3.65	7.07	.001

Table 11

Significant Difference Comparisons between Levels of Education on Emphasis Given to Curriculum Leadership Practices

Curriculum leadership practice	Bachelor plus M	Master M	Specialist/Doctoral M	p	Bachelor plus, Master comparison	Bachelor, Spec/Doc comparison	Master, Spec/Doc comparison
1. Describe past curriculum thought and practices.	3.02	3.36	3.35	.048	*		
2. Interpret past curriculum practices.	2.92	3.36	3.23	.006	*		
14. Conduct needs analyses.	3.43	3.84	3.75	.041	*		
19. Design a curriculum review cycle.	3.51	4.00	3.75	.027	*		
23. Base curricular decisions on research, theory, and informed practice.	3.54	3.74	4.25	.022		*	*
24. Monitor technological developments and their implications for curriculum.	3.53	3.81	4.13	.047			
33. Determine criteria to measure success of curriculum improvement plan.	3.29	3.74	3.88	.006	*		
37. Secure appropriate resources of time, money, personnel, and materials to support the implementation of curriculum.	3.59	4.00	3.94	.032	*		
38. Establish appropriate governance structures for curriculum development and approval.	3.12	3.77	3.44	<.001	*		
39. Interpret and communicate school district curricula.	3.51	3.97	3.65	.010	*		
40. Have knowledge of and understanding of the political influences on curriculum.	3.10	3.69	3.65	.001	*		

*Denotes pairs of groups significantly different at the .05 level.

between male and female principals. The means, the *F* ratios, and the *F* probabilities are shown. These data are displayed for each curriculum leadership practice for the total number of responses received from the principal group.

Table 12

Means, *F* Ratios, and Probabilities for Differences between Male and Female Principals on Perception of Emphasis Given to Curriculum Leadership Practices

Curriculum leadership practice	Males M	Females M	*F* ratio	*p*
CURRICULUM HISTORY				
1. Describe past curriculum thought and practices.	3.33	3.18	1.54	.217
2. Interpret past curriculum practices.	3.24	3.21	.09	.764
3. Provide a chronology of important events in curriculum.	3.03	3.09	.13	.719
4. Examine forces that inhibit curriculum innovations.	3.32	3.47	1.22	.271
CURRICULUM PHILOSOPHY				
5. Create collaboratively a clearly stated philosophy of learning which is widely known.	3.56	3.91	7.28	.008
6. Determine an orientation to curriculum.	3.34	3.69	5.91	.016
7. Support a curriculum that reflects and supports the school's mission.	4.25	4.45	2.96	.087
8. State the purposes of education (the schools of thought to which the faculty, parents, and students subscribe).	3.85	4.09	3.86	.051
9. Elaborate on the theory of curriculum.	2.91	3.10	1.84	.177
CURRICULUM DESIGN				
10. Attempt to define what subject matter will be used.	3.89	4.00	.61	.435
11. Permit curriculum ideas to be carried out.	4.32	4.49	2.47	.118
12. Integrate careful planning.	4.05	4.23	2.24	.136
CURRICULUM DEVELOPMENT				
13. Organize and involve teachers, parents, students, and other personnel to work on curriculum development.	4.08	4.16	.27	.604
14. Conduct needs analyses.	3.72	3.71	.01	.984
15. Decide on the nature and organization of curriculum.	3.57	3.72	1.53	.218
16. Determine procedures necessary for a curriculum plan.	3.72	3.82	.43	.514
17. Consider the community's values, goals, social needs, and changing conditions in curriculum development.	3.92	4.12	2.39	.124
18. Align (establish links among) the curriculum content, the teaching materials, the teaching strategies, and the assessment instruments.	3.77	4.14	8.22	.005
19. Design a curriculum review cycle.	3.79	3.91	.55	.461
20. Demonstrate knowledge of curriculum materials and their relationship to program goals and objectives.	3.76	4.06	6.31	.013

Table 12--Cont.

Curriculum leadership practice	Males M	Females M	*F* ratio	*p*
21. Address state and federal policies and mandates and national goals and standards in the development of curriculum.	3.81	4.01	2.13	.146
22. Design curriculum and instruction appropriate for varied teaching and learning styles including specific student needs based on gender, ethnicity, culture, growth level, social class, and exceptionalities.	3.76	4.06	4.85	.029
23. Base curricular decisions on research, theory, and informed practice.	3.61	3.89	4.60	.033
24. Monitor technological developments and their implications for curriculum.	3.70	3.84	1.14	.287
CURRICULUM ASSESSMENT/EVALUATION				
25. Facilitate faculty input and involvement in continual review, revision, and improvement of the curriculum.	4.20	4.44	4.48	.036
26. Provide information about the effectiveness of teaching practices on student performance.	3.86	4.09	4.13	.044
27. Determine whether actions yielded predicted results.	3.47	3.70	3.26	.073
28. Utilize multiple indicators such as norm-referenced tests (Iowa Basics, CTBS, etc.), criterion-referenced tests (testing what is taught), and teacher observations and reports in the assessment of curriculum.	3.85	4.29	12.75	<.001
29. Measure discrepancies between predetermined objectives and outcomes.	3.22	3.56	5.78	.017
30. Judge worth of instructional methods and materials.	3.87	4.09	3.34	.069
31. Determine desired outcomes of instruction.	3.70	4.05	7.50	.007
32. Determine effectiveness of curriculum content.	3.81	4.03	3.25	.073
33. Determine criteria to measure success of curriculum improvement plan.	3.62	3.64	.03	.855
34. Ascertain whether outcomes are the result of the planned school curriculum.	3.37	3.45	.30	.583
35. Identify the strengths of curriculum content.	3.86	4.08	3.14	.078
GENERAL ISSUES OF CURRICULUM				
36. Secure appropriate resources of time, money, personnel, and materials to support the development of curriculum.	3.87	3.81	.19	.663
37. Secure appropriate resources of time, money, personnel, and materials to support the implementation of curriculum.	3.86	3.91	.13	.718
38. Establish appropriate governance structures for curriculum development and approval.	3.64	3.45	1.60	.208
39. Interpret and communicate school district curricula.	3.80	3.85	.13	.718
40. Have knowledge of and understanding of the political influences on curriculum.	3.57	3.47	.50	.479

The results of the analyses reported in Table 13 show that significant differences were found in 11 of the 40 comparisons between male and female principals at the .05 level.

Table 13

Comparisons of the Mean Ratings for Differences between Male and Female Principals on Perception of Emphasis Given to Curriculum Leadership Practices

Curriculum leadership practice	Males M	Females M	*F* ratio	*p*
5. Create collaboratively a clearly stated philosophy of learning which is widely known.	3.56	3.91	7.28	.008
6. Determine an orientation to curriculum.	3.34	3.69	5.91	.016
18. Align (establish links among) the curriculum content, the teaching materials, the teaching strategies, and the assessment instruments.	3.77	4.14	8.22	.005
20. Demonstrate knowledge of curriculum materials and their relationship to program goals and objectives.	3.76	4.06	6.31	.013
22. Design curriculum and instruction appropriate for varied teaching and learning styles including specific student needs based on gender, ethnicity, culture, growth level, social class, and exceptionalities.	3.76	4.06	4.85	.029
23. Base curricular decisions on research, theory, and informed practice.	3.61	3.89	4.60	.033
25. Facilitate faculty input and involvement in continual review, revision, and improvement of the curriculum.	4.20	4.44	4.48	.036
26. Provide information about the effectiveness of teaching practices on student performance.	3.86	4.09	4.13	.044
28. Utilize multiple indicators such as norm-referenced tests (Iowa Basics, CTBS, etc.), criterion-referenced tests (testing what is taught), and teacher observations and reports in the assessment of curriculum.	3.85	4.29	12.75	<.001
29. Measure discrepancies between predetermined objectives and outcomes.	3.22	3.56	5.78	.017
31. Determine desired outcomes of instruction.	3.70	4.05	7.50	.007

Note. The groups were significantly different from one another at the .05 level.

Female principals were higher on all 11 of the significant findings. The curriculum leadership practices in which female principals were significantly higher belong to the domains of Curriculum Philosophy, Curriculum Development, and Curriculum

Assessment/Evaluation. Curriculum leadership practices 5, "create collaboratively a clearly stated philosophy of learning which is widely known"; 18, "align (establish links among) the curriculum content, the teaching materials, the teaching strategies, and the assessment instruments"; 28, "utilize multiple indicators such as norm-referenced tests (Iowa Basics, CTBS, etc.), criterion-referenced tests (testing what is taught), and teacher observations and reports in the assessment of curriculum"; and 31, "determine desired outcomes of instruction," were also significantly different at the .01 level.

8. Is there a significant difference between groups based on number of years experience as an elementary principal on emphasis given to curriculum leadership practices in the principal group? Analyses of variance across the mean value ratings of emphasis given to curriculum leadership practices for the four groups of number of years experience as an elementary principal were performed, followed by a Tukey multiple comparisons procedure to assess for paired differences. The data in Table 14 present the mean values, the *F* ratios, and the *F* probabilities to reveal if there is a difference between groups based on number of years experience as an elementary principal on emphasis given to curriculum leadership practices. These data are displayed for each curriculum leadership practice for the total number of responses received from the principal group.

The data in Table 14 show that the analyses of variance determined that there were no significant differences across the mean value ratings of number of years experience as an elementary principal on emphasis given to curriculum leadership practices.

9. Is there a significant difference between principals in schools of differing size on emphasis given to curriculum leadership practices? Analyses of variance across the mean value ratings of the emphasis given to curriculum leadership practices for the four groups of schools of differing size were performed, followed by a Tukey multiple comparisons procedure to assess for paired differences. The data in Table 15 present the mean values, the *F* ratios, and the *F* probabilities to reveal if there is a difference between emphasis given

Table 14

Means, *F* Ratios, and Probabilities for Differences between Groups Based on Number of Years Experience as an Elementary Principal on Emphasis Given to Curriculum Leadership Practices

Curriculum leadership practice	1-5 years M	6-10 years M	11-15 years M	More than 15 years M	*F* ratio	*p*
CURRICULUM HISTORY						
1. Describe past curriculum thought and practices.	3.20	3.28	3.04	3.46	1.83	.144
2. Interpret past curriculum practices.	3.14	3.14	3.14	3.44	1.62	.187
3. Provide a chronology of important events in curriculum.	2.91	3.23	2.75	3.24	1.97	.121
4. Examine forces that inhibit curriculum innovations.	3.38	3.35	3.57	3.32	.46	.710
CURRICULUM PHILOSOPHY						
5. Create collaboratively a clearly stated philosophy of learning which is widely known.	3.64	3.64	3.75	3.82	.50	.686
6. Determine an orientation to curriculum.	3.49	3.37	3.48	3.61	.49	.698
7. Support a curriculum that reflects and supports the school's mission	4.31	4.44	4.39	4.26	.49	.689
8. State the purposes of education (the schools of thought to which the faculty, parents, and students subscribe).	4.00	3.98	4.00	3.86	.32	.814
9. Elaborate on the theory of curriculum.	2.91	2.88	3.22	3.06	.93	.426
CURRICULUM DESIGN						
10. Attempt to define what subject matter will be used.	4.00	3.91	3.93	3.90	.12	.946
11. Permit curriculum ideas to be carried out.	4.27	4.47	4.50	4.42	1.01	.388
12. Integrate careful planning.	4.11	4.16	4.04	4.18	.23	.874
CURRICULUM DEVELOPMENT						
13. Organize and involve teachers, parents, students, and other personnel to work on curriculum development.	4.00	4.16	4.07	4.22	.53	.665
14. Conduct needs analyses.	3.52	3.84	3.56	3.92	2.11	.101

Table 14--Cont.

Curriculum leadership practice	1-5 years M	6-10 years M	11-15 years M	More than 15 years M	*F* ratio	*p*
15. Decide on the nature and organization of curriculum.	3.63	3.64	3.59	3.66	.04	.989
16. Determine procedures necessary for a curriculum plan.	3.64	3.85	3.63	3.90	.95	.416
17. Consider the community's values, goals, social needs, and changing conditions in curriculum development.	4.04	4.07	3.89	3.98	.29	.832
18. Align (establish links among) the curriculum content, the teaching materials, the teaching strategies, and the assessment instruments.	3.96	4.07	3.96	3.76	1.03	.382
19. Design a curriculum review cycle.	3.80	3.74	3.70	4.04	.85	.469
20. Demonstrate knowledge of curriculum materials and their relationship to program goals and objectives.	3.86	4.02	3.78	3.88	.58	.630
21. Address state and federal policies and mandates and national goals and standards in the development of curriculum.	3.95	3.84	3.81	3.94	.22	.885
22. Design curriculum and instruction appropriate for varied teaching and learning styles including specific student needs based on gender, ethnicity, culture, growth level, social class, and exceptionalities.	3.80	3.98	3.89	3.92	.30	.825
23. Base curricular decisions on research, theory, and informed practice.	3.75	3.65	3.89	3.70	.42	.741
24. Monitor technological developments and their implications for curriculum.	3.73	3.65	3.89	3.82	.47	.701
CURRICULUM ASSESSMENT/EVALUATION						
25. Facilitate faculty input and involvement in continual review, revision, and improvement of the curriculum.	4.21	4.26	4.43	4.38	.78	.507
26. Provide information about the effectiveness of teaching practices on student performance.	3.85	4.09	3.93	3.98	.82	.485
27. Determine whether actions yielded predicted results.	3.48	3.65	3.44	3.68	.84	.475

Table 14--Cont.

Curriculum leadership practice	1-5 years M	6-10 years M	11-15 years M	More than 15 years M	*F* ratio	*p*
28. Utilize multiple indicators such as norm-referenced tests (Iowa Basics, CTBS, etc.), criterion-referenced tests (testing what is taught), and teacher observations and reports in the assessment of curriculum.	4.05	4.14	4.04	3.96	.34	.796
29. Measure discrepancies between predetermined objectives and outcomes.	3.41	3.28	3.21	3.50	.72	.540
30. Judge worth of instructional methods and materials.	3.98	3.86	3.96	4.04	.39	.759
31. Determine desired outcomes of instruction.	3.86	3.95	3.64	3.88	.75	.525
32. Determine effectiveness of curriculum content.	3.91	4.00	3.79	3.88	.42	.739
33. Determine criteria to measure success of curriculum improvement plan.	3.52	3.65	3.68	3.70	.43	.736
34. Ascertain whether outcomes are the result of the planned school curriculum.	3.36	3.44	3.21	3.54	.74	.528
35. Identify the strengths of curriculum content.	3.89	4.12	3.96	3.88	.81	.493
GENERAL ISSUES OF CURRICULUM						
36. Secure appropriate resources of time, money, personnel, and materials to support the development of curriculum.	3.66	3.86	3.93	3.98	1.10	.352
37. Secure appropriate resources of time, money, personnel, and materials to support the implementation of curriculum.	3.82	3.88	3.96	3.90	.16	.926
38. Establish appropriate governance structures for curriculum development and approval.	3.46	3.53	3.26	3.84	2.63	.052
39. Interpret and communicate school district curricula.	3.79	3.84	3.72	3.90	.26	.853
40. Have knowledge of and understanding of the political influences on curriculum.	3.41	3.56	3.32	3.74	1.55	.203

Table 15

Means, *F* Ratios, and Probabilities for Differences between Principals in Schools of Differing Size on Emphasis Given to Curriculum Leadership Practices

Curriculum leadership practice	<100 M	100-250 M	251-399 M	>400 M	*F* ratio	*p*
CURRICULUM HISTORY						
1. Describe past curriculum thought and practices.	3.17	3.12	3.53	3.31	2.40	<.001
2. Interpret past curriculum practices.	3.03	3.15	3.49	3.22	2.38	.071
3. Provide a chronology of important events in curriculum.	3.06	3.02	3.19	3.06	.21	.889
4. Examine forces that inhibit curriculum innovations.	3.19	3.25	3.52	3.61	1.81	.148
CURRICULUM PHILOSOPHY						
5. Create collaboratively a clearly stated philosophy of learning which is widely known.	3.43	3.64	3.91	3.82	2.33	.076
6. Determine an orientation to curriculum.	3.18	3.52	3.79	3.46	2.71	.047
7. Support a curriculum that reflects and supports the school's mission.	4.11	4.27	4.52	4.43	2.13	.099
8. State the purposes of education (the schools of thought to which the faculty, parents, and students subscribe).	3.69	3.98	4.05	4.03	1.51	.213
9. Elaborate on the theory of curriculum.	2.63	3.03	3.43	2.74	6.09	<.001
CURRICULUM DESIGN						
10. Attempt to define what subject matter will be used.	3.83	4.00	4.09	3.71	1.28	.282
11. Permit curriculum ideas to be carried out.	4.11	4.36	4.68	4.37	4.89	.003
12. Integrate careful planning.	3.83	4.19	4.34	4.06	2.95	.034
CURRICULUM DEVELOPMENT						
13. Organize and involve teachers, parents, students, and other personnel to work on curriculum development.	3.75	4.03	4.34	4.35	3.70	.013
14. Conduct needs analyses.	3.22	3.68	4.00	3.94	5.57	.001
15. Decide on the nature and organization of curriculum.	3.50	3.63	3.77	3.62	.66	.577

Table 15--Cont.

Curriculum leadership practice	<100 M	100-250 M	251-399 M	>400 M	*F* ratio	*p*
16. Determine procedures necessary for a curriculum plan.	3.47	3.72	4.02	3.85	2.42	.068
17. Consider the community's values, goals, social needs, and changing conditions in curriculum development.	3.86	4.12	3.98	4.00	.71	.547
18. Align (establish links among) the curriculum content, the teaching materials, the teaching strategies, and the assessment instruments.	3.83	3.97	4.00	3.88	.30	.828
19. Design a curriculum review cycle.	3.47	3.86	4.25	3.56	4.56	.004
20. Demonstrate knowledge of curriculum materials and their relationship to program goals and objectives.	3.72	3.81	4.14	3.85	2.05	.108
21. Address state and federal policies and mandates and national goals and standards in the development of curriculum.	3.75	3.75	4.23	3.91	2.74	.045
22. Design curriculum and instruction appropriate for varied teaching and learning styles including specific student needs based on gender, ethnicity, culture, growth level, social class, and exceptionalities.	3.83	3.83	4.09	3.88	.82	.484
23. Base curricular decisions on research, theory, and informed practice.	3.51	3.58	4.02	3.79	2.99	.033
24. Monitor technological developments and their implications for curriculum.	3.36	3.80	3.93	3.82	3.04	.031
CURRICULUM ASSESSMENT/EVALUATION						
25. Facilitate faculty input and involvement in continual review, revision, and improvement of the curriculum.	4.17	4.31	4.48	4.20	1.46	.227
26. Provide information about the effectiveness of teaching practices on student performance.	3.77	3.93	4.16	3.97	1.77	.156
27. Determine whether actions yielded predicted results.	3.53	3.56	3.60	3.60	.07	.975
28. Utilize multiple indicators such as norm-referenced tests (Iowa Basics, CTBS, etc.), criterion-referenced tests (testing what is taught), and teacher observations and reports in the assessment of curriculum.	4.11	4.00	4.09	3.97	.26	.858

Table 15--Cont.

Curriculum leadership practice	<100 M	100-250 M	251-399 M	>400 M	*F* ratio	*p*
29. Measure discrepancies between predetermined objectives and outcomes.	3.25	3.41	3.43	3.37	.27	.844
30. Judge worth of instructional methods and materials.	3.89	3.95	4.11	3.89	.71	.545
31. Determine desired outcomes of instruction.	3.71	3.81	4.00	3.86	.75	.522
32. Determine effectiveness of curriculum content.	3.89	3.92	4.00	3.77	.52	.667
33. Determine criteria to measure success of curriculum improvement plan.	3.31	3.58	3.73	3.83	2.44	.066
34. Ascertain whether outcomes are the result of the planned school curriculum.	3.31	3.33	3.61	3.34	.98	.406
35. Identify the strengths of curriculum content.	3.81	3.97	3.95	4.06	.57	.636
GENERAL ISSUES OF CURRICULUM						
36. Secure appropriate resources of time, money, personnel, and materials to support the development of curriculum.	3.72	3.66	3.93	4.09	1.79	.152
37. Secure appropriate resources of time, money, personnel, and materials to support the implementation of curriculum.	3.69	3.69	3.98	4.20	2.97	.033
38. Establish appropriate governance structures for curriculum development and approval.	3.31	3.49	3.80	3.59	1.88	.136
39. Interpret and communicate school district curricula.	3.44	3.81	4.09	3.81	3.44	.018
40. Have knowledge of and understanding of the political influences on curriculum.	3.06	3.59	3.66	3.67	3.69	.013

to curriculum leadership practices and the schools of differing size (less than 100, 100-250, 251-399, and 400 or more students, grades K-6). These data are displayed for each curriculum leadership practice for the total number of responses received from the principal group.

A comparison between groups was performed using a Tukey multiple comparisons procedure to assess for paired differences. The data in Table 16 compare the mean cluster ratings for emphasis given to curriculum leadership practices by principals of schools of differing size. The means, *F* ratios, and *F* probabilities are shown, along with asterisks that indicate significantly different pairs at the .05 level.

The data in Table 16 show that in the mean ratings where significance was found, curriculum leadership practices 13, "organize and involve teachers, parents, students, and other personnel to work on curriculum development"; 37, "secure appropriate resources of time, money, personnel, and materials to support the implementation of curriculum"; and 40, "have knowledge of and understanding of the political influences on curriculum," had mean values that increased across all four groups as the size of school increased, indicating that emphasis given to curriculum leadership practices increased as the size of the school increased. In the other 10 mean ratings where significance was found, the mean values increased across schools with less than 100 students (Group 1), 100-250 students (Group 2), and 251-399 students (Group 3) and then decreased in schools of 400 or more students (Group 4). Significant differences existed for emphasis given to 10 of the curriculum leadership practices between principals who were at small schools (Group 1) and principals who were at larger schools (Group 3).

This chapter presented the results of the analyses of data by research question. A general description of the findings was presented for each curriculum leadership practice followed by the presentation of data which were significant for each research question.

Table 16

Significant Difference Comparisons between Principals in Schools of Differing Size on Emphasis Given to Curriculum Leadership Practices

Curriculum leadership practice	Group 1 <100 M	Group 2 100-250 M	Group 3 251-399 M	Group 4 >400 M	*F* ratio	*p*	1,2	1,3	1,4	2,3	2,4	3,4
6. Determine an orientation to curriculum.	3.18	3.52	3.79	3.46	2.71	.047		*				
9. Elaborate on the theory of curriculum.	2.63	3.03	3.43	2.74	6.09	<.001		*				*
11. Permit curriculum ideas to be carried out.	4.11	4.36	4.68	4.37	4.89	.003		*				
12. Integrate careful planning.	3.83	4.19	4.34	4.06	2.95	.034		*				
13. Organize and involve teachers, parents, students, and other personnel to work on curriculum development.	3.75	4.03	4.34	4.35	3.70	.013		*	*			
14. Conduct needs analyses.	3.22	3.68	4.00	3.94	5.57	.001	*	*	*			
19. Design a curriculum review cycle.	3.47	3.86	4.25	3.56	4.56	.004		*				*
21. Address state and federal policies and mandates and national goals and standards in the development of curriculum.	3.75	3.75	4.23	3.91	2.74	.045				*		
23. Base curricular decisions on research, theory, and informed practice.	3.51	3.58	4.02	3.79	2.99	.033				*		
24. Monitor technological developments and their implications for curriculum.	3.36	3.80	3.93	3.82	3.04	.031	*	*				
37. Secure appropriate resources of time, money, personnel, and materials to support the implementation of curriculum.	3.69	3.69	3.98	4.20	2.97	.033					*	
39. Interpret and communicate school district curricula.	3.44	3.81	4.09	3.81	3.44	.018			*			
40. Have knowledge of and understanding of the political influences on curriculum.	3.06	3.59	3.66	3.67	3.69	.013	*	*	*			

*Denotes pairs of groups significantly different at the .05 level.

Chapter V presents a summary and discussion of the findings. Conclusions and recommendations that may be delineated from the data are also presented.

CHAPTER V

SUMMARY AND DISCUSSION OF THE FINDINGS, CONCLUSIONS, AND RECOMMENDATIONS

In Chapter V, the investigator presents a summary and discussion of the findings. The chapter also includes the conclusions of the study and recommendations for further study.

Summary and Discussion of the Findings

The purpose of this study was to examine the emphasis North Dakota elementary principals gave to specific curriculum leadership practices and how the principals' perceptions differed from teachers' perceptions on emphasis given to curriculum leadership practices. In addition, information was sought concerning how well principals believed they were prepared to carry out curriculum leadership practices. Secondary purposes of this study were to determine if there was a relationship between curriculum leadership practices and perceived level of preparation in the principal group, to determine whether there was a significant difference between levels of education on emphasis given to curriculum leadership practices in the principal group, to determine whether there was a significant difference between genders on emphasis given to curriculum leadership practices, to determine whether there was a significant difference between groups based on number of years experience as an elementary principal on emphasis given to curriculum leadership practices in the principal group, and to determine whether there was a significant difference between principals in schools of differing size on emphasis given to curriculum leadership practices.

Data for conducting the study were procured by sending questionnaires to North Dakota elementary principals and two teachers from each of the principal's schools. The survey was developed by the investigator. A 56% response rate was acquired from the population of 326 North Dakota elementary principals. A 43% response rate was achieved from a sample of 652 elementary teachers.

The survey was scored and analyzed with the assistance of the Bureau of Educational Services and Applied Research at the University of North Dakota. The SPSS-X computer program was used.

The summary and discussion of the findings are presented in the order of the research questions as they appear in the study. The data for the first three research questions were analyzed by comparing the mean values for each of the 40 curriculum leadership practices. A rating of 1 indicated NO EMPHASIS; a rating of 5 indicated MAXIMUM EMPHASIS on a Likert-type scale.

Discussion of the Research Questions

1. How much emphasis did North Dakota elementary principals give to the practices of curriculum leadership as perceived by elementary principals? The mean values were examined to ascertain which curriculum leadership practices were given the highest and lowest emphasis by principals. The five highest and five lowest rated responses were reported. Principals perceived themselves as giving the highest emphasis to curriculum leadership practice 11, "permit curriculum ideas to be carried out," which is part of the Curriculum Design domain. The curriculum leadership practice with the second highest mean score was 7, "support a curriculum that reflects and supports the school's mission," which is part of the Curriculum Philosophy domain. The third highest rated curriculum leadership practice was 25, "facilitate faculty input and involvement in continual review, revision, and improvement of the curriculum," which is part of the Curriculum Assessment/Evaluation domain. The fourth highest rated curriculum leadership practice

was 12, "integrate careful planning," which is part of the Curriculum Design domain. The fifth highest rated curriculum leadership practice was 13, "organize and involve teachers, parents, students, and other personnel to work on curriculum development," which is part of the Curriculum Development domain.

The least emphasis was given to curriculum leadership practice 9, "elaborate on the theory of curriculum," which is part of the Curriculum Philosophy domain. The curriculum leadership practice rated second lowest was 3, "provide a chronology of important events in curriculum," which is part of the Curriculum History domain. The curriculum leadership practice rated third lowest was 2, "interpret past curriculum practices," which also is part of the Curriculum History domain. The curriculum leadership practice rated fourth lowest was 1, "describe past curriculum thought and practices," which again is part of the Curriculum History domain. The curriculum leadership practice rated fifth lowest was 29, "measure discrepancies between predetermined objectives and outcomes," which is part of the Curriculum Assessment/Evaluation domain.

An examination of these data shows that the highest rated curriculum leadership practices are scattered across the domains of Curriculum Design, Curriculum Philosophy, Curriculum Development, and Curriculum Assessment/Evaluation. The curriculum leadership practices that were given greatest emphasis were those that emphasized planning, implementation, and assessment of the curriculum. As one reviews the list of curriculum leadership practices, it is evident that some of the practices are typical to managing versus leading. In other words, these management practices, although necessary, are part of the implementation role of a manager rather than the initiation role of a leader. It is interesting to note that the three curriculum leadership practices rated highest by principals were more significant to a management role than to a leadership role. The

three curriculum leadership practices begin with the words permit, support, and facilitate. Extensive knowledge of curriculum is not required to permit, to support, or to facilitate.

As noted in the literature review, principals have identified curriculum to be an important target area; however, the tasks and practices they carry out related to curriculum have been limited. Perhaps principals only have time for the practices related to management, or perhaps they do not feel adequately prepared academically to carry out curriculum leadership practices.

A further examination shows that three of the lowest rated curriculum leadership practices are part of the Curriculum History domain. Lack of emphasis to the practices of curriculum history may be due to the fact that principals lack knowledge in this area, or they do not feel it is an important function of curriculum. However, if principals have an understanding of curriculum history, they do not have to reinvent the pedagogical wheel but can discard what was useless and build on what was useful (Tanner & Tanner, 1990).

2. How much emphasis did elementary principals give to the practices of curriculum leadership as perceived by elementary teachers? The mean values were examined to ascertain which curriculum leadership practices were given the highest and lowest emphasis by principals as perceived by teachers from each principal's school. The five highest and five lowest rated responses were reported. Although teachers did not rate their principals as giving high emphasis to any of the practices of curriculum leadership, they did rate their principals as giving the greatest emphasis to curriculum leadership practice 11, "permit curriculum ideas to be carried out," which is part of the Curriculum Design domain. The second highest rated curriculum leadership practice was 7, "support a curriculum that reflects and supports the school's mission," which is part of the Curriculum Philosophy domain. The third highest rated curriculum leadership practice was 8, "state the purposes of education (the schools of thought to which the faculty, parents, and students subscribe)," which is part of the Curriculum Philosophy domain. The fourth

highest rated curriculum leadership practice was 28, "utilize multiple indicators such as norm-referenced tests (Iowa Basics, CTBS, etc.), criterion-referenced tests (testing what is taught), and teacher observations and reports in the assessment of curriculum," which is part of the Curriculum Assessment/Evaluation domain. The fifth highest rated curriculum leadership practice was 25, "facilitate faculty input and involvement in continual review, revision, and improvement of the curriculum," which is part of the Curriculum Assessment/Evaluation domain.

Three of the five highest rated curriculum leadership practices by teachers were also the highest rated by principals. The common practices are part of the management role of the curriculum leader and begin with the words permit, support, and facilitate. Generally, then, it appears as though principals are permitting curriculum activity; but the intensity and comprehensiveness of this activity remain unanswered.

The teachers viewed the principals as giving the least emphasis to curriculum leadership practice 9, "elaborate on the theory of curriculum," which is part of the Curriculum Philosophy domain. The curriculum leadership practice rated second lowest was 29, "measure discrepancies between predetermined objectives and outcomes," which is part of the Curriculum Assessment/Evaluation domain. The curriculum leadership practice rated third lowest was 3, "provide a chronology of important events in curriculum," which is part of the Curriculum History domain. The curriculum leadership practice rated fourth lowest was 19, "design a curriculum review cycle," which is part of the Curriculum Development domain. The curriculum leadership practice rated fifth lowest was 33, "determine criteria to measure success of curriculum improvement plan," which is part of the Curriculum Assessment/Evaluation domain.

Two of the curriculum leadership practices rated lowest by teachers are part of the Curriculum Assessment/Evaluation domain. This raises the issue of accountability. Are educators reviewing outcomes? It appears that we continue to declare what children should

learn, but we do not spend a lot of time measuring outcomes and using the results to ensure accountability. The same appears to be true when it comes to measuring the success of the processes or the programs in curriculum. The gap between where we are and where we want to be cannot be determined and voided without a thorough grasp and usage of assessment and evaluation. Smith and Andrews (1989) claimed that to be considered effective by teachers, the principal must be perceived as possessing knowledge and skill in curriculum matters so that teachers can perceive that their interaction with the principal will lead to improved instructional practices.

The highest rated curriculum leadership practices were scattered among the domains of Curriculum Design, Curriculum Philosophy, and Curriculum Assessment/Evaluation. The lowest rated curriculum leadership practices were distributed among the domains of Curriculum Philosophy, Curriculum Assessment/Evaluation, Curriculum History, and Curriculum Development.

3. How well did elementary principals perceive they were prepared to carry out the practices of a curriculum leader? An examination of the mean values showed that principals did not perceive themselves as being very well prepared to carry out any of the curriculum leadership practices in their schools, since none of the mean values exceeded 4.00. However, principals felt the most prepared to carry out curriculum leadership practice 11, "permit curriculum ideas to be carried out," which is part of the Curriculum Design domain. The second highest rated curriculum leadership practice was 7, "support a curriculum that reflects and supports the school's mission," which is part of the Curriculum Philosophy domain. The third highest rated curriculum leadership practice was 25, "facilitate faculty input and involvement in continual review, revision, and improvement of the curriculum," which is part of the Curriculum Assessment/Evaluation domain. The fourth highest rated curriculum leadership practice 12, "integrate careful planning," which is part of the Curriculum Design domain. The fifth highest rated curriculum leadership

practice was 13, "organize and involve teachers, parents, students, and other personnel to work on curriculum development," which is part of the Curriculum Development domain.

Principals claimed they felt the least prepared to carry out curriculum leadership practice 24, "monitor technological developments and their implications for curriculum," which is part of the Curriculum Development domain. The curriculum leadership practice rated second lowest was 34, "ascertain whether outcomes are the result of the planned school curriculum," which is part of the Curriculum Assessment/Evaluation domain. The curriculum leadership practice rated third lowest was 29, "measure discrepancies between predetermined objectives and outcomes," which is also part of the Curriculum Assessment/Evaluation domain. The curriculum leadership practice rated fourth lowest was 40, "have knowledge of and understanding of the political influences on curriculum," which is part of the General Issues of Curriculum domain. The curriculum leadership practice rated fifth lowest was 27, "determine whether actions yielded predicted results," which is part of the Curriculum Assessment/Evaluation domain.

An examination of the data to compare research questions one and three shows that principals gave the most emphasis to curriculum leadership practices 11, "permit curriculum ideas to be carried out"; 7, "support a curriculum that reflects and supports the school's mission"; 25, "facilitate faculty input and involvement in continual review, revision, and improvement of the curriculum"; 12, "integrate careful planning"; and 13, "organize and involve teachers, parents, students, and other personnel to work on curriculum development." Principals perceived they were most prepared to carry out curriculum leadership practices 11, "permit curriculum ideas to be carried out"; 7, "support a curriculum that reflects and supports the school's mission"; 25, "facilitate faculty input and involvement in continual review, revision, and improvement of the curriculum"; 12, "integrate careful planning"; and 13, "organize and involve teachers, parents, students, and other personnel to work on curriculum development." So, principals gave the most

emphasis to those curriculum leadership practices for which they felt the most prepared. Teachers also perceived principals as giving the most emphasis to curriculum leadership practices 11, "permit curriculum ideas to be carried out"; 7, "support a curriculum that reflects and supports the school's mission"; and 25, "facilitate faculty input and involvement in continual review, revision, and improvement of the curriculum."

A similar comparison between research questions one and three of the lowest rated curriculum leadership practices shows that principals perceived themselves to be the least prepared to carry out curriculum leadership practices 24, "monitor technological developments and their implications for curriculum," 34, "ascertain whether outcomes are the result of the planned school curriculum," 29, "measure discrepancies between predetermined objectives and outcomes," 40, "have knowledge of and understanding of the political influences on curriculum," and 27, "determine whether actions yielded predicted results." Principals gave the least emphasis to curriculum leadership practices 9, "elaborate on the theory of curriculum," 3, "provide a chronology of important events in curriculum," 2, "interpret past curriculum practices," 1, "describe past curriculum thought and practices," and 29, "measure discrepancies between predetermined objectives and outcomes." It may be that principals and members of curriculum improvement committees are required to give attention to practices of curriculum improvement to build an improvement plan while practices of curriculum history are viewed as less important. Accordingly, curriculum assessment/evaluation appears to be an area where principals do not feel prepared.

The last six research questions were analyzed using *t* tests and analyses of variance with Tukey's HSD (Honestly Significant Difference) or Pearson correlation coefficients. The probability for significance for all inferential tests was set at the .05 level.

4. Is there a significant difference between elementary principals and elementary teachers on perceptions of emphasis placed upon principals' curriculum leadership

practices? The data for research question four illustrated the differences between elementary principals and elementary teachers on perceptions of emphasis placed upon principals' curriculum leadership practices. Out of the 40 curriculum leadership practices compared, 38 were significantly different at the .05 level. On all of these variables, principals believed they gave more emphasis to the curriculum leadership practices than did teachers. It may be that teachers see their principals more as managers than as instructional leaders. Cawelti and Reavis (1980) found that only about one fourth to one third of teachers believed that their curriculum needs were being met by principals. Research over the last decade has shown consistently that teachers do not perceive principals as instructional leaders nor do principals usually function in this manner (Blumberg & Greenfield, 1980).

5. Is there a relationship between emphasis given to curriculum leadership practices and perceived level of preparation in the principal group? The Pearson correlation was used to determine if there was a relationship between emphasis given to curriculum leadership practices and perceived level of preparation in the principal group. The data indicated a correlation for all 40 curriculum leadership practices, which indicates that principals' level of preparation and perceived level of confidence may be determinants of the amount of emphasis they give to curriculum leadership practices.

6. Is there a significant difference between levels of education on emphasis given to curriculum leadership practices in the principal group? A number of significant differences were found between levels of education on emphasis given to curriculum leadership practices in the principal group. Significant differences existed between principals who possessed a bachelor's degree plus and principals who possessed a master's degree for curriculum leadership practices 1, "describe past curriculum thought and practices," and 2, "interpret past curriculum practices," which are part of the domain of Curriculum History, and 14, "conduct needs analyses," 19, "design a curriculum review

cycle," and 24, "monitor technological developments and their implications for curriculum," which are part of the Curriculum Development domain. Significant differences were also found for curriculum leadership practice 33, "determine criteria to measure success of curriculum improvement plan," which is part of the Curriculum Assessment/Evaluation domain, and curriculum leadership practices 37, "secure appropriate resources of time, money, personnel, and materials to support the implementation of curriculum"; 38, "establish appropriate governance structures for curriculum development and approval"; 39, "interpret and communicate school district curricula"; and 40, "have a knowledge of and understanding of the political influences on curriculum," which are part of the General Issues of Curriculum domain. In all cases, principals who possessed a master's degree rated higher. For curriculum leadership practice 23, "base curricular decisions on research, theory, and informed practice," there was no significant difference between emphasis given by principals who possessed a bachelor's degrees plus and principals who possessed a master's degree, but there were significant differences between emphasis given by principals who possessed a bachelor's degrees plus and principals who possessed a Specialist degree or doctorate and between principals who possessed a master's degree and principals who possessed a Specialist degree or doctorate. As the level of education increased, the difference in emphasis increased for curriculum leadership practice 23, "base curricular decisions on research, theory, and informed practice." This was the only practice that had these levels of difference. The differences may be due to the fact that as the level of education increases, students are required to conduct more research and study more theory, giving them the knowledge and skills they need to increase their capabilities as curriculum leaders.

7. Is there a significant difference between male and female principals on emphasis given to curriculum leadership practices? Significant differences were found in 11 of the 40 comparisons between male and female principals. Female principals were higher on all

11 of the significant findings. The significantly different curriculum leadership practices that were part of the Curriculum Philosophy domain were 5, "create collaboratively a clearly stated philosophy of learning which is widely known," and 6, "determine an orientation to curriculum." The significantly different curriculum leadership practices that were part of the Curriculum Development domain were 18, "align (establish links among) the curriculum content, the teaching materials, the teaching strategies, and the assessment instruments"; 20, "demonstrate knowledge of curriculum materials and their relationship to program goals and objectives"; 22, "design curriculum and instruction appropriate for varied teaching and learning styles including specific student needs based on gender, ethnicity, culture, growth level, social class, and exceptionalities"; and 23, "base curricular decisions on research, theory, and informed practice." The significantly different curriculum leadership practices that were part of the Curriculum Assessment/Evaluation domain were 25, "facilitate faculty input and involvement in continual review, revision, and improvement of the curriculum"; 26, "provide information about the effectiveness of teaching practices on student performance"; 28 "utilize multiple indicators such as norm-referenced tests (Iowa Basics, CTBS, etc.), criterion-referenced tests (testing what is taught), and teacher observations and reports in the assessment of curriculum"; 29, "measure discrepancies between predetermined objectives and outcomes"; and 31, "determine desired outcomes of instruction."

Themes that appear in these 11 curriculum leadership practices are related to collaboration, measurement, instruction, and assessment. The differences may be due to the probability that most female principals were elementary classroom teachers longer than men were before they became principals. The findings in the research were consistent in that principals generally believed they lacked the skill and knowledge to be effective in curriculum leadership. Quality curriculum leadership is considered to be a necessary ingredient of effective schools. If we want effective schools, perhaps elementary principals

should be required to have additional classroom teaching experience than what is presently required.

8. Is there a significant difference between groups based on number of years experience as an elementary principal on emphasis given to curriculum leadership practices in the principal group? After reviewing the analyses of variance for differences, it was determined that there were no significant differences across the mean value scores of number of years experience as an elementary principal on emphasis given to curriculum leadership practices. Novice principals were perceived to give as much emphasis to curriculum leadership practices as did veteran principals.

9. Is there a significant difference between principals in schools of differing size on emphasis given to curriculum leadership practices? A number of significant differences were found between principals in schools of differing size on emphasis given to curriculum leadership practices. Generally, the principals in Group 3 schools (251-399 students) gave more emphasis to curriculum leadership practices than did the principals from the other three groups. This may be due to the fact that principals in larger schools in North Dakota must possess a Level I credential, which requires at least a master's degree, and therefore are more prepared to be curriculum leaders. Principals in small schools may lack preparation because a lower level credential is accepted and less coursework is required for the credential. Principals in larger schools (more than 400), who do not have assistants, may give limited attention to curriculum leadership because of the realities of routine administration and crisis management (Garner & Bradley, 1991; Howell, 1981). In the largest school districts in the state, district level curriculum committees may facilitate the curriculum improvement efforts in the system. However, whether the principal serves actively as curriculum leader or passively by delegating leadership responsibilities, curriculum work is doomed to failure without his or her support (Oliva, 1992; Ornstein & Hunkins, 1988).

Limitations

1. This study did not attempt to determine the importance of the curriculum leadership practices as perceived by principals and teachers.

2. The curriculum leadership practices comprising the domains of knowledge of curriculum were developed independently from the investigator's research.

3. This study did not consider the quality of the curriculum leadership efforts.

4. The return rate for the surveys was less than 60%.

Conclusions

The literature review and the analysis of the responses to the questionnaire have provided ample information regarding the emphasis North Dakota elementary principals gave to certain curriculum leadership practices in their curriculum leadership efforts. Based on this information, several conclusions were drawn.

The literature substantiated the idea that the principal's leadership is crucial in the establishment and maintenance of a quality school curriculum and that the principal cannot be effective in his or her leadership without a thorough understanding and working knowledge of the curriculum. Seeing that curriculum has yet to have a widely accepted definition adds to the complexity and diversity of curriculum as a field of study. This complexity may have contributed to the notion that principals believed they were not very well prepared in the very important task of curriculum leadership. Mean value scores suggested that principals believed they were only somewhat prepared in the tasks of curriculum leadership.

Principals consistently rated themselves higher on emphasis given to curriculum leadership practices than did teachers. Principals generally rated themselves as giving medium to high emphasis to all 40 practices, while teachers generally rated principals as giving low to medium emphasis to all 40 curriculum leadership practices. Teachers may be aware only of the curriculum efforts at their own level and less aware, or not aware, of the

curriculum efforts at other levels. In addition, it is typically expected that people will tend to see their own work in a better light than others.

Principals and teachers had three common curriculum leadership practices that were rated as having the highest emphasis: 11, "permit curriculum ideas to be carried out"; 7, "support a curriculum that reflects and supports the school's mission"; and 25, "facilitate faculty input and involvement in continual review, revision, and improvement of the curriculum." Principals and teachers also had three common curriculum leadership practices that were rated as having the least emphasis: 9, "elaborate on the theory of curriculum," 3, "provide a chronology of important events in curriculum," and 29, "measure discrepancies between predetermined objectives and outcomes." These results suggest that although teachers rated principals lower than they rated themselves, principals and teachers were fairly consistent in what curriculum leadership practices they believed were given high and low emphasis by principals. Cawelti and Reavis (1980) claimed that it was a general trend for those reference groups farthest from the teachers to regard the adequacy of their services more favorably than did the teachers.

The Pearson correlation was used to determine whether there was a relationship between emphasis given to curriculum leadership practices and perceived level of preparation in the principal group for all 40 practices. The data show that the more training or education a person has in the area of curriculum, the more emphasis he or she will be perceived to give to curriculum leadership.

Level of education does make a difference for emphasis given to curriculum leadership practices. The significant differences were noted between principals who possessed a bachelor's degree plus and principals who possessed a master's degree for 10 of the 11 practices. In addition, the mean value scores were higher for 37 of the 40 curriculum leadership practices for principals who possessed a master's degree as compared to principals who possessed a bachelor's degree plus. Only curriculum

leadership practice 23, "base curricular decisions on research, theory, and informed practice," which is part of the domain of Curriculum Development, had a significant difference between the bachelor's degree plus and the Specialist degree or doctorate and between the master's degree and the Specialist degree or doctorate. Perhaps this is because advanced degrees require increased knowledge and more work with research, theory, and the concept of informed practice. It appears that the level of emphasis increases as the level of education increases. Perhaps the additional educational experiences add both information about curriculum and confidence in self that contribute to this increased emphasis on curriculum development. Teachers may be more inclined to follow the curriculum leadership of the more highly educated principal because they think the person has the knowledge base to justify the leadership direction. Thus, a person with an advanced degree may have a greater measure of knowledge and self-confidence as well as confidence of subordinates.

Significant differences were found in 11 of the 40 comparisons between male and female principals. Male principals placed greater emphasis on curriculum leadership practices that were more common across areas of school administration. In other words, the curriculum leadership practices with which principals had the most exposure and experience and which were more typical to the day-to-day operation of a school were the curriculum leadership practices emphasized. Female principals gave more emphasis to curriculum leadership practices in the domains of Curriculum Philosophy, Curriculum Development, and Curriculum Assessment/Evaluation than did male principals. From these findings, it may be that women consider curriculum issues more important than do men; that women believe they are better prepared to be curriculum leaders; or that women give more emphasis to the curriculum leadership practices of curriculum philosophy, curriculum development, and curriculum assessment/evaluation. The data seemed to support the stereotypical notion that women give more attention to curriculum matters than

do men. No additional questions were asked to determine why women gave more emphasis to curriculum leadership practices than did men. Gender is somewhat balanced for the elementary principalship in the state of North Dakota, with 56% male principals and 44% female principals.

Number of years experience as an elementary principal did not make a significant difference on emphasis given to curriculum leadership practices. It appears that novice principals gave as much emphasis to curriculum leadership practices as veteran principals. However, data were not collected to ascertain the time involved in curriculum leadership efforts, the outcomes of curriculum leadership efforts, or the quality of the outcomes.

Significant differences did exist between principals in schools of differing size on emphasis given to curriculum leadership practices. The greatest differences were between Group 1, very small schools (less than 100 students), and Group 3, larger schools (251-399 students). This may be due to the fact that principals in larger schools have to possess a Level I principal's credential, which requires a master's degree. It has been determined already that level of education makes a difference in emphasis given to curriculum leadership practices by principals.

Recommendations

Recommendations for Practice

The conclusions of this study lead to the following recommendations regarding the practice and preparation of elementary principals in their curriculum leadership efforts as a principal.

1. It has been established by Glatthorn (1987a), Tanner and Tanner (1990), and Zais (1976) that a background in curriculum history and philosophy is necessary to understand the forces behind current trends, to build on work done in the past, and to provide the foundations that are necessary to build a curriculum. Thus, principals should

give more emphasis and attention to the practices in the domains of Curriculum History and Curriculum Philosophy.

2. The principals' and teachers' ratings for the emphasis given to curriculum leadership practices by principals suggest general agreement between the two groups as to which curriculum leadership practices have been given the most and the least emphasis. Hallinger (1992), Hallinger et al. (1983), and Rossow (1990) have shown that curriculum emphasis is requisite for effective leadership. Since none of the curriculum leadership practices rated were given high emphasis with a mean score of 4.00 or above, principals should give more emphasis to curriculum leadership practices.

3. Principals believed they were the least prepared to "monitor technological developments and their implications for curriculum." It is well known that technological networks are influencing the way students learn, the way they think and process information, and the way they experience school. Students are thinking more multidimensionally and creatively by using technology to enhance the way they process and utilize information. Principal preparation programs should include opportunities to learn about and have experience with the various technological advances and their implications for curriculum. The North Dakota LEAD Center should consider technological enrichment to be a new professional development area for administrators and develop training to close the gap on this deficiency.

4. Three of the five curriculum leadership practices that principals believed they were the least prepared to implement were part of the domain of Curriculum Assessment/Evaluation. Principal preparation programs should include education and training in determining whether or not outcomes are a result of the planned curriculum and, if not, determining what forces are causing deviation from emphasis in curriculum assessment/evaluation, particularly in measuring discrepancies between predetermined objectives and outcomes, and learning how to determine whether their actions yield

predicted results. Principals should know how to utilize a variety of assessment tools to evaluate and make necessary modifications in the curriculum. The North Dakota LEAD Center should consider the assessment/evaluation issues as new professional development areas to be addressed. Higher education should offer summer institutes on assessment/evaluation to provide additional opportunities for professional growth in this area.

5. Principals who possessed a master's degree gave more emphasis to curriculum leadership practices than did principals who possessed a bachelor's degree plus. The Department of Public Instruction should mandate and the North Dakota Association of Elementary School Principals (NDAESP) should support the efforts for raising the standards for principal certification.

6. All principals, regardless of the size of their school, should be required to have a master's degree, since level of education is positively correlated with emphasis given to curriculum leadership practices.

7. Efforts should be made by institutions of higher learning to bridge the gap between theory and practice and that graduates know how to develop, implement, and evaluate the process and the product of curriculum.

8. If principals are giving more emphasis to curriculum leadership practices than teachers give them credit, principals should do a better job of communicating what they are doing.

9. New approaches to professional inservice should be developed to ensure that veteran principals can become or remain competent as curriculum leaders. Marsh (1992) found that many staff development centers do not provide the skills needed for meaningful improvement because of conflicts between the organizational context, program governance, and goals of the development centers versus goals of the school leaders.

Recommendations for Further Study

Based on this study, the recommendations which follow are suggested for further study regarding the emphasis North Dakota elementary principals give to curriculum practices in their curriculum leadership efforts as a principal.

1. Further study should be conducted using the curriculum leadership practices listed in this study to determine the importance of the curriculum leadership practices as perceived by principals and teachers and whether or not perceived importance would affect emphasis given.

2. Further study should be conducted to ascertain why women consistently scored higher than men on emphasis given to curriculum leadership practices.

3. This study should be replicated with similar populations in other states to ascertain the generalizability of the findings. However, variations in principal certification requirements may affect implementation of curriculum leadership practices.

4. A study should be conducted of the North Dakota LEAD Center to determine if the center is meeting the curriculum leadership practice needs of elementary principals in North Dakota.

5. A study should be conducted to determine if curriculum leadership practices are effective (Do teachers teach in a different or better way? Do students learn more?) as a result of the successful employment of these practices.

This chapter presented a summary of the findings, conclusions, and recommendations for practice and further study on the emphasis of curriculum leadership practices by elementary principals. If the curriculum and the principal's defined role in curriculum are considered to be vital components of an effective school, then principals must have an understanding of the rudiments of curriculum, how to involve people in the process of curriculum, and how to assess the results. Only when principals have a solid

foundation in the knowledge of curriculum leadership practices can they assume their role as facilitators and leaders in the curriculum process.

APPENDIX A

DEMOGRAPHIC CHARACTERISTICS

Demographic Characteristics

Total Number of Years in Education	Frequency	Percent
Less than 10	8	4.6
10-19	52	29.1
20-29	72	40.4
30+	46	25.9
Size of School	**Frequency**	**Percent**
Less than 100 students	36	20.2
100-250 students	59	33.1
251-399 students	44	24.7
400-550 students	21	11.8
More than 550 students	15	8.4
Number of Years as Elementary Principal	**Frequency**	**Percent**
1-5 years	56	31.5
6-10 years	43	24.2
11-15 years	29	16.3
More than 15 years	50	28.1
Number of Years as Elementary Teacher	**Frequency**	**Percent**
1-5 years	35	12.3
6-10 years	46	16.1
11-15 years	56	19.6
More than 15 years	147	51.6
Education Level of Principals	**Frequency**	**Percent**
Bachelor's degree	•	•
Bachelor's degree plus	49	27.5
Master's degree	112	62.9
Specialist's diploma	12	6.7
Doctoral degree	5	2.8
Education Level of Teachers	**Frequency**	**Percent**
Bachelor's degree	17	6.0
Bachelor's degree plus	243	85.3
Master's degree	24	8.4
Specialist's diploma	•	•
Doctoral degree	•	•

Number of Hours Beyond the Bachelor's Degree for Principals	Frequency	Percent
0-8	•	•
9-16	1	.6
17-24	7	3.9
25-32	10	5.7
33-40	7	3.9
41-48	7	4.0
49 and above	17	9.9
Master's or above	129	72.5

Number of Hours Beyond the Bachelor's Degree for Teachers	Frequency	Percent
0-8	18	6.3
9-16	33	11.6
17-24	27	9.5
25-32	49	17.2
33-40	44	15.4
41-48	32	11.2
49 and above	31	10.9
Master's or above	24	8.4

Gender	Frequency	Percent
Male	99	55.6
Female	79	44.4

Recency of Administrator Training	Frequency	Percent
Presently enrolled in degreed program	24	13.5
1-3 years	39	21.9
4-6 years	29	16.3
7-9 years	14	7.9
10 or more years	68	38.2

Teachers Active in Curriculum Development/Renewal Efforts in Their School	Frequency	Percent
Yes	241	84.6
No	40	14.0

The majority of the teachers who answered yes to this question are active in the curriculum development/renewal efforts in their school because they belong to school improvement committees. Their membership on a curriculum committee is by choice, by appointment, or because they were required to belong to a committee. Some of the other

reasons that teachers became members of curriculum committees were "my additional schooling," "enjoy it," "I want to help determine what I teach."

Consider Principal as a Curriculum Leader	Frequency	Percent
Yes	203	71.2
No	77	27.0

Teachers who answered no to this question gave various responses for whom they considered to be the curriculum leader in their school: "other teachers/staff," "the superintendent," "the curriculum committee," "the curriculum coordinator," "myself," "the Board or District," "other schools or consortiums," "DPI," "textbooks," and "classes or publications."

APPENDIX B

PRINCIPAL SURVEY INSTRUMENT AND COVER LETTER

UNIVERSITY OF UND NORTH DAKOTA

BUREAU OF EDUCATIONAL SERVICES
AND APPLIED RESEARCH
P O BOX 7189
GRAND FORKS, NORTH DAKOTA 58202-7189
(701) 777-4421

P. O. Box 563
New Town, ND 58763
September 13, 1995

Dear North Dakota Elementary Principal:

I am a North Dakota elementary school principal working to complete my doctoral program at the University of North Dakota. I noted in my studies that many facets of the principalship had been studied extensively. However, curriculum leadership was an area that had not been studied in depth. I am conducting a study about the curriculum leadership practices of North Dakota public school elementary principals.

To complete this study, I am asking that you respond to the principal's survey. In addition, two teachers from your school have been randomly selected to respond to a similar survey. All responses will be confidential. No individual or school will be identifiable because all data will be grouped for analysis. Please complete the enclosed survey, fold and tape it so that the business reply address is visible, and mail it back. No postage is necessary. Completing the survey will take approximately 15 minutes.

Thank you for your help and cooperation.

Sincerely,

Jean M. Hall
Elementary Principal
Doctoral Candidate

Enclosures

BUREAU OF EDUCATIONAL SERVICES AND APPLIED RESEARCH

A Questionnaire for Principals about the Practices of the Elementary School Principal as Curriculum Leader

Part I: Background Information of Principal

Please complete the following items by checking the appropriate space or by providing the requested information.

1.) What is the total number of years that you have been in education as a teacher and as a principal? _____ years. (DO NOT include this school year.)

2.) Total number of years as an elementary principal: (DO NOT include this school year.)
- ___ 1 - 5 years
- ___ 6 - 10 years
- ___ 11 - 15 years
- ___ More than 15 years

3.) Your gender:
- ___ Male
- ___ Female

4.) School size category:
- ___ Less than 100 students
- ___ 100 - 250 students
- ___ 251 - 399 students
- ___ 400 - 550 students
- ___ More than 550 students

5.) Your education level:
- ___ Bachelor's degree
- ___ Bachelor's degree + _____(Please indicate the number of hours earned beyond the Bachelor's degree.)
- ___ Master's degree
- ___ Specialist's diploma
- ___ Doctoral degree

6.) How recent is your administrator training?
- ___ I am presently enrolled in a degreed program.
- ___ 1 - 3 years
- ___ 4 - 6 years
- ___ 7 - 9 years
- ___ 10 or more years

PART II: Several practices have been identified as competencies for successful performance in a curriculum leadership role. The practices are organized by domains. Please respond to both the "amount of emphasis" and "how well prepared" for each item.

In the first column, each practice should be rated according to how much emphasis you give to the stated practice in your curriculum leadership effort as a principal. Please use the following rating scale:

(A rating of "1" would indicate NO EMPHASIS; a rating of "5" would indicate MAXIMUM EMPHASIS.)

In the second column, please indicate how well you feel you were prepared (in your educational programming/coursework) to carry out this practice. Please use the following rating scale:

(A rating of "1" would indicate NOT PREPARED; a rating of "5" would indicate WELL PREPARED.)

How much emphasis do you give to this stated practice in your curriculum leadership effort as a principal?	How well do you believe you were prepared to carry out this practice?
1 2 3 4 5	1 2 3 4 5
No Emphasis ... Max. Emphasis	Not Prepared ... Well Prepared

<u>CURRICULUM HISTORY</u> (Domain)

In understanding the curriculum, I...

	AMOUNT OF EMPHASIS	HOW WELL PREPARED
1. Describe past curriculum thought and practices.	1 2 3 4 5	1 2 3 4 5
2. Interpret past curriculum practices.	1 2 3 4 5	1 2 3 4 5
3. Provide a chronology of important events in curriculum.	1 2 3 4 5	1 2 3 4 5

4. Examine forces that inhibit curriculum innovations. 1 2 3 4 5 1 2 3 4 5

CURRICULUM PHILOSOPHY (Domain)

In establishing the direction of the curriculum, I...

	AMOUNT OF EMPHASIS	HOW WELL PREPARED
5. Create collaboratively a clearly stated philosophy of learning which is widely known.	1 2 3 4 5	1 2 3 4 5
6. Determine an orientation to curriculum.	1 2 3 4 5	1 2 3 4 5
7. Support a curriculum that reflects and supports the school's mission.	1 2 3 4 5	1 2 3 4 5
8. State the purposes of education (the schools of thought to which the faculty, parents, and students subscribe).	1 2 3 4 5	1 2 3 4 5
9. Elaborate on the theory of curriculum.	1 2 3 4 5	1 2 3 4 5

CURRICULUM DESIGN (Domain)

In designing the curriculum, I:

	AMOUNT OF EMPHASIS	HOW WELL PREPARED
10. Attempt to define what subject matter will be used.	1 2 3 4 5	1 2 3 4 5
11. Permit curriculum ideas to be carried out.	1 2 3 4 5	1 2 3 4 5
12. Integrate careful planning.	1 2 3 4 5	1 2 3 4 5

CURRICULUM DEVELOPMENT (Domain)

In the development of the curriculum, I...

	AMOUNT OF EMPHASIS	HOW WELL PREPARED
13. Organize and involve teachers, parents, students, and other personnel to work on curriculum development.	1 2 3 4 5	1 2 3 4 5
14. Conduct needs analyses.	1 2 3 4 5	1 2 3 4 5
15. Decide on the nature and organization of curriculum.	1 2 3 4 5	1 2 3 4 5
16. Determine procedures necessary for a curriculum plan.	1 2 3 4 5	1 2 3 4 5
17. Consider the community's values, goals, social needs, and changing conditions in curriculum development.	1 2 3 4 5	1 2 3 4 5
18. Align (establish links among) the curriculum content, the teaching materials, the teaching strategies, and the assessment instruments.	1 2 3 4 5	1 2 3 4 5
19. Design a curriculum review cycle.	1 2 3 4 5	1 2 3 4 5
20. Demonstrate knowledge of curriculum materials and their relationship to program goals and objectives.	1 2 3 4 5	1 2 3 4 5
21. Address state and federal policies and mandates and national goals and standards in the development of curriculum.	1 2 3 4 5	1 2 3 4 5
22. Design curriculum and instruction appropriate for varied teaching and learning styles including specific student needs based on gender, ethnicity, culture, growth level, social class, and exceptionalities.	1 2 3 4 5	1 2 3 4 5

23. Base curricular decisions on research, theory, and informed practice.	1 2 3 4 5	1 2 3 4 5
24. Monitor technological developments and their implications for curriculum.	1 2 3 4 5	1 2 3 4 5

CURRICULUM ASSESSMENT/EVALUATION (Domain)

In preparation for analyzing the curriculum, I...

	AMOUNT OF EMPHASIS	HOW WELL PREPARED
25. Facilitate faculty input and involvement in continual review, revision, and improvement of the curriculum.	1 2 3 4 5	1 2 3 4 5
26. Provide information about the effectiveness of teaching practices on student performance.	1 2 3 4 5	1 2 3 4 5
27. Determine whether actions yielded predicted results.	1 2 3 4 5	1 2 3 4 5
28. Utilize multiple indicators such as norm-referenced tests (Iowa Basics, CTBS, etc.), criterion-referenced tests (testing what is taught), and teacher observations and reports in the assessment of curriculum.	1 2 3 4 5	1 2 3 4 5
29. Measure discrepancies between predetermined objectives and outcomes.	1 2 3 4 5	1 2 3 4 5
30. Judge worth of instructional methods and materials.	1 2 3 4 5	1 2 3 4 5
31. Determine desired outcomes of instruction.	1 2 3 4 5	1 2 3 4 5
32. Determine effectiveness of curriculum content.	1 2 3 4 5	1 2 3 4 5
33. Determine criteria to measure success of curriculum improvement plan.	1 2 3 4 5	1 2 3 4 5
34. Ascertain whether outcomes are the result of the planned school curriculum.	1 2 3 4 5	1 2 3 4 5
35. Identify the strengths of curriculum content.	1 2 3 4 5	1 2 3 4 5

GENERAL ISSUES OF CURRICULUM (Domain)

In my school, I...

	AMOUNT OF EMPHASIS	HOW WELL PREPARED
36. Secure appropriate resources of time, money, personnel, and materials to support the development of curriculum.	1 2 3 4 5	1 2 3 4 5
37. Secure appropriate resources of time, money, personnel, and materials to support the implementation of curriculum.	1 2 3 4 5	1 2 3 4 5
38. Establish appropriate governance structures for curriculum development and approval.	1 2 3 4 5	1 2 3 4 5
39. Interpret and communicate school district curricula.	1 2 3 4 5	1 2 3 4 5
40. Have knowledge of and understanding of the political influences on curriculum.	1 2 3 4 5	1 2 3 4 5

PLEASE FOLD YOUR QUESTIONNAIRE SO THE RETURN ADDRESS SHOWS AND SECURE THE SHEETS WITH TAPE - DO NOT STAPLE.

THANK YOU FOR YOUR RESPONSE.

APPENDIX C

TEACHER SURVEY INSTRUMENT AND COVER LETTER

UNIVERSITY OF UND NORTH DAKOTA

BUREAU OF EDUCATIONAL SERVICES
AND APPLIED RESEARCH
UNIVERSITY OF NORTH DAKOTA
P.O. BOX 7189
GRAND FORKS, NORTH DAKOTA 58202-7189
(701) 777-4421
FAX (701) 777-4365

P. O. Box 563
New Town, ND 58763
September 13, 1995

Dear North Dakota Elementary Teacher:

I am a North Dakota elementary school principal working to complete my doctoral program at the University of North Dakota. I noted in my studies that many facets of the principalship had been studied extensively. However, curriculum leadership was an area that had not been studied in depth. I am conducting a study about the practices of North Dakota elementary principals in curriculum leadership. As a part of this study I want to find out how much emphasis elementary principals give to the practices of curriculum leadership as perceived by you, a teacher in his or her school. Teachers' responses will then be compared with those from elementary principals.

To complete this study, I need your assistance. Your responses will be confidential. No individual or school will be identifiable because all data will be grouped for analysis. Please complete the enclosed survey, fold and tape it so that the business reply address is visible, and mail it back. No postage is necessary. Completing the survey will take approximately 15 minutes.

Thank you for your help and cooperation.

Sincerely,

Jean M. Hall
Elementary Principal
Doctoral Candidate

Enclosures

BUREAU OF EDUCATIONAL SERVICES AND APPLIED RESEARCH

A Questionnaire for Teachers about the Practices of the Elementary School Principal as Curriculum Leader

NOTE: If you are a first year teacher who has never taught, please give this survey to another teacher at your school who teaches at your grade level: primary grades (K-3), or upper grades (4-6). If you are an experienced teacher but new to the building, please respond to the survey by thinking of the principal you had last year. If your principal is new to your school this year, please respond to the survey by thinking of the principal who you had last year. It should take you approximately 15 minutes to complete this survey.

Part I: Background Information of Teacher

Please complete the following items by checking the appropriate space or by providing the requested information.

1.) Total number of years as an elementary teacher (do not include this year):
- ____ 1 - 5 years
- ____ 6 - 10 years
- ____ 11 - 15 years
- ____ More than 15 years

2.) Your education level:
- ____ Bachelor's degree
- ____ Bachelor's degree + ____ (Please indicate the number of hours earned beyond the Bachelor's degree.)
- ____ Master's degree
- ____ Specialist's diploma
- ____ Doctoral degree

3.) Are you active in the curriculum development/renewal efforts in your school at the school level?
- ____ Yes
- ____ No

Why or why not?_____

4.) To whom do you look for curriculum leadership?_____

5.) Do you consider the principal a curriculum leader?
- ____ Yes
- ____ No (If the principal is new to your school this year, think of last year's principal as you fill out this survey.)

PART II: Several practices have been identified as competencies for successful performance in a curriculum leadership role. The practices are organized by domains. Each practice should be rated according to how much emphasis your principal gives to each stated practice in his or her curriculum leadership effort as a principal. If your principal is new to your school this year, please respond to the survey by thinking of the principal who you had last year. Please use the following rating scale:

(A rating of "1" would indicate NO EMPHASIS; a rating of "5" would indicate MAXIMUM EMPHASIS.)

How much emphasis does your principal give to each stated practice in his or her curriculum leadership effort as a principal?

1 2 3 4 5
No Emphasis Max. Emphasis

CURRICULUM HISTORY (Domain)

In understanding the curriculum, the principal in my school...

	AMOUNT OF EMPHASIS
1. Describes past curriculum thought and practices.	1 2 3 4 5
2. Interprets past curriculum practices.	1 2 3 4 5
3. Provides a chronology of important events in curriculum.	1 2 3 4 5
4. Examines forces that inhibit curriculum innovations.	1 2 3 4 5

CURRICULUM PHILOSOPHY (Domain)

In establishing the direction of the curriculum, the principal in my school...

	AMOUNT OF EMPHASIS
5. Creates collaboratively a clearly stated philosophy of learning which is widely known.	1 2 3 4 5
6. Determines an orientation to curriculum.	1 2 3 4 5
7. Supports a curriculum that reflects and supports the school's mission.	1 2 3 4 5

8. States the purposes of education (the schools of thought to which the faculty, parents, and students subscribe). 1 2 3 4 5

9. Elaborates on the theory of curriculum. 1 2 3 4 5

CURRICULUM DESIGN (Domain)

In designing the curriculum, the principal in my school...

AMOUNT OF EMPHASIS

10. Attempts to define what subject matter will be used. 1 2 3 4 5

11. Permits curriculum ideas to be carried out. 1 2 3 4 5

12. Integrates careful planning. 1 2 3 4 5

CURRICULUM DEVELOPMENT (Domain)

In the development of the curriculum, the principal in my school...

AMOUNT OF EMPHASIS

13. Organizes and involves teachers, parents, students, and other personnel to work on curriculum development. 1 2 3 4 5

14. Conducts needs analyses. 1 2 3 4 5

15. Decides on the nature and organization of curriculum. 1 2 3 4 5

16. Determines procedures necessary for a curriculum plan. 1 2 3 4 5

17. Considers the community's values, goals, social needs, and changing conditions in curriculum development. 1 2 3 4 5

18. Aligns (establishes links among) the curriculum content, the teaching materials, the teaching strategies, and the assessment instruments. 1 2 3 4 5

19. Designs a curriculum review cycle. 1 2 3 4 5

20. Demonstrates knowledge of curriculum materials and their relationship to program goals and objectives. 1 2 3 4 5

21. Addresses state and federal policies and mandates and national goals and standards in the development of curriculum. 1 2 3 4 5

22. Designs curriculum and instruction appropriate for varied teaching and learning styles including specific student needs based on gender, ethnicity, culture, growth level, social class, and exceptionalities. 1 2 3 4 5

23. Bases curricular decisions on research, theory, and informed practice. 1 2 3 4 5

24. Monitors technological developments and their implications for curriculum. 1 2 3 4 5

CURRICULUM ASSESSMENT/EVALUATION (Domain)

In preparation for analyzing the curriculum, the principal in my school...

AMOUNT OF EMPHASIS

25. Facilitates faculty input and involvement in continual review, revision, and improvement of the curriculum. 1 2 3 4 5

26. Provides information about the effectiveness of teaching practices on student performance. 1 2 3 4 5

27. Determines whether actions yielded predicted results. 1 2 3 4 5

28. Utilizes multiple indicators such as norm-referenced tests (Iowa Basics, CTBS, etc.), criterion-referenced tests (testing what is taught), and teacher observations and reports in the assessment of curriculum. 1 2 3 4 5

29. Measures discrepancies between predetermined objectives and outcomes. 1 2 3 4 5

30. Judges worth of instructional methods and materials. 1 2 3 4 5

31. Determines desired outcomes of instruction. 1 2 3 4 5

32. Determines effectiveness of curriculum content. 1 2 3 4 5

33. Determines criteria to measure success of curriculum improvement plan. 1 2 3 4 5

34. Ascertains whether outcomes are the result of the planned school curriculum. 1 2 3 4 5

35. Identifies the strengths of curriculum content. 1 2 3 4 5

GENERAL ISSUES OF CURRICULUM (Domain)

The principal in my school...

AMOUNT OF EMPHASIS

36. Secures appropriate resources of time, money, personnel, and materials to support the development of curriculum. 1 2 3 4 5

37. Secures appropriate resources of time, money, personnel, and materials to support the implementation of curriculum. 1 2 3 4 5

38. Establishes appropriate governance structures for curriculum development and approval. 1 2 3 4 5

39. Interprets and communicates school district curricula. 1 2 3 4 5

40. Has knowledge of and understanding of the political and social influences on curriculum. 1 2 3 4 5

PLEASE FOLD YOUR QUESTIONNAIRE SO THE RETURN ADDRESS SHOWS AND SECURE THE SHEETS WITH TAPE - DO NOT STAPLE.

THANK YOU FOR YOUR RESPONSE.

APPENDIX D

POSTCARD REMINDER

REMINDER!!

Recently you were sent a questionnaire from the Bureau of Educational Services at UND. If you have already responded, please ignore this request. If you have not responded, we invite you to do so now as soon as possible. Thank you very much.

Bureau of Educational Services
University of North Dakota
PO Box 7189
Grand Forks, ND 58202-7189

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REFERENCES

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