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HOW PARENTS OF UTAH SCHOOL CHILDREN JUDGE  
SCHOOL EFFECTIVENESS

by

Philip L. Rodgers

A dissertation submitted in partial fulfillment  
of the requirements for the degree

of

DOCTOR OF PHILOSOPHY

in

Psychology

Approved:

UTAH STATE UNIVERSITY  
Logan, Utah

2003

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## ABSTRACT

How Utah Parents of Utah School Children Judge  
School Effectiveness

by

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Utah State University, 2003

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Department: Psychology

There is a perceived crisis concerning public education in the United States. This has led to an increase in the use of standardized tests for the purpose of measuring school effectiveness. However, the use of standardized tests for this purpose is problematic. Among these problems is the concern that standardized tests may not measure what parents believe are the most important attributes of an effective school. Unfortunately, there is little in the way of empirical evidence regarding parent beliefs in this area.

The purpose of this research was to answer the following four questions.

1. What do parents of school-aged children in Utah feel are the most important attributes of an effective school?
2. Are there statistical and practical differences between levels of respondents' association with public schools and their responses to question #1?



3. Are there statistical and practical differences between levels of respondents' level of education and their responses to question #1?

4. Are there statistical and practical significant differences between respondents' gender and their responses to research question #1?

A mail survey of 800 randomly selected Utah parents of school-aged children was conducted to address these questions. To answer research question #1, the method of paired comparisons was used to derive a parent ranking of eight attributes of an effective school. To answer research questions #2, #3, and #4, a chi-square analysis of association was conducted. The practical significance of these results was assessed through the calculation of the effect size  $w$ . In total, 199 usable surveys were returned.

Results indicated that parents believed that providing students with a balanced curriculum that encourages a wide range of learning experiences and providing students with the skills necessary to become a productive and useful citizen were more important attributes of an effective school than providing students with a good understanding of basic academic skills. This result is important because it indicates parent support for two attributes of an effective school—wide range of learning experiences and skills to become a productive and useful citizen—that are difficult to measure through the use of standardized tests.

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Philip L. Rodgers

## CONTENTS

	Page
ABSTRACT .....	iii
ACKNOWLEDGMENTS .....	v
LIST OF TABLES.....	viii
CHAPTERS	
I. INTRODUCTION.....	1
II. LITERATURE REVIEW.....	4
Literature Review Methodology .....	4
The Perceived Crisis in American Public Education .....	6
Increased Public Interest in Education .....	7
Calls for Reform.....	8
Reform in the Form of Accountability.....	8
Utah Accountability Laws.....	9
Problems with Standardized Testing.....	10
The Importance of Parent Opinions .....	11
Important Attributes of an Effective School .....	13
Determining Important Attributes of an Effective School .....	16
Summary .....	17
III. METHODOLOGY.....	18
Questionnaire Development.....	18
Mail Survey Administration.....	23
Population and Sample.....	24
Sample Size and Survey Return Rate.....	25
Data Coding and Entry.....	28
Analysis.....	28
IV. RESULTS .....	36
Important Attributes of an Effective School .....	37
Association of Demographic Variables with Responses .....	40
Respondent Characteristics .....	50
Practical Significance.....	51

	Page
V. DISCUSSION .....	53
Standardized Testing and Accountability .....	53
Important Attributes of an Effective School .....	55
What is Important to Parents? .....	59
Parent and Policymaker Disconnect.....	60
Study Limitations .....	62
Further Research .....	63
REFERENCES .....	65
APPENDICES .....	74
Appendix A: Townsend’s (1994) Effective School Components .....	75
Appendix B: School Effectiveness Questionnaire.....	77
Appendix C: Cover Letter .....	82
Appendix D: Prenotification Postcard .....	84
Appendix E: Follow-up Postcard.....	86
CURRICULUM VITAE.....	88

## LIST OF TABLES

Table	Page
1. Mail Survey Return Figures.....	25
2. Ranking of School Effectiveness Attributes.....	38
3. Head-to-Head Ranking: Balanced Curriculum Versus Skills to Become Productive and Useful Citizens .....	39
4. Head-to-Head Ranking: Balanced Curriculum Versus Good Understanding of Basic Academic Skills.....	39
5. Head-to-Head Ranking: Skills to Become Productive and Useful Citizens Versus Good Understanding of Basic Academic Skills .....	39
6. Frequency Distribution of Responses to Parent Association with School Questions (Percentages) .....	41
7. <i>p</i> - and <i>w</i> -Values for Each Paired Comparison for Level of Association With School .....	42
8. Respondent's Level of Education.....	43
9. <i>p</i> - and <i>w</i> -Values for Level of Education.....	44
10. Contingency Table for Level of Education by Basic Academic Skills and Leadership Skills .....	45
11. Contingency Table for Level of Education by Caring/Supportive Environment and Skills Necessary to Become a Useful Citizen .....	45
12. Contingency Table for Level of Education by Healthy Understanding of Self/Others and Skills Necessary to Become Employed .....	46
13. Respondent's Gender.....	47
14. <i>p</i> - and <i>w</i> -Values for Gender.....	47
15. Contingency Table for Gender by Healthy Understanding of Self/Others and Leadership Skills.....	48

Table	Page
16. Contingency Table for Gender by Leadership Skills and Caring/Supportive Environment .....	48
17. Contingency Table for Gender by Develop Value System and Caring/Supportive Environment.....	49
18. Contingency Table for Gender by Leadership Skills and Balanced Curriculum.....	49
19. Respondent Ethnicity.....	50
20. Number of Respondent Children Attending K-12 Schools .....	51

# CHAPTER I

## INTRODUCTION

There is a perceived crisis in American public education. While there may be some who debate the severity of the crisis or even its presence, the continuous drone of politicians and pundits decrying the state of public education cannot be denied. This perceived crisis has resulted in an increased interest in public education.

Increased interest in public education has led to an increased number of calls for educational reform and increased calls for education reform have resulted in an increase in legislated accountability measures. This is true for both on the national level and the state level.

Shortly after his election, President George W. Bush released his educational policy positions in a publication entitled “No Child Left Behind” (NCLB; Bush, 2001). The publication called educational outcomes in the United States “abysmal” (p. 1) and stated that “the federal government currently does not do enough to reward success and sanction failure in our educational system” (p. 1). In 2002, the NCLB act became law.

Prior to the passage of the NCLB act, the Utah State Legislature passed their own accountability legislation. House Bill 177—passed during the 2000 legislative session—codified a system of standards and assessments under the rubric of the Utah Performance Assessment System for Students (UPASS). UPASS called for increased standardized testing for the purpose of determining school effectiveness.

However, there are numerous problems with the use of standardized testing for the purpose of determining school effectiveness (e.g., Beck, 1995; Flink, Boggiano, &

Barrett, 1990; Shepard, 1991). Because of the many problems associated with standardized testing, it is important to look at alternative and/or complementary measures of school effectiveness, and perhaps the most important complementary measure of school effectiveness is parent satisfaction with their children's education.

While parents have often been asked how they rate the quality of education their children receive or their satisfaction with schools, they have rarely been asked to define school effectiveness. While many researchers have asked parents to rate various aspects of schooling, including the purpose of education (Randall, Hite, Cheung, & Cheng, 2000) or what schools priorities should be (Pipho, 1999a), a comprehensive review of the literature revealed only a single researcher who asked parents to rate elements of an effective school (Townsend, 1994). Unfortunately, while Townsend's study provides a usable list of factors parents consider important to school effectiveness, his results suffer from several methodological flaws. The problem, therefore, is the lack of empirically based knowledge concerning what parents believe to be the important attributes of an effective school.

The purpose of this study was to determine what parents of school children in Utah felt were the important attributes of an effective school. To meet this purpose, the following sets of research questions were answered.

1. What do parents of school-aged children in Utah believe are the most important attributes of an effective school?
2. Are there statistical and practical differences between levels of respondents' association with public schools and their responses to question #1?



3. Are there statistical and practical differences between levels of respondent's level of education and their responses to question #1?

4. Are there statistical and practical differences between respondent's gender and their responses to research question #1?

## CHAPTER II

### LITERATURE REVIEW

Using the preceding problem statement as an outline, the review of the literature provides references for all premises and support for the conclusion that a survey of parents of Utah school children was necessary to determine what parents feel are the most important aspects of school effectiveness. Sections of the review will address the perceived crisis in American public education, the increased public interest in education, resulting calls for reform, reform in the form of accountability, the NCLB act, Utah accountability laws, problems with standardized testing, the importance of parent opinions, and the lack of empirically obtained information concerning parent opinions of school effectiveness. These sections are contained within two major sections. The first section provides background on the increasing importance of school accountability that has led to the advent of the NCLB act and accountability requirements in Utah schools. The second section provides information regarding the importance of parent opinions and the dearth of information concerning parent opinions regarding elements of an effective school. Prior to the discussion of those items, an overview of the methods used in the review of the literature will be presented.

#### Literature Review Methodology

The methods used to conduct the review of literature included the following steps: (a) determination of keywords, (b) search of Educational Resources Information Center (ERIC) database, (c) search for internet-based sources, (d) search of electronic

periodicals, and (e) search of branching bibliographies.

Prior to searching, the keywords relevant to the topic of school effectiveness were determined. Keywords, however, were different for the two major categories of information contained within this review. These words were determined by reading samples of current literature and examining the ERIC thesaurus of descriptors. Keywords relating to the accountability movement included “accountability,” “effective schools research,” “school effectiveness,” “No Child Left Behind” and “testing.” Keywords relating to parent opinions included “parent attitudes,” “parent opinions,” “parent surveys” and “parent questionnaires” in conjunction with “education” and “schools.” These terms were used to search the ERIC database. Abstracts of articles found through the search were examined for relevancy. Those that were judged relevant—based upon their relation to the topic—were obtained. The same methods were used to search Internet-based sources. These included general search engines like Yahoo, Google, and Excite. General searches of the Internet yielded numerous sources of information related to accountability—usually advocacy groups. Finally, a search of several online publications including *EdWeek*, *Kappan*, and *Educational Researcher* was conducted. These searches proved fertile ground for issues related to school accountability, but few sources for the area of school effectiveness. The articles obtained through a search of these electronic sources had their bibliographies examined for further relevant articles, which were then obtained.

## The Perceived Crisis in American Public Education

In 1983, the report *A Nation at Risk* sounded a clarion call to Americans that something was seriously wrong with the state of education in the United States (National Commission on Excellence in Education, 1983). The introduction stated:

Our Nation is at risk. Our once unchallenged preeminence in commerce, industry, science, and technological innovation is being overtaken by competitors throughout the world...the educational foundations of our society are presently being eroded by a rising tide of mediocrity that threatens our very future as a Nation and a people. What was unimaginable a generation ago has begun to occur—others are matching and surpassing our educational attainments. (p. 1)

Serious concerns about education have not lessened during the intervening years. In a 1997 appearance before the United States Senate’s Budget Committee’s Education Task Force, former United States Secretary of Education William J. Bennett stated “...almost 15 years after a presidential commission warned in a report titled *A Nation at Risk* that ‘a rising tide of mediocrity’ threatened America’s public schools, student achievement is still mediocre at best” (Bennett, 1997, p. 1). This belief has been echoed by other educational leaders, including Manno (1988), who stated:

It’s been 15 years since the National Commission on Excellence in Education reported to President Reagan that a “rising tide of mediocrity” was engulfing public education, creating “a nation at risk.” Today, the nation is still at risk. And the problems are much the same: mediocre schools and weak academic achievement by our children. (p. 537)

More vitriolic assessments of public education have come from popular public commentators Thomas Sowell (1993) and Martin Gross (1999). Gross reported, “We are faced with an educational crisis that cuts across all philosophical concerns. Simply stated, American public schools, from kindergarten through the senior year of high

school, are miserably failing their students and the society” (p. 5) and “Nowhere in the developed world are there now so many ignorant schoolchildren as in America” (p. 13).

Some, however, have argued that public education was never as poor as represented in *A Nation at Risk* (Berliner & Biddle, 1995; Bracey, 1996; Cizek, 1999) and others have argued that significant improvements have been made since the report was issued (Fogione, 1999). Bracey (2000) addressed many of the criticisms leveled against public education and found them lacking in empirical support. Rothstein (1998) examined the claims that “American student achievement has declined in the past generation, and public school standards have deteriorated” and “Graduates know less now than they used to” (p. 1) and found them to be based more on nostalgic thinking than fact. Unfortunately, these voices have largely gone unrecognized by popular media, the public and politicians (Maeroff, 1998).

#### Increased Public Interest in Education

The crisis in education, whether real or imagined, has sparked increased interest in education from both the general public and politicians. The public interest in education has steadily increased during the past 12 years. According to Gross (1999), “As recently as the 1980s only 2 percent of the population described education as ‘the most important problem facing the nation.’ But by 1996 Americans ranked ‘the quality of public schooling’ as the most pressing concern after crime” (pp. 5-6).

Politicians from both major parties have recognized the increased public interest in education. Albert Gore, former Vice President of the United States and the

Democratic candidate for president in 2000, stated, “I have said from the very beginning of my campaign for president that my number-one priority is education” (Sack, 2000). The Republican nominee and current president, George W. Bush, adopted a similar view of the importance of education as a hallmark of his campaign (Gallagher, 2000).

### Calls for Reform

Because of the renewed interest in education sparked by the perceived crisis, calls for educational reform have become strident from many sectors of society. Louis Gerstner, Jr., CEO of IBM wrote in 1993 that “The country will be out of business if public education does not reinvent itself—and fast” (as quoted in Jennings, 1998). Diane Ravitch, former Assistant Secretary of Educational Research and Improvement at the U.S. Department of Education, wrote that “In the last two decades of the twentieth century, dissatisfaction with the performance of U.S. schools grew strong enough to permit serious consideration of major structural changes in American education” (Ravitch, 1995).

### Reform in the Form of Accountability

Increased public and private sector interest has led to calls for education reform, specifically standards-based reform (Nave, Miech, & Mosteller, 2000). These calls have resulted in an increased number of legislated accountability measures. The logic behind these measures is summarized by Shepard (1991), “Policy makers believe that,

by setting standards and measuring attainment, they will spur teachers to teach better and students to learn more” (p. 232). This signals a change from assessing inputs, such as resources, facilities, number of teachers with advanced degrees, number of books in the library and the like, to outputs in the form of student performance (Ravitch, 1995). While standards and assessment are not new to education, the hallmark of current accountability measures, rewards and punishments based upon performance, are new to education (Sirotnik & Kimball, 1999).

Because the implementation of accountability measures is increasing and because standardized testing is an appealing method of collecting accountability data, the use of standardized testing for this purpose has greatly increased (Dorn, 1998). Indeed, Wise (1990) has called standardized testing the “key witness” in the trial of school success. Gallagher (2000) also notes the increase in standardized testing:

Although standardized tests came under intense fire for a short time in the 1970s, we have returned to this practice with a fervor perhaps greater than at any other time since schools in the United States began making extensive use of standardized tests in the 1930s. (p. 503)

The use of standardized tests for this purpose is popular because (a) tests are relatively inexpensive, (b) testing changes can be implemented relatively quickly, (c) test results are visible and draw media attention, and (d) testing can create other changes that would be difficult to legislate, such as shaping the curriculum to the test instead of the test to the curriculum (Linn, 1998).

### Utah Accountability Laws

Recently, the Utah State Legislature voted into law a set of required standards

and assessments for public schools. The 2000 passage of House Bill 177 (Rowan, 2000) codified a system of standards and assessments under the title the Utah Performance Assessment System for Students (UPASS). The purpose of UPASS, in part, is to "...determine the effectiveness of school districts and schools in assisting students to master the fundamental educational skills towards which instruction is directed" (Rowan, p. 2). To achieve this goal, UPASS called for: (a) norm-referenced achievement testing of all students in grades 3, 5, 8, and 11; (b) criterion-referenced achievement testing of basic skills for students in all grade levels; (c) direct writing-assessment in Grades 6 and 9; (d) a 10<sup>th</sup>-grade competency test that students must pass in order to receive a high school diploma; and (e) student behavioral indicators. These measures are slated for implementation between 2001 and 2004.

### Problems with Standardized Testing

Although the use of standardized tests for accountability purposes is increasing, there are problems with using results of standardized testing for this purpose. Beck (1995) listed numerous problems with using standardized tests for accountability purposes. Among these problems are (a) tests measure only a small portion of student knowledge, (b) test scores have become substitutes for teachers' judgments, (c) testing ignores many kinds of knowledge and types of performance, (d) testing conveys the notion that what is taught in schools is neutral and that there is a universally agreed upon standardized body of knowledge in any particular subject matter, (e) testing often does not resemble local curriculum, (f) students are often not motivated to do well on



tests not carrying individual incentives, and (g) teaching to the test confounds scores.

Other difficulties with standardized testing include the “narrowing” of what is taught (Herman, 1992), the rejection of at-risk students (Shepard, 1991), cheating (Archer, 1999), public backlash and protests (Gehring, 2000; Olson, 1998, 2000a), artificially inflated scores (Shepard), and the possible deleterious effect of pressure on performance (Flink et al., 1990). Others are concerned that standardized testing diminishes local control of schooling (Wise, 1990). Popho (1999b) has noted that by making schools and teachers accountable for student learning, the responsibility for achievement is diminished for others, including parents and students.

### The Importance of Parent Opinions

Relying heavily on standardized testing for accountability purposes diminishes other important aspects of school effectiveness (Dorn, 1998). This deficiency is highlighted by Hill, Guthrie, and Pierce (1996) who stated, “We have begun to hold schools accountable for adhering to centrally issued operational rules, not for achieving parentally or socially desired outcomes” (electronic source). An important complementary source of evidence of school effectiveness can, therefore, be found in parent opinions (Davies & Ellison, 1995; Townsend, 1994).

In a review of the literature, Sconyers (1996) found that parents “hold a broad vision about what schools should be doing to meet the needs of their children” (p. 6), and, while parents expect schools to provide for the academic growth of their children, they also believe that schools are too narrowly focused on this one aspect and should

expand their vision to serving the needs of the whole child. This is not a new thought. In 1950, Hand and Sanford published results of a survey of parents, students and teachers aimed at what types of help secondary schools should undertake to provide students. In their survey, parents, students and teachers overwhelmingly felt that high school should help pupils with the problems of everyday life. Hand and Sanford (1950) prefaced their report by stating that:

Given our tradition of the local control of education, what the public thinks about its secondary (and all other) schools will ultimately determine whether these institutions are to be strengthened through community support or weakened through community neglect. (p. 138)

Standardized testing for accountability purposes does receive some limited support from parents (Olson, 2000b); however, parents also value other sources of evidence of school effectiveness. Some reports have indicated that parents' top priority for schools is that they prepare good citizens (Pipho, 1999a). A 1999 poll of Utah residents (Randall, Hite, & Cheung, 1999) indicated that overcrowding was considered to be the biggest problem that local public schools had to deal with (26%), followed by discipline (18%), lack of funding (13%), low teacher pay (7%), gangs/violence (6%), no parent/community input (6%), teacher apathy/quality (4%) and drugs (4%). When asked in a national poll which factors are important in determining teacher quality, 60% of parents rated teacher's level of academic degree earned as very important, while 52% rated years of teaching experience very important, and 47% rated the scores the teacher's students receive on standardized tests as a very important (Rose & Gallup, 1999). Clearly, when determining important indicators of school effectiveness, parents differ from those administrators and bureaucrats who support standardized testing as the

salient, and at times singular, indicator of school effectiveness.

### Important Attributes of an Effective School

While parents are often asked to rate their satisfaction with schools, they have rarely been asked to rate what factors they feel are most important in terms of school effectiveness. This is true for many of the popular parent questionnaires and opinion polls.

There are many standard survey instruments that can be used at the state, district or school level to assess parent satisfaction. Notable among these are the National Study of School Evaluation's opinion inventories (Fitzpatrick, 1996), the National Association of Secondary School Principals' school climate survey (National Association of Secondary School Principals, 1988), Victoria Bernhardt's school improvement questionnaires (Bernhardt, 1998), and the Center for the School of the Future's Indicators of School Quality (ISQ) questionnaires (Taylor, 2002). All of these instruments have been used extensively to assess parent satisfaction with various aspects of the schools their children attend. Unfortunately, with the exception of the ISQ, they provide little information regarding what parents feel the most important attributes of an effective school are. Typical questions from these instruments include "My child receives a quality education at this school" or "My child is safe at this school," which are answered by selecting one of five possible responses ranging from strongly disagree to strongly agree. While responses to these questions provide some evidence of parent satisfaction, they do not measure the intensity or importance that

parents place on various question domains. The one exception is the ISQ questionnaire that asks parents to select their three most important priorities from a list of seven domains (parent support, teacher excellence, student commitment, school administration, instructional quality, resource accessibility, and safety). These domains, however, largely represent inputs (those things that go into creating a quality school) and not outcomes (the skills/knowledge that students learn).

There are also many national polls that gauge opinion regarding public schools. Notable among these is the annual Phi Delta Kappa/Gallup poll of the public's attitudes toward the public schools (Rose & Gallup, 2002) and the annual poll conducted by Brigham Young University that largely mirrors the Gallop poll, but for a representative sample of Utah residents (Randall, Hite, & Biao, 2001). Generally, the purpose of these polls is to assess the public's satisfaction with public schools and to determine their opinions regarding critical education issues. Both of these surveys ask respondents to grade, on an A, B, C, D, Fail scale, the public schools that their children attend, the public schools in their community, the public schools in their state and the public schools in the United States. These polls do not, generally speaking, address issues of school effectiveness.

While many individual survey instruments and the Kappan/Gallup poll address issues of parent satisfaction with schools, this is only tangential to what aspects parents would rate as most important in terms of school effectiveness. Townsend (1994) provides the only research found that asks parents directly to rate attributes of an effective school. He asked parents, as well as other education stakeholders, to rate 10

areas of effectiveness on a scale of 1 (strongly agree) to 5 (strongly disagree). The 10 domains are academic skills, preparation for employment, leadership development, caring environment, productive citizens, student's understanding of self, balanced curriculum, value system, teachers who are role models, and student involvement in decision making.

In his 1994 study, Townsend surveyed groups of parents, students, principals and teachers in Melbourne, Australia and seven states in the United States. The primary purpose of this study was to ascertain "The perceptions of...respondents in relation to the possible roles of an effective school" (p. 4). His rationale for the study was that to much of the evidence for school effectiveness was derived from the opinions of researchers and bureaucrats who were far removed from school settings and that the local school community should play a greater role in determining what constitutes an effective school.

Townsend's research, however, has several weaknesses. Results across stakeholder groups were combined, so there is no way to determine if parent, student, principal and teacher opinions differed in any meaningful way. Further, no information is provided regarding how participants were selected. This is illustrated, in part, by the dispersion of sample sizes for individual states that ranged from 381 for Utah to 20 for Minnesota. Although respondents were selected from seven states, Utah's sample comprised 66% (381/573) of the total United States sample. While Townsend (1994) provides some evidence of what parents believe are important in effective schools, the validity of his results are suspect because of poor methodology.

The current study improves upon the methodology used by Townsend (1994) in two important ways. First, subjects were randomly selected from a list of households in Utah with school-age children. This allows for the estimation of error rates and inference to the statewide population of parents with school-age children. Second, results are not commingled across subject groups. They can be attributed to parents, not an unspecified group of parents, students, teachers and administrators.

### Determining Important Attributes of an Effective School

The Utah State Legislature has mandated a program of school testing for the purpose of determining “The effectiveness of school districts and schools in assisting students to master the fundamental educational skills towards which instruction is directed” (Rowan, 2000). Unfortunately, the definition of school effectiveness has largely been crafted by those far removed from the day-to-day operations of schools. According to Townsend (1994):

A review of school effectiveness literature established that the definition of ‘school effectiveness’ ...has been shaped, not by the people who are now being asked to implement the concept, but by researchers and bureaucrats who are at least one step, and in some cases many more, away from the situation where the concept is expected to be turned into practice. (p. 4)

This view may extend to educators as well. According to Deborah Wadsworth of Public Opinion, “Many educators dismiss the public’s view as uninformed or irrelevant. But the public is the taxpayer, or the spigot for tax revenues upon which our schools depend. We must listen to their perspectives” (Tacheny, 1997, p. 23).

## Summary

Standardized testing has become the de facto method of assessing school quality to fulfill accountability requirements. While providing important information, standardized testing provides only a portion of the information related to school effectiveness. Notably absent from the information that tests provide are academic indicators other than standardized tests, nonacademic outcomes, school climate and teacher qualifications. This deficiency is highlighted by Hill et al. (1996) who stated, “We have begun to hold schools accountable for adhering to centrally issued operational rules, not for achieving parentally or socially desired outcomes” (available online at).

Using standardized tests for the purpose of measuring school effectiveness has largely been a legislative decision, promoted by national and state-level politics. Unfortunately, the decision to use standardized tests to measure school effectiveness has often been made without little local input. This begs the question, what do parents believe to be the most important attributes of an effective school?

## CHAPTER III

### METHODOLOGY

The methodology used to answer the four research questions is outlined in this chapter. The sections of this chapter, in order of appearance, are as follows: questionnaire development, mail survey administration, population and sample, return rate, data coding and entry, and data analysis.

#### Questionnaire Development

The questionnaire used in data collection focused on eight of the ten domains of school effectiveness as defined by Townsend (1994). In addition, four demographic questions and four questions related to respondents' involvement with their child's school were also asked (see Appendix B). Following is a discussion of the relevance of Townsend's domains, how and why they were paired to eight, the importance of the demographic items and the methods used to validate the instrument.

#### *Types of Questions*

There were two groups of questions that were asked on the questionnaire: those related to the domains of school effectiveness developed by Townsend (1994) and those related to demographic features of respondents.

#### *Townsend's Domains*

In his study of school effectiveness, Townsend (1994) developed ten domains



of school effectiveness. These are (a) a good understanding of basic academic skills, (b) the skills necessary to become employed, (c) the opportunity to develop leadership skills, (d) a caring and supportive environment, (e) the skills necessary to become a productive and useful citizen, (f) the attitudes and skills necessary to develop a healthy understanding of themselves and others, (g) a balanced curriculum that encourages a wide range of learning experiences, (h) the opportunity to develop a value system that reflects the major values of our society, (i) teachers who act as role models for the development of community values and habits, and (j) an opportunity to be involved in the decision making processes within the school.

When Townsend asked subjects to rate the importance of these domains, his questions took the following form, “An effective school will provide students with...a good understanding of basic academic skills” (to use the first domain; p. 5). Respondents were asked to rate each of the statements by selecting a single point along a 5-point scale from strongly agree to strongly disagree (the middle 3 points were not defined by Townsend). The current study deviated from Townsend’s method by using the method of paired comparisons to determine which domains are most valued by parents (Remmers, 1972) and by reducing the number of domains from ten to eight. The method of paired comparisons asks respondents to choose the most important domain when each domain is compared with every other domain. This method will be more thoroughly discussed later in this chapter.

### *Demographic Variables*

The questionnaire included four questions related to demographic factors.

These were (a) the number of children who are or have attended public school, (b) respondent's relationship to children in the house (mother or female guardian and father or male guardian), (c) respondent's level of education (no high school diploma, high school diploma or GED, some college credit, bachelor's degree, or graduate degree), and (d) ethnicity (White, Black or African American, Asian, Native Hawaiian or other Pacific Islander, American Indian or Alaska Native, Hispanic or Latino, and other).

In addition to the demographic questions, a series of four questions were used to estimate the extent of parent involvement at school. These questions were as follows.

1. How often do you talk to one of your child's teachers?
2. How often do you attend parent/teacher meetings?
3. How often do you visit your child's school?
4. How often do you volunteer with activities at your child's school?

Respondents were asked to reply to these questions choosing either frequently, sometimes, seldom, or never.

#### *Questionnaire Validation Process*

Of the five major types of validity—face, content, concurrent, construct, and predictive—face and content validity were most relevant to the proposed research. Concurrent validity refers to the correlation between the measure under examination and a similar valid measure (Vogt, 1993). Because there were no similar measures, the use of concurrent validity to assess the validity of this measure was not possible. Construct validity refers to the “extent to which variables accurately measure the

constructs of interest” (Vogt, p. 44). Because the questions contained in the survey were not intended to measure specific constructs, construct validity was not directly relevant to this study. While one could argue that the result of this survey addresses the overall construct of “school effectiveness,” this does not correspond to the classical definition of a construct that is used to describe a theoretical concept through the use of a scale or index (Vogt, p. 44). Likewise, because survey results are not intended to predict any future behavior, predictive validity is also irrelevant to this study.

Face validity is defined as the extent to which a questionnaire appears to measure what it purports to measure and content validity is the degree to which the questionnaire items represent the content that the questionnaire is designed to measure (Borg & Gall, 1989). To ensure that standards of face and content validity were met, a three-stage process of questionnaire development was used to create the final questionnaire. The process was also used to refine ancillary materials such as the cover letter (see Appendix C). The three stages of questionnaire and questionnaire packet development were parent focus group, professional comment and piloting. Each of these stages is described below.

#### *Stage I: Parent Focus Groups*

A focus group of six parents of Utah school-children reviewed Townsend’s (1994) list of ten domains related to school effectiveness and paired the list to eight domains. The method of paring the list to eight domains included discussion of each of the domains, and a final vote by each of the parents. The domains receiving the fewest votes, and subsequently dropped from the questionnaire, were “teachers who act as role

models for the development of community values and habits,” and “an opportunity to be involved in the decision-making processes within the school” (Numbers 9 and 10 as listed in Appendix A).

### *Stage II: Professional Comment*

The questionnaire and accompanying cover letter were distributed for comment to two professionals with experience in questionnaire construction and mail surveys. Suggestions from the professionals were incorporated into the final design of the questionnaire and cover letter.

### *Stage III: Piloting*

The questionnaire packet was submitted to a group of 8 parents of public-school children for comment. These parents were asked to open the questionnaire packet, read the cover letter and instructions and complete the questionnaire as if they had received it in the mail. After this was done, the parents were asked to comment on the understandability of the cover letter, instructions and questionnaire. Suggestions from the parents were incorporated into the final design of the questionnaire and cover letter.

### *Question Order*

To diminish the possible influence of question order upon responses, the order of questions was randomly determined in two ways. First, each of the 28 paired comparisons—that asked respondents to select the more important domain of school effectiveness—were randomly assigned to questions number 1 to 28. Second, the order

the domains appeared in each question (one domain appeared “on top” of the other) was randomly determined.

### Mail Survey Administration

Data were collected through the use of mailed questionnaires. According to Mangione (1995) the use of mailed questionnaires is advantageous when the research sample is widely distributed, the research budget is modest, questions are written in a closed-ended style, the research sample has a moderate to high investment in the topic, the list of research objectives is short, and subject’s privacy is important. The research reported here meets each of these characteristics.

The use of mailed questionnaires has a long history in the social sciences. The first detailed account of a mail questionnaire appeared in the *Journal of the Royal Statistical Society* over 153 years ago (Scott, 1961). Since then, the use of mailed questionnaires has become one of the most popular methods used to gather data (Dillman, 1991). Mailed questionnaires, however, are uniformly subject to the threat of low response rates resulting in possible response bias (Ratneshwar & Stewart, 1989). The obvious solution to this threat is to increase return rates (Altschuld & Lower, 1984). To this end, there have been over 300 published studies that examine the various factors that are thought to influence response rates (Boser & Clark, 1993). The number has undoubtedly increased since that time. Although many authors have attempted to provide a cohesive combination of these factors into a single “best method” of mailed questionnaire design (Goyder, 1982; Harvey, 1987; Heberlein & Baumgartner, 1978;

Kanuk & Berenson, 1975; Rodgers & Worthen, 1995; Yammarino, Skinner, & Childers, 1991), perhaps the best conceptualized combination of factors appears in Dillman's (2000) Tailored Design Method.

Important aspects of Dillman's method included in the methods of this study included: (a) prenotification, all subjects were sent a postcard alerting them to the arrival of the questionnaire one week prior to its mailing (see Appendix D); (b) post-notification, all subjects were sent a postcard reminding them to return the questionnaire one-week after it was mailed (see Appendix E); (c) formatting the questionnaire within a booklet; and (d) using social appeals in the cover letter.

### Population and Sample

The sample was randomly drawn from the population of most households in Utah with children of school (K-12) age and was purchased from a marketing company that specializes in compiling updated lists of such households. Although many education-related surveys are conducted by sampling from the entirety of adult populations, as opposed to just adults with school-aged children, Tacheny (1997) has demonstrated that the latter group has a much better idea of what actually occurs in schools and therefore provides a more accurate picture of what's important to those most directly influenced by school effectiveness. This is not to say that the opinions of those without children in their home are unimportant, just that they may be different from those that do have children and, for reasons of economy and clarity, only one of these populations could be sampled.

### Sample Size and Survey Return Rate

While an exact figure representing the total population of households in Utah with school-age children is difficult to calculate, using information obtained from the State of Utah Economic and Demographic Research Database, it can be estimated that there are approximately 470,000 households with children in the state of Utah. Following the recommendations of Dillman (2000), a total of 800 households were randomly selected from a close approximation of this population. Survey packets were mailed to the selected households in August 2001. Fifty-four of the packets were returned as undeliverable, resulting in an accessible sample of 746 households. The initial mailing, followed by a postcard reminder, yielded 226 returned surveys or 30% of the accessible sample (see Table 1). Of these 226 surveys, 27 were excluded from analysis because they were incomplete. The final number of usable surveys, therefore, was 199.

Table 1

#### *Mail Survey Return Figures*

Event	Number	Percent
Initial mailing	800	
Undeliverable	54	
Deliverable	746	100
Final return	226	30
Usable surveys	199	27

Mail surveys are open to several types of error that could possibly influence results. Dillman (2000) recognizes four types of error found in mail survey process. Each of these possible sources of error is addressed in light of the final return rate for this survey.

### *Sampling Error*

Sampling error is the result of surveying only a sample of the population. While the sampling error rate for the original sample size of 800 was 3.46%, the final number of usable survey returns increased the sampling error to 6.95% at the .95 confidence interval. That is to say, 95% of the time, the population proportion will be within plus or minus 6.95% of the sampled response for any given question (Dillman, 2000), but not the aggregated results.

### *Coverage Error*

Coverage error occurs when some members of the target population do not have an equal chance of being sampled. The sample was purchased from a company that specializes in updated marketing lists of residents. Fifty-four of the 800 questionnaire packets mailed were returned as undeliverable. While it would be impossible to obtain an error-free sample from the population of all Utah residents with school-age children, the purchased sample was the most accurate available.



### *Measurement Error*

Measurement error results from poorly worded questions and poorly designed instruments. The three-step process of questionnaire validation outlined earlier, potentially decreased possible measurement error.

### *Nonresponse Error*

Nonresponse error is the greatest threat to the validity of results obtained from mailed questionnaires. It is the result of respondents being different from nonrespondents in a way that is relevant to the study. The best way to decrease the threat of nonresponse error is to increase the return rate. Unfortunately, the final return rate of usable questionnaires was only 27%. While this does not obviate the results, it does call into question their validity. For this reason, a nonrespondent bias check was conducted.

Mangione (1995) has recommended that a nonrespondent bias check should be administered when mail survey response drops below 70%. The final return rate of 27% necessitated just such a process. A total of 24 nonrespondents were randomly selected to participate in the nonrespondent bias check. These individuals were called and asked to respond to a selection of items from the questionnaire. If selected individuals were unable to be contacted after three calls, or refused to participate, a different nonrespondent was randomly selected and called.

The responses from these nonrespondents were compared to the replies of those who responded on four questions: (a) How often do you visit your child's school; (b)

How often do you attend parent/teacher meetings; (c) What is your level of education; and (d) How many children do you have attending school in grades K-12? A *t* test of results indicated that no differences between the respondent and sampled nonrespondent group existed ( $p \leq .05$ ).

### Data Coding and Entry

Error can also occur in data coding and entry. Because it is critical that methods of data review be used to ensure that the data set is as accurate as possible (Fink, 1995), the following methods were utilized to ensure that the data analyzed accurately portrays respondent's responses.

After the surveys were finalized, a codebook was created that described the protocols used to transfer data from completed survey to electronic format. The codebook was important because it provided precise directions and standards for how the data was to be coded. Based upon the parameters stated in the codebook, data were transferred from completed surveys to electronic format through keypunching into a text file. Because keypunching is prone to error, the data was keypunched twice. The two data sets were then compared for uniformity. Less than 10 discrepancies were discovered and were corrected through a review of the original survey. The data file was then imported into *SPSS for Windows* statistical software (release 7.0) for analysis.

### Analysis

The focus of this research concerned what parents of school-aged children in

Utah believe are the most important attributes of an effective school (research question #1). This question was easily answered through the cumulative ranking of parent responses. However, tangential questions such as determining the possible association of demographic variables with parent ratings of indicators of school effectiveness (research questions #2, #3, and #4) are also important and were addressed by estimating both the statistical and practical significance of these questions. Each of these analyses is addressed in the following sections.

### *Descriptive Analysis of Paired Comparison Rankings*

Research question #1 (What do parents of school-aged children in Utah believe are the most important attributes of an effective school?) was answered through the use of descriptive statistics. Descriptive statistics is the most basic of survey-reporting methods (Fink, 1995). Specifically, the method of paired comparisons, first conceived by Thurstone (1927), was used to create a frequency distribution of the domains of school effectiveness. Simply, a paired comparison is a method of obtaining relative rankings of a group of items (Remmers, 1972). Lemon (1973) described the method of paired comparisons as a type of rank ordering as follows:

In order to make the rank-ordering task more systematic it is possible to use the *method of paired comparisons*. In this method all the persons or objects to be rated are paired with each other in all possible combinations, and the rater is asked to select the one in each pair that he likes or approves of most. This method can be used as a means of obtaining preference rankings or as a method of attitude scaling. When it is used to generate preference rankings its interpretation is quite straightforward, and all the investigator need do is to arrange the objects along a continuum of favorability based upon the rank ordering derived from the measure. (p. 89)

One difficulty with the use of paired comparisons is the large number of comparisons required to rate a small number of domains. The formula used to determine the total number of comparisons required to rate a fixed number of domains is  $N * .5(N - 1)$ , where  $N$  = the number of domains. In the case of the eight domains examined as part of this research (reduced from the 10 originally studied by Townsend), 28 paired comparisons were required.

In the research presented here, for each comparison, respondents were asked to select which of the two listed domains was more important to an effective school. Each domain could be selected up to seven times (the total number times it was compared with the seven other domains). Each time a domain was selected over another domain, it was awarded a single point. Domains were then ranked based upon the total number of points they received. Subjects that did not respond to each of the 28 paired-comparison questions were excluded from this analysis, resulting in a usable sample of 199 respondents. The results chapter contains a frequency distribution of domain rankings based upon the methods described above.

#### *Chi-Square Analysis of Association*

While the primary question from this research was answered through a descriptive analysis of the data, the analysis of tangential questions related to the possible association of demographic variables with responses required the use of a chi-square test (the assessment of the practical significance of these questions is addressed in a separate section). Specifically, research questions #2, #3, and #4 were analyzed

through this method.

Because the data to be analyzed was in frequency form, chi-square is the most appropriate test of statistical significance for this analysis (Linton & Gallo, 1975). The chi-square test is appropriate because it tests “hypotheses involving proportions in various categories” (Glass & Hopkins, 1984, p. 275). While *z*-tests have often been used to test hypotheses regarding proportions, “The chi-square statistics has broader applications; it can accommodate three or more categories simultaneously whereas the *z*-test cannot” (Glass & Hopkins, p. 284).

Wherever possible, exact probability levels for each statistical significance test are reported. These probability values indicate the likelihood of obtaining an association of the magnitude observed with repeated same-size sampling.

It should be noted that chi-square tests of this type have been alternately referred to as “contingency,” “independence” or “association” tests (Cohen, 1988); throughout this paper, the term “association” will be used, as in chi-square test of association.

### *Chi-Square Assumptions*

There are four primary assumptions that must be met for the appropriate use of the chi-square test (Linton & Gallo, 1975). The first assumption is that raw data must be in the form of frequencies. This assumption was met because the analysis compares the raw frequencies of a demographic (categorical) variable, either educational level, association with school, or gender of respondent, with another categorical variable, the selection of one of two attributes of an effective school. While the association with the school variable was derived from summing the scores from four questions, responses

were divided into thirds to maintain their categorical nature. The second assumption is that each subject be counted only once for each analysis or, as referred to by Glass and Hopkins (1984), all observations must be independent “That each observation qualifies for one and only one cell—that is, the categories are mutually exclusive, and there is only one entry per observation unit” (p. 291).

Because all demographic variables are categorical and the response variable (selection of one attribute over another) is categorical, each subject is counted only once in the analysis. The third assumption is that cell sizes contain at least five subjects. This assumption was met. The fourth assumption is that categories should be set up prior to the analysis. This is done to ensure that categories are not set up in a way that favors certain outcomes. The demographic categories developed for this analysis were all constructed prior to the chi-square analysis. While these concerns were addressed, the chi-square analysis is still a relatively robust procedure. Cohen (1988) stated, “Other than the need to avoid very small hypothetical frequencies, the test is relatively free of constraining assumptions” (p. 216).

#### *Independent and Dependent Variables*

For chi-square tests, the independent variable is each classification or cell. The dependent variable is the number of people that fit in each cell (Linton & Gallo, 1975). For example, one analyses found here examines the association between gender of the respondent and selection of one domain over another. For this analysis, there would be four independent variables (gender X domain). The dependent variable would be the number of subjects that were contained in each cell.

### *Respondent's Self-Reported Association With Public Schools*

Association with public schools is intended to measure the amount of contact respondents have had with public schools. It was calculated by summing the responses to the following four questions dealing with school association: (a) How often do you talk to one of your child's teachers; (b) How often do you attend parent/teacher meetings; (c) How often do you visit your child's school; and (d) How often do you volunteer with activities at your child's school? For analysis purposes, respondent scores were divided into thirds that categorize relatively low, moderate, and high levels of association. Frequency distributions of these questions are reported in the next chapter.

### *Respondent's Self-Reported Level of Education*

Level of education was measured through respondent's selection of one of the following categories: no high school diploma, high school diploma or GED, some college credit, bachelor's degree or graduate degree or greater. The frequency distribution for this question is reported in the next chapter.

### *Practical Significance*

The purpose of statistical significance is to estimate the probability of chance occurrence as an explanation for the observed relationship between variables. However, statistical significance does not necessarily reveal anything meaningful about those variables (Vogt, 1993). Pedhazur and Schmelkin (1991) decry the reliance on

“statistical significance” that obscures, what they term, “substantive meaningfulness.”

In their words:

It requires little training and, in view of the widespread availability of computing facilities, even less effort to obtain a *t* ratio, say, and declare that the difference between two means is, or is not, statistically significant. However, it requires a good deal of knowledge and hard thinking to decide whether a given finding is substantively meaningful. (p. 203)

What Pedhazur and Schmelkin (1991) refer to as substantively meaningful, most researchers call practical significance. Practical significance provides information about the magnitude of associations between variables. One important measure of practical significance is the effect size.

### *Effect Sizes*

Borg and Gall (1989) recommend the use of effect sizes as an important aid in the interpretation of practical significance. This is important because measures of statistical significance are subject to variation based upon sample size (Shaver, 1993); therefore, while associations may be statistically significant, they may be of little practical importance. This recommendation is echoed by Fan (2001) who likens statistical significance and effect size as two sides of the same coin and that “Good research practice requires that, for making sound quantitative decisions in education research, both sides (of the coin) should be considered” (p. 275). To help assess the practical significance of applicable research questions, the effect size  $w$  was calculated for all cases where a chi-square analysis of statistical significance was performed (research questions #2, #3, and #4). Cohen (1988) has recommended the use of  $w$ , stating, “ $w$ ...indexes the amount of departure from no association, or the degree of



association between (variables)” (p. 221). Cohen also provided the following guide for interpreting  $w$ : .10 equals a small effect size, .30 equals a medium effect size and .50 equals a large effect size ( $w$  has a range of 0 to 1).

Equation 1 contains the formula for  $w$ , where  $P_{0i}$  = the proportion in cell  $i$  posited by the null hypothesis,  $P_{1i}$  = the proportion in cell  $i$  posited by the alternate hypothesis and reflects the effect for that cell, and  $m$  = the number of cells.

$$w = \sqrt{\sum_{i=1}^m \frac{(P_{1i} - P_{0i})^2}{P_{0i}}}, \quad (1)$$

### *Educational Significance*

In addition to practical, or substantive, significance, it is also important to address the educational significance of these results. While statistical significance estimates the probability of observed relationships between variables being due to chance and practical significance estimates the magnitude of those relationships, educational significance speaks to the importance of the relationships to the everyday world. Educational significance is addressed in the Discussion chapter.

## CHAPTER IV

### RESULTS

The presentation of results is organized in the following manner. First, the results related to research question number #1 (What do parents of school-aged children in Utah believe are the most important attributes of an effective school?) are reported through rank ordering of respondent selections. Second, research questions #2 (Are there statistical and practical differences between levels of respondents' association with public schools and their responses to question #1?), #3 (Are there statistical and practical differences between levels of respondent's level of education and their responses to question #1?), and #4 (Are there statistical and practical significant differences between respondent's gender and their responses to research question #1) are reported through the use of tables containing  $p$ -values for each paired comparison. In addition, contingency tables are provided for those paired comparisons whose  $p$ -value is less than .05.

Third, respondent characteristics will be highlighted. This information includes frequency tables for respondent gender, ethnicity, level of education, number of children attending school, and the four questions that address parent association with their child's school. And fourth, the practical significance of the results—in terms of magnitude of association—will be examined through the use of the effect size  $w$  ( $w$ -values are reported in the same tables that report  $p$ -values). Other aspects of practical significance will be addressed in the discussion chapter.

## Important Attributes of an Effective School

A ranking of respondents' most important domains of school effectiveness was used to answer research question number #1 (What do parents of school-aged children in Utah believe are the most important attributes of an effective school?). The ranking was obtained by tallying the number of times each domain was selected over another domain through the method of paired comparisons. The maximum number of points that each domain could tally was 1,393. This number was obtained by multiplying the number of times a domain could be selected over another attribute (7) by the total number of respondents (199). Table 2 contains a rank ordering of all eight attributes and the number of points (the number of times it was selected over another attribute) each received. Also included is the percent of times the attribute was selected over another attribute. For example, the attribute percentage, "An effective school will provide students with a balanced curriculum that encourages a wide range of learning experiences" was selected over another attribute 79% of the number of times it was compared to another attribute.

### *Respondent Consistency*

The consistency of respondent selections was analyzed in two ways, through a head-to-head comparison of the top-three ranked attributes and through a computer analysis of consistency. First, a head-to-head comparison was made between the top-three ranked attributes. This was important because it is theoretically possible for some of the attributes to be ranked ahead of others when scores are aggregated, but actually

Table 2

*Ranking of School Effectiveness Attributes*

Rank	Attribute	Points	Percent
1.	Provide students with a balanced curriculum that encourages a wide range of learning experiences.	1,102	79.1
2.	Provide students with the skills necessary to become a productive and useful citizen.	962	69.1
3.	Provide students with a good understanding of basic academic skills.	909	65.3
4.	Provide students with the attitudes and skills necessary to develop a healthy understanding of themselves and others.	705	50.6
5.	Provide students with the skills necessary to become employed.	594	42.6
6.	Provide students with a caring and supportive environment.	545	39.1
7.	Provide students with the opportunity to develop a value system that reflects the major values of our society.	389	27.9
8.	Provide students with the opportunity to develop leadership skills	366	26.3

*Note.* Every attribute was preceded in the original survey by the phrase “An effective school will...”

receive fewer selections when compared on a head-to-head basis. Tables 3, 4, and 5 contain these head-to-head rankings. In no case did the head-to-head comparisons deviate from aggregated rankings. Second, the consistency of individual rankings was assessed by comparing the possible conflicts within the top-three ranked and, therefore

Table 3

*Head-to-Head Ranking: Balanced Curriculum Versus Skills to Become Productive and Useful Citizen*

Attribute	Freq	%
Provide students with a balanced curriculum that encourages a wide range of learning experiences.	113	56.8
Provide students with the skills necessary to become a productive and useful citizen.	86	43.2

Table 4

*Head-to-Head Ranking: Balanced Curriculum Versus Good Understanding of Basic Academic Skills*

Attribute	Freq	%
Provide students with a balanced curriculum that encourages a wide range of learning experiences.	132	66.3
Provide students with a good understanding of basic academic skills.	67	33.7

Table 5

*Head-to-Head Ranking: Skills to Become Productive and Useful Citizens Versus Good Understanding of Basic Academic Skills*

Attribute	Freq	%
Provide students with the skills necessary to become a productive and useful citizen.	107	53.8
Provide students with a good understanding of basic academic skills.	92	46.2

most important, items. When calculated for the top-three ranked items, the consistency rate was 94%.

### *Association of Demographic Variables with Responses*

Using the method of chi-square analysis of association described in the methodology chapter, the first part of research questions #2 (Are there statistical and practical differences between levels of respondents' association with public schools and their responses to question #1?), #3 (Are there statistical and practical differences between levels of respondent's level of education and their responses to question #1?), and #4 (Are there statistical and practical significant differences between respondent's gender and their responses to research question #1?) were answered. The second part of these questions relating to practical differences is addressed in a later section.

### *Respondent Level of Connection with School*

Respondents were asked four questions designed to assess their level of connection with their child's school. The questions were as follows: "How often do you talk to one of your child's teachers?" "How often do you attend parent/teacher meetings?" "How often do you visit your child's school?" and "How often do you volunteer with activities at your child's school?" Respondents were provided with four response options: frequently, sometimes, seldom and never. Table 6 contains frequency responses for each of the four questions.

Responses were coded as follows frequently = 1, sometimes = 2, seldom = 3 and

never = 4. Respondent scores were combined across the four questions then divided into thirds that categorize relatively low, moderate and high levels of connection with school. Combined scores ranged from 4, indicating the lowest possible combined score, to 15. Scores were divided into thirds as follows: respondents whose combined score totaled 4 or 5 were placed in the “high” connection group ( $n = 59$ ), those whose combined score totaled 6 or 7 were placed in the “moderate” connection group ( $n = 68$ ), and those whose score totaled 8 and above were placed in the “low” connection group ( $n = 70$ ). Two respondents did not respond to one or more of the connection questions and were omitted from the analysis.

Table 6

*Frequency Distribution of Responses to Parent Association with School Questions*

*(Percentages)*

Question	Frequently	Sometimes	Seldom	Never
How often do you talk to one of your child’s teachers?	80 (40.6)	94 (47.7)	21 (10.7)	2 (1.0)
How often do you attend parent/teacher meetings?	167 (84.3)	25 (12.6)	4 (2.0)	2 (1.0)
How often do you visit your child’s school?	86 (43.4)	97 (49.0)	14 (7.1)	1 (0.5)
How often do you volunteer with activities at your child’s school?	47 (23.7)	77 (38.9)	42 (21.2)	32 (21.2)





*Respondent Level of Education*

Level of education was measured through respondent's selection of one of the following 6 categories: no high school diploma, high school diploma or GED, some college credit, associate of arts degree, bachelor's degree or graduate degree or greater (see Table 8). Because of a few number of respondents in some categories, respondents were collapsed into four levels of education from the original six. These were high school diploma or GED or less ( $n = 23$ ), some college credit or associate of arts degree ( $n = 83$ ), bachelor's degree ( $n = 59$ ) or graduate degree ( $n = 33$ ).

A 4 x 2 chi-square test of association yielded three statistically significant associations between levels of education and the selection of one domain of school effectiveness over another at the  $p \leq .05$  level (see Table 9 for the  $p$ -values for each of

Table 8

*Respondent's Level of Education*

Children attending K-12	Freq	Percent
No high school diploma	1	0.1
High school diploma or GED	22	11.1
Some college	58	29.3
Associate of arts degree	25	12.6
Bachelor's degree	59	29.8
Graduate degree	33	16.7

Table 9

*p- and w-Values for Level of Education*

Variable	Balanced curriculum	Skills productive citizen	Basic academic skills	Healthy understanding self/others	Skills to become employed	Caring & supportive environment	Value system reflects society	Leadership skills
Balanced curriculum		$p = .49$ $w = .11$	$p = .27$ $w = .14$	$p = .45$ $w = .12$	$p = .38$ $w = .12$	$p = .66$ $w = .09$	$p = .38$ $w = .13$	$P = .72$ $w = .08$
Skills productive citizen			$p = .60$ $w = .10$	$p = .98$ $w = .03$	$p = .26$ $w = .14$	$p = .01$ $w = .25$	$p = .38$ $w = .13$	$p = .51$ $w = .11$
Basic academic skills				$p = .13$ $w = .17$	$p = .16$ $w = .16$	$p = .13$ $w = .17$	$p = .33$ $w = .13$	$p = .00$ $w = .29$
Healthy understanding self/others					$p = .04$ $w = .21$	$p = .63$ $w = .09$	$p = .66$ $w = .09$	$p = .25$ $w = .14$
Skills to become employed						$p = .48$ $w = .11$	$p = .28$ $w = .14$	$p = .47$ $w = .11$
Caring & supportive environment							$p = .15$ $w = .16$	$p = .13$ $w = .17$
Value system reflects society								$p = 1.00$ $w = .02$
Leadership skills								

paired comparisons) for the 199 respondents. Tables 10, 11, and 12 contain the frequency values for each of the statistically significant associations.

*Respondent Gender*

Respondent gender was determined by asking whether their relationship to their child was “mother or female guardian,” “father or male guardian,” or other. Fifty-seven percent (113) of respondents selected the “mother or female guardian” response, 43%

Table 10

*Contingency Table for Level of Education by Basic Academic Skills and Leadership Skills*

Level of education	Domains						Total
	Basic academic skills			Leadership skills			
	<i>N</i>	%	Exp	<i>N</i>	%	Exp	
High school diploma or less	12	6.1	18.5	11	28.2	4.5	23
Some college education	67	42.1	66.7	16	41.0	16.3	83
Bachelor's degree	54	34.0	47.4	5	12.8	11.6	59
Graduate degree	26	16.4	26.5	7	17.9	6.5	33
Total	159			39			198

Table 11

*Contingency Table for Level of Education by Caring/Supportive Environment and Skills Necessary to Become a Useful Citizen*

Level of education	Domains						Total
	Caring/supportive environment			Skills to become useful citizen			
	<i>N</i>	%	Exp	<i>N</i>	%	Exp	
High school diploma or less	11	23.4	5.5	12	7.9	17.5	23
Some college education	22	46.8	19.7	61	40.4	63.3	83
Bachelor's degree	7	14.9	14.0	52	34.4	45.0	59
Graduate degree	7	14.9	7.8	26	17.2	25.2	33
Total	47			151			198

Table 12

*Contingency Table for Level of Education by Healthy Understanding of Self/Others and Skills Necessary to Become Employed*

Level of education	Domains						Total
	Healthy understanding of self/others			Skills necessary to become employed			
	<i>N</i>	%	Exp	<i>N</i>	%	Exp	
High school diploma or less	17	15.5	12.8	6	6.8	10.2	23
Some college education	49	44.5	46.1	34	38.6	36.9	83
Bachelor's degree	32	29.1	32.8	27	30.7	26.2	59
Graduate degree	12	10.9	18.3	21	23.9	14.7	33
Total	110			88			198

(84) selected the “father or male guardian” response, and no one selected the “other” response (see Table 13). Two respondents did not respond to the question and were dropped from this particular analysis.

A 2 x 2 chi-square test of association yielded four statistically significant associations between gender and the selection of one domain of school effectiveness over another at the  $p \leq .05$  level (see Table 14 for the  $p$ -values for each of paired comparisons) for the 199 respondents. Tables 15, 16, 17, and 18 contain the frequency values for each of the statistically significant associations.



Table 15

*Contingency Table for Gender by Healthy Understanding of Self/Others and Leadership Skills*

	Domains						Total
	Health understanding of self/others			Leadership skills			
	<i>N</i>	%	Exp	<i>N</i>	%	Exp	
Female	97	63.0	88.3	16	37.2	24.7	113
Male	57	37.0	65.7	27	62.8	18.3	84
Total	154			43			197

Table 16

*Contingency Table for Gender by Leadership Skills and Caring/Supportive Environment*

	Domains						Total
	Leadership skills			Caring/supportive environment			
	<i>N</i>	%	Exp	<i>N</i>	%	Exp	
Female	13	31.0	24.1	100	64.5	88.9	113
Male	29	69.0	17.9	55	35.5	66.1	84
Total	42			155			197

Table 17

*Contingency Table for Gender by Develop Value System and Caring/Supportive Environment*

	Domains						Total
	Develop value system			Caring/supportive environment			
	<i>N</i>	%	Exp	<i>N</i>	%	Exp	
Female	36	47.4	43.6	77	63.6	69.4	113
Male	40	52.6	32.4	44	36.4	51.6	84
Total	76			121			197

Table 18

*Contingency Table for Gender by Leadership Skills and Balanced Curriculum*

	Domains						Total
	Leadership skills			Balanced curriculum			
	<i>N</i>	%	Exp	<i>N</i>	%	Exp	
Female	7	35.0	11.5	106	59.9	101.5	113
Male	13	65.0	8.5	71	40.1	75.5	84
Total	20			177			197

## Respondent Characteristics

Demographic characteristics of the respondent group, other than those previously analyzed (association with school, level of education, and gender), were ethnicity and the number of children attending school. Each of those is examined below.

### *Ethnicity*

Subjects were asked their ethnicity. Responses provided were White, Black or African American, Asian, Native Hawaiian or other Pacific Islander, American Indian or Alaska Native, Hispanic or Latino, and other. A single respondent did not answer the question. The frequency distribution for ethnicity is found in Table 19.

Table 19

#### *Respondent Ethnicity*

Ethnicity	Freq	Percent
White	181	91.4
Black or African American	1	0.5
Asian	3	1.5
Hawaiian or Pacific Islander	2	1.0
Hispanic or Latino	8	4.0
Other	3	1.5
Total	198	100.0



*Number of Children Attending School*

Respondents were asked to write the number of children they had attending school in grades K-12. Table 20 contains a distribution of their responses.

Practical Significance

For the chi-square test, the relevant effect size measure is  $w$  (Cohen, 1988). As defined by Cohen, “ $w$ ...indexes the amount of departure from no association, or the degree of association between (variables)” (p. 221).

Cohen (1988) also provides the following guide for interpreting  $w$ : .10 equals a small effect size, .30 equals a medium effect size, and .50 equals a large effect size.

Preceding tables contained the values for the effect size  $w$  for each of the three demographic characteristics examined through the use of chi-square analysis:

Table 20

*Number of Respondent Children Attending K-12 Schools*

Children attending K-12	Freq	Percent
1 Child	58	29.1
2 Children	80	40.2
3 Children	36	18.1
4 Children	20	10.1
5 Children	5	2.5
Total	199	100.0

association with school (Table 7), level of education (Table 9), and gender (Table 14).

Not a single  $w$  value exceeded Cohen's requirements for a small effect size.

## CHAPTER IV

### DISCUSSION

I chose this study because, as an educational program evaluator, I was becoming more aware of the importance and use of accountability systems to measure school effectiveness. Concurrently, I found it disconcerting that standardized testing was the prominent and accepted tool for measuring school effectiveness. My review of the literature confirmed these concerns. Also, it became quite evident that parent attitudes about school effectiveness were not being considered. Further, the things that parents feel are the most important attributes of an effective school may not be those things that are measured through the use of standardized testing. In this section I provide a synopsis of the issues relating to the importance of this topic, a description of the results of the study, commentary on the importance of the results, a discussion of the limitations of the study and suggestions for future research.

#### Standardized Testing and Accountability

The use of standardized tests, for the purpose of holding schools accountable, has increased dramatically in recent years. As stated by Bracey (2001), "If 2000 was the year that testing went crazy, 2001 was the year it went stark raving mad" (p. 158). Undoubtedly one of the reasons that testing "went stark raving mad" in 2001 was the passage of the "No Child Left Behind Act." The act elevated the prominence of standardized testing by requiring that all states make adequately yearly progress towards having all of their students score at a proficient level on state tests. If

individual schools and districts fail to make adequate yearly progress, they ultimately face “corrective action.” This may result in the replacement of teachers and administrators, restructuring of the school organization, conversion to a charter school, or the takeover of the school by a private educational management organization or the state. Using the results of standardized tests to make such high-stakes decisions, however, is fraught with problems.

While standardized tests were never a perfect measure of student performance, let alone school effectiveness, they are even less so when used for high-stakes decisions. Problems associated with the use of standardized tests for this purpose include: (a) they only measure only a small portion of student knowledge, (b) students are often not motivated to do well on tests that do not carry individual incentives (Beck, 1995), (c) they may produce artificially inflated scores (Shepard, 1991), (d) the pressure that accompanies their administration may have a deleterious effect on performance (Flink et al., 1990), and (e) they may be too unreliable for this purpose (Kane & Staiger, 2002). But among all of the faults associated with using standardized tests to measure school effectiveness, there is one that has not received the attention it deserves: tests may not measure what parents want most from the schools their children attend. This is true for most states, including Utah.

Utah’s school accountability program—known as the Utah Performance Assessment System for Students or UPASS—requires a variety of tests to be administered to students in the first through 12<sup>th</sup> grade. The purpose of UPASS is to determine school effectiveness. As stated in Utah Code 53A-1a-601(1), “It is the intent

of the Legislature in enacting this part to determine the *effectiveness* of school districts and schools in assisting students to master the fundamental educational skills towards which instruction is directed” (italics added). The purpose of this research was to determine what Utah parents of school-aged children believe are the most important attributes of an effective school.

### Important Attributes of an Effective School

To answer the question of what Utah parents believe are the important attributes of an effective school, I first had to define a finite universe of attributes. I found these in research conducted by Townsend (1994) who had previously studied—although with some flaws—perceptions of effective schools. I refined Townsend’s list, based upon responses from a parent focus group, then constructed a survey that utilized the method of paired comparisons to derive a parent ranking of the most important attributes of school effectiveness. The results from this survey were used to answer the following research questions:

1. What do parents of school-aged children in Utah believe are the most important attributes of school effectiveness?
2. Are there statistical and practical differences between levels of respondent’s association with public schools and their responses to question #1?
3. Are there statistical and practical differences between levels of respondent’s level of education and their responses to question #1?
4. Are there statistical and practical significant differences between

respondent's gender and their responses to research question #1?

Clearly, the most important research question is #1, "What do parents of school-aged children in Utah believe are the most important attributes of an effective school?" The remaining research questions were of interest to evaluate whether specific demographic characteristics are associated with responses to research question #1. Therefore, the bulk of the discussion is focused on the results to research question #1, particularly because there appears to be little or no association between demographic characteristics and parent ratings of important indicators of school effectiveness. This, however, may be an interesting outcome itself.

Using the method of paired comparisons, a ranking of attributes of an effective school was obtained from parent respondents. The ranking of attributes, from greatest importance to least importance, is as follows:

1. An effective school will provide students with a balanced curriculum that encourages a wide range of learning experiences.
2. An effective school will provide students with the skills necessary to become a productive and useful citizen.
3. An effective school will provide students with a good understanding of basic academic skills.
4. An effective school will provide students with the attitudes and skills necessary to develop a healthy understanding of themselves and others.
5. An effective school will provide students with the skills necessary to become employed.

6. An effective school will provide students with a caring and supportive environment.

7. An effective school will provide students with the opportunity to develop a value system that reflects the major values of our society.

8. An effective school will provide students with the opportunity to develop leadership skills

The three items ranked highest provide the greatest interest for two reasons. First, the numerical gap between the third item and the fourth item is greater than between any two other items. Second, the third item—"An effective school will provide students with a good understanding of basic academic skills"—provides the demarcation between what UPASS measures and the two items parents believe are more important attributes of an effective school.

The results of this survey roughly correspond to those found by Townsend (1994). Although Townsend reported his results for a combined sample of 573 principals, teachers, parents and students from schools in seven of the United States, the top three attributes were the same for both studies; the order, however, was different. Townsend's sample ranked understanding of basic academic skills, first; a balanced curriculum that encourages a wide range of learning experiences, second; and the skills necessary to become a productive and useful citizen, third. The remaining attributes do not correspond as well.

An examination of the association of three demographic variables—association with school, level of education, and gender—with subject selection of attributes of an

effective school yielded few associations that were of any statistical or practical significance. Of the 84 possible associations (3 demographic variables X 28 paired comparisons), only seven yielded  $p$ -values equal or less than .05. The corresponding effect sizes,  $w$  in this case, were also small. The chi-square analysis for association with school produced no statistically significant outcomes at the .05 level.  $p$ -values for this analysis ranged from .98 to .06;  $w$ -values had a range of .02 to .17. The chi-square analysis for level of education produced three statistically significant outcomes at the .05 level.  $p$ -values for this analysis ranged from 1.00 to .00;  $w$ -values had a range of .02 to .29. The chi-square analysis for gender produced four statistically significant outcomes at the .05 level.  $p$ -values for this analysis ranged from .90 to .00;  $w$ -values had a range of .00 to .27. It should also be noted that for comparisons of the items ranked highest—balanced curriculum, skills to become a productive and useful citizen and understanding of basic skills—there were no statistically significant differences at the .05 level.

While the relative lack of statistically significant differences for demographic factors might be an interesting outcome in itself, the lack of differences should not be summarily dismissed. In some instances, the response of males and females were almost diametrically opposed, as with the comparison between providing students with the attitudes and skills necessary to develop a healthy understanding of themselves and others and providing students with the opportunity to develop leadership skills. Notwithstanding the results of this study, the impact of gender upon the desirability of certain educational outcomes may be an important area of future research.



## What is Important to Parents?

Based upon the results of this survey, Utah parents seem to believe that providing a balanced curriculum and the skills necessary to become a productive and useful citizen are more important attributes of an effective school than providing students with a good understanding of basic academic skills. Unfortunately, the standardized tests utilized as part of Utah's accountability plan—and their compliance with the NCLB Act—only measure basic academic skills. This has the effect of narrowing the curriculum to a few basic subjects, usually language arts, math and science. Teachers are then faced with the dilemma of whether to spend greater amounts of instructional time on these subjects than the broader array of core curriculum offerings such as fine arts, technology, foreign language, health, library media, physical education and social studies.

This, however, is not news. Herman noted this very point in her 1992 review of the topic, which said:

Insofar as traditional standardized tests assess only part of the curriculum, many of these researchers conclude that the time focused on test content has narrowed the curriculum in two ways: (a) an overemphasis on the basic skills subjects and lower levels of cognitive skills stressed by tests; and (b) a neglect of higher order thinking skills and content areas such as science and social studies that are not the subjects of tests. (pp. 1-2)

There can be little doubt that as the consequences of low test scores are felt at the local level, a greater amount of instructional time will be allotted to those subjects that are tested, to the detriment of those subjects that are not tested; as stated by Kohn (2001), "Across the nation, schools under intense pressure to show better test results

have allowed those tests to cannibalize the curriculum” (p. 350).

Lost in the emphasis on accountability through the use of standardized tests are parents’ desires for a balanced curriculum that encourages a wide range of learning experiences and the instruction of skills necessary to become a productive and useful citizen, the first- and second-ranked attributes of an effective school.

Or maybe parent opinions have not been “lost,” maybe they have never been found, or at least adequately considered. In a PBS special on school choice, Chester E. Finn, Jr., former Assistant Secretary for Research and Improvement at the U.S. Department of Education and current president of the Thomas B. Fordham Foundation, responded to the question “If you look at poll data, parents in suburban school districts might say that schools in general are bad, but that their own schools are fine” by stating, “I know, and this is of course a very tricky political issue, because you don’t particularly want to tell people that they’re wrong, and that something they think is fine is actually broken. You don’t endear yourself to them by telling them that” (PBS, 2000). Finn might be sincere when he states that parents might be wrong in believing that the schools their children attend are not broken, but his comments highlight a disconnect that many politicians and policymakers have between their own desires for school accountability and the desires of the parents that these school serve.

### Parent and Policymaker Disconnect

In the review of literature, I demonstrated the importance of the question “What do parents of school-aged children in Utah feel are the most important attributes of

school effectiveness?” Now that the question has been answered to some degree, it is important to answer the question “Why is the outcome of this study important?”.

This research points to a possible disconnect between what parents may want from schools and what politicians demand in terms of accountability. This disconnect can be witnessed in several areas. A recent poll of Utahns’ attitudes toward public schools indicated that 65% of parents awarded the schools their children attend an “A” or “B” grade. Only 6% of parents assessed a grade of “D” and no parents gave schools an “F” (Randall et al., 2001). Surveys have also demonstrated parents’ lukewarm support for the ability of standardized testing to measure the things that are most important about their child’s education. A recent national survey asked parents of school-aged children to rate the extent to which standardized tests scores measured the things that are important about their child’s education (Franz, 2000). Fourteen percent of respondents said all things, 30% said most things, 40% said some things, 10% said a few things, and 4% said no things (2% replied that they did not know). Over half of the respondents stated that standardized tests measure, at the most, some things that are important about their child’s education.

Parents give the schools their children attend high marks. They believe that standardized tests measure only some of the things that are important about their child’s education. And, as I demonstrated in this research, parents believe that providing students with a balanced curriculum that encourages a wide range of learning experiences and providing students with the skills necessary to become a productive and useful citizen are more important attributes of an effective school than providing

students with a good understanding of basic academic skills. Yet the use of standardized tests to measure school effectiveness, oblivious to parent desires, is increasing. Parents should be provided with greater opportunities to determine what the important attributes of an effective school are and how those attributes should be measured.

### Study Limitations

This study is limited in several important ways. First it is limited geographically to parents of school-aged children in Utah; conducting similar surveys in other parts of the country would help confirm these results or possibly expose a geographic difference in beliefs. Also, the beliefs of adults who do not have children should be assessed. Another limitation is that this research occurred prior to the advent of the NCLB Act of 2001 that mandated statewide education testing and provided penalties for schools and districts that do not meet adequate yearly progress requirements. Indeed, the NCLB Act has probably heightened public awareness of educational testing. It has also provided an unheard of political “spin” in education arena (Press, 2001). Although some congress members did vote against the NCLB Act (it passed the U.S. House of Representatives 381-41 and the U.S. Senate 87-10), it must have been difficult to be perceived, when voting against NCLB, as voting to leave some children behind.

Another limitation concerns the term “effectiveness.” The use of the term was born out of the Utah public law, which created the state’s accountability system. The law reads, in part, “It is the intent of the Legislature in enacting this part to determine

the *effectiveness* of school districts and schools in assisting students to master the fundamental educational skills towards which instruction is directed” (Utah Code 53A-1-601[1], italics added). The term effectiveness, however, is difficult to globally define. In regards to Utah, school effectiveness can be defined by the evaluative information (re: standardized test scores) obtained through standardized testing. Again, to quote the Utah Code (53A-1-601[2][a]):

The Utah Performance Assessment System for Students enacted under this part shall provide the public, the Legislature, the State Board of Education, school districts, public schools, and school teachers evaluative information regarding the various levels of proficiency achieved by students, so that they may have an additional tool to plan, measure, and evaluate the effectiveness of programs in the public schools.

Outside of Utah, however, school effectiveness is less clearly defined and can be combined into the category of equally poorly defined terms such as “school success” or “school quality.” I, perhaps too quickly, adopted the term “school effectiveness” and should have done a better job of canvassing the totality of terms regarding successful schools. These terms need to be better defined not only in the research literature, but in the public’s mind as well.

### Further Research

I would suggest several areas of research in this area that need to be conducted. First, there is a need to replicate this study in other states. Further research also needs to be done to better define what an effective, quality or successful school is in the minds of parents. Related research should also focus on what parents want in their schools—this is an especially important topic with the increasing opportunity for school choice

across the nation. One demographic variable that was not examined as part of this study was the grade level of children of parents who responded to this survey. It is well within reason that parents may desire different attributes of an effective school to different levels of that school. Future research could explore the differences between parents of children attending elementary school, middle school, and high school. And, as previously mentioned, the impact of gender upon the desirability of certain educational outcomes is also an area needing further research.

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APPENDICES



Appendix A

Townsend's (1994) Effective School Components

### Townsend's (1994) Effective School Components

1. An effective school will provide students with a good understanding of basic academic skills.
2. An effective school will provide students with the skills necessary to become employed.
3. An effective school will provide students with the opportunity to develop leadership skills
4. An effective school will provide students with a caring and supportive environment.
5. An effective school will provide students with the skills necessary to become a productive and useful citizen.
6. An effective school will provide students with the attitudes and skills necessary to develop a healthy understanding of themselves and others.
7. An effective school will provide students with a balanced curriculum that encourages a wide range of learning experiences.
8. An effective school will provide students with the opportunity to develop a value system that reflects the major values of our society.
9. An effective school will provide students with teachers who act as role models for the development of community values and habits.
10. An effective school will provide students with an opportunity to be involved in the decision-making processes within the school.

Appendix B  
School Effectiveness Questionnaire

## School Effectiveness Questionnaire

**DIRECTIONS:** For each of the numbered questions, please check the box that you feel represents the more important attribute of an effective school. For example, using the question below, if you felt that it was more important for effective schools to have highly qualified teachers than up-to-date textbooks, you would check the box next to highly qualified teachers.

- |                   |   |                                     |
|-------------------|---|-------------------------------------|
| Example Question: | An effective school will provide students with...   |                                     |
|                   | highly qualified teachers.  | <input checked="" type="checkbox"/> |
|                   | up-to-date text books.  | <input type="checkbox"/>            |
|                   |   |                                     |
| 1.                | An effective school will provide students with...   |                                     |
|                   | a good understanding of basic academic skills.  | <input type="checkbox"/>            |
|                   | the skills necessary to become employed.  | <input type="checkbox"/>            |
|                   |   |                                     |
| 2.                | An effective school will provide students with...   |                                     |
|                   | a good understanding of basic academic skills.  | <input type="checkbox"/>            |
|                   | a caring and supportive environment.  | <input type="checkbox"/>            |
|                   |   |                                     |
| 3.                | An effective school will provide students with...   |                                     |
|                   | a good understanding of basic academic skills.  | <input type="checkbox"/>            |
|                   | the skills necessary to become a productive and useful citizen.                                 | <input type="checkbox"/>            |
|                   |   |                                     |
| 4.                | An effective school will provide students with...   |                                     |
|                   | a good understanding of basic academic skills.  | <input type="checkbox"/>            |
|                   | the attitudes and skills necessary to develop a healthy understanding of themselves and others. | <input type="checkbox"/>            |
|                   |   |                                     |
| 5.                | An effective school will provide students with...   |                                     |
|                   | a good understanding of basic academic skills.  | <input type="checkbox"/>            |
|                   | a balanced curriculum that encourages a wide range of learning experiences.                     | <input type="checkbox"/>            |
|                   |   |                                     |
| 6.                | An effective school will provide students with...   |                                     |
|                   | a good understanding of basic academic skills.  | <input type="checkbox"/>            |
|                   | the opportunity to develop a value system that reflects the major values of our society.        | <input type="checkbox"/>            |
|                   |   |                                     |
| 7.                | An effective school will provide students with...   |                                     |
|                   | a good understanding of basic academic skills.  | <input type="checkbox"/>            |
|                   | teachers who act as role models for the development of community values.                        | <input type="checkbox"/>            |
|                   |   |                                     |
| 8.                | An effective school will provide students with...   |                                     |
|                   | a good understanding of basic academic skills.  | <input type="checkbox"/>            |
|                   | an opportunity to be involved in the decision-making processes within the school.               | <input type="checkbox"/>            |
|                   |   |                                     |
| 9.                | An effective school will provide students with...   |                                     |
|                   | a good understanding of basic academic skills.  | <input type="checkbox"/>            |

10. An effective school will provide students with...  
the skills necessary to become employed.   
a caring and supportive environment.
11. An effective school will provide students with...  
the skills necessary to become employed.   
the skills necessary to become a productive and useful citizen.
12. An effective school will provide students with...  
the skills necessary to become employed.   
the attitudes and skills necessary to develop a healthy understanding of themselves and others.
13. An effective school will provide students with...  
the skills necessary to become employed.   
a balanced curriculum that encourages a wide range of learning experiences.
14. An effective school will provide students with...  
the skills necessary to become employed.   
the opportunity to develop a value system that reflects the major values.
15. An effective school will provide students with...  
the skills necessary to become employed.   
teachers who act as role models for the development of community values.
16. An effective school will provide students with...  
the skills necessary to become employed.   
an opportunity to be involved in the decision-making processes within the school.
17. An effective school will provide students with...  
the skills necessary to become employed.   
the opportunity to develop leadership skills.
18. An effective school will provide students with...  
a caring and supportive environment.   
the skills necessary to become a productive and useful citizen.
19. An effective school will provide students with...  
a caring and supportive environment.   
the attitudes and skills necessary to develop a healthy understanding of themselves and others.
20. An effective school will provide students with...  
a caring and supportive environment.   
a balanced curriculum that encourages a wide range of learning experiences.



31. How often do you visit your child's school? (check one)
- Frequently
  - Sometimes
  - Seldom
  - Never
32. How often do you volunteer with activities at your child's school? (check one)
- Frequently
  - Sometimes
  - Seldom
  - Never
33. Please indicate your level of education. (check one)
- No high school diploma
  - High school diploma or GED
  - Some college credit
  - Associate of Arts degree
  - Bachelor's degree
  - Graduate degree
34. Please indicate your relationship to your children.(check one)
- Mother or female guardian
  - Father or male guardian
35. Please indicate your ethnicity. (check one)
- White
  - Black or African American
  - Asian
  - Native Hawaiian or Other Pacific Islander
  - American Indian or Alaska Native
  - Hispanic or Latino
  - Other

Appendix C

Cover Letter



(Utah State University College of Education Letterhead)

(Date)

Dear Parent,

I am writing to ask your help in a research project relating to school effectiveness. This research is designed to solicit parent opinions regarding effective schools. The purpose of the research is to determine what the parents of school-age children in Utah believe are the most important indicators of school effectiveness. The results from this research will be used to inform decision-makers about what parents think are important aspects of effective schools.

A total of 800 parents were randomly selected to participate in this research from all parents of school-age children in Utah.

Your answers to the attached questions are completely confidential. Results will only be reported as summaries in which no individual's answers can be identified. When you return your completed questionnaire, your name will be deleted from the mailing list and never connected to your answers in any way. Therefore, your participation has minimal risk. Participation in this research is entirely voluntary. You may choose to not participate without any consequences.

The questionnaire has just 36 questions and we anticipate that it would take approximately ten minutes to complete. When completed, please return the questionnaire in the enclosed stamped envelope.

If you have any questions concerning this study, please contact either Dr. Ron Thorkildsen, the principal investigator, or Philip Rodgers, the student researcher at the phone numbers listed below.

Thank you very much for your help with this important study.

Sincerely,

Ron Thorkildsen, Ph.D.  
Principal Investigator  
Utah State University  
(435) 797-1437

Philip L. Rodgers  
Student Researcher  
Utah State University  
(435) 797-0474

Appendix D  
Prenotification Postcard

In the next few days, you'll receive in the mail a request to fill out a brief survey for an important research project being conducted by Utah State University.

The results from this survey will be used to inform decision-makers about what parents believe are important aspects of effective schools.

We are notifying you in advance because we have found many people like to know ahead of time that they will be contacted. Thank you in advance for your participation.

Ron Thorkildsen, Principal Investigator  
Utah State University  
Logan, UT 84322-6506  
(435) 797-1437

Philip Rodgers, Researcher  
Utah State University  
Logan, UT 84322-6505  
(435) 797-0474

Appendix E  
Follow-up Postcard

In the mail, you should have recently received a survey related to school effectiveness. If you've already completed the survey and returned it, please ignore this card. If you haven't returned the survey, please take the time to complete and return it now.

We value your opinion and appreciate your contribution to our knowledge of effective schools. THANK YOU.

Ron Thorkildsen, Principal Investigator  
Utah State University  
Logan, UT 84322-6506  
(435) 797-1437

Philip Rodgers, Researcher  
Utah State University  
Logan, UT 84322-6505  
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## CURRICULUM VITAE

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## EDUCATION

- Current                    **Doctoral Student**, Research and Evaluation Interdisciplinary Program, College of Education, Utah State University, Logan, UT. Dissertation topic: *Utah Parent Ratings of Various Domains of School Effective*
- February 1997            **Master of Science**, Research and Evaluation Methodology, Department of Psychology, Utah State University Thesis: *A comparison of the impact of two different levels of item response effort upon the return rate of mailed questionnaires*
- August 1990              **Bachelor of Arts**, Experimental Psychology, Dept. of Psychology, California State University, Los Angeles

## WORK EXPERIENCE

- Sept. 2001-Present      **Senior Research Assistant**, Center for the School of the Future, Utah State University  
Responsibilities include: management of large research/evaluation projects, collection and analysis of social science data, writing of reports, writing of grant proposals, oral presentations of research results and supervision of small work teams.
- Sept. 1996-Present      **Research Consultant**, Spectrum Consulting, North Logan, UT.  
Responsibilities include ongoing evaluation of after-school and school safety programs.
- Jan. 1996-Aug. 1996    **Research Assistant**, Head Start Success Study  
Conducted through Federal Research Grant obtained by Utah State University. Responsibilities include: coordination of child and parent testing, management of parent/child database, statistical analysis of results.

- Sept. 1992-Dec. 1995 **Research Assistant**, Early Intervention Research Institute  
Responsibilities included: data collection, coding, analysis, reporting, and management of subject database.
- June 1991-Aug. 1992 **Teaching/Research Assistant**, USU Department of Psychology  
Assisted with producing materials for various research oriented graduate classes, helped create and grade student examinations, taught selected portions of classes.
- Sept. 1990 - May 1991 **Teaching Assistant**, USU Department of Psychology
- Aug. 1989 – Aug. 1990 **Student Intern**, Apple Computer

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- Taylor, M. J., & **Rodgers, P. L.** (1998). A Meta-Analysis of Various Questions Related to the School Lunch Program. For the Utah State Office of Education, Child Nutrition Program. Spectrum Consulting, North Logan, UT.
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Shuster, T., & **Rodgers, P. L.** (1992). An Evaluation of the Cache County School District's Year-Round Education Program. For the Cache County School District. Department of Psychology, Utah State University, Logan, UT.

Burnham, B. B., & **Rodgers, P. L.** (1992). Evaluation of the Salt Lake Community College Faculty Assessment Process. For Salt Lake Community College. Department of Psychology, Utah State University, Logan, UT.

## PUBLICATIONS

Mauk, G. W., Gibson, D. G., & **Rodgers, P. L.** (1994). Suicide postvention with adolescents: School consultation practices and issues. Education and Treatment of Children, 17(3), 468-483.

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## PRESENTATIONS

**Rodgers, P. L.** (2003, April). Utah's Evaluation of Charter Schools. Paper accepted at the 84<sup>th</sup> Annual Meeting of the American Educational Research Association, April 21-25, 2003, Chicago, Ill.

**Rodgers, P. L.** (1995, April). A Meta-Analysis of Mailed Questionnaire Return Rate Studies. Paper presented at the Annual Conference of the American Educational Research Association, San Francisco, CA, April 18-23.

**Rodgers, P. L.** (1994, April). Age-Related Response Bias of Mother's Reports of Child Health. Paper presented at the Annual Conference of the Rocky Mountain Psychological Association, Las Vegas, NV, April 22-24, 1994.

- Rodgers, P. L.** (1994, April). A Comparison of Estimated Development Obtained by Developmental Indices with Actual Developmental Gains. Paper presented at the Annual Conference of the Rocky Mountain Psychological Association, Las Vegas, NV, April 22-24.
- Rodgers, P. L.** (1994, February). The Relationship Between Social Support and Child and Family Functioning in Families with Children with Disabilities. Paper presented at the Biennial Meeting of the Southwestern Society for Research in Human Development, Austin, TX, February, 24-26.
- Merrill, K., **Rodgers, P. L.**, & Slocum, T. (1993, April). Eligibility Assessment Practices of Utah Special Education Teachers: Current Applications and Future Training Needs. Paper presented at the annual meeting of the Utah Federation, Council for Exceptional Children, Park City, UT.
- Leopold, G. D., & **Rodgers, P. L.** (1992, November) Evaluating Educational Programs: Using Results to Effect Change and Direct Reform. Paper presented at the annual meeting of the American Evaluation Association, Seattle, WA, November 5-7.