A Case Study of the New Elementary School in Kingsport, Tennessee

Debra R. Lee
East Tennessee State University

Follow this and additional works at: http://dc.etsu.edu/etd
Part of the Educational Administration and Supervision Commons

Recommended Citation

This Dissertation - Open Access is brought to you for free and open access by Digital Commons @ East Tennessee State University. It has been accepted for inclusion in Electronic Theses and Dissertations by an authorized administrator of Digital Commons @ East Tennessee State University. For more information, please contact dadmin@etsu.edu.
INFORMATION TO USERS

This manuscript has been reproduced from the microfilm master. UMI films the text directly from the original or copy submitted. Thus, some thesis and dissertation copies are in typewriter face, while others may be from any type of computer printer.

The quality of this reproduction is dependent upon the quality of the copy submitted. Broken or indistinct print, colored or poor quality illustrations and photographs, print bleedthrough, substandard margins, and improper alignment can adversely affect reproduction.

In the unlikely event that the author did not send UMI a complete manuscript and there are missing pages, these will be noted. Also, if unauthorized copyright material had to be removed, a note will indicate the deletion.

Oversize materials (e.g., maps, drawings, charts) are reproduced by sectioning the original, beginning at the upper left-hand corner and continuing from left to right in equal sections with small overlaps. Each original is also photographed in one exposure and is included in reduced form at the back of the book.

Photographs included in the original manuscript have been reproduced xerographically in this copy. Higher quality 6" x 9" black and white photographic prints are available for any photographs or illustrations appearing in this copy for an additional charge. Contact UMI directly to order.
A case study of the new elementary school in Kingsport, Tennessee

Lee, Debra R. Jean, Ed.D.
East Tennessee State University, 1992
A CASE STUDY OF THE NEW ELEMENTARY SCHOOL
IN KINGSPORT, TENNESSEE

A Dissertation
Presented to
the Faculty of the Department of
Educational Leadership and Policy Analysis
East Tennessee State University

In Partial Fulfillment
of the Requirements for the Degree
Doctor of Education

by
Debra R. Lee
December 1992
APPROVAL

This is to certify that the Graduate Committee of

DEBRA R. LEE

met on the

11th day of November, 1992.

The committee read and examined her dissertation, supervised her defense of it in an oral examination, and decided to recommend that her study be submitted to the Graduate Council and the Associate Vice-President for Research and Dean, School of Graduate Studies, in partial fulfillment of the requirements for the degree Doctor of Education in Educational Leadership and Policy Analysis.

[Signatures]

Chairman, Graduate Committee

Signed on behalf of the Graduate Council

Associate Vice-President for Research and Dean,
School of Graduate Studies
ABSTRACT

A CASE STUDY OF THE NEW ELEMENTARY SCHOOL IN KINGSPORT, TENNESSEE

by

Debra R. Lee.

The statement of the problem was taxpayers and the general populace have expressed dissatisfaction with the current schooling/education results. Influential educators, similarly, have stated their belief(s) that educational practice no longer meets the requirements for production of a competitive citizenry.

The purpose of this study was to investigate the process of developing a new elementary school in Kingsport, Tennessee. This study explores the process used by the Kingsport City School System to determine the sequence of analyzing, planning and implementing a new elementary school designed for the twenty-first century.

In this qualitative study, four research questions were formulated. A reputational model developed by Becker and Geer identified twelve interviewees for the study. Data were collected using semi-structured interviews, limited participant observations and document analysis. The field effort concentrated on the respondents' perceptions of the process of the development of the new elementary school. Verbatim transcripts, field notes and documents were analyzed using qualitative techniques.

Results suggested that there was planned process for developing/designing the new elementary school. During the analysis, twenty events emerged which form the sequence of the planned change for the implementation of the new elementary school. A visionary model of the new elementary school was reported from the three areas of analysis.
EAST TENNESSEE STATE UNIVERSITY
INSTITUTIONAL REVIEW BOARD

PROJECT TITLE: A Case Study of the New Elementary School in Kingsport, Tennessee

PRINCIPAL INVESTIGATOR: Debra R. Lee

The Institutional Review Board has reviewed the above-titled project on August 20, 1992 with respect to the rights and safety of human subjects, including matters of informed consent and protection of subject confidentiality, and finds the project acceptable to the Board.

Anthony J. DeLucia
Chairman, IRB
DEDICATION

To my daughter, Chelsea, the love of my life.
ACKNOWLEDGEMENTS

I would like to express my appreciation to those who helped make this study possible:

To Dr. Ernest Bentley and Dr. Donn Gresso, who served as chairmen of my committee, for their support, encouragement, and guidance.

To Dr. Cecil Blankenship, Dr. Howard Bowers, Dr. Charles Burkett, and Dr. Russell West, who served on my committee, for their time and service.

To my family for their endless support. Without the contributions of each of those listed above, this study would not have been possible.
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Chapter</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>APPROVAL</td>
<td>ii</td>
</tr>
<tr>
<td>ABSTRACT</td>
<td>iii</td>
</tr>
<tr>
<td>INSTITUTIONAL REVIEW BOARD</td>
<td>iv</td>
</tr>
<tr>
<td>DEDICATION</td>
<td>v</td>
</tr>
<tr>
<td>ACKNOWLEDGMENTS</td>
<td>vi</td>
</tr>
<tr>
<td>LIST OF FIGURES</td>
<td>xii</td>
</tr>
<tr>
<td>Chapter</td>
<td></td>
</tr>
<tr>
<td>1. INTRODUCTION</td>
<td>1</td>
</tr>
<tr>
<td>Statement of the Problem</td>
<td>5</td>
</tr>
<tr>
<td>Research Questions</td>
<td>5</td>
</tr>
<tr>
<td>Purpose of the Study</td>
<td>5</td>
</tr>
<tr>
<td>Significance of the Study</td>
<td>5</td>
</tr>
<tr>
<td>Assumptions of the Study</td>
<td>6</td>
</tr>
<tr>
<td>Limitations of the Study</td>
<td>6</td>
</tr>
<tr>
<td>Definition of Terms</td>
<td>7</td>
</tr>
<tr>
<td>Overview of the Study</td>
<td>8</td>
</tr>
<tr>
<td>2. REVIEW OF RELATED LITERATURE</td>
<td>10</td>
</tr>
<tr>
<td>Introduction</td>
<td>10</td>
</tr>
<tr>
<td>A Changing Education</td>
<td>11</td>
</tr>
<tr>
<td>Planned Change</td>
<td>13</td>
</tr>
<tr>
<td>Futures Studies and Futures Research</td>
<td>18</td>
</tr>
<tr>
<td>Need and Importance for Studying the Future</td>
<td>19</td>
</tr>
<tr>
<td>Leadership</td>
<td>20</td>
</tr>
<tr>
<td>Futuristics of Curriculum</td>
<td>28</td>
</tr>
</tbody>
</table>

vii
<table>
<thead>
<tr>
<th>Chapter</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Changing Family</td>
<td>40</td>
</tr>
<tr>
<td>Demographic Forecast</td>
<td>42</td>
</tr>
<tr>
<td>Schools of the Future and Economic Self-Sufficiency</td>
<td>44</td>
</tr>
<tr>
<td>Needed School Modifications</td>
<td>45</td>
</tr>
<tr>
<td>Proposed Educational Approaches</td>
<td>52</td>
</tr>
<tr>
<td>One Self-Described School of the Next Century</td>
<td>55</td>
</tr>
<tr>
<td>America 2000--An Education Strategy</td>
<td>57</td>
</tr>
<tr>
<td>Track I</td>
<td>60</td>
</tr>
<tr>
<td>Track II</td>
<td>61</td>
</tr>
<tr>
<td>Track III</td>
<td>62</td>
</tr>
<tr>
<td>Track IV</td>
<td>63</td>
</tr>
<tr>
<td>Summary</td>
<td>65</td>
</tr>
<tr>
<td>3. METHODOLOGY</td>
<td>70</td>
</tr>
<tr>
<td>Design of the Study</td>
<td>71</td>
</tr>
<tr>
<td>Subjects</td>
<td>71</td>
</tr>
<tr>
<td>Instrumentation</td>
<td>73</td>
</tr>
<tr>
<td>Data Collection</td>
<td>73</td>
</tr>
<tr>
<td>Phases of Data Collection</td>
<td>74</td>
</tr>
<tr>
<td>Interviews</td>
<td>74</td>
</tr>
<tr>
<td>Observations</td>
<td>75</td>
</tr>
<tr>
<td>Documents</td>
<td>76</td>
</tr>
<tr>
<td>Interview Analysis</td>
<td>77</td>
</tr>
<tr>
<td>Observations and Document Analysis</td>
<td>77</td>
</tr>
<tr>
<td>Trustworthiness</td>
<td>78</td>
</tr>
<tr>
<td>Consistency</td>
<td>79</td>
</tr>
</tbody>
</table>
4. ANALYSIS OF DATA

Introduction .......................................... 82
Interviewees .......................................... 83
Document Analysis .................................... 83
Observations ................................... 84
The Analysis Stage .................................... 85

Rationale for a New Elementary School
in Kingsport, Tennessee ............................. 85

Superintendent Researches/Presents
School of the Future ................................. 88

Superintendent and Key Central Office
Personnel Discuss Vision of New Elementary School 89

Presentation of the Vision of School Board ......... 90

Planning Stage ........................................ 94

School Board Retains Educational Planning Firm ... 94

Superintendent Conducts Meetings with
Administrators, Teachers and Community
Representatives for Feedback .......................... 95

Educational Specifications Developed for
New Elementary School ............................... 96

Educational Planner’s Specifications ................. 96

Central Office Personnel Revisions to
Educational Specifications ........................... 99

Specifications Approved by School Board .......... 100

Architect Selected for Facility Design and
Begins Design Based on the Approved
Educational Specifications .......................... 101
<table>
<thead>
<tr>
<th>Chapter</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Principal for New Elementary School Named</td>
<td>102</td>
</tr>
<tr>
<td>Change in Key Actors/Influentials</td>
<td>103</td>
</tr>
<tr>
<td>School Board Approves Architect's Design</td>
<td>103</td>
</tr>
<tr>
<td>Final Site Selection Decisions</td>
<td>104</td>
</tr>
<tr>
<td>Delay of Site Development</td>
<td>105</td>
</tr>
<tr>
<td>School Board Studies Other Sites for New Elementary School</td>
<td>107</td>
</tr>
<tr>
<td>New Site Chosen for Elementary School</td>
<td>109</td>
</tr>
<tr>
<td>Controversy Develops Concerning Location of New Elementary School in Hawkins County</td>
<td>111</td>
</tr>
<tr>
<td>Architect Designs New Facility for Allandale Site</td>
<td>112</td>
</tr>
<tr>
<td>Leadership Change at the Superintendent Level</td>
<td>113</td>
</tr>
<tr>
<td>Implementation and Evaluation Stage</td>
<td>114</td>
</tr>
<tr>
<td>Ground Breaking for Site Development for New Elementary School</td>
<td>114</td>
</tr>
<tr>
<td>Summary of Findings</td>
<td>114</td>
</tr>
<tr>
<td>5. SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS</td>
<td>120</td>
</tr>
<tr>
<td>Summary</td>
<td>120</td>
</tr>
<tr>
<td>Conclusions</td>
<td>121</td>
</tr>
<tr>
<td>Recommendations</td>
<td>125</td>
</tr>
<tr>
<td>REFERENCES</td>
<td>127</td>
</tr>
<tr>
<td>APPENDICES</td>
<td>134</td>
</tr>
<tr>
<td>A. COVER LETTER</td>
<td>135</td>
</tr>
<tr>
<td>B. INTERVIEW GUIDE</td>
<td>136</td>
</tr>
<tr>
<td>C. SUPPORT LETTER FROM SUPERINTENDENT</td>
<td>137</td>
</tr>
<tr>
<td>D. INTERVIEW CONSENT FORM</td>
<td>138</td>
</tr>
<tr>
<td>Figure</td>
<td>Description</td>
</tr>
<tr>
<td>--------</td>
<td>-----------------------------------------------------------------------------</td>
</tr>
<tr>
<td>1.</td>
<td>HARVEY’S (1990) PLANNED CHANGE IN KINGSPORT</td>
</tr>
<tr>
<td>2.</td>
<td>NEW ELEMENTARY SCHOOL</td>
</tr>
<tr>
<td>3.</td>
<td>TRENDS FROM LITERATURE BY SOURCE OF INFORMATION</td>
</tr>
<tr>
<td>4.</td>
<td>SEQUENCE OF EVENTS BY INFORMATION SOURCE</td>
</tr>
<tr>
<td>5.</td>
<td>NEW ELEMENTARY SCHOOL MODEL OVERVIEW</td>
</tr>
</tbody>
</table>
Chapter 1
Introduction

I find the great thing in this world is not so much where we stand, as in what direction we are moving: To reach the port of heaven, we must sail sometimes with the wind and sometimes against it—but we must sail, and not drift, nor lie at anchor.

Oliver Wendell Holmes

Educational reform movements have both followed and preceded periods in which first one group then another have attacked the public schools for various pedagogical, curricular, or ideological reasons (Benjamin, 1987). At the classroom level, teachers and students have ridden the pendulum back and forth between the extremes of opposite viewpoints. For example, Taba (1962) wrote that at the turn of the century critics struck out against formalism, hard discipline, narrowness of education, and McGuffey conservatism. Then, by the mid-20th century, reformers faulted education for being too soft, too progressive, too anti-intellectual, and too egalitarian, while ignoring the importance of fundamental academic skills. Sand (1981) remembers that

of Progressive Education, the child was the primary focus. In the 40s, when we were engaged in a great world war, the curriculum was society-centered. In the 50s and 60s, the scholars were in the saddle, and the curriculum was primarily subject- or discipline-centered, and in the 70s, we were concerned with the total curriculum for all children. (p. 41)

This same kind of ideological maneuvering for position continues. From the early 1980s to the present, one critical attack after another has been leveled at the public schools in an effort to counteract what
has been viewed as a long and dangerous slide into the quicksand of educational mediocrity (Benjamin, 1987).

It would appear that during the 20th century, our work in education has resembled a series of "spontaneous reactions" rather than gradual evolutionary progress toward clearly-defined and mutually-held goals. Years ago, Counts (1932) observed that a fundamental weakness of American education is our great desire for motion and our seeming lack of concern for the direction in which this motion carries us. "Like a baby shaking a rattle, we seem to be utterly content with action, provided it is sufficiently vigorous and noisy." In the last analysis, a very large part of American educational thought, inquiry, and experimentation is much ado about nothing (Counts, 1932, pp. 6-7). More recently, Goodlad (1981) suggested that the babble of voices speaking out about education continues, "and the need to find a guiding sense of direction for the schools is as great as or greater than it was two decades ago" (p. 71). As an example, professionals specializing in the planning and design of tomorrow's teaching and learning environments are often asked to address specific questions, to plan schools that will facilitate educational change, and to offer few constraints to achieving future educational objectives (p. 48).

The critical importance of education in the future, coupled with the difficulties typically associated with significant change, poses a major question for those in education (Jones, 1984). Do the issues and structure of education that are employed today prepare today's children for the life in the 21st century; are orientations and understandings
necessary to make the critical decisions needed in the years ahead created for today's youth?

Many futurists would indicate that schools are not educating for the 21st century (Shane & Tabler, 1981). School curricula dwell on the history and the present, with little or no emphasis on the future in terms of anticipating or actively planning for tomorrow. The teaching of values, interdependency, and the doctrine of limits, though identified as critical to life in the future, are rarely touched upon in school curriculum.

In this era of constant change, 12 years of formal education do not necessarily prepare a person to function successfully in society for the rest of his/her years. As early as 1967, Helmer reported change was accelerating at such a rate that continual adaptation would have to become a way of life for children. Society would need to anticipate changes rather than attempt to deal with them belatedly and inadequately after they arrived. Continuous learning, both formal and informal, has become a necessity for today's adults and will be a way of life for future adults. A major question that could be asked is to what extent our present structure of formal instruction will be sufficient for youth of the 21st century? If the present system and structure are not appropriate for tomorrow, it becomes important to determine how schooling needs to be changed in the next 10 years so as to contribute maximally to preparing youth for living in tomorrow's world (Helmer, 1967).

The identification of the issues that educational leaders will face is considered basic to the concept of planning for tomorrow in the
literature that exists comes from researchers such as Cetron and Gayle (1990) and Hodgkinson (1991). They agree upon the importance of education in the future, but also see a need to reorient the emphasis of education from predominantly historical to an approach that addresses issues of the future. Futurists identify a multitude of issues that will be faced in the years ahead: problems in demographics, economics, technology, human rights, life-long learning, world-wide interdependency (Benjamin, 1987).

On the political front, President George Bush and the nation's governors' educational initiative, "America 2000," have set standards for the year 2000 in curriculum, graduation levels, readiness for school, adult literacy, and safe, drug-free schools. President Bush has proposed to Congress that at least 535 New American Schools—including one in each congressional district in the nation—be in place by 1996. These schools are to be located in communities that pledge cooperation and support, have a system of assessment that uses a variety of community-identified indicators of success, and endorse the national educational goals (U.S. Department of Education, 1991).

Public school systems are beginning to experiment with new and different approaches to schooling their students. Kingsport, Tennessee, school officials have stated a desire for an innovative concept for a new elementary school. This attempt for a planned change process is to design an elementary school new to Kingsport City Schools.

Various publics consistently voice criticisms of public school educational efforts and outcomes. The tax support and other resources typically needed to operate current schooling approaches have not
resulted in significant reduction of these criticisms, suggesting that the existing factory/industrial school model is inadequate to address legitimate concerns of these publics.

The Statement of the Problem

Taxpayers and the general populace have expressed dissatisfaction with the current schooling/education results. Influential educators, similarly, have stated their belief(s) that educational practice no longer meets the requirements for production of a competitive citizenry.

Research Questions

The educational literature and local information sources will be investigated for answers to the following questions:

1. What are the curricular, organizational, and pedagogical plans for the new Kingsport elementary school?
2. Does the new Kingsport elementary school model match the emerging educational requirements reported in the literature survey?
3. What processes can be documented as influencing the plans?
4. What planning procedures were employed in the developmental processes?

Purpose of the Study

The purpose of this study is to document one school system's attempt to implement a planned change process to develop an elementary school for the 21st century that will result in production of citizens who are prepared for existing and future conditions.
Significance of the Study

The significance of this study is to provide documentation that will allow others interested in restructuring to respond to an additional model in their review of options. Also, the evolutionary process of information could be informative concerning the refinements that may be a necessary part of any local restructuring efforts.

Assumptions of the Study

Assumptions for this study were as follows:

1. Sufficient history in the form of documents and recollections of the primary developers can be assembled, analyzed, and interpreted by the investigator to present an accurate description/documentation of the emerging model.

2. Although unique in concept, the objective in planning the new Kingsport elementary school was to obtain a functional, economical, student-successful, and easily maintainable educational approach.

3. Other school systems can use the resulting description as they examine options for their own paradigm shifts.

Limitations of the Study

The limitations of the study are as follows:

1. This study was fixed by the boundaries of the data available on the new Kingsport elementary school concept and the population involved in the design and study of the concept during the time period identified.

2. The selection process used to designate the individuals interviewed in the study eliminated those in current positions within
the Kingsport City Schools and community of Kingsport if they were not involved in the evolvement of the new elementary school concept.

3. The study was limited to selected individuals' perceptions of the school concept and the planned change process.

Definition of Terms

The following definitions are offered as clarification for the particular meaning of the terms in this study:

**New elementary school** will refer to a planned 500 pupil school to house grades pre-kindergarten through 5. The school is scheduled to be completed by August, 1994, on the western boundaries of Kingsport, Tennessee (Kingsport City School Board, 1992).

**Flexible school** will be defined as a facility that provides change in the physical space allowing arrangement at will of students and programs. The interior instructional area is equipped with portable or moveable partitions that allow for various sizes of classrooms to be made (Kingsport City School Board, 1990).

**Case study** will refer to a type of observational research that ordinarily uses nonparticipant observation. In a case study, the researcher performs an in-depth investigation of a situation but usually is not directly involved in the situation and does not control or manipulate it (Long, Convey, & Chwalek, 1991).

**Concept** will be identified as an idea that has been given an abstract, generalized meaning related to a model. A researcher uses a concept to study and analyze a given phenomenon systematically (Hoy & Miskel, 1991).
Vision will refer to a mental journey from the known to the unknown creating the future from a montage of current facts, hopes, dreams, dangers, and opportunities (Hickman & Silva, 1984).

Futuristic studies will be defined as education about the future and about methods for studying the future (Kauffman, 1976).

Educational trend will be defined as the study and analysis of educational literature and research findings which demonstrate a prevailing tendency or course of events (Office of Education, 1969, p. 173).

Multiple-case approach will be defined as more than one identified mean of studying a subject or event (Merriam, 1988).

Semi-structured interview will refer to a technique of allowing a subject to respond to questions concerning a topic with flexibility as to comments, perceptions and length of response (Merriam, 1988).

Schooling will refer to a program of planned and organized instruction designed to transmit and preserve in youth those skills, attitudes and values that are prized by their elders and that are deemed to be essential to the community's well being, traditionally thought of as public education and designed for children and youth (Shane & Tabler, 1981, p. 5).

Overview of the Study

It is not easy to fight for change in any environment. But in one as entrenched as education, where the risk is so great, it can be especially daunting. Futurists forecast changes, but are educators planning for or even considering these changes?
It is tempting to think of change as something we can accomplish once, congratulating ourselves for a job well done. But lasting, meaningful reform is not an event, it's a perpetual process. Educators in the most successful schools are always thinking about how to improve. School leaders understand that providing the best possible schools for children and their future demands continual experimentation, evaluation and adjustment. It means welcoming change, and expecting it.

Chapter 1 was used to introduce the theoretical basis for the study. In Chapter 2, the study of current and pertinent literature and research in the area of futures of societal and educational trends to determine the major issues identified as lying ahead for education will be examined. Future school models, currently under design, will be investigated. The specific methodological features of this study will be fully detailed in Chapter 3. The data collected from the study will be identified in Chapter 4. Chapter 5 will contain the results of the information collected and assembled. The new Kingsport elementary school model will be presented. In order to set the stage for the new elementary school concept, a review of themes and general conclusions of education in the 21st century will be discussed.
Chapter 2
Review of Related Literature

Introduction

There should be no mystery about the quality of education in the 21st century (Catron and Gayle, 1990). Education in the year 2000 depends upon actions taken today and tomorrow and until the end of the century. Actions taken, not some uncontrollable chain of events, will determine the future fate of education.

Educational reforms of the 1980s can lead to significant improvements throughout the 1990s and into the 21st century. For this to happen, however, goals are needed to establish where a community wants its education to be and mileposts are needed to indicate our progress in getting there (Pitman, 1980).

The quality of tomorrow’s schools will be influenced by already identifiable emerging trends. The researcher will investigate and present in this chapter significant issues experts have identified that will be influential to the educational, social, and industrial development of students for the next century. Research and reports have been reviewed that will assist the researcher in studying various paradigms that will lead the way for changes in the educational processes of our students, both young and old. Information has been selected for inclusion in this synthesis in the major areas of a changing education, future studies, leadership curriculum, demographic forecast, changing family, and future school approaches and models.
A Changing Education

Society is characterized by increasing change. Ironically, the most important and most frequently encountered change detailed by educational futurists is the nature and rate of change itself. Futurists suggest that change is increasing both in pace and complexity. This notion is also a fundamental building block of a future-based theory of education. Education in a time characterized by exploding change must necessarily be greatly different than education prescribed for a static society in a static time. Gay (1981, p. 82) believed that in the future, change will be the most consuming characteristic of life. Shane (1977) argued that change is accelerating to the point that we are in a state of hyper turbulence, and it is this change in the nature of change that suggests important educational implications.

According to Gay, the futurists' theory is built upon the notion that change is a powerful and driving force in society and that change is occurring more rapidly and to deeper levels than has previously been observed. The theory suggests that change is so overpowering that the ability of futurists to fathom the future has been severely limited. Thus, in a purely technical sense, if the futurists admit that change muddies the water so even they cannot derive a clear image of the future, there is no more reason to accept their analysis and recommendations than those of crystal-gazers or science fiction writers (Gay, 1981).

Brown and Saks contended that technology is the factor which is causing greater change. Spin-offs from technological change are creating new realities in society. We are becoming a more
interdependent and global world because of changing economic and political realities, expansion of knowledge, social shifts, population growth, the microelectronic revolution, and realities and advances in travel and communications (Brown & Saks, 1984). Futurists see technology as the driving force that stirs up change. They realize that there are other factors that affect the rate and complexity of change.

Naisbitt argued that the future is not an extrapolation of the past. Although several authors suggested that studying present trends is an appropriate and effective method of glimpsing the future (Naisbitt, 1982), a large majority of futurists recognize that trends are not straight lines that begin somewhere in the past and continue through the present into the future, undisturbed by unforeseeable commotion. Toffler (1980) reminded the public that one must not be "seduced by straight lines" (p. 129). Most people, including many futurists, conceive of tomorrow as a mere extension of today, ignoring that trends, no matter how seemingly powerful, do not merely continue in a linear fashion. Peters and Klein (1981) wrote that "the future cannot be extrapolated in linear fashion from the trends of the past" (p. 141).

In a time of rapid change fueled by new technological and scientific discoveries that produce multiple and complex political, economic, social, and familiar restructuring, the futurists tend to agree that knowledge is produced ever more quickly, thus replacing old knowledge at a faster rate. The fund of new knowledge grows geometrically to the point of supersaturation. Abbott (1977) wrote that 10% of the technical knowledge in some industries becomes obsolete each
year and that the world's store of knowledge has doubled again during the 20th century.

Although many futurists may overstate the importance of focusing on changes in society and on the need to change education; there is an underlying presumption in the literature that education should balance desires for change with desires to retain worthwhile aspects of society and education. Combs (1981) reminded his readers that the curriculum must simultaneously be both conservative and critical. It must preserve the ideals that have guided discourse in the U.S. for centuries. . . . Yet it must also empower individuals to question the ethics of their institutions and to criticize them when they fail. (p. 371)

Planned Change

Fullan stated that the purpose of educational change is presumably to help schools accomplish their goals more effectively by replacing identified programs or practices with better ones. Fullan also stated that change occurs because it is imposed on the organization by natural events or deliberate reform or because the organization voluntarily participates in or initiates change when dissatisfaction, inconsistency, or intolerability are found in the current situation (Fullan, 1982).

Fullan (1982) identified four major aspects pertaining to the nature of change which were found to relate to subsequent implementation: need, clarity, complexity, and product quality. Priority needs through careful examination of innovations allow the individuals to view the possibility for an advocated change. Fullan (1982) stated that implementation is more effective when relatively focused or specific needs are identified.
Clarity, according to Fullan, deals with goals and means. Problems related to clarity have been found in virtually every study of significant change (1982). Lack of clarity—diffuse goals and unspecified means of implementation—represents a major problem at the implementation stage. The organization is able to understand the process because the information is clear and concise.

Fullan (1982) defined the third aspect, complexity, as the difficulty and extent of change required of the individuals responsible for implementation. The actual amount depends on the starting point for any individual or group. Any change may be examined in regard to the difficulty, skill required, and extent of alterations in beliefs and strategies. While complexity creates problems for implementation, it may result in greater change because more is being attempted. This is similar to the "little ventured, nothing gained" theory. Fullan suggested that difficult changes are attempted because they have the potential to achieve greater benefits, but the changes should be completed in a way which maximizes clarity through defining specific components and implementing them incrementally.

Product quality, according to Fullan (1982), should be considered when adoption decisions are made on grounds of political necessity or perceived need without time for development. When adoption is more important than implementation, decisions are made without follow-up or preparation time necessary to generate adequate materials or outcomes. Relevance and practicality are considered essentials to changing product quality.
In summary, the lack of a demonstrable need for change, the lack of a clear practical picture of the discrepancy between current practice and what is proposed, insufficient attention to the complexity of change in terms of extent and difficulty, and the lack of adequately developed and good-quality practical materials constitute major barriers for implementation of change. Fullan (1982) suggested that, while these can and should be assessed objectively, it is equally important to recognize that they must be understood in relationship to individual implementers. Change is a difficult personal and social process of unlearning old ways and learning new ones.

Change is a complex process that is manageable and purposeful. According to Harvey (1990), change is best accomplished by teams rather than individuals. With organizations, stated Harvey, conflicting interests can make change more difficult to implement. Harvey recommended three major stages in the change process: analysis, planning, and implementation and evaluation.

In the analysis stage, Harvey (1990) suggested that a clear description be given of the suggested change with clarity of expression. The existence of a need for change provides the organization with answers to questions concerning this reform act. Need, stated Harvey, is normally based on previous experiences concerning an issue.

The identification of the key actors or influentials in the analysis stage gives credibility to the people who will create the desired change. Once these individuals are identified, the payoff may be determined. Unless the organization recognizes the payoff and benefits, change may be resisted.
An examination of the culture during the analysis period, stated Harvey (1990), establishes organizational and individual readiness for change. Harvey recognized that change is easier or more difficult depending on the organization's cultural inclination toward innovation and risk. The stronger the culture is in support of change, the bolder the potential change.

Harvey (1990) described the planning stage as a combination of ideas and strategies. He identified Chin and Benne change strategy framework: rational-empirical, power-coercive, or normative-reeducative. With rational-empirical approach, there is a use of integration of data and logical analysis. An individual or organization may choose power-coercive to plan change when time is of the essence and the institution is "frozen" and stress is needed to promote change. The individual or organization may be interested in long-term change and wish to link the change with people's needs and drives. The normative-reeducative strategy is the one most chosen by planned-change strategists to accomplish this task.

Harvey (1990) stated that participation and involvement in the planned change process allows the individual to become excited in forming the vision and participating in crafting its implementation. Bandwagons are created when there is an of energy and zeal aroused by a change effort. Commitment and participation grow out of association with joint ideas and strategies.

In the planning stage, the examination of the scope of the change process is vital to the success of the implementation (Harvey, 1990). The organization or individual may examine the objectives for the
change, resources available, time lines, and continued functioning of
the organization while the change effort is occurring. The scope of the
process would determine the "go/no go" decision.

In the third stage, implementation and evaluation, Harvey (1990)
recommended an individual or organization start with a recognized
advocate—one in the organization willing to put his or her name and
time and psyche behind the change effort. This person or persons should
be willing to take a visible and assertive role. A vision of change
requires focused advocacy.

Harvey (1990) stated that time management is a critical issue in
implementing change. Realistic time lines with clear steps create
trust from the organization. Plans may drift off course because of
delayed gratification. Changes, stated Harvey, want to see success in
the near term. Multi-year accomplishments should allow for multiple
strategies—each year a new conception for proceeding toward change.

In the evaluation stage, a monitoring plan is needed to "gauge" or
audit the change process. The organization should continue to study the
progress to know when it has arrived. By identifying the actors who
will provide the richest data for monitoring, the group will be able to
evaluate based on credible information.

An action plan in the implementation and evaluation stage provides
a blueprint for the change (Harvey, 1990). The plan specifies the order
of actions to be taken, who is to be involved, and when each action is
to occur. The action plan contains specificity, performance,
involvement, realism and observability.
Risk analysis, according to Harvey (1990), completes the final stage. The advantages of the change are as important as the negative consequences of the proposed change. In examining these positive and negative consequences, the group needs to weigh one set against the other. A good innovator, stated Harvey, can identify the need to retreat, reconsider, and reinvent when the change process is not functioning appropriately.

A change process is made up of a series of steps that allow for change to occur. There is a greater probability for successful change when a planned and systematic process is selected and used. Greatness in planning change lies not in reaching a goal, but in how an organization journeys toward it. Rich, vibrant organizations are those with effective processes. A strong process leads to fostering a positive organizational climate (Fullan, 1982).

**Futures Studies and Futures Research**

It seems appropriate to devote some space to an explanation of what futures research entails and how it differs from conventional thought. Shane (1977) defined future research as "a new discipline concerned with sharpening the data and improving the processes on the basis of which policy decisions are made in various fields of human endeavor such as business, government, or education" (p. 17).

Such research is based on the premise that human decisions now being made will shape the world. The knowledge gained by such research will serve to help leaders choose widely among alternative courses of action. Although all of the problems of the future cannot be anticipated, society can anticipate their nature. Lewis (1983) felt
that they will undoubtedly be global and require the use of interdisciplinary knowledge. The correctness of first decisions will be vital--irreversible harm could result from a faulty decision.

Futures research not only provides reasoned and documented advice, but also seeks to sensitize people to possible alternative futures. Shane (1977) suggested five significant differences between futures research and conventional research:

1. Futures planning is influenced and directed by the planners' values and is action-oriented. It emphasizes alternative avenues rather than one direction and concentrates on the relationships among the probabilities, their cross-impact upon each other and the possible implications of such influences.

2. Futures planning is designed to point to more alternative courses of action than that of conventional planning. Considering all possibilities assures that good ideas are not overlooked.

3. Conventional planning tends to see tomorrow as another version of today, while futures planning works from the premise that we need to anticipate a different tomorrow and to plan different courses of action with different concepts of the future.

4. While traditional research relies heavily on statistical analysis and projections, futures research relies on the rational study of anticipated developments.

5. Rather than focusing on the reform of the past, futures planning concentrates on creating probable futures in which all consequences are considered before choices are made.
Need and Importance for Studying the Future

Study of the future and the development of techniques to delve into the future have been more characteristic of fields such as industry and the military rather than of education. Forecasting has been an integral part of business, industry and the military for several decades. Only in the most recent past have futures study and forecasting received notice in the field of education.

In the Hensley and Yate publication, *Futurism in Education* (1974), the authors stressed the need for a "literacy about the future." Society's institutions, particularly today's educational systems, are missing any kind of systematic reasoning about the future. Today's decisions not only affect, but also mold, the future; yet these decisions are based, for the most part, on the past and what has been experienced. To make the best decisions for the future, citizens need a literacy about the future. They need to consider probable and possible trends and alternatives. Our logic in reasoning must incorporate the directions for the future with the well-grounded learnings of the past. Using the knowledge of the past together with the research of the future, mankind can make the best decisions today that will lead to the most desirable future tomorrow and can develop and determine the new laws of nature and human will. The authors felt that the optimum place for this new philosophy toward the future to begin is in society's schools. Consideration of the future and exploring alternative futures in reasoning for decisions is a way of thinking, a philosophy that needs to be developed. To cause a philosophy of the future to develop in the
school systems, leaders in the educational community must espouse such a philosophy (Allain, 1979).

Leadership

In a report entitled Preparing Leaders to Anticipate and Manage the Future (1982), the University Council for Educational Administrational Task Force (UCEATF) attempted to help administrators develop a future orientation based on an understanding of complexities of educational futures and managing those futures. The authors stated that anticipating the future to allow for effective management planning presents a very difficult challenge. The skills and understandings that educational managers possess will greatly affect the strategies to respond to social conditions and to shape educational futures. Today's and tomorrow's management challenges are far different in scope and in urgency from those of yesterday. Worldwide social, political, and economic turmoil creates a great challenge to educational leaders. That challenge is to envision and shape educational futures that offer creative and courageous responses to social needs.

Society and education are linked in a dynamic, reciprocal relationship. Mankind is well aware of the cultural and societal changes of the past few decades. Institutions of education reflect these conditions. Educational leaders must be able to identify the social conditions which have significant impact on education and which require some management action to maintain or alter and shape the future of those conditions within the educational system. Herman Kahn (1983) felt that an orientation toward the future is necessary in schools, not only to help prepare this generation to be tomorrow's leaders, but also
to change the excessively negative impressions that schools are giving to today's youth about what lies ahead.

In her cognitive styles research, Guild (1987) matched effective leaders' cognitive styles with the types of visions suited to each style. Based on the Myers-Briggs Type Indicator, leader behavior approaches one of four ideal types. Guild suggested that a person with a sensing cognitive style will have visions which are practical and reality-based, such as concerns about what skills children will need in the job market tomorrow. Intuitive leaders envision long-range goals which focus on the meaning and love of learning. The thinking prospective encourages visions which concentrate on knowledge and skills. Finally, the leader who displays a feeling style will create visions that emphasize the development of the whole child (Guild, 1987).

Several of the reform reports draw quite heavily from the effective schools research. Perhaps the most commonly referred "finding" of this research is that effective schools are run by strong principals who place instruction ahead of other demands on their time.

According to Guild, the principal is a pivotal character in effective schools, and because the reports charge that current principal training programs are ineffective, there are numerous recommendations for strengthening the preparation of these school leaders. The university-based training of principals is largely irrelevant to the work structure a principal will face on the job. States should set higher standards for recruiting, training, and monitoring the performance of principals. Certification should be based on demonstrated skills and knowledge (Guild, 1987).
Visions have also been categorized by function. In their recent study of vision and principals, Stevens and Marsh (1987) divided visions into four groups. The first of these categories, instruction-related visions, deals with teaching practices, computers, and educational programs. Teacher-related visions are concerned with staffing changes, quality of staff, teacher morale, and pupil-teacher ratio. Student-related visions center on student achievement and motivation. Finally, the "other" visions deal with counselors, facilities, parents, and the community.

Kanter (1983) discussed integrative action rather than segmentalism as the key to innovation. In suggesting ways to seek cooperative solutions, she includes strategies such as: active listening and inclusive decisions; meeting one-on-one to help people feel valued and less intimidated; keeping superiors informed to enlist their support; and letting people know exactly what the vision is by seeking specific rather than broad support.

As late as 1985, Peterson and Finn reported that at a time when the nation is deeply concerned about the performance of its schools, and near-to-obsessed with the credentials and careers of those who teach in them, scant attention has been paid to the preparation and qualifications of those who lead them. Yet, to date, no comprehensive analysis of these calls for changes in school administration has been undertaken.

Although teachers bore the brunt of accountability demands, administrators did not get off scot-free. If students were not achieving enough, teachers must not be teaching well enough, and logically, administrators must not be doing enough either. Problem assumptions about educational leadership relate primarily to the school productivity decline manifested in falling test scores. As
policy makers addressed the problem of declining achievement they first criticized teacher performance then school administration. (Association for Supervision and Curriculum Development, 1986, p. 56)

Murphy (1990) stated the growing acceptance of the need to alter the basic organizational structure of schools puts tremendous pressure for change on school administration. New forms of governance and control, with shifts in both the distribution of authority in the system and the bases for influence, require new models of leadership. New perspectives on what leaders do in turn suggest important changes in the preparation of prospective principals and superintendents, and of other women and men to fill many yet to be defined leadership roles (Murphy, 1990).

There are several pressures specific to school leaders. One is the dissatisfaction with the status quo. University programs have come under severe criticism for the way they conduct business and the results they produce. The most encompassing critique maintains that current preparation programs are dysfunctional. In their quest to gain respectability in the wider university community, programs were molded to fit an arts and sciences rather than a professional model of preparation. The behavioral sciences in turn became the structure and deductive theory the heart of the new model.

The dissatisfaction with the status quo in the profession is accompanied by reform pressure of a more positive sort—a growing body of research showing that school leaders can have an important influence on organizational outcomes, especially on measures of student performance (Murphy, 1990). At the same time that deficiencies in preparation programs are being uncovered, studies are confirming the
connection between school leaders, especially principals, and effective schools:

For years now, studies have been pointing to the pivotal role of the principal in bringing about more effective schools. Our own field studies bear out these findings. In schools where achievement was high and where there was a clear sense of community, we found, invariably, that the principal made the difference (Murphy, 1990, p. 106).

Researchers are discovering that women and men act differently than their counterparts in average schools. Because of this, there is growing pressure to change university preparation programs and to create alternative systems to produce school leaders who are prepared to function more like the administrators of these effective schools—and less like social scientists (Murphy & Hallinger, 1987).

What is all important is that the principal provide the educational leadership that the school community needs. It has been shown in repeated studies that the quality of teaching and learning that goes on in a school is largely determined by the quality of such leadership. (Alder, 1982, p. 74)

The head of the school—the principal—should not be solely or even primarily concerned with running the school efficiently or economically, or merely keeping the peace of the community. Keeping the peace, doing justice, balancing budgets, enforcing laws is the main business of the political community at any level; they are not the main business of the school community. Its main business is teaching and learning. The head of the school—its principal—should, therefore, administer all other affairs in ways that facilitate the main business (Alder, 1982). School administrators risk becoming an anachronism if their preparation programs in schools, colleges, and departments of education do not respond to calls for change in preparing them for the professional leadership functions.
Sizer (1984) felt school leaders should devote more time, energy, and authority to the central mission of schooling. The school leader is the principal teacher. Schools need business management, and there should be executives for this. But the principal is the lead teacher and needs to be among colleagues and students, as that is where the most vital judgments in the life of a school must be made. Schools need instructional leadership, but at present the principal's time is largely consumed by management tasks. Currently, most principals, for example, are trained as managers, but are not prepared to meet school instructional leadership needs. Leadership education should include much more emphasis upon the study of curriculum and instruction, learning, teaching, evaluation, and assessment (Murphy & Hallinger, 1987).

Before the onslaught of the reform proposals of the 1980s, principals were spending between 5% and 20% of their time managing technical core operations (National Commission on Excellence in Educational Administration, 1987). This fact led researchers to conclude that the technical tasks associated with producing student learning are not supervised, managed or coordinated in any serious sense across managerial levels in school districts. If the reform proposals of the 1980s are influential in shaping preparation programs and administrative behavior, there should be a dramatic shift in the attention administrators devote to the core technology of schooling in the years ahead.

According to a study conducted at the University of Texas at Austin, Rutherford (1985) found five essential qualities of effective
principals. The first is a vision that focuses on students and their needs. Effective principals have goals such as finding ways to meet the learning needs of all students, helping teachers adjust to a changing school population, raising test scores in specific content area, or turning out more National Merit Scholars (Rutherford, 1985, p. 32). The effective principal has an enthusiasm that reflects his/her personal belief in and active support of their goals.

Translating the vision to teachers, students and community is another quality of an effective principal. The principals with visions for their schools are almost always identified by their teachers as the individuals most influential in determining what happens in the school. They lead the band and make things happen (Rutherford, 1985). Teachers who have effective principals have a common understanding of school-wide goals and expectations. Teachers function more as a team and less as an individual because the goals are clear and endorsed.

The third quality is a supportive environment. Effective principals allocate funding and materials in ways that maximize teaching effectiveness and thus student achievement. In addition, they selectively and systematically apply such other support mechanisms as advantageous scheduling, careful assignment of teachers, and the dispensing of recognition to achieve these ends. To them, a good school environment is one that enhances students' learning and development (Rutherford, 1985, p. 33).

Monitoring is another quality of an effective principal. The effective principal provides not only specific details about the performance of their teachers but also insights into why the teachers
performed as they did. The principal takes time to discover what is going on in the classrooms and handles less management tasks during the school day. The duties include walking the hallways, ducking in and out of classrooms, attending grade-level and departmental meetings, and holding spontaneous conversations with individual teachers (Rutherford, 1985, p. 35).

The final quality is intervening. The effective principal looks for positive features and then directly and sincerely recognizes and praises the teachers responsible for them. Such actions support the goals and expectations that these principals have established for their schools. Although they tend to focus on the positive aspects of their schools, the effective principals also spot problems and take necessary corrective actions (Rutherford, 1985, p. 36).

In the process of "administering," school leaders often create schools without visions. They become agents for stability rather than visionaries, adapters as opposed to transformer, and maintainers rather than champions (Rutherford, 1985). They influence professional behavior through rules, procedures, and regulations rather than by instilling devotion to values and ideals that create shared responsibility for success.

Futuristics of Curriculum

Failure of curricular planners to anticipate future directions for the educational system leads to an "educational crisis" such as that of Sputnik in the 1950s. According to Beach (1981), curriculum development must change from an "alphabet soup approach" to a rational input
planning approach. Beach stated that information and tools exist to help instill planning for the future into all curriculum design.

Curriculum workers need to use the knowledge and tools available to plan for the future. The emphasis in curriculum planning and development is recommended to be placed on forward-looking programs rather than on those tied to the traditions of the past. Beach (1981) indicated that by developing priorities through futuristic studies, long-range goals can be developed for the curriculum.

Torrence (1980) saw an inseparable bond between creativity and futurism in education. Torrence felt that the future had such variety of directions that alternative thinking must be encouraged. Forecasting and futures research require imagination and creativity. Students will need to think more creatively and to adapt to the demands of the high-change world. Creativity, divergent thinking, abstract reasoning and self-directed learning reflect some of the critical skills seen by futurists and educators alike as necessary for studying and adapting to the future and will be useful to curriculum developers.

A prominent leader in humanistic education, Arthur Combs (1981) stated that preparation for the future has always been a primary objective of education. Until recently that future for which education strove to prepare youth was generally stable and predictable; therefore, the curriculum centered around learning specific skills and well-defined subject matter. The revolution of change today no longer allows us the luxury of knowing precisely what lies ahead in our future. Combs felt that some images of the future can only be dimly perceived while others are quite certain and need to be dealt with immediately. Combs cited
two certainties about the future that have implications for schooling today and tomorrow. The nation is in the midst of an information explosion; and change is accelerating at an ever-increasing pace.

Pulliam (1980) suggested that, in a time of accelerated change, exponential growth in science and technology, global problems, transition from industrial to a post-industrial information age, and mass communication, old standards and values become suspicious. Shane and Tabler (1981) cautioned that values borrowed from our parents and grandparents may be hazardous to our health. They suggest that values developed during energy-rich, individualistic, and nationalistic times may be improper in tomorrow's world—a world which may see the need for major transformations in contemporary lifestyles, particularly with respect to greater conservation, diminished pollution, and greater equity among peoples of the world.

Education should help students understand their ability to create alternative futures. With a future-focused education is the desire to help individuals realize that there is an infinite number of possible futures waiting to be constructed, and that the actions or inactions will help bring about some of those futures. Futurists hope to empower people with this idea as a prerequisite to forging a more humane society. Shane (1977) suggested that

one of the most important goals of education in the next decade might well be to instill in youth a much greater awareness of alternatives and of their consequences. The curriculum for tomorrow's educational programs must help young learners recognize that the future is literally created by our citizens. (p. 112)

Shane (1977) suggested that the availability of future alternatives can be presented to youth when discussing life options—career and
lifestyle choices and personal goal setting. He also indicated that students should gain experience with the idea that people can make a difference in what happens to themselves, to others, and to the future. Futurists point out that it is important for students to realize that there are many alternative solutions to problems. It would make little sense to force a future focus into the curriculum if students could not imagine alternative solutions to problems, and if they were unsure of their abilities to mold the future.

Tyler (1975) stated that character education is a major educational problem for the future of society. He felt that there is a serious absence in our contemporary society of comprehensive educational experiences to aid children and youth in character development. We need research to provide a fuller understanding of how youth are developing or not developing character and we need to devise comprehensive programs in our schools to fill the void.

Combs (1981) saw a framework of values as necessary for the world of choices that lies ahead. Values will need to be the basis of choices in order to maintain stability and to strive toward worthwhile goals. Combs saw affective, humanistic education not as a frill, but as a necessity for tomorrow.

Educational futurists generally criticize traditional education for overemphasizing the cognitive, while failing to recognize the importance of other components of one's personality. Combs (1981) suggested a more balanced perspective--one which strives for the development of the inner lives of persons. He called for education that emphasized student values, self-concepts, student perceptions of challenge and threat, and
feelings of identification. He stressed the importance of developing mental, physical, and emotional health for the total person. Cetron and Gayle (1990) argued for more attention to aspects of personality traditionally developed at home because of dramatic shifts in family structure over the past decade.

Dodd (1984) called for attention to the arts in future education. He stressed the need for a comprehensive arts program in which children learn both to appreciate great artistic accomplishment and to participate in creating music, drama, dance, painting, sculpture, film, and other forms of artistic expression. Dodd recognized that the arts are among the first casualties of the budget crunch, but given the dominant climate of today's schools, children need the most.

Future educators stress the shift from viewing curriculum and learning as acquisition of discipline-based subject matter, essentially a passive view of education, to viewing curriculum as process—the active seeking knowledge of each student (Cetron & Gayle, 1990). Such is the case, because of the emphasis placed on the short life of knowledge of the future. Curriculum and learning become the process of discovering meaning of information heaped up by revolutions in electronics, communications technology, science, and population growth. Cetron and Gayle (1990) advocated that education should focus on the process skills of learning, not the treatment of facts that change quickly. They predicted that students will demand an education that prepares them to deal with new situations, problems, knowledge, and changes in the workplace. Learning will move from a knowing to a searching emphasis.
Inherent within this statement, and in keeping with the admonition to develop the whole person, is the educational futurists' desire to stress the fact that education has a broader purpose than mere preparation of youth for productive work lives. In a time of expanding change and complex problems, education must develop self-directed learners and competent citizens. Futurists desire to develop in students the abilities and attitudes necessary for self-directed learning at work, in their private lives, and as citizens (Alley, 1985). Alley indicated that education should have as one of its goals the development of a sense of social responsibility in individuals. It is the futurists' contention that students must learn to be responsible citizens capable of balancing self-interest with the well-being of society. Education must arm citizens with the desire and ability to solve society's complex problems.

Ornstein (1981) included values as one of four trends he envisioned for curriculum in the future. He said the greatest danger in planning future curriculum lies in subordinating human values to technological advances. Social consciousness needs to be woven as a thread that runs throughout the curricula.

One of the most often mentioned and most critical tenets of the theory of future education is the importance of lifelong learning. Future life will be characterized by great change and complexity. Knowledge, skills, and values will become obsolete very rapidly. Workers will find it necessary to retrain for new jobs four or five times over the course of their work years as job skills,
classifications, and entire industries phase through shorter business cycles (Cetron & Gayle, 1990).

In private and public life, people will be required to consider complex problems and multiple options for which intelligent choices will be required. In such a world, education must continue throughout one’s life. Education can no longer be reserved for the early years of life. Alley (1985) resisted attempts to think in terms of permanent education. He argued that the future school will stress a continuum of growth as the process that defies age and time, that pursues its course from the infant’s rattle to the study of the Greek at age 80.

Combs (1982, p. 146) suggested that, in the future, we must be involved in building a progressively broader and more diversified learning network—combining formal, nonformal, and informal modes of education—to serve the evolving lifelong learning needs of all members of the population. If people are expected to learn throughout their lives, it would be beneficial for learning to exist without the assistance of teachers, instructors, or trainers. The learner may develop, at an early age, the ability and inclination to learn on their own. The need for life-long learning is tied closely to the knowledge explosion in that the continued increase in information would make knowledge gained from schooling as it exists today obsolete in a very short time (Schlechty, 1989).

Pitman (1980), in his writings on education for the future, felt that life-long learning or continuous education is the most appropriate style of learning in a world of limited resources in which the fulfillment of human potential becomes the essential issue. In our
society today, which must seek to make the best use of its people, a style of interrupted education would best address the need of both individuals and society.

Combs (1981) saw the future of change as demanding life-long education. Learning would be undertaken when it was most needed or appropriate and when the individual was, therefore, the most motivated to accomplish the task. Our present coercive structure of schooling causes problems both for the system and the learner when the learner is not ready or able to learn.

Early childhood education is an important beginning phase of the educational continuum. Early childhood education could reduce or prevent learning problems later in children's lives. Changes in the family structure, working mothers, single-parent families have created the potential for more early childhood problems. Nursery school or day-care centers, that are recommended for 2- to 3-year-old children, run under the auspices of the school systems with teacher specialists from the area of early childhood education. Knowledgeable educators are aware of how children develop and the importance of the early years in the overall development of the child.

For schools to accommodate students in the form of a life-long continuum, the structure of all forms of schooling as we know it would have to change drastically. Kelly (1982) envisioned that happening by means of a comprehensive system of schooling that would unite industry, education, labor and human services into a variety of formal and informal efforts. Kelly agreed with futurists as to the need for continuous opportunities for learning and then concentrated his efforts
into achieving an efficient, affective method of producing those opportunities.

Ornstein (1981) agreed with the trend toward life-long learning, but questioned the ability of the schools as we know them to supply such learning. He felt that business and industry and/or neighborhood or community resource centers would undertake a large part of the continuous learning. Shane and Tabler (1981) suggested that the quality of teaching and learning could be improved by extending learning into the real world. The idea of a school/business partnership can do much to bridge the transition between schooling and the work world. In many communities, business and industry have become very involved in schooling as they realize the importance of schooling to our overall society. This combination of schooling, interlaced with real-world experiences, can help prepare students for a life-long continuum of learning.

The educational enterprise of the future will be increasingly characterized by a multiplicity of organizations: public, private, commercial, corporate, and industrial. Due to competition for resources, increased cooperation and coordination of activities will be necessary. An understanding of the critical nature of education in the scheme of our society will prompt the creation of partnerships for the mutual interest of organizations (Cetron et al., 1985).

The Task Force Report on Education for Economic Growth (Hunt, 1983) recommended that schools should create broadened and more effective partnerships for improving education. The report suggested that business leaders, labor leaders and members of the profession should
become more active in education with partnerships being developed to the mutual interest of all.

A portion of the total schooling experience should be sponsored by the school but take place in the community as "service" learning. Service learning is an important type of learning. Service learning generally, although not necessarily, takes place beyond the school walls in the local community, or in the larger world. Opportunities for service exist in the school as well. Etzioni (1982) viewed service learning as a way to involve students in active learning, to allow interaction with community adults and other youth, to introduce students to agencies and institutions found within the local communities, and to help youth gain a service ethic that will check tendencies toward unbridled self-interest. Service learning is real, useful learning. Toffler (1981) advocated more active involvement with the community. He suggested that learning should focus on real community problems, thus enabling students to provide services to the community. Boyer (1984) recognized the importance of real experience toward the development of responsible citizens, and he recommended social agency internships for youth.

Shane and Tabler (1981) felt that active, dynamic experiences sponsored by the school, but taking place outside of the confines of school buildings, are more important today than ever before. Making those experiences "service" learning, that is, involving socially useful work, adds the extra ingredient of significant participation to those experiences. Such training cannot only teach youth to cope wisely and successfully with new challenges, but also teach youth to willingly
participate in the task of shaping the future. Shane and Tabler (1981) felt there was a dichotomy between school and life that stems from the inability of the schools to adapt to the reality of the world outside their walls. Obstacles such as the rigidity of schooling and the implicit restraints it places on values create a gap between schools and life. Schooling must integrate theoretical learning with real world experiences to develop caring, involved citizens who feel a responsibility and participate in shaping their world. Service learning can help to develop that participatory orientation.

The report of the National Home Study Council (1982) listed predictions for "distant education," or education outside the classroom, by the year 2000. Its findings clearly showed a vast audience age 18 to 70 desirous of continued learning. Although this organization saw itself, rather than conventional schooling, as filling the void, its data is useful for this study. The report saw mid-life career changes accepted as a social norm; a greater proportion of older people in society who are candidates for learning; continued learning will be a part of a more complex living-learning-working-recreating social pattern.

A large portion of formal instruction will take place in the home setting through a computerized home-to-school communications network. Home-school hookups will be seen as an extension of today's communications system. The school building facilities are seen as the major "base" for schooling but considerable time may be spent away from that base. A portion of time will be in real-world learning experiences
and service learning while another block of time will be spent in instruction from the home.

According to Miller (1981) the computer will soon become the major source of instruction and communication available to teachers and learners. Development of computerized communication network will allow home-to-school instruction for students of all ages and will allow continued schooling of adults without the requirement of physical attendance at a particular facility. Miller (1981) also saw decentralization of schools with home-based learning via a computerized communication hook-up between home and school. With the technological possibilities that exist, the convenience of such schooling would make it highly desirable for all ages of students. Miller (1981) felt that schooling would go beyond the normal school day as we know it today with projects and long-term lessons that go beyond the confines of the formal instruction time to be accomplished in the home setting. Toffler (1981) saw a decentralized school structure with the household redesigned as an "electronic cottage" for work and education, the 21st century home now serving as the new center of society.

Miller (1981) saw learning in the near future as often taking place outside of the classroom and outside of the school. Miller felt that we are just beginning to recognize the educational role of television and electronic communications. The home is on its way to becoming a major site of non-school learning through the availability of relatively inexpensive equipment now on the market. Modern technology makes at-home learning a practical reality (Miller, 1981, p. 19).
Since students will have information instantly available to them on virtually any topic, their ability to access and isolate needed information on demand will be important. Developing research skills such as locating, organizing, managing, retrieving, classifying, and storing will be necessary as a result. Shane (1977) called these skills "neoaademic skills" including a knowledge of sources of information and the ability to use computers.

The Changing Family

Educational futurists generally comment on two familiar trends that currently impact education, and which show little inclination toward reversal. First, much of the literature detailed the fact that a growing number of females with children are entering the workforce. Second, one frequently encounters discussion of the fact that more single-parent households exist today than in previous years. Futurists believe that these two changes in family makeup suggest implications for the conduct of education in our society.

Nearly half a century ago, educational futurists recognized that more women, and more women with children, were entering the workplace. Ogburn (1930) wrote that

one in eight married women in the Census of 1930 reported themselves as gainfully occupied. At the beginning of the century this proportion was one in twenty-two. Quite possibly, the future ratio may be one in four or five. (p. 96)

Naisbitt (1982, p. 51) said that nearly 50 million American women are in the work force—around 53% of women over 16 who are capable of working, and 45% of total employment. By 1995, 6 of every 10 American workers will be female. Catron, Gayle, and Soriano (1985) cited these
same figures and listed the Department of Commerce as their source. These authors also believed (p. 14) that in the future women, particularly married women, will enter the work force at a faster rate than any other group within the population. Shane (1979, p. 63) wrote that in 1960, only 20% of the mothers of children of 17 or younger were employed. In 1978, more than 50% of mothers were working and a third of this group had children less than 6 years of age. Today, 65% of mothers with school-age children now work outside the home (Cetron & Gayle, 1990). The fastest growing segment of working mothers consists of those with children under one year of age, according to Cetron and Gayle.

Most futurists believe that the growth in the number of families in which both parents work will continue to grow. This reality is caused by several factors, but most important is the desire to maintain or improve the family’s standard of living. The average family seems to have only maintained its standard of living by putting mother out into the labor force.

A second familiar trend is an increase in single-parent families. While many factors contribute to this increase, divorce is perhaps the most visible, if not the most important, driving force behind this shift (Cetron & Gayle, 1990). Using U.S. Census Bureau data, Cetron and Gayle (1990) documented a near doubling in the percentage of white families maintained by women between 1970 and 1984, up from 9% to 15%. Minority families are even more likely to be headed by females (23% of Hispanic, 40% of Black families). Cetron and Gayle (1981) reported that “so
many divorces, breakups, and separations have occurred in recent years—
mainly in nuclear families—that today a staggering one-in-seven nuclear
families exist in urban areas" (p. 16).

Bronfenbrenner’s (1978) research on the American family culminated
with implications for public policy. Although the study dealt with the
structure of the American family and particularly with the behavior and
the development of the nation’s children, the position of women in our
society was an integral part of the cause and result of the family
situation in America. Bronfenbrenner stated emphatically that the place
and status of women in American society is the most important single
factor affecting the welfare of the nation’s children. The author saw
the breakdown of the family structure and the resulting alienation of
children as a problem of society and a problem that needs to be dealt
with by the schools. Bronfenbrenner felt that the route to the
rehabilitation of youth in American society lay in the enhancement of
the status and place of women in all walks of life and that schooling
must seek to educate the youth of today to the role of women in our
society.

Demographic Forecast

The demographic trends most often cited are the graying of the
population and the growth in minority populations. Educational
futurists suggest that both offer implications for future education.
Concerning the graying of the population, demographers indicate that in
general the median age of the population of the United States is
advancing. Cetron and Gayle (1990) projected that the median age will
rise to 36.3 by the year 2000, up from 30.6 in 1982. Moreover, they
wrote that the proportion of the population over 65 will rise from the current 12% to an estimated 17% during the same period.

Minority populations will also continue to grow, relative to the overall population, and the Hispanic population will grow faster than any other group. Naisbitt (1982) documented the growth of Hispanic populations in the United States, as did Shane (1977), who wrote that "Hispanics seem fated to become our largest ethnic group during the 80s and to outnumber Blacks appreciably during the 1990s" (p.63). Further refinements of these data show that minority population growth will be found primarily in the large urban areas and in the southern and western sections of the nation. Futurists indicate that these trends will force changes in education, and policy makers and planners should consider the implications of such demographic changes.

By the year 2000, approximately one-third of our population will be "minority" (Cetron & Gayle, 1990). Already more than half the students in many of the nation's largest public schools are non-white, and this percentage is certain to increase. By the year 2000, minorities will make up the majority of the school-age population in 53 major American cities.

Cetron and Gayle (1990) call for equal access to education by minorities. The rationale for this statement is generated by the observation that poor children are effectively closed out from many educational experiences because of the poverty of their home environments. This is especially true of computer education. Cetron et al., (1985, p. 31) cited studies conducted in the eastern part of this country which document that 90% of upper-income homes have computers,
compared to 20% of the lowest income homes which consist primarily of home video games rather than computers. These authors warned that if trends continue, by the year 2000, this will be a "have and have not" learning society, with a growing gulf between the two groups (p. 31).

Schools of the Future and Economic Self-Sufficiency

Since one important function of schooling is to prepare students to be economically self-sufficient, much of the futures literature discusses the nature of work in the next decades. Futurists such as Meierhenry (1981) believed that the United States economy, along with the economies of much of the rest of the developed world, is experiencing a shift from a long-established industrial, manufacturing base to that of a service, information, and high-technology base. Meierhenry (p. 101) suggested that the world is entering an era that will be referred to as the "information" or "communication age." He also noted the growth of professional, semi-professional, and technical occupations and the decline of industrial and manufacturing jobs.

Although much work will demand high-level knowledge of the workings of technological devices, and although many people will use technology in the future, a relatively small percentage of the total workforce is estimated to be involved in work that demands a great deal of highly sophisticated technical knowledge. Cetron and Gayle (1990) believed that most future jobs will not be characterized as high-tech, and that those jobs which require the use of technology will only require employees to use the equipment, not to understand how or why it works.
Perhaps because of the influence that technology exerts on the economy, and because future society will likely be characterized by significant change, futurists predict that various sectors of the economy will be prone to violent upheavals during which workers are displaced. Some believe that whole industries will be born, grow to maturity, and die in the matter of a decade, as technological advances speed swiftly ahead. In such an environment, it is likely that workers will find it necessary to shift from one job to another, as many as four or five times in the course of their work lives (Gay, 1981).

Naisbitt (1982) believed that education must change with the times. In the face of accelerating change in society, Toffler (1981) urged that "older images based on past reality must be replaced, for, unless we update them, our actions become divorced from reality and we become progressively less competent" (p. 39). Educators need to study contemporary social indicators that anticipate the future and begin to design learning experiences that will enable young people to live effectively in the technological, economic, and social futures that are pressing upon us (Shane & Tabler, 1981, p. 76). They urge a rethinking of current education programs because of rapid societal change, suggest that failure to do so will bring about disaster.

Needed School Modifications

Although society has changed, the school has often failed to keep pace (Cetron & Gayle, 1990). The task of educators was different in the industrial age. Toffler (1981) urged reexamination of old beliefs and ideas about education. He felt teachers still adhere to a conception of education that dates back to the 17th century, a conception called "the
transmission theory of education." Educators still follow old educational paradigms which will succeed in training many of today's students to live in a society which no longer exists. Education focuses on the skills and values of the past, not the present and future. In the face of great societal change, schools are criticized for remaining static and unchanging.

Shane and Tabler (1981) stated that we need significant modifications in the U.S. educational system. New strategies will require radical changes in conventional educational thinking, methods, organizational structures and practices. Toffler (1981) felt that society is clearly at a critical point in the history of thought where old paradigms are challenged and new ones may emerge. Cetron and Gayle (1990) called for a completely new design, a new structure to replace one that is worn out. They urged for the adoption of both a new societal paradigm and a new and compatible educational paradigm. The problems, conflicts, and discontinuities of renewing the existing education system to meet emerging needs suggest to many educators that a new education paradigm is needed.

In addition, educational futurists recognize the poor track record of traditional school in developing literate graduates. They charge that in the future society will require all of its citizens to be able to communicate and think about important, complex issues. They believe that through redesigned education systems which provide increased financial support for those groups most in need, every student should be able to master competencies required for future living (Gay, 1981). Gay also charged that the central function of schools is to develop
literacy, but she proposed an expanded notion of literacy which included critical thinking among the top priorities. She also suggested that, in a future which requires creative uses of technology, all students must develop thinking skills and reasoning skills. The future work will be more intellectual, this requiring workers who are able to exhibit proficiency in thinking.

There was much discussion in the educational literature concerning the need for more advanced cognitive skills—higher order skills as they are often called. Generally, authors suggested that, because of the nature of future society (i.e., complex, technological, overloaded with information, interdependent, global, change-driven), students will need to be able to analyze, classify, evaluate, and synthesize much more than students in the past. Various authors suggested that future people must be able to think critically, uncover bias and propaganda, reason, question, inquire, utilize the scientific process, remain intellectually flexible, think about complex systems, think holistically, think abstractly, be creative, and view and read critically (Shane & Tabler, 1981; Cetron et al., 1985).

Shane and Tabler (1981) believed that helping young people develop the ability to think is the central purpose of schools. They suggested that schools should encourage youth to think analytically about social evidence in order to distinguish fact from fiction—a task that will be much more difficult if the expected information glut predicted by many futurists actually materializes. Several theorists think that because life is now so complex, these highly complex intellectual skills will be required if we are to make sense of all the muddle. Because knowledge
in the future will not remain firm for very long, future citizens must be able to sort through a bountiful harvest of information in order to glean facts that can be used as guides to successful living and for solutions to complex problems.

Although other authors doubted that the majority of jobs will require high-tech knowledge and skills, there was general agreement that some portion of future jobs will demand more complex behaviors and thinking. The economic issues notwithstanding, Combs (1981) pointed to requirements for citizens who are able to understand complex community, national, and global problems. He also discussed the requirement that education examine real social issues. Boyer (1983) stressed the future demands effective problem-solvers and open-system thinking. He felt that an ideal curriculum should provide opportunities to develop the abilities of inquiry, abstract thinking and critical analysis.

Although much emphasis was placed in the literature on the need to strengthen the cognitive development of all students, significant importance was also associated with attention to the affective dimension of personality. Futurists fault contemporary education for "shortchanging" these competencies in favor of the more commonly favored cognitively-oriented academic skills. Shane and Tabler (1981) urged educators to stress development of the affective components of personality as much as the negative. They suggested expanding from the current cognitive orientation to include the connotative, sensory, and affective. Futurists believe that in the rush to improve standardized achievement test scores, little thought is given to balancing cognitive, affective, and other personal dimensions.
Future education, according to the literature, must direct a healthy portion of its attention toward the aesthetic development of the complete person. Aesthetic education generally refers to art, music, dance, and other such studies. Authors faulted current and past education for an over-attention to the cognitive, while demonstrating little concern for what has been viewed as the soft, non-productive aspects of personality (Pulliam, 1980).

Shane and Tabler (1981) stressed the need for active, dynamic experiences. They suggested that in the future, "experimental education--field trips, demonstrations, investigative projects, and hands-on labs" will grow in importance. In this approach, teachers are no longer the fountain of knowledge and students the receptors, but rather, students accept an active senior partnership role in the learning enterprise. Teachers assist as mentors and guides in helping students become active learners.

Education must stress active learning. This can be accomplished in two ways. First, students must be engaged in learning endeavors in which they engage in the process of learning. Second, students must be more active in determining the nature of their own educational programs. They must be given more autonomy and power of choice (Gay, 1981).

Gay (1981) advocated that future education should allow students more freedom to decide what they wish to study. Gay stated that we should move away from the belief that students should sit docile and quietly at desks--a most unnatural position, especially for the young--to a recognition that the more active persons are, the more they tend to learn. Cornish (1986) felt that in new-paradigm education
one major shift would be in the relationship of the teacher and the learner. The old paradigm made the teacher responsible for the student's learning with the student obliged to learn. The new paradigm of a learning society shifts the responsibility for learning to the learner. (p. 129)

For students to be able to solve tomorrow's complex problems, they must decide between multiple, often equally attractive, solutions. Decision-making in tomorrow's world will require various high-level abilities. Cetron et al., (1985, p. 93) believed that future education will place greater emphasis on lifelong learning skills, such as problem-solving and decision-making. They declared that decision-making abilities were of key importance for future citizens and that education should assist youth in developing this competency.

Another important skill is the ability to process information. This skill takes on added meaning with information accumulating at record rates. Sifting through more and more information in order to make well-informed choices becomes a time-consuming and difficult art. In the future, much information processing will be accomplished with the assistance of technology. Students will need to learn to utilize valuable electronic, high-tech hardware and software to avoid drowning in a sea of useless data.

Gay (1981) believed general education is more vital for the student than specialized training. Because future life will be characterized by rapid change, futurists suggest that a generalist perspective is more desirable than one which is highly specialized. Generalists will have an adequate developmental learning base on which they can continue to build throughout their lives. General processes and general knowledge are thought not to pass out of vogue quite so quickly as specialized
training. A general education allows flexibility in the face of great change; one can adapt because general education enhances versatility. When considering solutions to complex problems, generalists can anticipate the broad ramifications that specialists might overlook. A general or liberal education allows a broad vision, the ability to see many dimensions of problems and of life.

Toffler (1981) believed that in the future we will need to think like generalists, not specialists. Large-scale thinking, a synthesis approach that can put the pieces back together again, will be needed. Naisbitt (1982) documented the fact that the future demands a shift from a specialist to generalist perspective.

Because future society is likely to be characterized by increased interdependence among growing populations of more diverse people, and because future problems must be solved cooperatively, the futurists stress the fact that a new-paradigm education must assist students in developing social skills that will assist social interaction. Nash (1981) wrote that both intrapersonal (ability to work effectively with others) and interpersonal competence (ability to participate socially) are required components of future education if a goal is to harmonize education's offerings with human demands. Much work demands heightened human interaction skills, and the future will be an environment that demands effective communication. Nash further predicted the need for a greater focus on group interaction skills such as empathy, cooperation, and other prosocial behaviors. In society and in school, human beings will need to relate well to others regardless of age, capacity, achievement, race, creed, or religion.
A globally interdependent world is likely in the coming years, and greater diversity may exist in our nation and communities. Naisbitt (1982), Toffler (1981), and Hodgkinson (1991) have documented our nation's growing ethnic and cultural diversification. Educational futurists deduce the need for students to be able to expect, understand, and cope with change and diversity in the coming years. The authors indicated the growing likelihood of rapidly increasing interaction in a more heterogeneous society. Gay (1981) noted that greater and expanded opportunities for communication and travel have increased contact with people from other countries and other cultures. Such contact will increase the amount of diversity in our lives.

Shane (1977) inferred from an image of a complex, change-driven world the need to accept change as inevitable, and be able to use it to advantage. In such an environment, characterized by change and diversity, people need to be open-minded, able to adapt, and able to cope. Life will require greater levels of toleration. Education will need to help students become flexible, able to deal with dichotomies.

Proposed Educational Approaches

Cetron et al., (1985) believed that the future will bring assignment of students to learning tasks according to developmental level, a lengthening of the school year, expansion of education beyond the school's walls, fewer time constraints, fewer comparisons between students, and fewer limits to possible learning paths. Gay (1981) suggested that education should be flexible and use imaginative grouping according to interest, ability, and task combinations; relax attention to rigid time requirements; expand vision of education that include more
real-world experiences; and individualize educational plans (IEPs) for all students. Combs (1981) and Ornstein (1981) proposed a step-in, step-out system that would allow individual learners much more flexibility according to the demands of different periods of life.

In the future schools, learning is suggested as centered around ideas and problems, and will not be fragmented into discrete subject areas controlled by a 7-period, 5-day week, and 9-month learning year. The educational futurists call for a learning curriculum that is activity- and idea-based. Cetron and Gayle (1990) suggested that knowledge is not segmented but interrelated. They also noted that curriculum in its present departmentalized setting is as outmoded as medieval medicine.

The educational futurists' theory paints a vastly different picture of education than that which exists today. Toffler (1981) noted that Third-Wave society will be flexible, not standardized, it will be built on segmentation and diversity. Naisbitt (1982) saw trends toward decentralization occurring in society. If these liberalizing recommendations are to find fertile ground, the current educational structure must be much more flexible. Goodlad (1986) favored flexible, imaginative grouping patterns and flexible school scheduling. The idea of semester or year-long schedules should cease to exist; rather, school and classroom schedules should be changed frequently, and without particular form of regularity.

Frequently mentioned in the literature was the need to decentralize education, from planning and budgeting, to personnel matters, to concerns about daily learning activities. McClure (1981) believed that,
in the future, those closest to the learner will develop learning objectives. He stated that today, much of this activity is mandated at the state and national levels.

Toffler (1981) advised that decision-making be shifted in two ways—up toward the transnational level and down to the local levels. He discussed the advisability of sharing educational planning and decision-making among students, teachers, parents, principals, and central office staff members.

Some authors suggested that schools should be modeled more after the family than big business, with its over-attention to economies of scale. Ravitch (1983) wrote that

in order to build a sense of community and mutual concern, the school of the future will be small. . . . Unlike some present schools, which are as vast and impersonal as factories, the school of the future should be modeled on a family; here, caring, knowledgeable adults would guide and instruct young people—and each person would be special. (p. 320)

McClure (1981) criticized the belief that schools have to be modeled after industry. Large size in education is viewed as a problem, not an economic cost benefit. Many futurists disagree with James Conant that schools are the right size. McClure stated that we need many more small, informal, experimental schools. He predicted that future schools will be smaller in order to combat alienation and violence. Other authors suggested that teachers will be coupled with very small groups of children.

In keeping with the concept of lifelong learning, many educators stress the importance of early education for children. Boyer (1983) reminded that the early years are the most important. He viewed early education as preventive problem-solving which will provide students,
especially those from poor homes, a proper base from which to build. Early childhood education will do much to make later compensatory education unnecessary. Cetron and Gayle (1990) stated that problem-preventing education began in early childhood is distinctly superior to compensatory education provided at a later time. However, futurists suggest that early childhood education should stress child development, limiting undue stress on cognitive and academic learnings.

Opportunities that foster intellectual, emotional, aesthetic, social, and physical growth are appropriate goals for early childhood education. Also, futurists note that because of the changing family structure (i.e., more families in which either both parents work, or the single parent works) institutions are needed to care for and nurture the very young.

Another problem concerning learning resources is that of access to computer and technology education in schools and in homes. Some authors noted the growing gap between the children of wealthy and poor parents. Cornish (1986, p. 17) wrote that the children of prominent parents may receive computers and other educational equipment. These children may develop much faster than children in poorer homes. The result may be a widening gap between the educational have-s and have-nots.

One Self-Described School of the Next Century

The Winston-Salem/Forsyth, North Carolina County School System introduced a new innovative approach to teaching students. The Integrated Learning Center opened with 120 students of equal numbers of 5-, 6-, 7-, and 8-year-olds. Students were received by application and are allowed to remain at the center until age 11. In the second year,
the school plans to add 60 students equally divided among 6-, 7-, 8-, and 9-year-old children. In the third year, the center will add 45 3-year-old and 45 4-year-old students.

Operating on an extended day and extended year basis, the Center is open 11 hours each day (7:00 a.m. - 6:00 p.m.) and 11 months each year (August through June). Students are divided into groups of 15 with one teacher assigned to each group for 2 years at the pre-school level and for 3 years for 5-11-year-old students.

Each team of teachers, with input from parents, sets specific learning goals for each child in their charge. Rather than move from grade to grade, students move to new learning goals when they achieve 90% mastery, as determined by tests, observations, performance and work samples.

The center is designed to stimulate learning in all developmental areas—the physical, social, emotional, and cognitive. The core of the program is first-hand and hands-on experiences, with practical application of information and concepts. It responds to individual differences in ability, interest, development and learning styles by offering choices of many learning activities that are relevant to life experiences of students, permitting them to interact and actively explore with each other and adults.

At the center, the subject content is presented in an integrated, life-compatible manner. The goal for all students is to internalize concepts and information—to know things well. Instruction occurs almost exclusively through teachers and students working together in an open-ended fashion to explore real life situations and problems.
The centerpiece of instruction is the higher order thinking, in contrast to traditional knowledge-based models. Teachers design learning opportunities that move students from knowledge through comprehension, application, analysis, synthesis and evaluation to decision-making. Cooperation, team planning and decision-making are introduced into all facets of the school program, thereby providing students with training for life.

The Integrated Learning Center has a strong business partnership. R. J. Reynolds Tobacco Company sold the building to Forsyth County. The building has six floors and is in excellent condition. R. J. Reynolds supports the center financially and by giving students opportunities to learn about the world of work and the specifics of jobs and careers. The employees are encouraged to work with the students, with each 15 students having a "coach" from the company. Coaches make weekly visits to encourage students, talk with them about their progress, and relate their progress appropriately to the expectations of the business world.

This innovative school has made the major leap into society. The center is proving that "old dogs can learn new tricks." With there being a waiting list for students to be accepted to this new school, Winston-Salem is busy planning for another such school to be developed on the other side of the city.

**America 2000—An Education Strategy**

On April 18, 1991, President Bush announced to the nation AMERICA 2000. With governors, educators, congressmen and senators present, President Bush stated the urgency of such a strategy.
Nothing better defines what we are and what we will become than the education of our children. ... For the sake of the future, of our children and of the nation's, we must transform America's schools. The days of the status quo are over. ... Now I ask all Americans to be points of light in the crusade that counts the most; the crusade to prepare our children and ourselves for the exciting future that looms ahead. At any moment in every mind, the miracle of learning beckons us all. (p. 4)

AMERICA 2000 is a complex federal education strategy, announced by President George Bush, in April of 1991. The proposals that constitute the strategy seek to advance national goals for education, and are based on the assumptions that the U.S. requires "a new standard for an educated citizenry" and "must become a nation that values education and learning" (U.S. Department of Education, 1991). The proposals in AMERICA 2000 support the Bush administration's novel and important premise that the national government has a major responsibility to improve the quality of elementary and secondary education.

The rationale behind AMERICA 2000 is based on several factors. Eight years after the National Commission on Excellence in Education declared us a "Nation at Risk," America has done little to change education. Total spending for elementary and secondary schools has more than doubled since 1980, while the number of students has remained about the same. In real terms, education spending has increased approximately 33% per public school student. As a nation, we now invest more in education than in defense (U.S. Department of Education, 1991).

Serious efforts at education improvement are under way by most international competitors and trading partners. Employers cannot hire enough qualified workers. Immense sums are spent on remedial training, much of it at the college level. Companies export skilled work or abandon projects that require it. Shortcomings are not limited to what
today’s students are learning in school. Approximately 85% of America’s work force for the year 2000 is already in the work force today. These people are the products of the same education system. Nearly 25 million adults are functionally illiterate. As many as 25 million adult workers need to update their skills or knowledge. While more than 4 million adults are taking basic education courses outside the schools, there is no systematic means of matching training to needs; no uniform standards measure the skills needed and the skills learned (U.S. Department of Education, 1991).

America 2000 has identified six national education goals (U.S. Department of Education, 1991). By the year 2000:

1. All children in America will start school ready to learn.
2. The high school graduation rate will increase to at least 90%.
3. American students will leave grades 4, 8, and 12 having demonstrated competency in challenging subject matter including English, mathematics, science, history, and geography; and every school in America will ensure that all students learn to use their minds well, so they may be prepared for responsible citizenship, further learning, and productive employment in our modern economy.
4. U.S. students will be first in the world in science and mathematics achievement.
5. Every adult American will be literate and will possess the knowledge and skills necessary to compete in a global economy and exercise the rights and responsibilities of citizenship.
6. Every school in America will be free of drugs and violence and will offer a disciplined environment conductive to learning.
The AMERICA 2000 strategy has four parts or tracks that will be pursued simultaneously. The four are: better and more accountable schools; a new generation of American schools; a nation of students continuing to learn throughout their lives; and communities where learning can happen.

**Track I.** Track I will serve all six goals, but especially goals 2, 3, and 4. The strategy for this track is the use of a 15-point accountability package. Parents, teachers, schools and communities will be encouraged to measure results, compare results and insist on change when the results are not good. Standards will be developed in conjunction with the National Education Goals Panel. These standards, for each of the five core subjects, will represent what young Americans need to know and be able to do if they are to live and work successfully in today's world. These standards will incorporate both knowledge and skills to ensure that, when they leave school, young Americans are prepared for further study and the work force (U.S. Department of Education, 1991).

If standards and tests tell parents and voters how their schools are doing, choice gives them the leverage to act. Such choices should include all schools that serve the public and are accountable to public authority, regardless of who runs them. New incentives will be provided to states and localities to adopt comprehensive choice policies, and the largest federal school aid program (Chapter 1) will be revised to ensure that federal dollars follow the child, to whatever extent state and local policies permit.
Because real education improvement happens school by school, the teachers, principals and parents in each school must be given the authority—and the responsibility—to make important decisions about how the school will operate. States will be encouraged to allow the leadership of individual schools to make decisions about how resources are used, and Congress will be asked to enact education flexibility legislation to remove federal restraints that impede the ability of states to spend education resources most effectively to raise achievement levels. Individual schools that make notable progress toward the national goals will be rewarded. Academies will be established for improvement in school leaders and teachers. These academies will be funded with federal money and will be developed to train school personnel to help students attain the world class standards and pass the American Achievement Tests.

Congress will be asked to make grants available to states and districts to develop alternative certification systems for teachers and principals. New college graduates and others seeking a career in teaching or school leadership are often frustrated by certification requirements unrelated to subject area knowledge or leadership ability. This initiative will help states and districts develop means by which individuals with an interest in teaching and school leadership can overcome these barriers.

Track II. This track will highlight tomorrow's students and a new generation of American schools. Track II will service all six national goals with each community, one by one, inventing and establishing schools that enable their students to achieve a quantum leap in
learning. A number of excellent projects and inspired initiatives are pointing that way. These include Washington State's Schools for the 21st century, Theodore Sizer's Coalition of Essential Schools, James Comer's School Development Program, Henry Levin's Accelerated Schools, RJR Nabisco's Next Century Schools, and the Saturn School of Tomorrow in St. Paul.

This track enlists communities, aided by the best research and development the nation is capable of, to devise their own plans to break the mold and create their own one-of-a-kind high performance schools. The goal is to bring at least 535 such schools into existence by 1996. America's business leaders will establish and secure the private resources for the New American Schools Development Corporation, a new nonprofit organization that will award contracts in 1992 to a number of design teams. These design teams may consist of corporations, universities, think tanks, school innovators, management consultants and others. The mission of this team is to help communities create schools that will reach the national education goals for all students. Once design is complete and the schools are launched, the operating costs of the new schools will be about the same as those of conventional schools.

American business and other donors will make approximately $200 million in contributions to begin these 535 new schools. The new school does not necessarily mean new bricks and mortar, nor does it have to rely on technology; the quality of learning is what matters. Time, staffing, and other resources in these new schools may be used in ways yet to be imagined. Some may radically alter the customary modes of...
teaching and learning and redesign the human relationships and organizational structures of the school.

**Track III.** This track will serve all six goals, but especially the goal identifying adult literacy, citizenship, and ability to compete in the workplace. For our children to understand the importance of their own education, we must demonstrate that learning is important for adults. Lifelong learning is promoted, using the myriad formal and informal means available to gain further knowledge and skills.

Business and labor will be asked to adopt a strategy to establish job-related skill standards, built around core proficiencies, and to develop "skill certificates" to accompany these standards. Skill clinics will be developed in every large community and work-site, including many federal agencies. People will be able to readily find out how their present skills compare with those they would like to have and where they can acquire the skills and knowledge they need.

The nation's efforts will be strengthened by developing performance standards for all federally aided adult education programs and making programs accountable for meeting them. The National Adult Literacy Survey will be expanded so that we have better information on a regular basis about the condition of literacy among adults. A major conference will be called to develop a nationwide effort to improve the quality and accessibility of the many education and training programs, services and institutions that serve adults.

**Track IV.** Children starting school ready to learn in drug and violence free schools will be the major foci of Track IV. Even if
Tracks I, II, and III are successfully completed, achieving the goals requires a renaissance of recognized American values—proven values such as strength of family, parental responsibility, neighborly commitment, the community-wide caring of churches, civic organizations, business, labor and the media. As tomorrow’s schools are reshaped, the timeless values that are necessary for achievement should be rediscovered.

The work of creating and sustaining healthy communities—communities where education really happens—can only be performed by those who live in them: by parents, families, neighbors and other caring adults; by churches, neighborhood associations, community organizations, voluntary groups and the other "little platoons" that have long characterized well-functioning American communities. Such groups are reported as essential to building relationships that nurture children and provide them with people and places to which they can turn for help and guidance (U.S. Department of Education, 1991).

President Bush has challenged every city, town and neighborhood in the nation to become an AMERICA 2000 Community (U.S. Department of Education, 1991). He has asked each to undertake four tasks: adopt the six national education goals; develop a community-wide strategy to achieve them; design a report card to measure results; and plan for and support a new American school. National attention and rewards will be given to those communities who focus special emphasis on at-risk children.

The four-part AMERICA 2000 strategy depends upon the strong and long-term commitment of all Americans. Congress will need to pass the AMERICA 2000 Excellence in Education Act, containing most of the federal
initiatives in support of this strategy. The Governors will designate
the AMERICA 2000 communities and, along with the Secretary of Education,
will decide where the first 535+ New American Schools are located. The
business community will provide people and resources to help catalyze
needed change in local schools, communities and state policies.

Summary

Information has been provided in this literature search/review to
document the attention afforded changing trends and expectations for
schools in ensuing decades and to illustrate types of suggested
responses that can be anticipated for local implementation. Futurists,
as a group, were cited often to provide the flavor of their predictions
and data sources being used as bases for somewhat scientific
speculation. Other authors, whose works have often proved influential,
were incorporated as a reality test for the anticipated transition. As
education continues to change at an increasing pace and complexity,
futurists continue to believe that change confuses issues and limits
their ability to vision the future.

The literature review substantiates that educational change is not
an extrapolation of the past, but a mere extension of today into the
future. The impact of such change may provide the opportunity for
individuals to question the current systems and to empower them to
design new ones. Future studies examined the difference in future
research and conventional thought.

Planned change was reviewed in the literature as a systematic means
of replacing programs and practices with better ones. One process of
identifying need, clarity, complexity and product quality allowed an organization to change based on natural events or deliberate reform.

Another process of analysis, planning and implementation and evaluation, presented evidence that planned change best occurred with teams rather than with individuals. The success of change resulted from not reaching the goal, but the journey toward the goal.

The research examined how society can anticipate the future with the ability to choose alternative courses of action. Five significant differences between futures research and conventional research were identified to emphasize creating possible futures where consequences are considered before choices are made. The literature substantiated that for a philosophy of the future to develop in the schools, leaders in the educational community must espouse such a philosophy. The research identified the school leadership as being imperative to the success of schools in the future.

Educational leaders who can identify the social conditions which have significant impact on the schools were identified as effective leaders who have the cognitive styles to "invision" the future. Intuitive leaders were described as leaders who envision long-range goals which focus on the meaning and love of learning while the leader who displays a "feeling" style creates visions that emphasize the development of the whole child. Concerns in future school leadership, as identified by the authors, were dissatisfaction with the status quo and dysfunctional preparation programs. School leaders were viewed to hold an important influence on organizational outcomes, especially on measurement of student performance. In the preparation programs, the
literature examined the emphasis on the behavioral sciences of such programs and suggested a change to alternative systems of preparation which would result in more effective school leadership.

The literature review examined the history of curriculum beginning with Sputnik through current educational practices such as computer technology and tele-learning. The authors stated that future curriculum design be placed on forward-looking programs rather than those tied to the traditions of the past. The literature identified the need for education to help students understand their ability to create alternative futures. Such areas as character education, arts education, life-long learning, distance learning, early childhood education, service learning and computer technology were examined with regard to their impact on student learning. The family was studied to evaluate its impact in the future of education. The research identified key indicators such as a growing number of single-parent households and an increase of females entering the work force as suggesting implications for the conduct of education in society. With the change in the family, the authors suggested that the schools of the future provide before and after school programs to provide supervision and care for students whose parent or parents cannot provide proper care. Minority families were identified as the greatest "at-risk family" because of lower levels of parent education and skills and by having the largest percentage of family households headed by a female.

Demographic studies indicated the education of students for the future be more in the skill areas and less in the industrial areas. The future job market will be characterized as less technical and more
wide-experienced based, with individuals changing jobs as many as five times in their work lives. Various educational approaches were studied in this chapter. Areas such as lengthening the school year, expanding education beyond the school walls and fewer limits to possible learning paths were examined along with expansion of real-world experiences and flexible scheduling.

The educational futurists identified in the literature suggested learning will be build on segmentation and diversity rather than standardization with favor shown to imaginative group patterns with education being modeled more after the family rather than big business. The researcher investigated a current innovative school model that provides for individual student differences and operates on an extended day and year schedule.

The literature identified the Integrated Learning Center as a "fresh" approach to present schooling techniques. With the centerpiece of instruction being higher order thinking, students are challenged with knowledge through comprehension, application, analysis, synthesis and evaluation. With a strong business partnership, employees of the company serve as coaches to students and spend time each week with the children.

Finally, America 2000 was examined because of its proposed impact on the nation's educational system in the coming years. With six national goals identified, four tracks were developed that will be pursued simultaneously. With spending for secondary and elementary schools doubling since 1980 while the number of students has remained
about the same, the report was developed to improve student learning and
growth for a future society.

Chapter 3 will outline the methodology of this study. The
researcher will specify the sequence of the study and define procedures
that will be used in investigating the proposed new elementary school
for Kingsport, Tennessee City Schools. The design of the study,
instrumentation, phases of data collection and document analysis will be
discussed.
Chapter 3
Methodology

Using a multiple case model, one can investigate sharing of visions by talking with others about communication, involvement, and commitment strategies. It is within this framework that the present study began the search to determine how educational and political influentials share their visions and what this sharing process meant to them and to others in their schools and community as they are reflecting in process and product.

It is the central premise of this dissertation that most educational and political influentials formulate images of the preferred future, or visions, and that these visions reflect a sense of the possible and guide their behavior. This study reflects the investigation of such an approach leading toward the new elementary school concept in Kingsport, Tennessee. The creation of a vision involves sharing ideas, values, and purposes with others in the school community. One way of viewing sharing is to examine the set of perceptions and behaviors that immediately follows the envisioning process. In this more narrow sense, one can talk about communicating a vision to others in the school environment. This essential phase of sharing a vision should be identifiable in the design under consideration.

As people become involved in the sharing process they participate in activities which make them a part of the course of action. This is generally labeled the involvement phase. Additionally, this sharing
process can also be carried one step further to embrace a commitment of sense of ownership and responsibility to the vision. This commitment phase of the vision-sharing process will be considered in the investigation of the Kingsport model.

**Design of the Study**

The design of the study was based upon a multiple-case approach. Attitudes and beliefs of Kingsport's new elementary school concept were explored by interviewing subjects who serve in either educational or political roles in Kingsport, Tennessee. The primary method of data collection was semi-structured interviews. The study also employed limited direct observation and document analysis. Qualitative interpretation served as the predominant mode of analysis.

**Subjects**

The types of sampling used in case study research can be probability, such as random sampling, and nonprobability sampling. The educational and political influentials in this study were selected through purposive techniques, a form of nonprobability sampling. Generalizing to all educators and politicians was not a research goal.

A method of selection of interviewees developed by Becker and Geer (1957) was used to contact two expert sources. Expert individual A was currently an educational writer for a local newspaper. This individual had been researching and reporting the events of the new Kingsport elementary school to the public since the school board's announcement to build a new elementary school. This individual had attended over 20
meetings where many of the political and educational influentials involved in the design of the new elementary school were in attendance.

Expert individual B had been employed as a central office director in Kingsport City Schools for over 5 years. Although not involved directly in the origination of the new elementary school concept, this individual had attended school board and public meetings where the educational and political influentials discussed the development of the new elementary school. This individual had viewed documents and school designs that established the rationale for the development of the concept for the new elementary school.

Expert individual A and expert individual B each developed lists of significant political and educational individuals involved in the evolvement and/or development of the new school concept. Based on personal experience accrued during an internship in the system, this investigator prepared her own list. The three lists were compared with the political and educational influentials selected who appeared on all three lists. This list was considered a "starter list," allowing for additional influentials to be added to the list for interview purposes.

Personal contact, by telephone, was made to each of the identified influentials. A written communication was sent to each identified influential, containing a letter of explanation of the study, along with a letter supporting the study from the school superintendent, following the personal contact.

Personal interviews with each of the influentials who agreed to participate in the study were scheduled. The interviews took place at the designated date and time of the request of the interviewee, with all
interviews completed by September 15, 1992. Each interview participant received and was asked to sign a copy of an Informed Consent Form.

Instrumentation

In the planning stage of the study, an interview guide was developed. The instrument was based on the literature review, analysis of the educational specifications and physical specifications of the new Kingsport elementary school, and experiences from an internship served in the Kingsport City Schools during the summer of 1991.

The interview guide was composed of six core questions, generic to both the political and educational influentials. (See sample in Appendix B.) Its purpose was to elicit the responses of those significant individuals in the educational and community environment who were involved in this shared vision of the "21st century school." Permission to tape record each interview was requested so that minimal information was lost when later transcribed.

Data Collection

During all activities in a qualitative case study, the researcher is the primary data collection instrument. A trained researcher is believed to be more responsive to the context in which the phenomenon is occurring (Markham, 1971). Detailed descriptions of events, persons, interactions, direct quotations, excerpts from documents, and the school and community environment were recorded. Notes were made of any occurrence which appeared to relate to the research topic.

The process of triangulation, using multiple methods to collect data, provided a system of checks and balances to check the accuracy of
the descriptions and of the analyses. Member checking was an additional verification tool and is discussed in the following data analysis section.

Phases of Data Collection

Data collection began with the semi-structured interviews with each of the educational and political influential in the sample. The interview focused on the six core questions. The interview with the influential continued until information became redundant and it was apparent that no new information would be shared. Notes were used to record information. A tape recorder was used to record the interview so that minimal information was lost.

In addition to the interviews, observations of the environment were made and collection and analyses of documents took place. Notes were recorded in a field notebook and in a field experience log. A journal of personal thoughts was maintained as the study unfolded.

Interviews

The purpose of an interview was to discover the respondent's perspective of the topic. Interviewing served as the primary means of data collection in the study because this technique was judged the most appropriate means to explore how influential view a unique elementary school concept in their community. The interviews were conducted in a single session.

The interviews were semi-structured for a variety of reasons. Structure helps respondents focus on a given topic, thus allowing them opportunities to think about and verbalize their vision of the new
elementary school. As the interview progressed, the questions became more exploratory and less structured in nature. This looseness allowed each respondent to express his or her perceptions freely.

The researcher made an effort to remain neutral and nonjudgmental throughout the study. Reflective listening techniques were employed throughout the interview process in order to check the accuracy of the perception recorded by the tape recorder. Member checking with the interviewees occurred within 30 days. In addition to verbatim transcripts, notes were made on environmental conditions and nonverbal behaviors, as well as remarks about the appearance of the respondent and perceived attitude.

Prior to the initial interviews, each participant was mailed a packet of information containing the following items: a letter of introduction including a brief description of the study; a biographical sketch of the researcher; an Informed Consent Form to be completed and signed before the interview; and a copy of a letter of support for the study from the school superintendent.

Observations

Observations provided firsthand knowledge of events and behaviors as they occur in their natural environment. The limited participant observer role was adopted for this study. The purpose was to collect information, not to function as a committee member, planner, or voter. This partial involvement allowed focus on the major tasks at hand: gaining entry into selected events and observing and recording data—and doing so in an unobtrusive and noninvasive fashion.
The researcher focused on the purpose and appropriateness of the events for each observation. Notetaking at the events were consistent and precise. The notebooks contained for each event the name, date, location, and time followed by documentation of the setting, the participants, the activities, and seemingly important interactions. Additional impressions were recorded in the field experience log and personal journal.

The extent to which observation changes the behavior of those being observed is a well-known concern of the limited participant observer (Herriam & Simpson, 1984). This complication was taken into consideration throughout the study. As Herriam and Simpson (1984) pointed out, "the more controlled the research, the farther it departs from natural interaction, the greater the likelihood that one will end up studying the effects of research procedures" (p. 211).

In order to minimize this effect, entrance to each observation event was as natural as possible. Seating selection was made in an effort not to distract group members. Care was exercised to refrain from offering advice or indicating reactions and preferences through nonverbal cues. Attempts were made to record data as unobtrusively as possible in order to blend into the group situation.

**Documents**

Documents collected included all of the written information available addressing the new elementary school concept. The examination of such materials added another dimension to the research process. It served as a confirmation of the perceptions gleaned through interviews and observations. The advantage of the use of documents lay in the fact
that most of them were influenced by the research process. Once their authenticity was established, they provided rich sources of triangulation.

The documents selected to review for the study included: Kingsport City Schools' Strategic Plan; the latest modified educational and physical specifications of the new elementary school; newspaper articles; and published interviews with significant individuals concerning the new school concept. Basic descriptive categories will be established early in the collection phase to assist in sorting and coding the vast amount of data available in these documents.

The researcher followed Lincoln and Guba's (1985) four guidelines for ending the data collection phase of a study. Sources appeared to be exhausted, categories were saturated, regularities began to repeatedly emerge, and feelings of "over-extension" began to occur. When nothing new seemed to be gleaned from interviews, observations, and document analysis, the researcher exited the field. The researcher projected exiting the field in September, 1992.

**Interview Analysis**

Through a process similar to content analysis, categories were identified within which to compile related information. Misleading terms requiring clarification, inconsistencies needing explanation, and compelling insights demanded follow-up investigations.

**Observations and Document Analysis**

Observation occurred informally as the researcher noted spontaneous events and interactions which related to the study. A major feature of
the study involved preplanned observations of events. As these events occurred, field notes were processed in three ways. First, the observations were recorded and categorized in a fashion that allowed further analysis. Second, statements were extracted from the observation notes which validated information received through other sources. Third, the observations were a rich source of insight into new ways of thinking about the new elementary school concept. Ideas began to cluster around recurring themes.

In a similar manner, each document was examined for new information and for the validation of previously collected data. Whenever possible, the original documents or copies were stored for easy retrieval during later stages of analysis.

Techniques for member checking, peer debriefing, and triangulation played important roles in both collection and analysis processes. Triangulation involved the verification of data by using other sources. Member checking allowed the participants to review and comment on the data extracted from the interviews, documents, and observations.

A disinterested peer was used for peer debriefing in a manner paralleling an analytic session. Aspects of the inquiry were explored that might otherwise have remained only implicit within the inquirer’s mind. The process allowed the researcher to be kept "honest" and assisted in identifying potential biases in the study.

Trustworthiness

In qualitative research, one often speaks of rigor and credible findings when considering reliability and validity. Regardless of the descriptors used, "the basic question remains the same: To what extent
can the researcher trust the findings of a qualitative case study?" (Merriam, 1988, p. 164). The notion of "trustworthiness" combines validity, reliability, and ethical concerns and is the true judgment of merit of a qualitative research study. Merriam maintains that "rigor" in a qualitative case study derives from the researcher's presence, the nature of the interaction between the researcher and participants, the triangulation of data, the interpretation of perceptions, and rich, thick description" (1988).

In this qualitative inquiry, capturing how participants viewed reality was more critical than what might really exist. Proof of "internal validity" or perceptual validation was considered a foregone conclusion since the strength of qualitative research lies in detailed treatment of how all respondents view the problem (Merriam, 1988, p. 165).

**Consistency**

Viewing reliability in the traditional sense is problematic at best. Lincoln and Guba (1985) stated that one can never cross the same stream twice. How can a qualitative case study possibly be replicated or transferred? According to Merriam (1988):

Because what is being studied in education is assumed to be in flux, multifaceted, and highly contextual, because information gathered is a function of who gives it and how skilled the researcher is at getting it, and because the emergent design of a qualitative case study precludes a priori controls, achieving reliability in the traditional sense is not only fanciful but impossible. Replication of a qualitative study will not yield the same results. Several interpretations of the same data can be made, and all stand until directly contradicted by new evidence. (p. 201)
Lincoln and Guba (1985) have offered their preference for use of the term "dependability" instead of "reliability" when working within the qualitative paradigm. The use of the term "consistency" in this study was similar to the dependability concept. According to Merriam (1988), there are several techniques to ensure consistent and dependable results. These include the investigator's position, triangulation, and an audit trail. The first two techniques were described previously.

The audit trail provided the evidence for all conclusions in the study. A file was maintained of documents which included all field notes, a research experience log, completed interview instruments, transcripts of recorded interviews, cassette tapes of the interviews, correspondence between informants and the researcher, and copies of documents considered relevant to the study. These materials, in addition to the dissertation, will provide information necessary for replication.

**Transferability**

In the traditional sense, external validity concerns the generalizability of study results. When several cases are combined, such as in this study, the prospects of generalizing are slightly increased. It was not intended to generalize beyond the participants studied. The likelihood of transferability in this study was increased by the rich, thick description, by the clarification and by identification of the recurring concepts within the interviews.
Ethical Considerations

Merriam (1988) summarized several ethical dilemmas which are likely to surface in case study research. These included over involvement, breach of confidentiality, misinterpretations of the data as they are collected, misinterpretations of the data as they are analyzed, misinterpretations of the study results as they are written, and rights to privacy of those who are unaware of being observed for research purposes.

Decisions were made in an ethical fashion with no serious problems occurring. The issues mentioned by Merriam were considered potential threats to the integrity of the study. Each was addressed in a professional manner.

Summary

In this chapter, an outline of the proposed research methods and a discussion of planned research activities were presented so others can understand the theoretical perspective. The research questions guided the selection of a research method and, as a result, the research design elaborated in the earlier pages was deemed appropriate for the conduct of this study. In subsequent chapters the findings, conclusions, and recommendations of the study are reported.
Chapter 4

Analysis of Data

Introduction

The design, implemented according to plans reported as Chapter 3, resulted in the identification of 12 influentials for in-depth interviews and the collection of a number of documents and reports, which recorded various aspects of development related to the subject under investigation. As identified in Chapter 1, four research questions were developed concerning this study. Research questions 2, 3 and 4 were answered in Chapter 4. While data were reported in Chapter 4, which related to question 1, the summary was included in Chapter 5 (see Figure 5, page 122).

1. What are the curricular, organizational, and pedagogical plans for the new Kingsport elementary school?

2. Does the new Kingsport elementary school model match the emerging educational requirements reported in the literature survey?

3. What processes can be documented as influencing the plans?

4. What planning procedures were employed in the developmental processes?

The research reported in Chapter 2 and the results of the investigation in this chapter provided the answers to the research questions.

The interview procedure consisted of personal questioning, tape recorded responses, typed transcripts which were reviewed by the interviewees and completion of a consent form by those being
interviewed. Documents were collected as they became known and these were stored for eventual analysis.

Analysis procedures included systematic review of the transcripts for commonalties and differences and a search for consistencies and inconsistencies and/or discrepancies across the interviews. The story that emerged was determined to be consistent with the information in printed school system and media reports prepared at various stages of development of the new school. A narrative report was then prepared to reflect the data from individuals interviewed and documents available.

**Interviewees**

Twelve educational and political influentials emerged from the identification process described in Chapter 3. Those interviews consisted of five Kingsport School Board members, four central office administrators, one elected city official, one educational planner and one architect.

Eleven individual interviews were conducted in person at a location chosen by the interviewees. Due to a scheduling conflict, one interview was completed by mailing the interviewee the questions and a blank audio tape. The interviewee responded to the questions on the blank audio tape and returned the tape by mail. The interviews were completed by September 15, 1992.

**Document Analysis**

There were four major types of documents collected for this study. The Kingsport City School Strategic Plan entitled "Vision 2001" was developed and approved in 1991. The second document was the educational
specifications designed for the new elementary school. This document was studied and reported in various events of the planning sequence for the new elementary school. Written revisions to the educational specifications prepared by the educational planner were reviewed to identify the specific changes made from the original document. The fourth set of documents consisted of 27 newspaper articles collected from the Kingsport Times News. These documents served to validate the data obtained from the 12 interviews and to uncover additional information about Kingsport City School's plan for a new elementary school.

Observations

Four meetings were attended to allow for limited participant observation. Three Kingsport school board meetings were attended. Meetings were attended on June 10, 1991, July 9, 1991 and September 9, 1991. Notes were taken from information presented about the new elementary school and data were recorded based on relevance to the study.

A community meeting, held on September 19, 1991, was attended to gather information about the choice of the Granby Road property as the site for the new elementary school. Observations were focused on attendance, format of the meeting and opinions shared by the community members.

The data collected from interviews, document analysis and observations were organized and reported in stages and phases describing the processes and procedures selected to create and construct a new elementary school.
Three overall stages were identified for purposes of this report: analysis, planning and implementation. These followed work identified in Chapter 2 by such experts as Harvey (1990), who described planned change as a gradual and systematic process, encompassing the four phases (see Figure 1). The three stages are inclusive of steps identified as they emerged in the analytic process. These steps or phases were organized within the three stages.

The Analysis Stage

The analysis stage was chosen as a label which appropriately described the early data analysis and discussions leading to the decision to plan and build a different kind of elementary school in the Kingsport School System. Four headings allowed for organization of these early phases of the planned change: Rationale for Hew Elementary School in Kingsport; Superintendent Researches School of the Future; Superintendent and Key Central Office Personnel Discuss Vision of New Elementary School; and Presentation of the Vision to the School Board.

Rationale for a New Elementary School in Kingsport, Tennessee

Fifty-two acres of hillside property on the Granby Road facing Bays Mountain were purchased by the city of Kingsport in 1969 for $341,000. The purchase was made based on early census predictions that the site would be appropriate for a future school to serve elementary and middle school students.

A general population increase had occurred in the western region of the city. One city official stated that information was gathered years
<table>
<thead>
<tr>
<th>STAGES</th>
<th>STEPS/PHTASES</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANALYSIS STATE (CLEAR DESCRIPTION OF THE SUGGESTED CHANGE)</td>
<td>1. Need is normally based on previous experience</td>
</tr>
<tr>
<td></td>
<td>2. Identification of key actors/ influentials</td>
</tr>
<tr>
<td></td>
<td>3. Payoffs determined/ benefits identified</td>
</tr>
<tr>
<td></td>
<td>4. Examination of the culture as to inclination toward innovation and risk</td>
</tr>
<tr>
<td>PLANNING STAGE (COMBINATION OF IDEAS AND STRATEGIES)</td>
<td>1. Objectives for change</td>
</tr>
<tr>
<td></td>
<td>2. Resources available for the change</td>
</tr>
<tr>
<td></td>
<td>3. Time line</td>
</tr>
<tr>
<td></td>
<td>4. Continued functioning of organization while change is in process</td>
</tr>
<tr>
<td>IMPLEMENTATION AND EVALUATION (BLUEPRINT FOR THE CHANGE)</td>
<td>1. Advocate</td>
</tr>
<tr>
<td></td>
<td>2. Action plan</td>
</tr>
<tr>
<td></td>
<td>3. Time management</td>
</tr>
<tr>
<td></td>
<td>4. Monitoring plan</td>
</tr>
<tr>
<td>RISK ANALYSIS (ADVANTAGES AND DISADVANTAGES OF PLANNED CHANGE)</td>
<td>1. Positive/Negative consequences</td>
</tr>
<tr>
<td></td>
<td>2. Appraise status</td>
</tr>
</tbody>
</table>

Figure 1. Harvey's (1990) Planned Change as Applied in Kingsport
ago concerning the need for a new elementary school in the west area of Kingsport:

In the early 1970s, the city of Kingsport hired demographic experts to conduct a feasibility study of a possible school on the west end of the city. The group's reported finding stated that a middle school was needed. A demographics study conducted in the late 1980s identified that a 42% growth had taken place on the west end of Kingsport.

The Kingsport City Schools Strategic Plan (1991) described in Goal Five—Facilities stated that by 1995 a new elementary school would be constructed on the Granby Road location. According to the plan, Washington Elementary School would close and the facility would be returned to the city. Many of the Washington Elementary students would attend the new elementary school after a planned rezoning occurred.

A subsequent decision to build a new elementary school was the response due to the growth in the west end of Kingsport, through annexation and the existing conditions of small elementary schools that were already overcrowded. The strategy to renovate a number of elementary facilities and, simultaneously, expand their capacities, included the decision that a new school was needed. Washington Elementary School, one of the oldest schools in the city, had not been identified to be renovated under the $30 million Capital Improvement Plan adopted by the City of Kingsport and the Kingsport School Board in 1988.

No new school had been constructed in Kingsport City Schools, according to seven interviewees, since 1966 when Dobyns Bennett High School was constructed. According to four interviewees, the Capital Improvement Plan suggested that Washington Elementary School and John Sevier Middle School close when a new west end elementary and middle
school open. Three interviewees stated that this decision brought about controversy in the city. A constituency of citizens came forward to voice their concern about closing the Sevier Middle School and transporting the students to the west end of the city.

The initial attendance boundary was recommended to begin with the Mount Carmel town limits and moved eastward until approximately 500 students were identified for the new elementary school. Fifty-two prime acres, according to seven interviewees, were purchased by the city of Kingsport on Granby Road, off highway 11 West, located in Sullivan County, but bordering closely to Hawkins County. The property was a heavily wooded plateau that would accommodate an elementary and middle school, along with athletic fields and playgrounds. This selected site afforded a picturesque view of Bays Mountain.

As stated by four interviewees, the plan was placed "on hold" for the construction of a new middle school. However, the Kingsport School Board proceeded with the decision to build a new west elementary school. The name given to this new school plan was "Granby Road School."

Superintendent Researches/Presents School of the Future

Nine interviewees acknowledged the superintendent of Kingsport schools with the initial developmental concept of the new elementary school. The basic process began with the superintendent's study of ideas from various experts in the educational reform movement. Marvin Cetron, Margaret Gayle, Phil Schelechty, Harold Hodgkinson and Stephen Covey were named by three interviewees as some of the researchers that
were discussed in the "start-up meetings" held by the superintendent with key central office staff.

Superintendent and Key Central Office Personnel Discuss Vision of New Elementary School

The superintendent and two central office personnel met on several occasions early in the developmental phase to discuss the ideal elementary school of the future.

One interviewee who attended meetings with the superintendent stated:

In the meetings we discussed several different assumptions about what a school of the future should be like; how it should look; what services it should provide. We discussed what the vision for this new elementary school should be. We asked a few teachers if there was anything they would like to do in education they felt so strongly about it would be worth losing their job to try and do. We received some interesting responses. The majority of the responses focused on the school having adaptability, mobility and flexibility.

Another central office interviewee described the discussions as follows:

Let me give you a few of the things that came out of our discussions. In one of them we said that every child should go to school and go home that day and when the parents or a significant other says what did you do today, the child should be able to say, "I did something I couldn't do yesterday and some big person noticed it and praised me for it . . . ." We said that not all the instruction needs to be done by teachers, but planned by teachers. We were not interested in teaching groups of kids, but teaching individuals.

A third central office administrator characterized the discussion groups as a time to brainstorm variations from the construction of such a "different" school:

This school would not be for every type of student. Twenty percent of the enrollees would be by choice; anybody in the system could go there, but then 20% of the students who lived in the attendance area would opt to go to a more "traditional" school. These
students would probably come from families where the parents perceived this kind of instruction would not be suitable for their children. It was the consensus of the group that no child would be forced to attend the new elementary school.

After several informal meetings between the superintendent and the two other central office personnel, seven "essentials" were identified for the implementation of a school for the future (see Figure 2). The seven essentials were a learning community, flexibility, collaboration, success for all, production of knowledge work, an acceptance of and celebration for diversity and authentic assessment.

Presentation of the Vision to School Board

In late 1989 the superintendent presented to the Kingsport School Board a "vision" of the new elementary school. The information, according to three school board interviewees, included a school that provided programs focused on student individuality. There was an emphasis on learning centers versus self-contained classrooms. The presentation also illustrated how high technological means through computer and communication networks would provide accessibility to information banks internationally. The concept of this new elementary school being one of "choice" for the city of Kingsport was presented. Although the initial plans were for the new elementary school to service students on the west end of the city, other students would be allowed to attend from other school zone areas if space were available. The plan also allowed for parents who did not support such an innovative-type school for their child(ren) to enroll them in another Kingsport elementary school, providing space was available.
Seven "essentials" have been identified for the implementation of a school for the future. My understanding of these "essentials" is as follows:

A LEARNING COMMUNITY

The children as well as the adults in this school community are involved in learning. All subgroups within the school will be producing work which must be shared. The successful implementation of technological networks will allow communities to share, as well as seek the products of other subgroups. This will greatly expand the learning community - it will be limitless.

FLEXIBILITY

The entire school community is committed to making the necessary adjustments to assure that the mission and vision of the system are implemented. Paradigms must be examined and shifted when necessary.

COLLABORATION

Collaboration is achieved when participants work together for a common cause especially in an intellectual endeavor. Cooperative learning is probably the best structure for this collaboration. Teacher collaboration, when achieved, will have a powerful effect on school culture. Creating a positive school culture is of utmost importance to insure success for all.

SUCCESS FOR ALL

Work would be structured to provide every child a positive experience daily. Celebrations that include all children will be common. Staff members will also be included in the "success for all" endeavor.

Figure 2. Seven Essentials for New Elementary School
PRODUCTION OF KNOWLEDGE WORK

Students will be actively engaged in relevant and authentic work in every classroom. Teachers will be "designers" while the students will be the workers; at times the student may be the "designer". Technology implementation is a key in this area.

AN ACCEPTANCE OF, AND CELEBRATION OF DIVERSITY

Everyone will be accepted as a unique individual. Differences will be recognized and built on in the daily activities and curriculum. This school will practice true integration in all areas, not just racial integration.

AUTHENTIC ASSESSMENT

This school must identify what it is about based on both the school and the system's mission and vision. Important areas such as climate and attitudes must be part of the outcomes that are used in judging "success". The system and the community must assist in determining the tolerance levels desired for successful operation. The school community will be accountable for its manner of working.

Prepared by Kingsport Schools
Central Office Personnel

Figure 2. Continued
One school board interviewee stated that the superintendent shared his earlier research in the area of future schools. The data presented, according to the interviewee, were what many of the board members had been discussing at state school board conferences with other school systems' board members.

The school board voted to forge ahead with the information presented by the superintendent. According to eight of the interviewees, there was a new excitement that Kingsport City Schools was on the cutting edge of creating the first elementary school of the future in Tennessee.

There were some educational and political influentials who viewed the superintendent's vision as questionable. A common theme emerged from three interviewees addressing the traditional success of Kingsport City Schools:

Kingsport City Schools has a tradition of being one of the top school systems in the state of Tennessee. The reason for this success is the tradition that has endured many "fads" throughout the years in public education. We do not need to tinker with something that works. Change is not always beneficial.

A school board member stated in the interview:

I don't mean to be the "sour grapes" of the group, but I was not really caught up in this new concept for the new elementary school. There had been plans to close one of the middle schools. I felt it was my duty to put my energies into the efforts of saving that school. If the new elementary school was to be constructed, it was only fair that the middle school be renovated so that our students would not have to be bussed over to the west side of town should a new middle school be built there. I felt I had the community support to renovate the middle school. I was willing to wait until something was decided about the new school.
Planning Stage

The second phase of planned change, according to Harvey (1990) is planning. In this investigation there were 15 cluster of events that evolved in the planning for the new elementary school: School Board Retains Educational Planning Firm; Superintendent Conducts Meeting with Administrators, Teachers and Community Representatives for Feedback; Educational Specifications Developed for New Elementary School; and Revisions to Educational Specifications made by Central Office Personnel. Architect Selected for Facility Design and Begins Design Based on the Approved Educational Specifications; Principal for New Elementary School Named; Change in Key Actors and Influentials; School Board Approves Architect’s Design; Final Site Selection Decision; Delay of Site Development; School Board Studies Other Sites for New Elementary School; New Site Chosen for Elementary School; Controversy Develops Concerning Location of New Elementary School in Hawkins County; Architect Designs New Facility for Allandale Site; and Leadership Change at Superintendent Level.

School Board Retains Educational Planning Firm

In the spring of 1990, the Kingsport School Board employed an educational planning firm to develop the educational specifications for the new elementary school based on the data and information formulated from meetings with the superintendent and two central office personnel. The planning firm was charged with taking the desired student outcomes outlined in documents approved by the school board along with the firm’s own experience and expertise. The outcomes were summarized as seven essentials needed for the new elementary school (see Figure 2). Of the
five school board members interviewed, three stated a desire for an innovative, high-technology elementary school that would not match existing programs anywhere.

This decision gained national attention. According to two interviewees, the Associated Press pulled the press release from the Kingsport Times News shortly after the newspaper reported the school board meeting. Calls began to be received at the central office from other school systems as to the logistics of this plan. Calls were received from school systems in approximately eight states requesting more information on the "new elementary school concept."

Superintendent Conducts Meetings with Administrators, Teachers and Community Representatives for Feedback

The superintendent, as reported by five interviewees, took the school board's approved vision of the new elementary school to each of Kingsport's six elementary schools. In meetings with administrators and teachers, the superintendent shared the plan for the new school. He requested input/feedback from each group as to their perceptions and ideas that would make this new elementary school successful.

The superintendent also presented the "vision" to such civic groups as the Rotary Club, Lion's Club and Kiwanis Club. He met with various P.T.A. groups in the school system to hear their interests and concerns. According to the interview with the superintendent, the meetings described above led to information, such as flexible scheduling, that had not been formulated in earlier meetings with the central office personnel or the school board.
Educational Specifications Developed for New Elementary School

There were three clusters of information in the development of the educational specifications for the new elementary school. These clusters emerged as the process was described by the school board members, central office administrators and the educational planner and have been identified as: educational planner's specifications, central office personnel revisions to educational specifications and specifications approved by the school board.

Educational Planner's Specifications. In September, 1990, the educational planner presented to the Kingsport School Board and school superintendent a set of educational specifications based on early meetings with the school board and superintendent. The planner used information received from the various meetings attended by the superintendent with administrators, teachers, civic groups and community members.

The initial educational specifications, according to nine interviewees, described a pre-kindergarten through grade 5 facility to accommodate approximately 500 pupils. The school was best described as a flexible facility allowing for multi-usage in the coming century. It was designed as a high technology elementary school completely networked for current and future telecommunications devices. Additionally, the specifications provided for central location of a number of service agencies. As stated in an interview with the educational planner:

The analysis of the educational specifications document identified an area of the facility for various agencies such as health, medical and social services to be provided for students. The rationale for this decision was to service the special needs of
students on site and not remove them from the school setting. By providing these forms of assistance on the school site, students would not have to leave the school, as a result, lose instructional time.

The new school, according to six interviewees, was conceived as a place where professionals plan to work and teams of adults and older students would actively assist younger students. Teams of teachers, volunteers, paraprofessionals, teacher assistants, parents and others would work in the planning, thinking, cooperating, evaluating student needs. Students would work individually and in multi-age groups, therefore there would be a need for enough space and equipment to support both activities.

A central office administrator emphasized the following characteristics from the educational specifications:

The school was basically programmed to operate in six instructional areas that approximate the equivalent of four classrooms. In the traditional sense the staff equal to four teachers per instructional area. The four teachers may or may not be in the conventional mode in that there could be two teachers and several teacher assistants, parents or business partners that would be working in the learning area with the youngsters.

With further examination of the educational specifications, the school was basically organized as preschool through what would be the equivalent of grade 5. However, there could be intergrade grouping at any given time, depending on the activity. The school was to be programmed where teachers in each instructional area have access to state of the art inter-school communication systems where faculty and staff can correspond directly with each other by telephone within the school. According to the educational planner:

Conferences can be established between teams of teachers. For example, a resource teacher, a classroom teacher, a guidance counselor, a social worker, and the principal could be on a
conference call within the school as in many businesses in
discussion of a prescribed program or need for an individual child.
This kind of technology will drive achievement upward in our
judgment, in that it will free teachers from much of the problems
of logistics in a traditional sense in that often this kind of
conference had to be established on when there were teachers’
meetings, at the end of the week or some awkward time and all the
while the youngster needs are going unmet. Teachers would be able
to also contact parents from the instructional area.

As summarized from four interviewees, the students in this school
were expected to have a flexible schedule. Students’ grades would be
earned individually as group members. All would perform and provide
portfolios for individual grades as well as prove group competence in
other ways. One school board member perceived the curriculum from the
educational specifications as follows:

Each child shall be provided well coordinated programs with
subsequent skills, instruction in language arts, reading, 
listening, speaking, handwriting, mathematics, social studies and
science while also receiving a balanced program in art, music,
health, physical education and safety, personal hygiene and daily
living skills and all other special services instruction.
Instruction would fully meet all governing standards of the state
of Tennessee, in order to implement the type of program just
described.

The educational specifications were considered unique by five of
the interviewees who were involved in collaboration with the educational
planner. They represented three central office administrators and two
school board members. Below is a summary of their perspectives of the
overall educational plans:

The school that is programmed in Kingsport currently has features
in it that are found in many different schools but all the features
are not found in any one school. We saw it basically as a
combination of good practice that is taken from many concepts and
it has some uniqueness in it in that it is fully networked
technologically for the 21st century. It is our personal view that
the school should have all the components necessary initially when
the school is opened to completely self-contain the school or any
portion thereof into typical classrooms or to use any range of
flexibility between that and an open type classroom facility. That
range of flexibility is necessary in our judgment to meet all the program requirements conceived for the school.

The student services area was described by one central office administrator as an innovative addition to an elementary school:

A child advocacy center will be provided for services not normally found in an elementary school. The services include public health, mental health, public housing, human services and guidance. Students will no longer be required to leave the school campus for these services. They will be provided on site.

When the September 1990 school board meeting was held, the specifications document was discussed. The board voted to study the educational specifications more closely and to give the central office administration, teachers and community members ample time to review the document. The action was achieved by tabling the motion until a later date to allow for revisions of the plans.

Central Office Personnel Revisions to Educational Specifications.

Three members of the central office administration identified areas of the educational specifications that did not provide for clarity and overall coverage of the full school concept. The central office administration, along with two school board members revised areas of the plans.

The revisions (Addendum, 1990) were identified as follows:

1. It was proposed that fitness/nature trails be developed to be shared by the school and community. It was suggested that city officials and planners coordinate development contiguous to the school site in such a fashion that will extend the fitness/nature trails into the surrounding community.

2. The facility must be designed as a "child advocacy center."
3. Each room and area should have the option of individual control of heating and cooling.

4. The architect is requested to be creative in design as to number of floors, shape, location of site and other items.

5. Window design should be planned to maximize the setting. Major emphasis should be placed on quality and environment with energy savings as an element in the decision.

6. Use of interior graphics should be determined by the owner and architect in conference at the design development stage. A warm, inviting learning environment is desired by the owner.

7. The lobby should be the focal point or center of the school. Great care should be taken in the design of this area. It should set the tone of the facility.

8. Change terms such as "classroom" and "instructional area" to learning area.

The revisions were completed by November, 1990, and submitted to the school board and the educational planner for study. The revisions were considered to have provided a more concise and clearer vision of the new elementary school concept.

*Specifications Approved by School Board.* The task of designing an elementary school of the future was not an easy one, according to the educational planner. The process began with input from several sources:

We actually developed the educational specifications at least three times. We were not completely sure that the school district was ready to implement as innovative of a program as they were. Our first development of the educational spot and specifications was more of a traditional type of school, high quality, state of the art, conventional school with some minimal amount of flexibility. The school district, while it was still groping with the notion of
what it really wanted, because there was no prototype for this type of facility in the country, indicated that the plans were not very flexible nor would it really be the school of choice and vision. So we went back to the drawing board and again developed an education specification with more flexibility. While this nearly met the intent of the governing authority at the time, it was still not quite what the school district wanted. They were in essence plowing new ground and it was a matter of developing a model, studying it and revising until an outcome was to their liking. On the third attempt, we made it a very flexible type plan that it is currently.

In December, 1990, the Kingsport school board approved the educational specifications developed by the planner in conjunction with the suggested revisions made by key central office administrators. This was the first time, according to one interviewee, that the Kingsport School Board had not allowed the contracted architect to develop and design the "total package," the educational specifications and the facility.

Architect Selected for Facility Design and Begins Design Based on the Approved Educational Specifications

A local architectural firm was granted the bid for design of the new elementary school for Granby Road. The major architect of the firm had been designing schools for over 25 years. His firm had designed approximately $300 million worth of school facilities in Tennessee, Kentucky, Virginia and North Carolina. There were six schools in the East Tennessee area designed by this firm. According to one school board member:

The reputation of this architectural firm is impeccable. The knowledge and experience they have with the East Tennessee area goes way back. Many school boards and construction companies would support my comments. This firm had a great pool of expertise on board. We felt really good about them being the major designers of this new school.
In the late winter of 1990, the architectural firm began designing the new elementary school based on the approved educational specifications. This type of process, according to the major designer, was different than their normal operating procedure. The firm had always used their own data on school design. This process required them to take another agency's findings and develop the school.

Principal for New Elementary School Named

The Kingsport school board discussed in various work sessions in the spring of 1991 the desire to begin a search for the principal of the new elementary school. According to two school board interviewees, the rationale for this move was to have on line the leader of the future school. The following is a summary based on the two interviewees comments:

This is not the way most principals are selected, however, we felt it was imperative that the person who would most have input into the program design should be the building principal. There is a great deal of planning that must go into this new concept for teaching students. The principal is the best one in the process to identify those needs and assist in planning for them. The school belongs to the people who work there and the community. We needed the team named.

The superintendent stated in the interview that he was originally opposed to naming a principal so early: "From my prospective, there were many unanswered questions concerning logistics about the new school. Personnel matters did not seem appropriate at the time."

The person named as the new elementary principal was an experienced teacher and administrator from the Kingsport City Schools. Having started as a teacher in the school system in the late 1960s, he later
became an assistant principal and principal of elementary and middle schools.

In 1990, he was named the Director of the Life Long Learning Center of Kingsport City Schools where he will continue to function until the new elementary school is constructed. As the new elementary principal stated:

I was not involved in the initial development of the new elementary school concept nor the educational specifications other than through meetings with the faculty and superintendent. When the design began to unfold, I became excited about possibly being a part of this vision. I notified the superintendent when I heard the board was thinking of naming the principal soon.

At the June, 1991 school board meeting the superintendent recommended the Life Long Learning Director as his choice as the new elementary school principal. The vote by the school board was 5-0 in favor of his appointment.

Change in Key Actors/Influentials

Three of the Kingsport school board members, who were instrumental in the initial development of the new elementary school, chose not to run for re-election. Their last official act as school board members was the approval of the superintendent's recommendation of the new elementary school principal. Three new school board members assumed their positions beginning July 1, 1991.

School Board Approves Architect's Design

On July 19, 1991, the Kingsport Board of Education approved the architectural design for the new Granby Road elementary school. As stated by the superintendent:
The architect has done a topographical survey, drawings and analysis of available maps and aerial photos. The firm has completed site analysis, including a "footprint" review, circulation review and outdoor activities review. A utilities review to determine how much and what kind of utilities will be necessary has been completed as well.

The 90,000 square feet, two-story facility was designed, according to the architect, with a great deal of glass in the front of the school:

With the school facing Bays Mountain, we wanted students to be able to sit or lay on their stomachs and draw the mountains. With a glass plant in Kingsport, it made good sense to involve as many local industries in this facility as possible.

The facility design captured all the elements of the educational specifications, as stated by five interviewees. The floor plans identified six learning areas which provided space for students ranging from early childhood through grade 5. There were learning areas designed for special education, physical education, music, art and storytelling.

The new elementary school, according to the architect's scheme, housed a child advocacy or service center, media center, cafeteria and several teacher resource and work areas. A little theater was designed to seat 500 people. Movable partitions were drawn to demonstrate the flexibility of the facility. The school design was considered by six interviewees as being a school of function but, also one of uniqueness. The projected cost of site development and construction of the new elementary school was estimated at $7.57 million.

**Final Site Selection Decisions**

A growing area of disagreement became apparent concerning the Granby Road site as the location for the new elementary school.
Residents of Granby Road voiced concern about the potential adverse impact on the new elementary school from the adjacent quarry operations.

Delay of Site Development

In September of 1991, controversy surfaced concerning the Granby Road as the location as the site for the new elementary school. City leaders expressed their concerns about locating the school adjacent to a local quarry operation. According to one city leader:

Residents who live near the quarry have reported earthquake-like tremors, cracking plaster and ever-present dust. People are thinking that a cloud of dust would hover over the new elementary school. I do have concerns agreeing to put a school near a quarry.

A community meeting was held on September 19, 1991 to address the school being located beside a rock quarry. School and city officials were in attendance to answer questions concerning the site location. Representatives and parents who opposed the school being built on Granby Road prepared data verifying that children could suffer from physical and emotional damage due to the blasting from the rock quarry. One report presented from a psychologist suggested that strong tremors caused by blasting at the quarry could scare children. There was also concern about excessive and toxic dust in the area near the site location.

A vibration testing report was released on September 29, 1991. The report stated that testing was done near the school site and that blasts from the quarry were below state established levels. According to the report, vibrations would be perceived from time to time by building occupants; however, the levels detected were not expected to cause any structural damage.
Other concerns about the location were reported. A city official interviewed identified the need for air testing:

We asked the Tennessee Department of Environment and Conservation to make an air quality survey in the neighborhoods near the quarry. The public comments made about dust in the area led us to request the air survey. We felt, in order to get some hard data, we needed to monitor the air.

A central office administrator who attended meetings with the Kingsport Board of Mayor and Alderman and concerned residents of Granby Road stated:

Many of the residents brought petitions to the meetings asking the city to refuse to allow the quarry to expand its operations. They brought along an attorney who said the quarry's expansion was an emotional issue for his clients because their homes and their quality of life were involved. He described cracks in their homes, falling plaster, and clinging dust that threatened their health. Now they are saying it's not so bad and they need a school building on Granby Road. These are the same people who stood up and said the health of children was at stake.

Not all Granby Road residents were supportive of relocating the school. An interview from the Kingsport Times News (1991) with a concerned citizen reported:

We own the site, and we've already spent so much money on it. I think we should just go ahead with it. That's my money there, and if you are a resident of Kingsport, it's your money too. In your family budget, would you waste that kind of money? They have put 2½ years in studying this. That's too much time for them [school board] to just turn around and say we aren't going to build it there.

Due to the public outcry requesting the new elementary school not be located near the rock quarry, the school board voted at the December, 1991 meeting to begin a search for alternative sites for the new elementary school. The Granby Road site was still being considered; however, a school board committee began the investigation to study other property in the west end of the city.
School Board Studies Other Sites for New Elementary School

Three school board members were appointed to a site investigation committee by the school board president. According to an interview with Kingsport Times News (1991), the school board president stated: "The charge of this committee is to basically investigate any other possible sites and come back to us with a recommendation if there are any other sites available they would like for us to look at."

The committee visited the city hall and examined tax maps for availability of 15 acre potential west-end sites, which would be large enough for a school campus. Kingsport residents began contacting the committee members suggesting sites.

One site that was studied immediately was the Jackson-West Elementary School. The Kingsport City Schools annexed this school from Sullivan County in 1986. The kindergarten through grade 5 school was in operation with a 150 student enrollment who would attend the new west elementary school. The plan called for closing the Jackson-West campus and turning it over to the city for use.

The architectural firm hired to design the new elementary school reported at the September, 1991 school board meeting that the proposed design would fit on the seven-acre site. According to the architect:

The school comes within 15 feet of the edges of the property. The rough estimate of about $400,000 is what is projected to make the site a workable one for the new school. Of that amount, about $150,000 is removal of asbestos, $65,000 for demolition of the building, $80,000 to elevate the front part of the new school and $74,000 in various site surveys and testing.

Although this site was already owned by the city, the school board was not in favor of building the school on such a small site. The
report from the architect did not illustrate any savings to the city for selecting the Jackson-West site. The president of the school board requested that the site investigation committee continue to examine possible sites.

On September 29, 1991, the Kingsport school board presented five potential locations that would meet size requirements for the new elementary school. There were various factors to site investigation such as demographics, topography and site preparation costs. The sites were located with the assistance of the city's planning and finance department through the tax maps at city hall. One school board member identified the five sites:

The first was the original Granby Road site. Another was an 18-acre tract behind Allandale Mansion. A third was part of a 95-acre tract where the Kingsport University Center is located. The fourth site was a 10.9-acre tract near Asbury Center at Baysmont; and the fifth was a 42.6-acre tract front West Stone Drive near Lawson Drive.

According to 1990 tax reports, the values of these tracts of land indicated the cost per acre to range from $1,225 to $10,000 (Kingsport Times News, 1991). The cheapest site was the 42.6-acre site along West Stone Drive which appraised at $52,000. The Baysmont property appraised at $65,700 with about 11 acres. The Allandale property was part of a 200-acre tract with a market value of $2 million. It was taxed as agricultural land under the "greenbelt" provision and therefore had an appraisal value of $79,600. The Kingsport University Center property was state-owned and any transfer of property would have to be an "institutional decision." The school board site investigation committee reported that they would have a site recommendation to the entire board by the October 17, 1991 school board work session.
New Site Chosen for Elementary School

On November 21, 1991, the Kingsport School Board voted 5-0 to ask city leaders to purchase the Allandale property for a new west elementary school. The site received 450 points based on the weighted criteria list developed by the school board. According to a school board member interviewed about the site change:

At a school board retreat in October, we developed nine criteria to judge the different sites. Total cost, including the facility and site development, was the highest weighted criterion, represented 21% of the decision. Neighborhood development was the next highest criterion at 15%. Location of students near the sites was the third highest criterion with a weight of 12%. Other criteria and their weights were: safety, 11%; timing, 11%; community acceptance, 11%; security, 8%; accessibility, 6%; and visibility, 5%.

The original Granby Road location scored a close second with 424 points. The board agreed that if a reasonable price could not be negotiated for the Allandale property, the Granby site would be used.

Two other sites—a tract near Rivermont and a part of the Kingsport University Center property—came in a distant third and fourth respectively. Rivermont garnered 310 points and the university center received 266 points. The estimated costs prepared by the construction company hired to build the new elementary school showed both the Allandale ($8.41 million) and Granby ($8.45 million) sites near the same projected costs. Rivermont was projected to cost $8.88 million, and the university center was estimated at $9.5 million. At all four sites, the actual building was estimated to cost $5.74 million of the total amount.

The neighborhood development data, prepared by city staff members, uncovered potential growth of population surrounding the Allandale site.
at an estimate of 1,834 single- or multi-family units. The university center site was estimated at 814, Granby at 672, and Rivermont at 170.

The location of students near the site was considered a major criterion. Granby had 526 students within a one and one-half mile radius of the school location, according to information provided by the school staff. (The system personnel anticipated 20% of the new students would attend from other attendance areas, meeting their choice criterion; and planned to bus any child from within the new elementary school attendance zone to one of the schools of their choice.) Rivermont had 419 students; Allandale, 178; and the University Center, 169.

The board directed the architectural firm to begin drawing the plans for the new school based on the change of site location. The plans were requested to be completed as soon as possible so that site development could begin as soon as the property was purchased.

The Allandale property was purchased from Allandale Associates by the city of Kingsport on January 16, 1992. The 22.5 acres was purchased for $240,000. The school board voted to buy an additional 5.6 acres for $110,000. The purchase funds came from the $30 million capital improvement plan.

The Granby property, according to one school board member, is no longer of any use to the school board. According to the Kingsport Times News (1992) the city discussed selling the Granby Road property. If sold, the money from the sale would be placed in the capital improvement plan fund.
Controversy Develops Concerning Location of New Elementary School in Hawkins County

The site investigation committee met with opposition from residents of Hawkins County, where three of the proposed sites were located. The Hawkins County Commission unanimously passed a resolution that protested Kingsport building a new elementary school in Hawkins County. The Allandale site was located in Hawkins County but was annexed several years ago by the City of Kingsport. In an interview with a central office administrator: "There are 559 students, or 6.08% of all Hawkins County students, who attend Kingsport city schools. Of them, about 200-300 pay tuition. The others live inside the city limits that is in Hawkins County."

An additional concern was stated in the interview with the central office administrator:

This could create a problem with our already established partnership with Sullivan County agencies who were willing to establish offices in the child advocacy center in the new elementary school. Now that the talk is to build in Hawkins County, I don't know if the county agencies will be as excited, especially when the majority of the students they will serve are from another county.

Residents of Hawkins County met in a public forum in January, 1992 to discuss their concerns about their students transferring out of the county, thus costing the county $1,800 per pupil (the state reimbursement figure per child based on average daily attendance). In attendance was a Kingsport school board member. The board member stated the city of Kingsport had not attempted to "recruit" students from Hawkins County to attend the new school. The board member presented data identifying the land radius of the new school attendance zone showing that 83% of the student body will come from within the city.
limits. No action was taken by the Kingsport School Board to alter the Allandale decision.

**Architect Designs New Facility for Allandale Site**

The architectural firm charged to redesign the new elementary school for the Allandale site stated the location allowed for an improved plan:

It's a less-expensive version, costing about $500,000 less than expected. The delay allowed for us to discuss the innovative program planned for the school with its principal and a group of interested teachers. I feel we have a much better idea of what the school should be than we had a year ago.

The person named as the new elementary principal said in the interview that the delay gave him the opportunity to visit other innovative programs in other schools:

After seeing some really exciting and progressive programs in "cutting edge" schools, we came up with some better ideas of how to implement many of the program designs already identified in the educational specifications. We had some of these programs going on in the system.

The new one-story design, according to the architect, would be more suited to the overall program. The learning areas can be partitioned into rooms of different sizes for different activities. The architect stated that he made some revisions based on school board requests:

The board requested that the child advocacy center be reduced in size. This required fewer rooms to be designed in this area. They also requested the kitchen be reduced in size. Because of the reduction from two stories to one story, we were able to reduce the perimeter of the school by 33%. The school will still accommodate 500 pupils.

The projected cost of the new school design was estimated at $7.9 million, including $720,000 for site development. The actual building, according to the architect, will cost approximately $5.5 million, about
$200,000 less than the previous building design. The new plan required the removal of more dirt, but is still considered cheaper than the Granby Road location.

A spokesman for the construction company stated in the Kingsport Times News (June, 1992) that an additional $300,000 will be saved elsewhere in the project. The spokesman also stated the school will not only be less expensive to build, but will also have lower operating costs.

Leadership Change at the Superintendent Level

In June, 1991 contract negotiations for the superintendent were conducted by the school board. The superintendent's contract was extended for two additional months, expiring August, 1992.

In July, 1991, the superintendent announced that he would be leaving at the end of June, 1992 and recommended the school board begin a search for his successor. The Tennessee School Board Executive Director was contacted to begin compiling a list of possible candidates for the superintendency position.

The superintendent who presented the "vision" of the elementary school of the future left in June, 1992. The school board named a central office administrator who had been supportive of the new elementary concept as the interim superintendent. This interim superintendent served until a new superintendent was selected in August, 1992. This investigation reflects no major changes in the new elementary school concept since the resignation of the former superintendent.
Implementation and Evaluation Stage

This study included only the ground breaking events as a concrete example of the actual implementation of the new school plans. Therefore, the stage of implementation and evaluation, as specified by Harvey (1990), has limited importance in this particular report.

Ground Breaking for Site Development for New Elementary School

On September 3, 1992, at 11:30 a.m., there was a ground breaking for the new Kingsport west elementary school. As reported by the Kingsport Times News (1992), one school board member stated: "There were times I didn't think we would get here. This location takes the children out of a questionable area of concern. This was financially more attractive."

Site development of the 22.5 acre parcel was expected to begin immediately. The actual construction of the school is to begin in early 1993. The projected opening of the new west elementary school is projected for fall, 1994.

Summary of Findings

This chapter presented the analysis of the data. The three means of data collection were semi-structured interviews, document analysis and observations. The data were clustered into three stages: analysis, planning and implementation and evaluation. These stages were described in terms of multiple events, processes and procedures.

A detailed description of the significant findings was presented in each of the three identified stages. Specific data such as dates, sizes and costs were furnished. Direct quotes from the interviewees were
incorporated to present their perceptions of the processes and procedures, resulting in the final plan. Documents were used to verify data gathered through the interviews.

In brief, the interview results, documents reviewed and meeting observations reported revealed: a detailed set of educational specifications, architectural plans and organizational procedures have been developed and approved for implementation by the appropriate decision groups; that the proposed school plan incorporates a number of recommendations from current forward-looking literature (see Figure 3); a number of processes influenced plan development, including the leadership visioning process, various involvement or participative strategies with target groups, and use of experts to prepare essential programmatic and facility designs; and the implementation of a number of specific procedures, expecting to result in eventual realization of the intended school model (see Figure 4).

Chapter 5 provides the summary, conclusions and recommendations for this study. A model of the new elementary school is presented.
<table>
<thead>
<tr>
<th>Trends from Literature</th>
<th>Interview</th>
<th>Strategic Plan</th>
<th>Educational Specifications</th>
<th>Revised Educational Specifications</th>
<th>Newspaper Articles</th>
<th>Observation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Planned Change</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>(Fullan, Harvey)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Leadership</td>
<td>X</td>
<td>X</td>
<td></td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Kahn, Guild, Murphy, Hallinger)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Technology</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>(Cetron and Gayle, Ornstein)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lifelong Learning</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Ornstein, Alley, Pitman)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Distant Education</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(National Home Study Council, Miller)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Changing Family</td>
<td>X</td>
<td></td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Maslubitt, Shane, Cetron and Gayle)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Demographic Forecast</td>
<td>X</td>
<td>X</td>
<td></td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Cetron and Gayle)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Higher Order Thinking Skills</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Shane and Tabler, Cetron)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Decentralization</td>
<td>X</td>
<td>X</td>
<td></td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Goodlad, Maslubitt)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Early Childhood</td>
<td>X</td>
<td></td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Education (Boyer, Cetron and Gayle)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Figure 3. Trends from Literature by Source of Information
<table>
<thead>
<tr>
<th>SEQUENCE</th>
<th>INTERVIEW</th>
<th>*DOCUMENT ANALYSIS</th>
<th>OBSERVATION</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>ANALYSIS STAGE</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rationale for a New Elementary School in Kingsport, TN</td>
<td>X</td>
<td></td>
<td>SP, N</td>
</tr>
<tr>
<td>Superintendent Researches/Presents School of the Future</td>
<td>X</td>
<td></td>
<td>N</td>
</tr>
<tr>
<td>Superintendent and Key Central Office Personnel Discuss Vision of New Elementary School</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Presentation of the Vision to School Board</td>
<td>X</td>
<td></td>
<td>N</td>
</tr>
<tr>
<td><strong>PLANNING STAGE</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>School Board Retains Educational Planner</td>
<td>X</td>
<td></td>
<td>N</td>
</tr>
<tr>
<td>Superintendent Conducts Meetings with Administrators, Teachers and Community Representatives for Feedback</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Educational Specifications Developed for New Elementary School</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Educational Planners Specifications</td>
<td>X</td>
<td></td>
<td>ES, N</td>
</tr>
<tr>
<td>Central Office Personnel Revisions to Educational Specifications</td>
<td>X</td>
<td></td>
<td>RES, N</td>
</tr>
</tbody>
</table>

*SP* - Strategic Plan  
ES - Educational Specifications  
RES - Revised Ed Specifications  
N - Newspaper Articles

**Figure 4.** Sequence of Events by Information Source
<table>
<thead>
<tr>
<th>SEQUENCE</th>
<th>INTERVIEW</th>
<th>*DOCUMENT ANALYSIS</th>
<th>OBSERVATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Specifications Approved by School Board</td>
<td>X</td>
<td>N</td>
<td></td>
</tr>
<tr>
<td>Architect Selected for Facility Design and Begins Design Based on the Approved Educational Specifications</td>
<td>X</td>
<td>N</td>
<td></td>
</tr>
<tr>
<td>Principal for New Elementary School Named</td>
<td>X</td>
<td>N</td>
<td>X</td>
</tr>
<tr>
<td>Change in Key Actors/Influentials</td>
<td>X</td>
<td>N</td>
<td>X</td>
</tr>
<tr>
<td>School Board Approves Architect's Design</td>
<td>X</td>
<td>N</td>
<td>X</td>
</tr>
<tr>
<td>Final Site Selection Decisions</td>
<td>X</td>
<td>N</td>
<td>X</td>
</tr>
<tr>
<td>Delay of Site Development</td>
<td>X</td>
<td>N</td>
<td>X</td>
</tr>
<tr>
<td>School Board Studies Other Sites for New Elementary School</td>
<td>X</td>
<td>N</td>
<td></td>
</tr>
<tr>
<td>New Site Chosen for Elementary School</td>
<td>X</td>
<td>N</td>
<td></td>
</tr>
<tr>
<td>Controversy Develops Concerning Location of New Elementary School in Hawkins County</td>
<td>X</td>
<td>N</td>
<td>X</td>
</tr>
<tr>
<td>Architect Designs New Facility for Allandale Site</td>
<td>X</td>
<td>N</td>
<td></td>
</tr>
</tbody>
</table>

*SP - Strategic Plan  
ES - Educational Specifications  
RES - Revised Ed Specifications  
N - Newspaper

Figure 4. (Continued)
<table>
<thead>
<tr>
<th>SEQUENCE</th>
<th>INTERVIEW</th>
<th>*DOCUMENT ANALYSIS</th>
<th>OBSERVATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Leadership Change at the Superintendent Level</td>
<td>X</td>
<td>N</td>
<td></td>
</tr>
<tr>
<td><strong>IMPLEMENTATION AND EVALUATION STAGE</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ground Breaking for Site Development for New Elementary School</td>
<td></td>
<td>N</td>
<td></td>
</tr>
</tbody>
</table>

*SP - Strategic Plan  
ES - Educational Specifications  
RES - Revised Ed Specifications  
N - Newspaper Articles

Figure 4. (Continued)
Chapter 5

Summary, Conclusions, and Recommendations

Chapter 5 includes a brief summary of the study, major conclusions resulting from the findings and selected recommendations to allow others to take advantage of the results of the study. The summary serves as a brief reminder of the steps taken in accomplishing the study. The nine conclusions that are reported were selected as examples of reasonable inferences based on the previously reported findings. Six recommendations are then presented to assist others to accomplish similar kinds of innovations in their own settings.

Summary

This study was undertaken to investigate one school system's attempt to plan a new elementary school for the 21st century. It was intended to document the processes used in developing the plan in order to determine if a change process were apparent. Chapter 1 introduced the theoretical basis for the study. Four research questions were identified that allowed for the foundation of the study to be developed. The problem statement, purpose, significance, assumptions and limitations of the study were reported.

The literature review in Chapter 2 reported futuristic needs for schools of the 21st century. Changing education, planned change, leadership, curricular innovations, demographics and changing family trends were summarized. One innovative school model was presented that illustrated collaboration between schools and business and industry.
Chapter 3 detailed the methodology used in this study. Using a qualitative approach, the investigation utilized interviews, document analysis and observations to collect the data. A peer debriefer was instrumental in the attempt to assure validity in the data analysis procedure.

The analysis of data and findings were reported in Chapter 4. The information describing the change process and the plans for the new elementary school were arranged in sequential order (Figure 4). The summary of findings demonstrated that the change process followed the criteria described in the literature for a planned change process. The cumulative perceptions from the influentials interviewed were synthesized and reported. Research questions 2, 3 and 4 were answered in narrative and figures synthesized the results. Question 1 was addressed in Figure 5 in this chapter, which includes the basics of the new school model.

Conclusions

Nine conclusions were prepared based on the belief that the findings reported in Chapter 4 represented potential for application by school personnel in a wide variety of local settings. These conclusions represent the type contribution possible from similar qualitative research efforts.

1. A change can be achieved with a visionary leader. The Kingsport City Schools change plan was achieved because of the persistent leadership of a visionary, who believed that new ways were essential based on current national and international trends. His commitment was reflected through visible involvement in town meetings,
<table>
<thead>
<tr>
<th>VISION</th>
<th>PROGRAM</th>
<th>STAFFING</th>
<th>FACILITIES</th>
</tr>
</thead>
<tbody>
<tr>
<td>LEARNING COMUNITY</td>
<td>Active learning; Designed to involve up to 16 staff members per 80 students</td>
<td>Teachers, assistants, MAT students, parents, students</td>
<td>Space for 80-85 students-allowance for after hour use by others</td>
</tr>
<tr>
<td>FLEXIBILITY</td>
<td>Multi-age grouping; child advocacy center; before and after school day care</td>
<td>Attitude commitment; business and industry providing instruction</td>
<td>Work areas with flexible space sizes; child advocacy center</td>
</tr>
<tr>
<td>COLLABORATION</td>
<td>Group work in instructional areas of content, methodology of cooperative learning</td>
<td>University professionals, community members, students of all ages</td>
<td>Flexibility to serve from 1 to 100 students in learning area</td>
</tr>
<tr>
<td>SUCCESS FOR ALL</td>
<td>Individual educational programs</td>
<td>Teachers, along with students to be designers of work</td>
<td>Provisions for special needs students</td>
</tr>
<tr>
<td>KNOWLEDGE WORK</td>
<td>Specialized arts, sciences, technology and other content areas</td>
<td>Business and industry; experts and staffing patterns of learning community</td>
<td>Special technology stations in instructional areas for experimentation and discovery</td>
</tr>
<tr>
<td>DIVERSITY</td>
<td>Inclusive educational opportunities</td>
<td>Recognize and build on differences</td>
<td>Aesthetically attractive</td>
</tr>
<tr>
<td>AUTHENTIC ASSESSMENT</td>
<td>Evaluation system is inclusive of portfolios as to skills, knowledge, attitudes, and habits</td>
<td>School/Community accountable for judging success</td>
<td>Spacing available for communication devices and networks</td>
</tr>
</tbody>
</table>

Figure 5. New Elementary School Model Overview
meetings with school faculties and civic groups, and his persuasiveness with central office and school board personnel.

2. The move from a traditional school plan is difficult, even with publicly-stated support. The Kingsport School Board, based on the interviews and document analysis, had stated its support of an innovative and flexible approach to the new elementary school. The educational specifications required revisions to accommodate their actual level of willingness. The school board's eagerness for this innovative school was underestimated by some of the planners.

3. Strategies to provide for systematic inclusion of ideas and concerns can contribute to accommodation on issues that could impede the orderly sequence of a planned change. Various interest groups, including parents, have the ability to make a major change in the planning process.

4. Major controversy about an innovation can occur without altering the original purpose of the innovation. Disagreements over the geographical location of the site remained focused on the politics and emotions of various interest groups without resulting in questioning of the recommended programmatic approach.

5. Communication procedures that provide for inclusion of ideas and suggestions result in an informed community. There was widespread interest in the general community in this effort by their local system to develop a new approach to education in the elementary school. The newspaper coverage resulted in 40 articles over a 3-year time span. Although there was an issue on site location, there was little or no
negative reporting related to this innovative effort to prepare youngsters for 21st century living.

6. Innovation is possible in tradition-oriented settings when the procedures for planned change serve as guideposts. The existence of a local strategic plan in report form contributed to the preparation of this planned change. While there was nothing to indicate a planned change process was adopted as a guide, the sequence applied in the planning process included stages described by planned change experts.

7. Substantial professional development will be needed to successfully implement this model. The proposed model anticipates successful transitions by instructional and administrative staff to new ways of working on learning with students and other community members. It appears that extensive staff development for all personnel will be required.

8. A model can be described for the new elementary school which incorporates a number of forward-looking ideas. Figure 5 was prepared to share illustrative samples in the three areas of programs, staff and facilities. (This model was derived from information shared in the interviews and reported in the documents, as synthesized in Chapter 4.) Such a model has the potential of explanation for constituents who need visual representations of complex ideas.

9. While a system desiring innovation may benefit from the study of the reported model, best results are to be expected from accomplishing/implementing the stages and phases to reach a locally-oriented/customized model.
Recommendations

Six recommendations were developed to illustrate possible extensions of this work. These six were suggested by the findings reported in Chapter 4 and the conclusions reported above.

1. A system needs to have in place adequate mechanisms to deal with innovation, i.e., strategies for drafting of a defensible rationale, having in place a strategic plan for the organization and utilizing reputable specialists such as educational planners and architects.

2. While a major innovation is underway, the community should be kept informed throughout the change process by means of school board and community meetings and newspaper and television coverage. This can best be managed by establishing dates and places for input.

3. A follow-up study should be conducted to determine if the new school reflected the intent of the designers, both in terms of the attitudes supportive of the vision and outcomes expected of students.

4. A school system should identify the influentials who should be involved and/or informed about a planned change process. Someone must know who the influentials are or be able to identify them through some accepted sociometric procedure.

5. Since the Review of Related Literature and the results of this study indicate that schooling will undergo many changes between now and the year 2000, further research needs to be conducted to determine the educational trends that are occurring and, also, to determine the curricular and instructional changes that are successfully achieving paradigm shifts.
6. A handbook for local system change should be developed to serve as a procedures manual for personnel contemplating developing a new school or systems without access to the human and financial resources available in the school system studied in this effort.
REFERENCES


Association for Supervision and Curriculum Development. (1986). Schools, students face uncertain occupational future. ASCD Update, 24, 1, 6.


Counts, G. S. (1932). *Dare the school build a new social order?* New York: John Day.


APPENDIX A

COVER LETTER
Dear Interviewee:

Thank you for talking with me recently by telephone and agreeing to be a part of my study. Please find enclosed a copy of the interview guide, an interview consent form and a biographical sketch.

I look forward to our meeting and appreciate you taking the time to assist me. If you have any questions, please contact me at 282-2779.

Sincerely,

Debra L. Lee

Enclosures
INTERVIEW GUIDE

NAME ________________________________ OCCUPATION ________________________

DATE ______________________________ TIME ________________________________

LOCATION ________________________________________________________________

1. What can you tell me about the new elementary school Kingsport has planned?

2. Will you describe the formal planning process the school system used?

3. What has changed about these plans over the planning period?

4. How do you think the school plan is/is not different from other elementary school plans?

5. What individuals/groups have been influential and how have they influenced this idea as it was developed?

6. Who else was a mover and shaker in this process that should be interviewed?
APPENDIX C

SUPPORT LETTER FROM SUPERINTENDENT
Dear Interviewee:

Ms. Debra Lee, Principal of Keystone Elementary School in Johnson City, TN, is also a doctoral student at East Tennessee State University. She is conducting a study to examine the planned change process for the new elementary school Kingsport City Schools is planning to build. The study will consist of a series of interviews with influentials, both educational and political, who have been involved in this change process. She will also be doing observations and document analysis. Her study shows promise of helping other schools systems plan for educational change in the twenty-first century.

I request that you give Ms. Lee your assistance.

Sincerely,

[Signature]

Vaughn Chambers
APPENDIX D

INTERVIEW CONSENT FORM
INTERVIEW CONSENT FORM

I give permission to Debra Lee to use information obtained from our interview for her doctoral study dealing with planned change in developing the new elementary school in Kingsport, Tennessee. I understand that the interview will be tape-recorded and that I will be given a typed copy of the interview within 30 days for review. I also understand that I may make changes/revisions if I feel it necessary. I give permission for the approved copy to be used in printed form in Ms. Lee's study.

Signature of Interviewee Date

Signature of Interviewer Date
APPENDIX E

BIOGRAPHICAL SKETCH
Debra R. Lee

Biographical Sketch

Debra Lee was born in Kingsport, Tennessee. She received her elementary and secondary education in Washington County, Tennessee. In 1973, she entered East Tennessee State University, completing 2½ years of higher education. She transferred to Clinch Valley College of the University of Virginia where she graduated with a Bachelor of Science degree in elementary education.

In 1981, she completed a Master of Arts degree in elementary curriculum and instruction at East Tennessee State University. She entered the Educational Leadership and Policy Analysis Doctoral program at East Tennessee State University in 1989.

For the past 15 years, she has taught fourth grade and has been an assistant principal in Virginia. She is currently an elementary principal in Johnson City Public Schools in Johnson City, Tennessee.
Dear Interviewee:

Please find enclosed a copy of our interview. I would appreciate you reviewing the copy and making any changes that you feel appropriate. Please return the copy in the enclosed self-addressed stamped envelope.

I appreciate your assistance with my study. If I can be of service to you please let me know. Thank you for your cooperation.

Sincerely,

Debra R. Lee
APPENDIX G

FREQUENCY OF NOMINATIONS
FOR INTERVIEW PROCESS
<table>
<thead>
<tr>
<th>Interviewees</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
<th>11</th>
<th>12</th>
</tr>
</thead>
<tbody>
<tr>
<td>#1. Central Office Administrator</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>#2. Central Office Administrator</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>#3. Central Office Administrator</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>#4. Central Office Administrator</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>#5. School Board Member</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>#6. School Board Member</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>#7. School Board Member</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>#8. School Board Member</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>#9. School Board Member</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>#10. Educational Planner</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>#11. Architect</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>#12. Elected City Official</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
DEBRA R. LEE

Date of Birth: April 24, 1955
Place of Birth: Kingsport, Tennessee

Public Schools, Washington County, Tennessee
Clinch Valley College of the University of Virginia, Wise, Virginia; elementary education, B.S., 1977
East Tennessee State University, Johnson City, Tennessee; elementary curriculum and instruction, M.A., 1981
East Tennessee State University, Johnson City, Tennessee; educational leadership and policy analysis, Ed.D., 1992

Teacher, Wyoming County Public Schools, Pineville, West Virginia; 1977-1978
Teacher, Dickenson County Public Schools, Clintwood, Virginia; 1978-1979
Teacher, Wise County Public Schools, Wise, Virginia; 1979-1984
Assistant Principal, Wise County Public Schools, Wise, Virginia; 1984-1992
Principal, Johnson City Public Schools, Johnson City, Tennessee; 1992-Present

"Improving Student Behavior", March, 1990, Better Teaching

Delta Kappa Gamma
Phi Delta Kappa
Tennessee Association of Supervisors and School Administrators (TASSA)
East Tennessee Elementary Principal's Association
Association of Supervision and Curriculum Development (ASCD)
Appalachian Educational Laboratory (AEL)
Clinch Valley College Alumni Association
National Association of Elementary School Principals