



An investigation of factors related to teacher retention in small rural school districts in Montana
by Marsha Smith Davis

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

Montana State University

© Copyright by Marsha Smith Davis (2002)

Abstract:

The purpose of this study was to identify factors inherent in Montana's smallest elementary schools that attract and retain teachers. Certified elementary teachers in 107 elementary school districts with a student enrollment of 40 students or less (classified as 6E by OPI) were invited to participate (N=147). Respondents (126 teachers) completed a questionnaire indicating the extent of influence that factors related to teacher retention had on their decisions to accept employment and remain teaching in their current schools. Secondly, the factors categorized as the "four spheres of influence," based on the work of Boylan et al. (1993), were analyzed to determine if there were significant differences as to their influence on teachers' decisions to accept employment and remain teaching in these schools.

Individual factors were ranked by their means to identify those that were reported by teachers to have the highest extent of influence on their decisions. Factors were categorized using the "four spheres of influence:" personal/family, within classroom, community and whole-school and analyzed utilizing paired t-tests of dependent means to determine if differences existed between them in their influence on teachers' decisions to accept employment and remain teaching in their present schools.

The factor that had the greatest influence on teachers' decisions to accept employment was "enjoy the rural lifestyle." Other factors reported as having a considerable influence were "challenge of the teaching position," "safe environment," and "family and/or home is close by." "Relationships with students" was the factor having the greatest influence on their decisions to remain teaching in their present school. Three additional factors having considerable influence were "enjoy the rural lifestyle," "support from parents and community," and "safe environment." When individual factors were categorized by the "four spheres of influence," mean scores for each sphere revealed that factors related to the personal/family sphere of influence had the greatest influence on teachers' decisions to accept employment.

Factors related to the community sphere of influence had the greatest influence on teachers' decisions to remain teaching. Factors related to the whole-school sphere of influence had the least influence on teachers' decisions to both accept employment and remain teaching in their present schools.

Statistically significant differences were found between all paired mean scores of the four spheres of influence related to acceptance of employment supporting the hierarchical ranking of influence that each sphere had on teachers' decisions: personal/family, within classroom, community and whole-school. Statistically significant differences were found between three of the four paired mean scores of the four spheres of influence related to teachers' decisions to remain teaching. No significant difference was found between the mean scores of within classroom and personal/family spheres of influence within the population of 6E teachers.

AN INVESTIGATION OF FACTORS RELATED TO TEACHER RETENTION IN
SMALL RURAL SCHOOL DISTRICTS IN MONTANA

by

Marsha Smith Davis

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

of

Doctor of Education

in

Education

MONTANA STATE UNIVERSITY
Bozeman, Montana

April 2002

D378
D295

APPROVAL

of a dissertation submitted by

Marsha Smith Davis

This dissertation has been read by each member of the dissertation committee and has been found to be satisfactory regarding content, English usage, format, citations, bibliographic style, and consistency, and is ready for submission to the College of Graduate Studies.

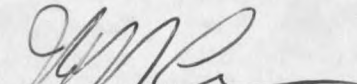
Dr. Boyd Dressler


(Signature)

4/16/02
(Date)

Approved for the Department of Education

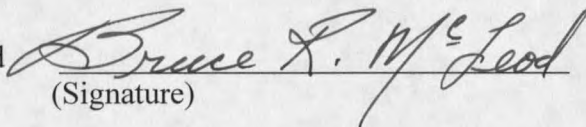
Dr. Robert Carson


(Signature)

4/16/02
(Date)

Approved for the College of Graduate Studies

Dr. Bruce McLeod


(Signature)

4-19-02
(Date)

STATEMENT OF PERMISSION TO USE

In presenting this dissertation in partial fulfillment of the requirements for a doctoral degree at Montana State University, I agree that the Library shall make it available to borrowers under rules of the Library. I further agree that copying of this dissertation is allowable only for scholarly purposes, consistent with "fair use" as prescribed in the U.S. Copyright Law. Requests for extensive copying or reproduction of this dissertation should be referred to Bell & Howell Information and Learning, 300 North Zeeb Road, Ann Arbor, Michigan 48106, to whom I have granted "the exclusive right to reproduce and distribute my dissertation in and from microform along with the non-exclusive right to reproduce and distribute my abstract in any format in whole or in part."

Signature

Marsha Davis

Date

4-16-02

ACKNOWLEDGMENTS

The researcher is appreciative of the efforts of many individuals who provided guidance, assistance, support and encouragement on the long journey toward the completion of this endeavor. Included are:

- Dr. Boyd Dressler, committee chair, whose patience and thoughtful feedback were invaluable throughout the dissertation process;
- Drs. Rich Howard, Joanne Erickson, James Doyle, and Priscilla Lund, doctoral committee members, whose time and expertise aided in the successful conclusion of this study;
- Dr. Colin Boylan, Charles Sturt University, whose research inspired me;
- The 126 teachers from Montana's 6E elementary school districts who gave of their time and willingly shared their experiences and opinions;
- My friends at the Office of Public Instruction who cheered me on;
- My loving husband and best friend, Michael, who sustained me through the tears and years;
- My dear parents, Hannah and Forest Smith, who taught me that life is precious and that time spent with family is priceless; and
- My Heavenly Father, who has and continues to bless me in so many ways each day.

TABLE OF CONTENTS

1. INTRODUCTION	1
Statement of the Problem	5
Purpose of the Study	5
Research Questions	7
Significance of the Study	7
Delimitations and Limitations of the Study	8
Definition of Terms	8
Summary	11
2. REVIEW OF RELATED LITERATURE	12
Introduction	12
Teacher Shortages	12
Montana Teacher Shortages	15
Rural Education	18
Rural Education Research	22
Characteristics	24
Conditions	28
Compensation	33
A Model for Teacher Retention	36
Summary	39
3. METHODOLOGY	41
Population Description and Sampling Procedures	41
Research Design	42
Validity and Reliability	43
Data Collection Instrument	45
Data Collection Strategy	48
Data Analysis	49
Timeframe for Data Collection	51
Summary	52
4. FINDINGS AND INTERPRETATION	53
Introduction	53
Data Collection Procedure	54
Instrument Validity and Reliability	55
Profile of the Population's Schools	57
Profile of Elementary Teachers in 6E Schools	58

Open-Ended Responses	62
The Study's Research Outcomes	63
Research Questions	64
Research Question #1	64
Factors Influencing Teachers' Decisions to Accept Employment	65
Responses to Open-Ended Question	67
Research Question #2	69
Factors Influencing Teachers' Decisions to Remain Teaching	69
Responses to Open-Ended Question	72
Research Question #3	73
Four Spheres of Influence Comparison	77
Paired T-Tests	78
Null Hypothesis	78
Null Hypothesis	79
Additional Information About the Population	80
Teacher Opinions About Effective Recruitment and Retention Strategies	80
Open-Ended Responses	86
Teacher Satisfaction	88
Summary of Findings	92
 5. FINDINGS, CONCLUSIONS, AND RECOMMENDATIONS	96
Introduction	96
Findings	97
Conclusions	100
Discussion	103
Recommendations Related to Practice	104
Recommendations for Further Research	108
Summary	110
 REFERENCES CITED	111
 APPENDICES	119
Appendix A: School District Size Classification	120
Appendix B: Rural Gauge Rankings for Montana	122
Appendix C: List of 6E School Districts - 2001-2002	125
Appendix D: Map of 6E Schools by County	129
Appendix E: Questionnaire	131
Appendix F: Cover Letters to Rural Education Experts	138

Appendix G: Cover Letter to Pilot Test Teachers	140
Appendix H: Cover Letter to 6E Teachers	142
Appendix I: Survey Open Ended Responses	144

LIST OF TABLES

Table	Page
1 Timeframe for Data Collection	51
2 6E Teacher Responses by School Type	57
3 Profile of 6E Elementary Teachers by Characteristics	59
4 Frequency and Percent of Years Teaching	60
5 Number of 6E Teachers at Each Grade Level	61
6 Number of Grade Levels Taught by Number of Teachers	62
7 Frequencies of Responses to Influencing Factors to Accept Employment	65
8 Influence Factors to Accept Employment by Mean and Standard Deviation	66
9 Written Comments Categorized by Four Spheres Related to Accepting Employment	68
10 Frequencies of Responses to Influencing Factors to Remain Teaching	70
11 Influence Factors to Remain Teaching by Mean and Standard Deviation	70
12 Written Comments Categorized by Four Spheres Related to Teacher Retention	72
13 Means and Standard Deviation of Spheres of Influence Related to Acceptance of Employment	74
14 Means and Standard Deviation of Spheres of Influence Related to Retention	75
15 Paired T-Test Results: Four Spheres Related to Accepting Employment	78
16 Paired T-Test Results: Four Spheres Related to Teacher Retention	79
17 6E Teacher Opinions About Most Effective Recruitment and Retention Strategies	81
18 Teacher Satisfaction Items: Frequencies and Percent of Responses	89

LIST OF FIGURES

Figure	Page
1 Model for Teacher Retention	37
2 Percent of Responses by Week Received	54
3 Means and Standard Deviations of Years in Teaching of 6E Teachers	60
4 Rural Background Categories Defined by Study Participants	64
5 Rank Order of Influence Factors to Accept Employment	67
6 Rank Order of Influence Factors to Remain Teaching	71
7 Mean Scores of Factors Related to Acceptance of Employment Categorized by Four Spheres of Influence	75
8 Mean Scores of Factors Related to Teacher Retention Categorized by Four Spheres of Influence	76
9 Four Spheres of Influence: Comparison of Mean Scores	77
10 Most Effective Step Schools Could Take to Retain Teachers	83
11 Second Most Effective Step Schools Could Take to Recruit and/or Retain Teachers	84
12 Third Most Effective Step Schools Could Take to Recruit and/or Retain Teachers	85
13 Total Responses of 6E Teachers About Most Effective Steps to Recruit and/or Retain Teachers	86
14 6E Teacher Responses: Q4 (How long do you plan to remain teaching?)	90
15 6E Teacher Responses: Q5 (If you could go back to your college days, would you choose teaching as a career again?)	91
16 6E Teacher Responses: Q6 (To what extent do you agree or disagree with the statement, "I sometimes feel it is a waste of my time to do my best as a teacher?")	91

Abstract

The purpose of this study was to identify factors inherent in Montana's smallest elementary schools that attract and retain teachers. Certified elementary teachers in 107 elementary school districts with a student enrollment of 40 students or less (classified as 6E by OPI) were invited to participate (N=147). Respondents (126 teachers) completed a questionnaire indicating the extent of influence that factors related to teacher retention had on their decisions to accept employment and remain teaching in their current schools. Secondly, the factors categorized as the "four spheres of influence," based on the work of Boylan et al. (1993), were analyzed to determine if there were significant differences as to their influence on teachers' decisions to accept employment and remain teaching in these schools.

Individual factors were ranked by their means to identify those that were reported by teachers to have the highest extent of influence on their decisions. Factors were categorized using the "four spheres of influence:" personal/family, within classroom, community and whole-school and analyzed utilizing paired t-tests of dependent means to determine if differences existed between them in their influence on teachers' decisions to accept employment and remain teaching in their present schools.

The factor that had the greatest influence on teachers' decisions to accept employment was "enjoy the rural lifestyle." Other factors reported as having a considerable influence were "challenge of the teaching position," "safe environment," and "family and/or home is close by." "Relationships with students" was the factor having the greatest influence on their decisions to remain teaching in their present school. Three additional factors having considerable influence were "enjoy the rural lifestyle," "support from parents and community," and "safe environment."

When individual factors were categorized by the "four spheres of influence," mean scores for each sphere revealed that factors related to the personal/family sphere of influence had the greatest influence on teachers' decisions to accept employment. Factors related to the community sphere of influence had the greatest influence on teachers' decisions to remain teaching. Factors related to the whole-school sphere of influence had the least influence on teachers' decisions to both accept employment and remain teaching in their present schools.

Statistically significant differences were found between all paired mean scores of the four spheres of influence related to acceptance of employment supporting the hierarchical ranking of influence that each sphere had on teachers' decisions: personal/family, within classroom, community and whole-school. Statistically significant differences were found between three of the four paired mean scores of the four spheres of influence related to teachers' decisions to remain teaching. No significant difference was found between the mean scores of within classroom and personal/family spheres of influence within the population of 6E teachers.

CHAPTER 1

INTRODUCTION

Growing concern about the nationwide teacher shortages has focused considerable attention on education and the teaching profession in the last five years. More than a million teachers are close to retirement, and projections indicate the need for more than two million teachers by 2010 (Education Week's Quality Counts 2000). Several conditions account for this national "crisis" including an increasing student population, attrition rates in teacher preparation programs, and the retention of teachers once they enter the profession (Allen, 2000; Fox & Certo, 1999). Roughly one-third of teachers leave the profession within the first five years (Texas Education Agency, 1999; Darling-Hammond, 1999 as cited in Fox & Certo, 2001; Nielson, 2001).

The retention rate for rural teachers has historically been low (Williams & Cross, 1987). Stone (1990) reports that teacher turnover in rural areas reaches 30% to 50% compared with a national average of 6% annually. Data from the 1990-91 Schools and Staffing Survey (SASS) examined by Ingersoll and Rossi (1995) found that schools with less than 300 students experienced higher turnover rates than did those sites with the greatest number of students. An observation reported in a Texas Teacher Recruitment and Retention Study completed in 1999 was that greater teacher mobility was experienced in rural districts over both urban and suburban districts.

According to the U. S. Census Bureau, "rural" is defined as an area with a population of 2,500 inhabitants or less (Beeson & Strange, 2000). In Montana, using this definition, rural students comprise 32.5% of all its public school students and the schools these students attend make up 63.2% of the school districts in Montana (Beeson & Strange, 2000). In 1999, there were 151 multi-grade independent elementary school districts supervised directly by County Superintendents (Morton, 1999). All of these districts have one school building containing grades K-8. Twenty-one of these school districts have a principal but the vast majority, 130 schools, have one supervising teacher or a supervising teacher with as many as 11 professional staff (Morton, 1999).

The Montana Office of Public Instruction (OPI) classifies school districts by the size of student enrollment. "Small elementary districts," defined as those with 40 or fewer students, are classified as 6E. They comprised 110 of the multi-grade independent elementary districts during the 1999-2000 school year (Nielson, 2000) (Appendix A). Of these, 73 are truly one-room schools with only one teacher who is expected to meet the educational and extracurricular needs of all students (Morton, 1999; Nielson, 2001).

In April 2000, Montana Governor Racicot appointed a task force to study the issue of teacher shortages and teacher salaries in Montana. The conclusion of the six-month study was that there is indeed a problem related to the retention of teachers in Montana. The twelve-member task force determined seven factors to be most highly related to the current status of teacher shortages:

- low salary;
- recruitment efforts of other states and districts;
- lack of induction and mentoring programs;

- retirement/post-retirement employment options;
- immense workloads and preparations due to small school settings;
- remoteness of available openings; and
- working conditions and other factors affecting daily teaching (Burke, 2000, p. 5).

The task force felt three of these factors were particularly problematic for the smallest of Montana's rural school districts—low salary, remoteness and immense workloads.

Morton (1999) surveyed county superintendents of 151 school districts (6E schools are a subset of these districts) to gather information concerning salaries and benefits for these districts. She found that full-time teachers' salaries ranged from \$11,565 to \$38,775 during the 1998-99 school year with an average salary of \$23,050. This represents roughly \$9,000 less than the average teacher salary for the state, and \$18,500 less than the national average (Nielson, 2001).

Since there is generally a correlation between general fund budgets and student enrollment, teachers in schools with the lowest student enrollment and lowest general fund budgets tended to be paid less. In general, the lowest paid teachers had little or no health insurance or other benefits such as professional or personal leave. In several cases, these teachers also were responsible for performing janitorial services with little or no additional pay (Morton, 1999).

Janitorial duties, for example, add to an already heavy workload for rural teachers. While single teacher schools may enjoy the benefit of a small class size ranging from 1 to 18 students, the teacher is responsible for instruction in all subject areas for all grades, recess duty, lunch duty, and extracurricular activities with generally no preparation time during the school day. Nielson (2001) reported that during 1999-2000,

there were 73 of these districts and “they are beginning to feel a severe shortage of teachers willing to work in their schools” (p. 10).

The Montana Office of Public Instruction in cooperation with the Certification Standards and Practices Advisory Council (CSPAC) gathered information from all districts about teacher shortages through the October 1999 fall report. Major reasons identified for positions described as “hard to fill” in 1999 related to distances/isolation of rural assignments, low salaries and benefits, and part-time or multiple role positions (Nielson, 2000). “Two-thirds of the difficulties hiring elementary teachers are in small elementary districts with 40 or fewer students” (Nielson, 2001, p. 7). These reasons represent the conditions that exist in the population of this study.

Projections indicate that Montana will need approximately 909 new teachers and administrators each year for the next several years (Nielson, 2001). Current school district administrators indicate that the “greatest need for new certified staff will be for elementary teachers—approximately 150 per year” (Nielson, 2000, p. 3). Montana’s smallest rural schools, ever competing with more desirable teacher openings, will be more challenged to acquire teachers when needed.

Two studies conducted in Montana since 1992 by Morton (1999) gathered data about teacher salaries and benefits for these smallest of Montana’s rural school districts. Information from these studies contributes to the knowledge about the compensation of Montana’s rural teachers. Little is known, however, about who these teachers are and how long or why they stay in these schools. This study will strengthen the knowledge base about the characteristics and perspectives of teachers who persevere in teaching in rural schools, why they choose to teach there, and why they stay.

Statement of the Problem

The problem addressed by this study was the lack of knowledge that exists about the reasons teachers in Montana's smallest elementary school districts accept teaching positions and remain teaching in these schools. If Montana is going to be prepared for projected teacher shortage, it will be necessary to identify and implement strategies to attract and retain teachers for its schools. Reliable knowledge about those who currently teach in the smallest of Montana's rural elementary school districts is essential data in order to determine those strategies that may be most effective.

Purpose of the Study

The purpose of this study was to identify factors inherent in Montana's smallest schools that attract and retain teachers. Attracting and retaining quality teachers for Montana's schools is essential to maintain its successful education system. Traditionally, students have demonstrated high levels of academic performance on national measures of assessment such as the National Assessment of Educational Progress (NAEP). Good teachers are integral to the excellence Montanans have come to expect from their schools and districts.

Difficulty in securing and retaining well-prepared and well-qualified teachers is theorized by Sher (1983) to be "largely a function of the three C's: characteristics, conditions and compensation" (p. 261). A similar but slightly more specific model of teacher retention was developed by Boylan et al.(1993), using grounded theory methodology that served as a useful framework for this study. He defined the following

four spheres of influence that affect a teacher's decision to remain or leave a teaching position:

1. Within Classroom Activities;
2. Whole School-Level Activities;
3. Community Level Activities; and
4. Family/Personal Factors (p. 123)

Within Classroom Activities consist of such things as interactions with students, collegial relationships with other teachers, and a sense of accomplishment in the duties of teaching itself. Beyond the classroom, the influence of Whole School-Level Activities might include relationships with supervisors, professional development opportunities, paperwork requirements, or the physical condition of the school. Examples of Community Level Activities include parental support, involvement in the community, geographic location of the school, and the safety of the environment. The last category of influence, Family/Personal Factors, is concerned with issues such as quality of lifestyle, commitment to family, contentment with rural living, and home ownership (Boylan et al., 1993).

Through review of available literature on rural education and discussions with Montana rural education experts, factors were identified and used to construct the survey instrument for this study. Thirteen factors were identified as possible influences for teachers in their decisions to accept teaching positions. Fourteen factors were identified as possible influences for teachers in deciding to remain teaching in small rural schools. Each grouping of factors was then categorized using the four influences identified by Boylan as part of the data analysis process.

Research Questions

Three research questions were crafted to address the problem identified for this study:

1. How much influence did each of the 13 factors have on teachers' decisions to *accept* employment in their present school as reported by teachers in the "Teaching in Montana's Small Rural Schools Survey?"
2. How much influence did each of the 14 factors have on teachers' decisions to *remain* teaching in their present school as reported by teachers in the "Teaching in Montana's Small Rural Schools Survey?"
3. When individual factors were categorized by the four spheres of influence identified by Boylan et al. (1993) (e.g., Within Classroom, Whole School-Level, Community Level, and Family/Personal), how did they rank as having influenced teachers' decisions to accept employment and remain teaching in their present schools?

Significance of the Study

Teacher retention is a critical issue for all rural schools, but particularly for Montana, since it is characterized by a high percentage of school districts classified as "rural." Recent research concerning rural teacher recruitment and retention "appears thin and much of it has been conducted outside the United States," reports Collins (1999, p.

- 1). Other scholars describe it as "limited" and "of poor quality" (Storey, 1993; De Young, 1987; Stephens, 1985). Much of this research has focused on the issue of why

teachers leave rather than why they stay and populations studied have tended to be concerned with pre-service teachers, first-year teachers, and/or administrators. Ingersoll and Rossi (1995) state that more research is needed on the specific influences that affect teachers' decisions to remain at their schools or in the profession. Information gained from this study may suggest strategies that school districts and administrators can employ in recruiting and maintaining quality in their teaching staffs in Montana school districts.

Delimitations and Limitations of the Study

There are natural limitations of this study. The study focused only on the smallest school districts in Montana. While there are other schools and school districts in the state, it was the intent of this study to focus on those 107 school districts, or the smallest, which have or seem to have the greatest challenges regarding the recruitment and retention of teachers. The sample for this study was also the population and thus findings may not necessarily be generalized to other larger school districts in Montana; however, the study's findings may be applicable to similar size school districts in other states with high percentages of rural schools. The study was purposely delimited by two factors. First, elementary certified teachers were the focus of the elementary school districts in the state and information was sought from these 147 teachers. Second, only data/information from the 2001-2002 school year was sought.

Definition of Terms

There are several terms and concepts whose definitions are important for this study.

6E – A school district enrollment size category; elementary with 40 or fewer students (Montana Statewide Education Profile).

Elementary School—A school is classified as elementary if it has one or more of grades K-6 and does not have any grade higher than grade 8; for example, schools with grades K-6, 1-3, or 6-8 are classified as elementary schools (Schools and Staffing Survey-1990-91, National Center for Education Statistics).

Local Education Agency (LEA)—LEAs, or public school districts, are government agencies that employ elementary or secondary teachers and are administratively responsible for providing public elementary/secondary instruction and support services (Schools and Staffing Survey, National Center for Education Statistics).

Multi-Grade—Students in a class assigned to one teacher represent more than one grade level (Claudette Morton, Director of Small Schools Alliance).

Office of Public Instruction (OPI)—The state education agency for the Montana K-12 school system (Montana Statewide Education Profile Glossary).

Public School—A public school is defined as an institution that provides educational services for at least one of grades 1-12, has one or more teachers to give instruction, is located in one or more buildings, receives public funds as primary support, and is operated by an education agency (The Schools and Staffing Survey, National Center for Education Statistics).

Rural—The U.S. Census Bureau category for an area with a population of 2,500 inhabitants or less.

School District—An agency administratively responsible for providing elementary and/or secondary instruction or educational support services (Montana Statewide

Education Profile Glossary).

Small School—The Montana Statewide Education Profile reports that Montana is comprised of many small schools and classrooms due to the rural nature of the state. During 1998-99, the average school size was 175 students per school; over half of the schools had 100 or fewer students, and over two-thirds had 200 or fewer (p. 8).

Teacher—A teacher is defined as a full-time or part-time teacher who teaches any regularly scheduled classes in any of grades K-12 (The Schools and Staffing Survey, National Center for Education Statistics). In this study, the term teacher does not include itinerant teachers, substitutes, administrators, or specialists such as counselors, music teachers, physical education teachers, special education teachers, or librarians.

Teacher Recruitment—Refers to the various strategies employed by school districts/administrators to attract teachers to accept employment in a school district (formulated by the researcher based on review of the related literature).

Teacher Retention—Refers to the proportion of teachers in one year who are still teaching in the same school the following year (Policy Research Report, Texas Education Agency).

Teacher Attrition—Refers to the number of teachers in one year who are no longer teaching the following year (Policy Research Report, Texas Education Agency).

Tenure—Whenever a teacher has been elected by the offer and acceptance of a contract for the fourth consecutive year of employment by a district in a position requiring teacher certification..., the teacher is considered to be reelected from year to year as a tenured teacher... (School Laws of Montana, OPI, 2001).

Turnover—The rate at which teachers exit schools; consisting of both teacher migration (i.e., “movers”—those who transfer or migrate to teaching positions in other schools) and teacher attrition (i.e., “leavers”—those who leave teaching altogether).

Ungraded—Classes or programs to which students are assigned without standard grade designation (Montana Statewide Education Profile Glossary).

Other terms and concepts are defined in the context of this research narrative.

Summary

“The rural teacher can properly be viewed as the key to the quality of rural education” (Sher, 1983, p. 261). It is essential that strategies be identified and implemented that will contribute to the longevity of quality teachers for Montana’s rural schools. The purpose of this study was to identify factors inherent in Montana’s smallest elementary schools that attract and retain teachers.

In the next chapter, a review of the related literature will provide the reader with information regarding teacher shortages in general, as well as Montana teacher shortages. The field of rural education and the research conducted related to the recruitment and retention of teachers in rural schools will be reviewed and organized according to three categories suggested by Sher (1983). Finally, an overview of a model of teacher retention developed by Boylan et al. (1993) will conclude the chapter.

CHAPTER 2

REVIEW OF RELATED LITERATURE

Introduction

In this chapter, information is presented on teacher shortages, both nationally and specific to Montana. Issues pertaining to rural education and its body of research are discussed. Research specific to the recruitment and retention of teachers in rural schools is analyzed according to Sher's (1983) three categories: characteristics, conditions, and compensation. An overview of the four spheres of influence developed by Boylan et al. (1993) as a theoretical model for teacher retention concludes the chapter.

Teacher Shortages

Nationally, estimates indicate that 2.4 million teachers will be needed in the next decade (Hussar, 1999). The National Education Association warns, "an historic turnover in the teaching profession is on the way" (www.nea.org/teaching/shortage.html, p. 1). Two of the greatest factors contributing to the looming shortage are increasing student enrollment and the aging of the current work force. By 2008, student enrollment is expected to exceed 54 million, an all-time record according to the National Center for Education Statistics (1998; as cited in Fox & Certo, 2001). Rising birth rates and the

impact of immigration are viewed as central to this historic national event (Darling-Hammond, 1999). Secondly, more than a third of today's teachers are age 50 or older and will more than likely retire within the next 10-15 years (Recruiting New Teachers, Inc., 1998; Merrow, 1999; Fox & Certo, 1999).

Additionally, more teachers are now needed and will continue to be needed as a result of appropriations set aside for education at the national level. The United States Congress, in response to educational research supportive of smaller classes as a means to increase student performance, passed legislation in 1999 to provide additional funding to schools to reduce class size. Hand-in-hand with smaller classes is the need for teachers to fill those classrooms.

Lastly, teachers are not entering and/or staying in the profession. While not a new problem, serious consequences could be the result when combined with the other contributing factors identified above. Darling-Hammond (1999) reports that institutions of higher education are producing more than sufficient numbers of teachers. The following statistics from America's Teachers: Profile of a Profession shed light on this issue of teacher supply and demand (NCES, 1993-025):

- Only 58 percent of newly qualified teachers were employed as teachers the year after they graduated (p. 25).
- Twenty-eight percent of newly qualified teachers did not apply for teaching jobs (p. 28).

New college graduates represent the primary source of supply for teacher vacancies; thus it is of great concern that such high numbers of newly qualified teachers are not entering the profession. Researchers reason that some graduates view the teaching

field as a career option for the future or that positions in desired locales were simply not available (Fox & Certo, 1999). Others report a loss of interest in teaching as a result of discouragement with their student teaching experience, attraction of other jobs with higher salaries, feelings of unpreparedness, and dissatisfaction with perceived teaching conditions (NCES, 1993-025).

Another factor is the attrition rate for beginning teachers. Marlow et al. (1997) reported that "as many as 40 percent of beginning teachers resign during their first two years of teaching" (p. 43). Levels of support from the administration, other colleagues, parents and the community are cited as important in teachers' reasons for leaving (Marlow et al., 1997; Metropolitan Life, 1986).

A different explanation emerges in the report of The National Commission on Teaching and America's Future. In its report, "What Matters Most: Teaching for America's Future," inadequate preparation was indicated as one of the factors to explain why some teachers don't remain in the profession (1996). In the Condition of Education report (1999), the majority of public school teachers (71%) indicated they felt well prepared to handle discipline in their classrooms; however, far fewer teachers reported that they felt well prepared to implement new teaching methods (41%), implement state or district curriculum and performance standards (36%), use various assessment strategies (28%), integrate technology into their teaching methods (20%) or address the needs of students with disabilities (21%) (NCES, 1999-80).

Other researchers argue that distribution of teachers is the problem, not a teacher shortage (Fox & Certo, 1999; Darling-Hammond, 1999). Wealthy school districts and

districts in alluring geographical locations are likely to continue to have plenty of teacher applicants when vacancies occur (Fideler & Haselkorn, 1999). Shortages are more common for urban and rural areas, however (Croasmun et al., 2000; Chaika, 2000). A lack of qualified teachers was reported by two-thirds of the districts that comprise the Council of the Great City Schools Organization according to a report by Recruiting New Teachers, Inc. (1998).

Subject area specialization in science, math, special education, technology and bilingual education represents another key distribution issue. Career opportunities offering far higher salaries abound for those with backgrounds in science, math and technology in today's economy (NASBE, 1998). Rising rates in student enrollment comprised of students with special needs, including English as a Second Language, demand teacher education majors with subject matter expertise in bilingual and special education.

Teacher shortages are occurring nationally for a variety of reasons—rising student enrollment, aging of the work force, and reductions in the supply of teachers. In the next section, the teacher shortage problem in Montana is presented.

Montana Teacher Shortages

“A teacher shortage problem does, in fact, exist in Montana,” was a conclusion of the Governor's Task Force on Teacher Shortage/Teacher Salaries completed in 2000 (Burke, 2000, p. 2). Nielson (2001), in her analysis of various Montana studies conducted in recent years states, “the problem is here, right now, and it's big” (p. 17). In

some ways, Montana mirrors the explanations at the national level, the aging of the teaching force being one example. Nielson (2001) reports that an 85% increase in the number of retirements occurred in 2000 over the previous year according to Montana Teachers' Retirement System (TRS) data. Within the next five years, an additional 1,568 teachers will be 50 years old with 25 years of service or more and may likely consider retirement.

Montana also mirrors the national research performed by Darling-Hammond (1999). An adequate supply of teacher graduates is completing Montana's education programs (Nielson, 2001). One institution, the University of Montana (UM), reports that a dramatic decline in the percentage of graduates that stay in Montana to teach has taken place in the last six years. While the information is not complete, statistics maintained by the Director of Field Experiences, Marlene Bachman, show that only 27% of the 2000-2001 UM teacher education graduates accepted jobs in Montana compared to 79% of graduates staying in Montana during 1995-96. Nielson (2001) noted a similar finding in an examination of the "teacher program completers" from the eight teacher education colleges in Montana in 1996-97 and 1997-98. She found that only 29% of the 1,830 graduates were actually teaching in Montana's accredited schools during the 1999-2000 school year.

In addition to the loss of teachers through retirement and the loss of new graduates, experienced teachers are also leaving Montana. The 2000 Montana K-12 Staff Recruitment and Retention Report (Nielson, 2000) revealed that of the 1,108 certified staff positions with turnover in the last five years, 16% or 177 were the result of taking

another position out of state. Writing about the aggressive recruitment of other western states such as California and Nevada, one Montana Standard reporter stated, "They're even raiding experienced teachers who retire early here then pad their income and retirement pay by teaching elsewhere" (December 26, 1999, A5).

As in the nation, Montana is experiencing difficulties in certain subject area specialties. Information collected by the Office of Public Instruction (OPI) during October 1999 indicated that the greatest needs for teachers were in order of priority: music, special education, guidance, world languages, and library (Nielson, 2000). Requirements of accreditation standards may partially account for the numbers of guidance and library positions that are difficult to fill. The Standards for School Accreditation established FTE requirements for both library media services and guidance based on the enrollment of the school. In the case of library media, for example, a school with 126-250 students must have a .5 FTE certified media specialist, 1 FTE is required for schools with 251-500, etc. Regarding guidance, the standards state, "A minimum equivalent of one full-time counselor for each 400 elementary (K-8) students shall be provided" (OPI, 2001, 10.55.710). Special language is included for small schools:

- Schools or districts with fewer than 125 students shall employ or contract with a certified, endorsed school library media specialist, or seek alternative ways to provide library media services, using certified personnel (10.55.709 (2)).
- Schools and or districts with fewer than 125 students shall employ or contract with a certified, endorsed school guidance specialist, or they shall seek alternative ways to provide guidance services and meet the required guidance program goals (10.55.710 (3)).

Of greatest concern in this study, especially for the small rural schools in Montana, is the finding of the Montana K-12 Schools Staff Recruitment and Retention Report that within

“the next two years, school districts estimate the greatest need for new certified staff will be for elementary teachers—approximately 150 per year” (Nielson, 2000, p. 3). These teachers must by necessity be generalists, able to teach a variety of subjects.

All the reasons for the national teacher shortage problem are present in Montana as well. Additionally, Montana is experiencing the loss of its graduates and experienced teachers to other states that pay higher salaries and offer other incentives. Since Montana is primarily a rural state, the next subsection focuses on the nature of rural education.

Rural Education

Defining the concept of “rural” has been a predominant theme present in the literature about rural education for many years (Kannapel & Young, 1999). The U. S. Department of Education Committee on Rural Education found 31 different definitions in their search for the meaning of rural (Nielson, 1991). Stern (1994) attributes the differences to be dependent upon program authority in federal and state statutes. The U. S. Census Bureau has established several categories to describe community type within two broad descriptors: “metropolitan” and “nonmetropolitan.” These descriptors reference counties; however, rather than “places” within the counties. Two of the six categories listed under nonmetropolitan that contain “rural” are as follows:

- Completely rural (no places of 2,500 or more population) adjacent to a metropolitan area.
- Completely rural, not adjacent to a metropolitan area (Stern, 1994, p. 17).

Despite the various definitions that exist, “rural” is usually determined on the basis of “sparse population” and/or “isolation from a population center” (Stern, 1994, , p. 4).

According to Beeson and Strange (2000), “one-fourth of U.S. schoolchildren go to schools in rural areas or small towns of less than 25,000 population. Fourteen percent go to schools in even smaller places with fewer than 2,500 people” (p. 1). In terms of actual schools, the Atlantic Educational Laboratory (AEL) indicates that 45% of schools in the United States are located in rural areas and small towns [On-line, 2001]. Despite this fact, these schools, the children and communities they represent are usually left out of the national education debate (Beeson & Strange, 2000). Great diversity characterizes rural populations, accounting for this void. In describing Rural America, Sher (1977) maintains that it is like a blind man attempting to understand what an elephant is by holding its tail. A fishing village in Alaska, an Indian Reservation in Montana, a farming community in Iowa, a mining town in Appalachia, and an oil boom town in Texas may all be small rural communities; however, homogeneity is not apt to be present when comparing these communities. Beeson and Strange (2000) maintain that this diversity causes rural people to be “politically invisible” (p. 1).

Kannapel and DeYoung (1999) describe certain common characteristics, generalizable and unique to rural communities, in their extensive review of literature on rural education. They report that “most rural communities:

- Are experiencing population loss;
- Are poorer;
- Offer few opportunities for educational and occupational advancement;
- Are quite similar to urban America in their economic structure; and
- Have lower levels of formal education of rural residents” (p. 68-69).

Isolation is consistently linked with rural communities, albeit geographical, social, cultural and/or professional (Bull & Hyle, 1989). In fact, isolationism is a frequently

cited reason teachers leave their positions in rural communities (Murphy & Angelski, 1996-97; Bull & Hyle, 1989; Barker & Beckner, 1987; Luft, 1991).

While these characteristics seem somewhat dismal, a number of positive assets are also noted about rural communities. A set of values permeates rural communities that cause its residents to strongly desire to be there, in fact, "staying close to family and friends is more important than high-paying jobs" reports Kannapel and DeYoung (1999, p. 69). Relationships with others are of primary importance. Nachtigal (1982) comments on the social structure of rural communities:

Social interactions are more tightly linked in rural communities than in urban communities; personal interactions are more frequent. One meets the same people in a variety of social settings—at school, church, the local stores, the doctor (p. 270).

Many of these positive characteristics are true of rural schools as well. With generally smaller enrollments, the teacher and students know one another well, extending that sense of community within the school. The school itself is central to many social, cultural, and recreational activities for the community. Other important strengths of rural schools include: individual student attention, strong community support, greater opportunities for student participation in extracurricular activities, and caring teacher-student relationships (Jess, 1985; Carlson, 1992).

Special problems, however, exist for rural schools according to Beeson and Strange (2000). Isolation and low salaries cause difficulties in recruiting and retaining teachers and administrators. General fund budgets are often consumed by high costs of transporting students long distances. Teachers must "wear many hats" in the rural school

setting, resulting in the need for them to teach subjects or perform services outside their area of certification (Nielson, 2001). Kannapel and DeYoung report that “educators who serve rural schools, as a group, are younger and less experienced than their urban counterparts and have less professional preparation” (1999, p. 70).

Efforts to bring attention about rural schools and communities to national attention were made by the Rural School and Community Trust in its published report Why Rural Matters released in 2000 (Beeson & Strange, 2000). In it, the authors gathered and analyzed data from all 50 states to compare them on the following measures or “gauges,” as they were termed:

- Rural Importance Gauge: How important is it to the overall educational performance of the state to explicitly address the particular needs of schools serving its rural communities? (p. 4)
- Rural Urgency Gauge: Given the conditions in the state’s rural schools and communities, how urgent is it in each state that policymakers develop explicit rural education policies? (p. 5)

Each gauge was comprised of several indicators (8 and 11, respectively, as above) to arrive at a placement for each state along a continuum. For example, three indicators for the rural importance gauge included the number of people living in rural places, the percentage of public schools in rural areas, and the percentage of rural children in poverty. Indicators for the rural urgency gauge included such things as average rural teaching salary, percentage of rural schools with internet access, and average percentage of rural school expenditures spent on instruction. Montana’s ranking (Appendix B)

indicates that "rural education is crucial to Montana, and the need for an explicit rural education policy is critical" (Beeson & Strange, 2000, p. 40).

Defining what it means to be rural has been problematic for research in the area of rural education. Adding to this quandary is the fact that the great diversity represented by rural America contributes to its neglect on the national agenda. A recent report, however, indicates that it is crucial that Montana address the importance of rural education. A discussion of rural educational research that has been conducted is presented in the next subsection.

Rural Education Research

Educational research in issues faced by small rural schools is viewed as woefully lacking. Storey (1993) in his review cites the following assessments:

Research on the particular problems and issues in rural education is still relatively obscure, lacking in focus, and comparatively unsophisticated (DeYoung, 1987, p. 36).

There is not at present a body of research providing a comprehensive and inclusive view of rural education that even begins to approach that on education in an urban setting (Stephens, 1985, p. 167)

Research concerning rural teacher recruitment and retention "appears thin," reports

Collins (1999, p. 1), especially within the United States. McIntosh agrees that

"references in the literature on the topic of recruitment are extremely limited and almost non-existent on the topic of retention" (1989, p. 26). The literature that does exist often contains methodological problems (i.e., small sample size, controlling for variables), concluded Boylan and McSwan (1998) in their examination of several North American

studies.

The vast majority of the research conducted in the United States specific to rural teachers—recruitment, turnover and/or retention—dates back to the 1980's and early 1990's and is survey design. More current research on this topic appears to be emanating from British Columbia, Australia and New Zealand. A great deal of the research focuses on the reasons teachers leave rural schools or how to recruit teachers to rural schools. Fewer studies have looked at the reasons teachers might be attracted to or continue to teach in rural schools.

A useful framework for examining the literature and research on the recruitment and retention of rural teachers is one proposed by Sher (1983). He maintains that difficulty in securing and retaining well prepared and well qualified teachers is "largely a function of the three C's: characteristics, conditions, and compensation" (p. 261). Characteristics, as outlined by Sher, refer to the presence of personal qualities related to preparation, pre-service training and background experiences that might attract teachers to rural areas. With respect to conditions (the second "C"), Sher includes environmental surroundings—geographical, cultural, recreational as well as the school facilities themselves. Compensation as the third "C" encompasses not only salary but also incentives, rewards and benefits such as travel allowances, housing loans, or paid tuition.

In the next subsection, the research literature concerned with the issue of teacher recruitment and retention in rural schools will be discussed according to Sher's three categories. Research related to each category will address what is known about why teachers leave and why they remain teaching in rural schools.

Characteristics

Horn (1985) suggested that the characteristics for the rural teacher would ideally include the following:

- Ability to teach more than one subject or grade level;
- Ability to teach a wide range of abilities;
- Preparation to supervise several extracurricular activities; and
- Ability to adjust to the uniqueness of the rural community (in Queitzsch & Hahn, 1995, p. 24).

Indeed, the rural schoolteacher is faced with many challenges. Sher (1983) maintains that while circumstances are better today than in years past, the rural teacher is “still expected” in most cases to fulfill such roles as janitor, playground supervisor, nurse, social worker, administrator, and psychologist/counselor, among others (p. 260). These demands tend to defeat teachers who are “unprepared for rural realities,” observes Stone (1990). Young, single, and inexperienced characterizes many who leave rural schools (Stone, 1990; Cotton, 1987). “New teachers often feel that their lives are too closely scrutinized particularly if their values, lifestyles or cultural backgrounds differ from community norms” (Stone, 1990, p. 2). Sher refers to these individuals as “flashes in the pan” and asserts that “they often lack the patience and commitment necessary to adapt themselves and their teaching to local needs” (1983, p. 260).

Psychological and sociological reasons are also reported to cause teachers to leave rural areas. Being far away from family and friends who represent an individual’s system of support results in a perceived sense of deprivation and loneliness (Bull & Hyle, 1989). One’s attitude about the rural situation can also be a determinant. As cited in Boylan and

Bandy (1994), the Challenge-Deficit Model of Ankrah-Dove suggests that the “viewpoint” held by the individual will influence the reaction of the professional in a rural appointment. According to her work, when an individual focuses on the negative aspects of the rural situation—isolation from family and friends, lack of services, long geographical distances, that person holds a “deficit” viewpoint and usually does not stay long. He/she may have been attracted initially to the position by its potential for career building and/or the fringe benefits. At the opposite end are individuals who hold a “challenge” viewpoint and concentrate on the positive aspects both personally and professionally associated with the rural lifestyle (p. 154). These individuals who hold the “challenge” viewpoint are more likely to stay for extended periods of time in rural locations (Boylan, 1991).

Inadequate preparation has been a contributing factor to the lack of teacher retention. Gibson (1994) conducted structured interviews with all newly appointed teachers in two outback regions of Queensland in Australia and contrasted their perceptions with those of major stakeholders providing educational services. One of his findings was that teachers felt ill-prepared to deal effectively with rural situations and especially their role in the community. Gleadow and Bandy (1982-83) conducted a survey of rural elementary school teachers in British Columbia to gain their perspectives on strengthening pre-service programs. In addition to a set of personal characteristics such as flexibility, self-reliance, and sense of humor, respondents believed a rural practicum that included techniques and methods for multigrade and peer teaching was essential.

Barker and Beckner (1987) found programs for prospective rural educators to be few in number. They surveyed 473 public four-year colleges and universities across the United States during 1985. Course(s) to prepare teachers for rural service and/or to provide information about rural education was reported by only nine institutions.

Although many institutions recognize the need for specialized training, Stone (1990) states that colleges and universities have little incentive to do so since the legal and professional requirements they must meet are focused by the needs of big city schools.

Teachers who are most successful in remaining in rural schools are those who come from a rural background or who are interested in the rural lifestyle. Ciscell (1989) surveyed education majors (N=259) and tenured teachers (N=139) to discover the influence of geographic preferences on the location of preferred teaching positions.

Participants were asked to characterize their former high schools by size and geographic location: rural, suburban or urban. A majority (58%) of the tenured teachers who attended rural high schools stated that they preferred teaching in a rural school. Likewise, the undergraduates from rural high schools indicated their preference to begin their teaching career in a rural setting. Very few (0-7%) of the education majors or tenured teachers from suburban or urban high schools expressed a preference for a rural school setting.

Ciscell's finding is also supported by Storey (1993) who surveyed two groups of teachers in British Columbia currently employed in rural/remote school districts and teachers enrolled in the Forgivable Loan Program (N=1,139). Storey sought to gain an understanding of respondents' decisions regarding teaching in rural or remote areas there.

While the response rate was only 49%, 51.2% of the participants in this study indicated that they “considered themselves to have a rural background” (p. 164). Likewise, Anschutz (1987) in his study of factors that influence rural teachers’ decisions to seek a rural position or remain teaching in rural communities in seven states with less than 2,500 found that teachers are more likely to remain employed in rural schools who come from similar backgrounds.

Boylan and McSwan (1998) sought to determine why some teachers chose to remain teaching in rural schools in Australia for periods of at least six years (N=427). The profile of “long-staying” rural teachers developed from their work revealed that:

- 72.3% experienced the rural lifestyle in their upbringing; and
- 60% of elementary teachers had attended a rural education institution for their pre-service studies (p. 53).

The rural lifestyle itself is another reason that teachers choose to remain teaching in rural schools. Carlson (1992) surveyed three groups of Vermont rural professionals during 1989 (N=34) to gain their perceptions about their work experiences in their rural locations. The majority, in response to the question, “If you had another professional opportunity in a metropolitan area, would you leave your rural position?,” indicated that they would not. The reasons cited included “liking the rural lifestyle, slower pace and quality of life, feeling a part of the community, and feeling where they live is a good place to raise a family” (p. 45). Concern about the quality of family life was also present in Storey’s study of teachers in British Columbia. Comments expressed by respondents indicated that they enjoyed the safety of the rural schools and community and appreciated

the smaller class sizes for their children (1993). Boylan and McSwan (1998) found additional support for the importance placed on the rural lifestyle. An open-ended question was presented to the 427 teachers in their study asking them to list the advantages for them of living in a rural area. Responses were grouped into four categories:

- rural lifestyle—68.3%
- environmental benefits—17.1%
- quality of schooling—11.2%
- personal benefits—3.2% (p. 60-61)

Young, single and inexperienced teachers tend to leave rural schools quickly, especially when they are unprepared for the rural realities. Individuals with a rural background and/or who find the rural lifestyle to be satisfying for them and their families are more likely to remain teaching in these locations. In the next section, conditions related to the rural community and school will be addressed. Both community-related and school-related factors may constitute reasons why teachers leave as well as remain in rural schools.

Conditions

Isolation is noted by researchers as the major cause for teacher turnover in rural and remote schools (Stone, 1990; Collins, 1999; Boylan & McSwan, 1998; Barker & Beckner, 1987; Luft, 1991; Murphy & Angelski, 1996; Bull & Hyle, 1989). Isolation can take many forms. Geographical distances and extremes of climate permeate the isolation of many rural locations. Davis (1987) created sub-categories of isolation as part of his

study of teachers, parents and students in Western Australia and Northwestern Ontario, Canada (teachers = 777). Through an analysis of open-ended comments, he identified three types of isolation: social, cultural and professional.

Social isolation was expressed by respondents through comments referring to "separation from family and friends, difficulties...breaking into the closed social life of the community, and absence of a telephone" (p. 12). Young single teachers bemoaned the fact that few other single people were even available in town (Storey, 1993). Luft (1991) also noted that administrators in North Dakota and Nevada expressed that "lack of social life" was a factor making it difficult to recruit teachers to a rural area.

Being set apart from the rural community was also observed by Gleadow and Bandy (1982-83). In their survey of rural elementary teachers in British Columbia, 46% of the teachers felt they were being closely scrutinized and experienced a lack of privacy. Murphy and Angelski (1996) also reported that teachers are placed frequently on "a high moral pedestal" [in a rural community] and often find it difficult to live in a "fishbowl" (p. 10). Others speak about the existence of a "dichotomy between the locals and outsiders" that increases the sense of isolation in some communities (McIntosh, 1989; Kannapel & DeYoung, 1999). An interesting observation was pointed out in Boylan and Colleagues (1993) in their study of "long-staying" teachers in that approximately half of the teachers expressed the sense that they were not perceived by the community to be "locals" even after living in the community for as many as fifteen years or more.

Cultural isolation, as described by Davis (1987), refers to the lack of opportunities to access such activities as movies, plays and performances, art galleries and sporting

events. In extremely isolated locations, particularly in Australia and Canada, teachers expressed concern that even radio and television services were limited. Storey (1993) also reported that the lack of social and recreational opportunities was rated as the second highest factor for teachers deciding to leave their rural teaching assignment in British Columbia. He pointed out that for some it was a matter of personal preference in the opportunities available, however. For example, if the area afforded hunting and fishing opportunities and the teacher preferred shopping or seeing a musical performance, there was not a "reasonable fit between the teacher and the community" (Bull & Hyle, 1989 as cited in Storey, 1993, p. 167).

Davis (1987) spoke about the inability to share experiences and learn from others as professional isolation. Roughly a third of teachers in both the Australian and Ontario samples responded with concerns in this area. For some, it was due to the staffing of the school in that few or no other staff members meant little opportunity to interact with colleagues on a regular basis. In other cases, the requirement to teach a variety of subjects caused teachers to feel not only overwhelmed but also not able to stay current in their field of expertise (Davis, 1987; Barker & Beckner, 1987). Barker (1986) reported that it was common for rural teachers to "receive limited or sporadic training" (p. 1).

In addition to inadequate professional development opportunities, other researchers point out that a lack of resources is an influence for some teachers to leave rural schools. Materials may be outdated, curriculum guides inadequate, and funding may be limited for the purchase of equipment and library books. Instruction may be even more difficult to provide if special services are required for handicapped students and no

other staffing is available (Sher, 1983; Bull & Hyle, 1989; Barker & Beckner, 1987; Luft, 1991; Carlson, 1992). Another resource viewed as lacking for some teachers was the support from an administrator (Bull & Hyle, 1989; Taylor, 1997).

Some of the same conditions that cause teachers to leave rural schools may also attract others to stay. Storey (1993) found that the area itself was a frequent reason for teachers in his study to accept the position of employment. Comments ranged from "beautiful scenery...clean air and water...no line-ups" to affordable land and a safe environment (p. 165). To serve as an illustration, one respondent commented, "Where else can one have children, golf, ski, fish, hunt, hike, and mountain bike for less than \$1,000 a year?" (p. 166). Murphy and Angelski (1996-97) and Boylan and McSwan (1998) also noted that the lifestyle possible in a rural community was a contributing factor for teachers to remain in the rural community.

The teaching assignment itself may be a major reason for some teachers to stay. Small class size, motivated students and fewer discipline problems were frequent reasons cited by Storey (1993). Sixty percent of teachers reported by Murphy and Angeleski (1996-97) indicated that they felt a "sense of achievement in teaching" and felt recognized for their work (p. 9). Teachers reportedly enjoyed a "high level of professional autonomy" that characterized these rural positions (Murphy & Angeleski, 1996-97, p. 10). Relationships with students and support of a principal or administrator have been consistently reported as influential in retaining teachers, regardless of location (Storey, 1993; Matthes & Carlson, 1986; Boylan & McSwan, 1998; Stone, 1990; Clarke & Keating, 1995; Squires et al., 1992).

The community plays an important role in retaining teachers. Matthes and Carlson (1986), in their comparison study of rural, urban and suburban teachers, discovered that rural teachers ranked the support from parents and community as the second highest reason for accepting a teaching position after starting salary. Support from administration was more highly regarded by urban and suburban teachers. Anschutz (1987) and Squires et al. (1992) concluded that acceptance by the community was a significant factor in the continued employment of teachers. Boylan and McSwan (1998) sought the perceptions of "long-staying" rural teachers about the influence of the local community. Their findings revealed:

- Teachers felt their work was valued by their communities—74.9%;
- Teachers felt their contributions to the community infrastructure were valued—79.5%;
- The community valued having the teacher living locally—70.4%; and
- The communities were committed to improving rural education—67.8% (p. 59).

Community involvement with the school as perceived by rural school principals in British Columbia was considered to provide "the greatest benefits and satisfaction in rural school teaching" (Gleadow & Bandy, 1982-83, p. 17).

Teachers leave rural schools for reasons associated with the isolation found to exist in many rural areas. Often it has more to do with the conditions of the place rather than the job itself; however, work-related issues such as lack of resources, lack of administrative support, and few professional development opportunities contribute to teacher attrition. At the other end of the spectrum, individuals remain in rural schools as "long-staying" teachers because they enjoy the autonomous challenge and satisfaction of

the teaching assignment as well as the support of the community. Next, the contribution of teacher pay and benefits will be presented.

Compensation

Salaries and benefits are often considered to be a consistent source of dissatisfaction with teachers across all educational settings. Farkas et al. (2000) found from a survey of new teachers that "3 in 4 (75%) say they are seriously underpaid" (p. 18). In fact, low salary was reported by the participants to be "the worst part about being a teacher" (Farkas et al., 2000). Overall, salaries for teachers in rural areas tend to be lower than either urban or suburban settings (Ingersoll & Rossi, 1995; NCES, 1996; Stern, 1994; NEA, 1998).

To understand how salary might impact undergraduates' decisions to leave the education profession, Ciscell (1989) surveyed 259 juniors majoring in elementary education in a midwestern university. Participants, grouped by their formal high school location (rural, suburban, or urban), were asked to indicate from a list of four concerns which problem would most likely result in their career termination. Salary was predicted as a primary consideration by forty percent (40%) of the students in each group. Matthes and Carlson (1986) conducted another study of undergraduates in Iowa and Vermont completing their teacher education programs. The 99 respondents who went on to begin their teaching career were grouped by school type: rural, suburban, and urban. While starting salary was not rated as highly for those individuals in rural school districts as a reason for accepting their present positions, all three groups listed starting salary as one of

the most important reasons to consider when accepting a teaching position in another district.

Clarke and Keating (1995) studied 114 teachers representing school districts that included urban, suburban, and rural schools to expose areas of concern for teachers about their work situation. Given a list of variables, pay being one of them, respondents were to indicate the single most satisfying factor and also the single most dissatisfying factor. While only 2% indicated that pay was the most satisfying factor, no teachers reported pay as the most dissatisfying factor. The researchers noted in their analysis that other factors were perhaps greater sources of dissatisfaction.

In the Montana OPI Fall Report 1999-2000 survey "low salaries and lack of benefits were cited as the second highest reason positions are difficult to fill" (Nielson, 2001, p. 8). Montana has lost ground in recent years. Once close to the national average, the most current figures show that the average teacher's salary is \$32,121, nearly \$10,000 below the national average (Nielson, 2001). Morton conducted two comparison studies, one in 1992-93 and the other in 1998-99, examining small school budgets and teacher salaries. These small schools "have only a supervising teacher or principal and administration is provided by the County Superintendents" (1999, p. 1). Of the 151 school districts surveyed, only 24 were paying a teacher close to the state average or higher (Morton, 1999). In addition to salaries, benefits for these small schools are also low. In Morton's most recent survey, fewer districts were providing "teacherages" (housing provided for teachers) (41), fewer districts were providing professional leave (86), while some districts offer no health insurance or limited dollars for health insurance

coverage (1999).

One component of a British Columbia study by Storey (1993) sought to find out the extent of influence its Forgivable Loan Program had on teachers' decisions to accept positions and/or continue teaching in positions located in rural provinces. In the program offered by the Ministry of Education, up to \$12,000 in student loans are forgiven as long as teachers continue to teach in a rural or remote school district. Two groups of teachers were sampled in this study. The first group was composed of teachers currently employed in school districts classified as rural/remote from schools having two to nine teachers (N=688). Teachers enrolled in the Forgivable Loan Program (FLP), some of whom were in the first group, comprised the second group (N=450). Half of the respondents reported that they were or had been enrolled in the Forgivable Loan Program. While none of these indicated that the program was the most important factor influencing their decision to accept employment, 42% of the respondents stated that it was a factor that influenced them. A conclusion drawn by Storey was that "important employment decisions are likely to be influenced by financial factors" (p. 167).

Incentives are employed to attract teachers to remote locations in other countries. Rural service is a requirement for promotion in New Zealand according to Sher (1983). Murray (2001 unpublished dissertation) reports that the Remote Teaching Service (RTS) package was established in 1996 in response to staffing difficulties in remote schools in Western Australia. The package offers teacher and administrators benefits that include locality allowances and free housing. Once participants have completed three or four years of service, they receive additional benefits. Early indicators suggest a reduction in

teacher turnover, although Murray believes it is much too soon to conclude that the RTS has been successful.

While salary and other incentives appear to be a factor in attracting teachers to serve in rural and remote locations, Sher (1983) maintains that they will not necessarily retain them supporting McIntosh's belief that "successful recruitment is much easier to accomplish than successful retention" (1989, p. 26). The next section will provide an overview of a teacher retention model proposed by Boylan et al. (1993) that will be used as a conceptual framework in the questionnaire development for this study.

A Model for Teacher Retention

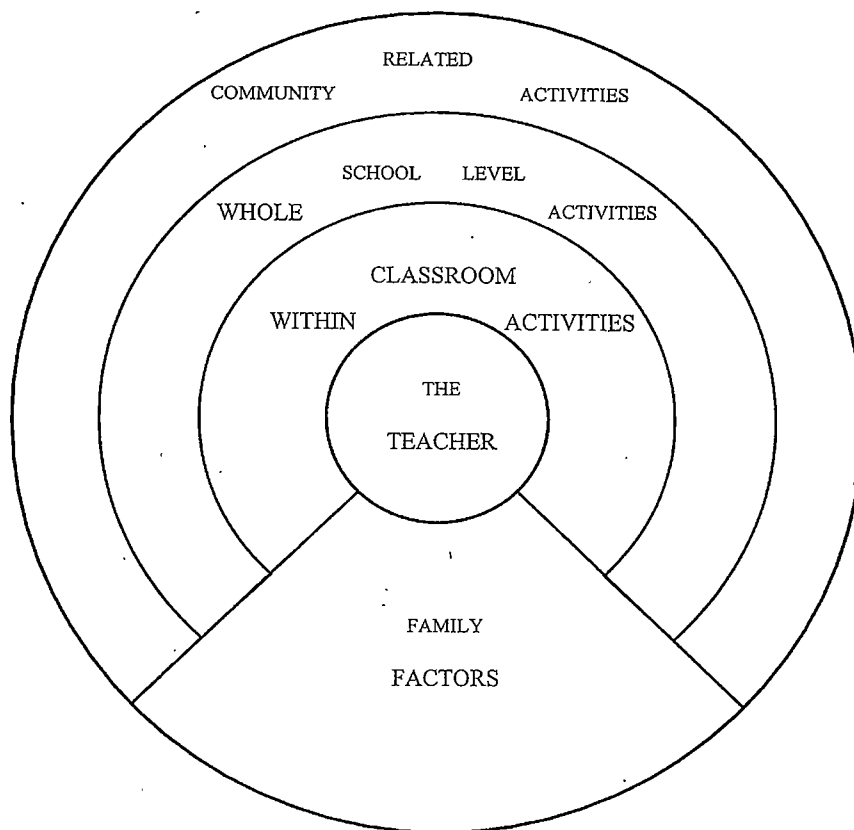
In the last twelve years in Australia, a great deal of work has been done by Boylan et al. in the area of teacher retention and satisfaction in the rural regions of that country (1991, 1993, 1998). Initial survey research of 1,100 teachers in New South Wales identified as "long-term stayers" provided information that revealed that these rural teachers are:

satisfied with their career in teaching, are committed to their profession, they do not wish to leave teaching nor their present rural location in the short to medium term future, they value their community's support for their efforts in the classroom and its support provided for rural education, they find the rural lifestyle conducive in providing a quality lifestyle and for raising their children (Boylan et al. 1993, p. 14).

Teacher comments in response to questions concerning their satisfaction with teaching and the sources of their satisfaction as well as dissatisfaction, their commitment to teaching, and their perceptions about their communities were gathered over a two-year

period. Further analysis of the data collected together with follow-up interviews with these teachers resulted in the development of a theoretical model for teacher retention (Figure 1). The teacher is viewed as the center of the model surrounded by “four principal spheres of influence” that may affect a teacher’s decision to remain or leave: Within Classroom Activities; Whole School-Level Activities; Community Level Activities; and Family/Personal Factors. Teacher retention, according to Boylan, is represented as the complex set of interactions between these influences.

Figure1. Model for Teacher Retention



Boylan et al. (1993) maintains that two of the influences have “immediate and direct consequences” on whether a teacher decides to remain. They are Within Classroom Activities and Family/Personal Factors. While operating independently, they often are complementary to one another. **Within Classroom Activities** are identified as those factors that relate to the sources of satisfaction and commitment to teaching expressed by the study’s teachers. Positive relationships with students and colleagues comprised major sources of satisfaction. Additionally, the profession itself as a “sense of calling” and the challenges of teaching children are central factors in this sphere of influence. **Family/Personal Factors** are those that concern personal and family issues of the teacher. This category was comprised of comments by teachers that identified positive influences such as home ownership, stability, the quality of life and contentment with rural living. A number of influences that could negatively impact the teachers’ decision to stay included factors such as lack of privacy, lack of cultural activities, and a high cost of living.

The other two influences, Whole School-Level and Community Level Activities, represent the “social context” of the teaching experience and either could be the basis for the decision by the teacher to remain or leave. **Whole School-Level Activities** constituted a variety of activities that engaged the teacher outside of the classroom teaching itself. Often these influences were sources of dissatisfaction and included both work-related issues and relationships with administrative staff. Lack of communication, less than adequate school facilities, excessive paperwork, insufficient scheduling, access to professional development, and availability of teacher support were all identified by

teachers as potential sources of dissatisfaction. The influence of **Community Level Activities** encompassed a complex set of interactions that spanned parental support, the teacher's involvement in the community, the geographical area, safety of the environment, and the rural lifestyle. These often were sources of personal satisfaction for teachers and aided in the teachers' desire to remain in their position. Three quarters of the teachers in this study felt that the community valued them for the job they were doing to educate their children. Through review of available literature on rural education and discussions with Montana rural education experts, appropriate subfactors for these four influences identified by Boylan were identified and used in the construction of a survey instrument.

Summary

Teacher shortages in the nation and Montana were discussed as concerns in the present and the near future. Research related to rural education and specifically to the recruitment and retention of teachers was discussed. These statements capture a common theme in the literature:

We have no trouble getting teachers here; it's keeping them (in Yarrow et al., 1998 reported by Lunn, 1997 p. 6).

We're misdiagnosing the problem as 'recruitment' when it's really 'retention' (Merrow, 1999, p. 64).

Rapid teacher turnover, while advantageous because of the 'new blood' continually infused into the system, is generally not welcomed by rural communities because the disruption to school courses, the constant adjustment to new teachers demanded of pupils and other such factors are seen as disadvantages far outweighing the one or two possibly positive aspects of turnover (Boylan et al.

1993, p 111).

Finally, an overview of a retention model proposed by Boylan et al. (1993) was provided. Chapter 3 will present the research methodology for the proposed study. The study will examine the reasons why teachers are attracted to and remain teaching in small elementary school districts in rural Montana.

CHAPTER 3

METHODOLOGY

The purpose of this descriptive study was to identify factors inherent in Montana's smallest elementary school districts that attract and retain teachers. Factors related to four spheres of influence which affect a teacher's decision to remain or leave a teaching position based on the work of Boylan et al. (1993) were investigated: Within Classroom Activities, Whole School-Level Activities, Community Level Activities, and Family/Personal Factors. During the 2001-2002 school year, elementary teachers in small rural elementary districts classified as 6E in Montana (147 teachers in 107 schools) were surveyed to collect data concerning the spheres of influence to identify those factors that might help explain reasons teachers are attracted to and remain teaching in these smallest of Montana's rural elementary schools. This chapter presents the research methodology including the study's population description and sampling procedures, research design, data collection instrument, data collection strategy, initial data analysis, and the study's timeframe.

Population Description and Sampling Procedures

During the 1998-99 school year, there were approximately 505 certified teachers employed in 151 multi-grade elementary school districts and supervised by the County

Superintendent (Morton, 1999). Of these 151 school districts, 107 are termed “small elementary districts” classified as 6E by the Office of Public Instruction, and enroll forty or fewer students (Nielson, 2001). The Accountability and Measurement Division at the Montana Office of Public Instruction (OPI) verified the actual number and names of the operating 6E elementary schools during the 2000-2001 school year.

These 107 schools are located in 42 counties of Montana. (See Appendix C for listing of school districts by county included in the study). One hundred and forty-seven (147) certified teachers from these “small elementary schools” comprised the population, as well as the sample for this study. Throughout the study, the researcher refers to this group as the “population.” The OPI School Directory (2000-2001) provided the names of supervising teachers for each of the schools included in the study. County Superintendents were contacted to verify that names were correct and/or furnished the names of other full-time and part-time elementary teachers for each school.

Research Design

The study used a single stage cross-sectional survey design (Creswell, 1994; Gay, 1996). Data were collected from the population of certified elementary teachers in the small elementary districts in Montana classified as 6E to describe identified factors that influenced them to accept teaching positions and remain teaching in these school districts (Gay, 1996). Geographically, these school districts are located in 42 of Montana’s 56 counties, and thus a mail survey represented a cost-effective and efficient method of gathering information about this population (see Appendix D for map of school

distribution across Montana).

The development of the questionnaire (Appendix E) was based on an extensive review of the related literature, consultation with current researchers in rural education, as well as practitioners knowledgeable about Montana's small rural elementary schools. Since the researcher developed the questionnaire used for this study, it was especially critical that steps were taken to deal with content and construct validity of the instrument.

Validity and Reliability

Content validity is defined by Gay as "the degree to which a test measures an intended content area" (1996, p. 139). Construct validity is "the degree to which a test measures an intended hypothetical construct ...or a nonobservable trait" (Gay, 1996, p. 140). Expert judgment by rural education professionals and researchers facilitated the establishment of validity during the various stages of questionnaire development as described below.

Reliability, that is "the degree to which a test consistently measures whatever it measures" (Gay, 1996, p. 145), was established through the data analysis process following data collection. Steps taken to establish the validity of the data collection instrument through the utilization of expert judgment assisted the establishment of its reliability in that potential problems regarding clarity of directions, vocabulary and format were detected affording necessary revisions of the questionnaire.

The steps taken by the researcher to establish validity and reliability of the instrument were as follows:

Step 1: The researcher conducted a review of the literature related to teacher recruitment and retention in order to identify factors that might explain why teachers are attracted to and remain teaching in rural schools (Sher, 1983; Storey, 1993; Boylan et al. 1993, 1998; Pesek, 1991; Matthes & Carlson, 1986). Through the review of various instruments from related studies, the researcher identified factors related to teacher recruitment and retention could be categorized by four spheres of influence identified by Boylan et. al (1993): Within Classroom, Whole School-Level, Community Level, and Family/Personal. Construction of the first draft of the questionnaire was initiated.

Step 2: Ten persons knowledgeable about rural education issues in public schools and in Montana from the Montana Rural Education Association, the Montana Small Schools Alliance, the Montana Association of County Superintendents, the Northwest Regional Educational Laboratory's Rural Education Division, as well as current practitioners were consulted for their opinions about the coverage of the content contained in the questionnaire. Dr. Boylan, Australian researcher and developer of the "four spheres of influence," provided extensive comments about the survey content and its ability to measure the intended construct.

In addition to the survey content, this group of experts in rural education as indicated above were also asked to comment on the format of the questionnaire and indicate whether issues identified by Dillman (1978) as problematic to the validity and reliability of the questionnaire might be present. These issues included: clarity of directions, clarity of items, arrangement of items, vocabulary and sentence structure, survey length, ambiguity, and construction of questions (Appendix F). Following this

review of the draft questionnaire, revisions were made to address problems identified by the rural education experts.

Step 3: A field test of the revised questionnaire was conducted. Eight supervising teachers, identified by County Superintendents, were contacted to participate. These teachers were from similar but slightly larger elementary schools with a student enrollment greater than 40 students. Teachers were asked to complete the survey, provide feedback about the content and format of the items, and offer any suggestions for improvement (Appendix G). Minor revisions to the questionnaire were then made to correct identified problem areas. Survey materials were prepared for mail distribution to the members of the study's population.

Data Collection Instrument

Data were collected through the use of a questionnaire containing 18 items, some requiring multiple responses, entitled "Teaching in Montana's Small Rural Schools" (Appendix E). Directions at the top of the first page included information about the purpose of the study and provided an assurance that no individual participant or school would be identified in any report of the findings. Participants were further assured that the identification number in the corner of the questionnaire was to be utilized for follow-up purposes only.

The questionnaire consisted of four sections as follows:

Section I: Factors Influencing Decisions to Accept and Remain Teaching

Question #1: Participants were asked to circle a number on a Likert type scale from 1-5 to indicate the extent to which listed factors (a- m) influenced their decision to accept employment in their current position. Number "1" meant the factor had *no influence* on their decision and the number "5" meant the factor had *a very large influence* on their decision to accept employment. The factors, categorized on a master sheet according to the four spheres of influence identified by Boylan (1993), appeared in random order on the questionnaire. The spheres and factors included:

- Within-Classroom—small class size; challenge of the position; opportunity to practice multiage teaching; materials and resources available;
- Whole School-Level—best or only job offer; satisfaction with salary and benefits; good reputation of the school; school's recruiting program;
- Community Level—access to recreational activities; safe environment;
- Personal/Family—spouse/partner employment; family and/or home is close by; enjoy the rural lifestyle.

Participants were then presented with an opportunity to list any additional factors that were important to them on lines n and o and asked to rate their extent of influence.

Question #2: Participants were asked to circle a number on a Likert type scale from 1-5 to indicate the extent to which listed factors (a- n) influenced their decision to remain teaching in their current school. Number "1" meant the factor had *no influence* on their decision and the number "5" meant the factor had *a very large influence* on their decision to continue in their position. The factors, categorized on a master sheet according to the four spheres of influence identified by Boylan (1993), appeared in random order on the questionnaire. The spheres and factors included:

- Within-Classroom—small class size; challenge of the position; relationships with students; materials and resources available;
- Whole School-Level—satisfaction with salary and benefits; school facility; support from the supervisor; professional development opportunities; recognition for a job well done;
- Community Level—support from parents & community; safe environment;
- Personal/Family—spouse/partner employment; family and/or home is close by; enjoy the rural lifestyle.

Additionally participants were afforded the opportunity to list additional factors that were important to them on lines o and p and asked to rate their extent of influence.

Section II: Opinions about Effective Recruitment and Retention Strategies

Question # 3: Participants were presented with 16 possible steps (each identified with a code number) that schools could take to encourage teachers to be attracted to and remain teaching in Montana schools. Participants were asked to select three steps they considered to be most effective and list them in priority order by their code numbers for 3a, 3b, and 3c. An opportunity was provided for participants to optionally offer other suggestions in 3d. The majority of the steps listed were taken from the *Governor's Task Force on Teacher Shortage/Teacher Salaries* completed in September, 2000. Formatting for this section was derived from the NCES *Characteristics of Stayers, Movers, and Leavers Teacher Followup Survey: 1994-95*.

Section III: Satisfaction with Teaching

Questions # 4- #6: Participants responded to three multiple-choice questions utilized by NCES in the 1993-94 Schools and Staffing Survey. The three items created a satisfaction index used for descriptive analyses about teacher satisfaction in the 1997 statistical analysis report, "Job Satisfaction Among America's Teachers: Effects of Workplace Conditions, Background Characteristics, and Teacher Compensation."

Section IV: Background Information

Question #7 - #10: Through the use of multiple-choice responses, each participant was asked demographic questions which provided information about the participant's gender, race, age and marital status.

Question #11 - #12: Each participant indicated by a yes or no response if he/she considered life before teaching to be characterized as "of a rural background." An open-ended question allowed participants to explain their understanding about the meaning of "rural background." These items, derived from the work of Storey (1993), aided the researcher in analyzing participants' understanding of "rural" and its possible contribution in teachers' decisions about retention.

Question # 13 - # 17: Through multiple-choice responses and/or fill-in-the-blank responses, each participant was asked school-related questions that provided information about the grade levels they teach, years taught in their present school, total years of public school teaching, and the type of teaching degree(s) they hold.

Question #18: The respondent was asked to indicate his/her desire for a summary of the study's findings upon its completion. Space was provided for them to list their name, mailing address, and e-mail address if that choice was made.

Data Collection Strategy

Steps were taken to facilitate a high rate of return. County Superintendents were informed through e-mail about the study and notified that the survey instrument was being mailed to certified teachers in the 6E schools in their respective counties. A copy of the instrument invited them to review its contents and optionally discuss it with teachers as appropriate. The cover letter to the members of the population (Appendix H) explained the purpose of the study and its importance to Montana's small rural schools. As Dillman (1978) suggests, "personal appeal" is helpful in encouraging individuals to respond, thus the cover letter inferred that teachers would be making a contribution to the search for solutions for the impending teacher shortage. Teachers were assured that no individual participant or school would be identified and that the results would be presented in aggregate form. A sheet of stickers that teachers could use to put on student papers was included in the first mailing as a small gift and incentive for participation.

The second mailing contained a new cover letter that suggested that the researcher knew that it was a busy time of year for them, that they meant to fill it out, but perhaps had misplaced the survey. It also informed them about the number of teachers that had replied and that the researcher was impressed with their responses. A postcard with a picture of a "little red schoolhouse" labeled "6E schools" comprised the third mailing. It again provided personal appeal to teachers and served as a final gentle reminder to return the survey and/or thank them for their participation.

Mailing labels were generated through a database containing the verified list of teachers for each school. An identification number was placed in the upper right hand corner of each page of the questionnaire and notated on the master list of the researcher. This procedure enabled follow-up requests for questionnaire responses to be targeted to those who had not previously responded.

A three-step mailing procedure as outlined by Creswell (1994) was employed. Questionnaire packets were mailed to members of the population on November 26, 2001 with a requested due date of December 12, 2001. As completed surveys were returned, the date received or the postmark date of each was recorded on the master sheet. Sixty-one percent (61%) of the 147 teachers responded to the first mailing. A second complete mailing was sent to 57 members of the population who had not responded to the initial mailing on December 18, 2001. A due date of December 28, 2001 was established for the second mailing. An additional 18 teachers responded to the second mailing. On January 3, 2002, the researcher sent out a postcard reminder to the remaining 39 subjects who had not responded to the second mailing encouraging them to complete the survey and return it by January 18, 2002. Eighteen teachers responded to this third mailing. These efforts yielded a return rate of 86% of the 147 surveys mailed to members of the population.

Data Analysis

A series of steps as outlined by Creswell (1994) comprised the initial data analysis. First, the percentage of responses was calculated and presented in table form for the total number of usable surveys and for each survey item contained in the

questionnaire. Next, a frequency distribution and mean scores (as appropriate) for all demographic information were calculated to provide a profile that described the sample by age, gender, marital status, total years taught, years taught in the current school district, and type of degree. A table was developed to represent this information for the total sample.

Mean scores and standard deviations were calculated for each of the factors identified in questions 1 and 2. Means for each factor ranked them in descending order regarding the level of influence each had on teachers' decisions to accept employment and remain teaching in their current school. These factors were then categorized into four groups called the "spheres of influence" (i.e., Within Classroom, Whole School-Level, Community Level, and Family/Personal). The mean response of each of the four spheres was calculated to compare the relative importance of each as an explanation for teachers' decisions to accept employment and/or remain teaching in small elementary rural schools in Montana. Mean scores provided rankings for the four spheres for each set of factors. Paired T-tests were performed to determine whether significant differences existed between the means within the population.

Through this analysis, the researcher was able to answer the research questions outlined in Chapter 1:

1. How much influence did each of 13 factors have on teachers' decisions to accept employment in their present school as reported by teachers in the "Teaching in Montana's Small Rural Schools Survey?"

2. How much influence did each of 14 factors have on teachers' decisions to remain teaching in their present school as reported by teachers in the "Teaching in Montana's Small Rural Schools Survey?"
3. When individual factors were categorized by the four spheres of influence identified by Boylan et al. (1993) (e.g., Within Classroom, Whole School-Level, Community Level, and Family/Personal), how did they rank as having influenced teachers' decisions to accept employment and remain teaching in their present school?

Timeframe for Data Collection

An extensive review of the related literature preceded the initial development of the survey instrument for this study. Review by rural education experts and a field test of the questionnaire resulted in improvements and refinement of the instrument to its final form. The questionnaire was distributed to 147 certified teachers in 107 small elementary school districts in Montana. Following the collection process, data were analyzed. The researcher's timeframe is presented in Table 1.

Table 1. Timeframe for Data Collection

June – September 15, 2001	Review of related literature and examination of survey instruments from previous studies yielded the draft questionnaire.
September 26, 2001	Committee Meeting and Defense of Study's Proposal
September 26 – November 3, 2001	Review of draft questionnaire by rural education experts and researchers. Revision of questionnaire by researcher.
November 4 – November 25, 2001	Field test of revised questionnaire by 8 supervising teachers from similar small elementary schools. Final revisions to survey instrument and critique by committee members.

November 26 – December 12, 2001	First mailing to study's population of 147 certified elementary teachers and due date.
December 18 – December 28, 2001	Second complete mailing to members of population not responding to initial mailing and due date.
January 3 – January 18, 2002	Third mailing of postcard reminder to nonresponsive members of the study's population.

Summary

In this chapter the study's methodology was outlined. The reasons why teachers are attracted to and remain teaching in selected small elementary school districts in rural Montana were investigated related to the four spheres of influence identified by Boylan et al. (1993). Details concerning the population description and sampling procedures, research design, the data collection strategy and survey instrument, initial data analysis strategy, and the study's timeframe were described. Further discussion concerning the data collection procedure and data analysis is presented in the next chapter.

CHAPTER 4

FINDINGS AND INTERPRETATION

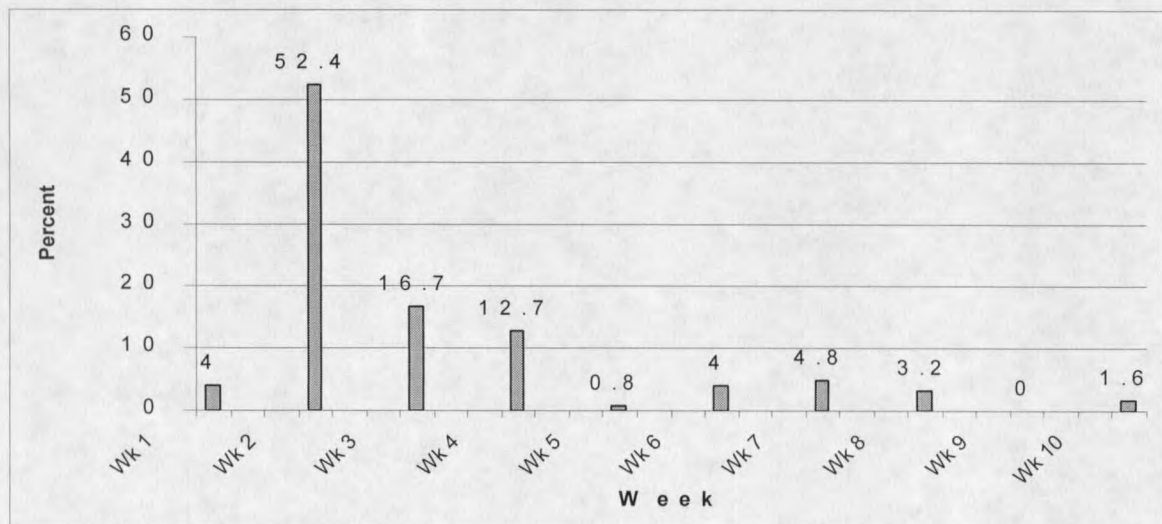
Introduction

The purpose of this study was to identify factors inherent in Montana's smallest elementary schools that attract and retain teachers. Certified elementary teachers, in 107 elementary school districts with a student enrollment of 40 students or less, completed a questionnaire. Responses indicated the extent of influence that factors related to teacher retention had on their decisions to accept employment and remain teaching in their current schools. Individual factors or items were ranked by their means to identify those that were reported by teachers to have the highest extent of influence on their decisions. Items were then categorized into four groups or spheres of influence for each set of factors (13 related to acceptance and 14 related to retention) that included Family/Personal, Within Classroom, Whole School-Level, and Community Level factors. These spheres were then analyzed to determine if differences existed between them in their influence on teachers' decisions to accept employment and remain teaching in their present school.

Data Collection Procedure

County Superintendents of the 42 counties in which the 107 elementary school districts are located were contacted through e-mail and phone and verified the names of the 147 teachers that comprised the population and sample for this study. Labels and questionnaire materials were prepared and mailed in an initial mailing on November 26, 2001. Ninety surveys (61%) were returned by the deadline of December 12, 2001. The researcher recorded the postmark date as surveys were received on the master sheet listing teachers by their code numbers. A second complete mailing was prepared and sent December 18, 2001 to the 57 teachers who had not responded to the first mailing. Eighteen additional surveys (12%) were received by December 28, 2001. A postcard reminder was then sent to the 39 remaining members of the population on January 3, 2002. This third mailing generated an additional eighteen surveys (12%). A total return rate of 86% was accomplished by the third deadline of January 18, 2002. A frequency distribution of the responses by the week received is shown in Figure 2.

Figure 2. Percent of Responses by Week Received



Instrument Validity and Reliability

As described in Chapter 3, content and construct validity of the instrument developed for this study was established through a three-step process employing review of the literature and expert opinion of persons knowledgeable in rural education issues and research. A pilot test of the survey instrument was conducted with eight individuals similar to the study's population. These efforts facilitated revisions to the instrument to improve its content coverage, format, and clarity of instructions to reduce unintended errors in survey completion.

In Section I of the instrument, "Teaching in Montana's Small Rural Schools Survey" (see Appendix E), teachers were presented with 27 factors and asked to indicate the extent of influence that each factor had on their decisions to accept employment (13 factors) and remain teaching (14 factors) in their present school. In order to have confidence that the scores realized on these factors would be consistent with scores from a readministration of the survey, a reliability analysis procedure in SPSS Base 10.0 was performed. This calculation utilizing Cronbach's Alpha resulted in an alpha score of .88, indicating a high level of internal consistency between the 27 influence factors.

"Mathematically, reliability is defined as the proportion of the variability in the responses to the survey that is the result of differences in the respondents...[not that] the survey is confusing or has multiple interpretations" (SPSS Base 10 Applications Guide, 1999, p. 362).

Similarly, the 27 influence factors were categorized utilizing the four spheres construct developed by Boylan et al. (1993) and statistics applied to calculate Cronbach's

Alpha. Thirteen influence factors that could influence teachers to accept teaching employment were grouped into the following four categories (spheres):

- Within Classroom: small class size, challenge of the teaching position, opportunity to practice multiage teaching, and materials and resources available;
- Whole School-Level: best or only job offer, satisfaction with salary and benefits, good reputation of the school, and school's recruiting program;
- Community Level: access to recreational activities, and safe environment;
- Family/Personal: family and/or home is close by, and spouse/partner employment.

Fourteen influence factors that could influence teachers to remain teaching were also grouped into the four categories or spheres as follows:

- Within Classroom: small class size, relationships with students, challenge of the teaching position, materials and resources available;
- Whole School-Level: support from supervisor, professional development opportunities, recognition for job well done, satisfaction with salary and benefits, and school facility;
- Community Level: support from parents and community, and safe environment;
- Family/Personal: enjoy the rural lifestyle, spouse/partner employment; family and/or home is close by.

Eight groups were created—four spheres related to the factors that influenced teacher decisions to accept employment and four spheres related to the factors that influenced teacher decisions to remain teaching. Applying again a reliability analysis procedure

(Cronbach) resulted in an alpha of .86, also a high level of consistency indicating that the survey consistently measured constructs related to teacher recruitment and retention.

Profile of the Population's Schools

During the 2001-2002 school year, there were 107 elementary schools classified as 6E by the Office of Public Instruction. These districts are located in 42 of the 56 counties in Montana (Appendix D). The number of teachers in each school ranged from a single teacher to as many as four. The majority (71%) of the districts were single teacher schools. Twenty-four school districts had two teachers, five had three teachers and two school districts had four teachers. Ninety five (95) of the 107 schools were represented by the participants in the study from 40 of the 42 counties (95%) in which the schools were located (Table 2). Eleven single-teacher school districts and one two-teacher school district did not respond.

Table 2. 6E Teacher Responses by School Type

Number of Schools	Type of School	Number of Teachers	Number of Responses	Percent of Response
76	One teacher school	76	65	86%
24	Two teacher school	48	40	83%
5	Three teacher school	15	14	93%
2	Four teacher school	8	8	100%
107		147	126	86%

Profile of Elementary Teachers in 6E Schools

Of the 147 members of the population identified for this study, 86% or 126 elementary teachers responded. The majority of the participants were female (118), white (123), and married (82). Ages of the participants were distributed across all age groupings. Teachers under 25 and over 60, comprised 4.8% and 4%, respectively, of the population. The other four age groupings were flatly distributed ranging from 22.2% to 23.8% (Table 3). The vast majority (92.9%) of teachers were full-time while seven teachers (5.6%) worked part-time in their schools. In response to the question, "As you think of your life before you began teaching, would you say that you have a rural background?," 73% of respondents indicated "yes," while 25.4% responded "no" (Table 3).

Teachers were asked to "circle all that apply" regarding the type of teaching degree they hold. One hundred and sixteen (116), or 92.1%, indicated they held a Bachelor's degree. Seven teachers appeared to have omitted circling this response and marked only a Master's degree when responding to this question. Since one cannot get a Master's without a Bachelor's degree, the true percent of teachers with Bachelor's degrees would be 97.6%, or 123 teachers. Eleven teachers held Master's degrees (8.7%), one held an Education Specialist degree (.8%), and three (2.4%) of the participants' responses were missing (Table 3).

Table 3. Profile of 6E Elementary Teachers by Characteristics

Characteristic	N	Percentage
Sex		
Male	8	6.3
Female	118	93.7
Race		
Missing/Refused	2	1.6
Hispanic	1	.8
White	123	97.6
Age		
Less than 25	6	4.8
25-29	28	22.2
30-39	30	23.8
40-49	29	23.0
50-59	28	22.2
60 or older	5	4.0
Marital Status		
Married	82	65.1
Widowed, Divorced or Separated	25	19.8
Never Married	19	15.1
Rural Background		
Missing/Refused	2	1.6
Yes	92	73.0
No	32	25.4
Degree		
Bachelor's	116*	92.1
Master's	11	8.7
Education Specialist	1	.8
Missing/Refused	3	2.4
Contract Type		
Full time	117	92.9
Part time	7	5.6
Missing/Refused	2	1.6

*Number does not account for those teachers who marked Master's degree only.

Data were gathered about the years teachers had taught in their current school as well as the total number of years in public school teaching. Twenty-eight teachers were in their first year of teaching at their current school. Years taught ranged from one year

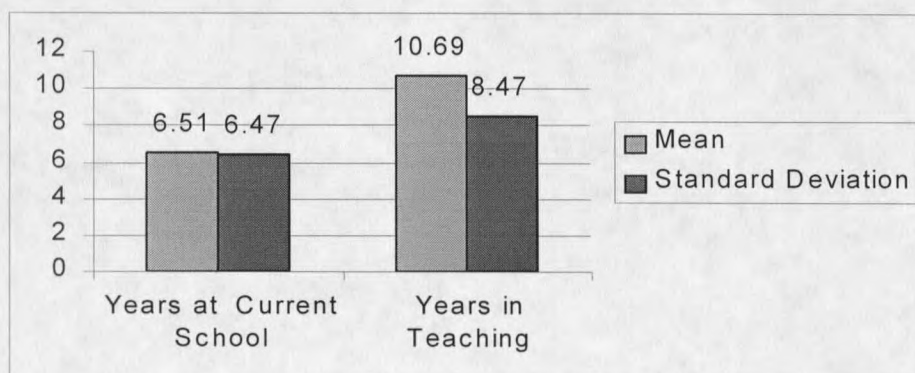
to 25 years in the current school with 77 teachers (61%) in the first three years of teaching in their present schools (Table 4). Total years in public school teaching ranged from one year to 34 years with 37 teachers (29.3%) in their first three years of teaching. This included eight teachers in their first year of teaching (Table 5).

Table 4. Frequency and Percent of Years in Teaching

Years of Teaching in Current School	N	Percent
First Year	28	22.2
1-3 years	49	38.8
4-9 years	23	18.4
10 years or more	23	18.4
Missing or refused	3	2.4
Total Years in Public School Teaching	N	Percent
First Year	8	6.3
1-3 years	29	23.0
4-9 years	36	28.7
10 years or more	51	40.8
Missing or refused	2	1.6

The mean for years teaching in the current school was 6.51 and for total public school teaching, 10.69 years. The means and standard deviations for these categories are contained in Figure 3.

Figure 3. Means and Standard Deviations of Years in Teaching of 6E Teachers



Since teachers in these small schools typically teach multiple grades, data were gathered about the grade levels taught. Teachers were asked to circle all grade levels that they were currently teaching. As indicated in Table 5, more teachers were teaching at the 3rd grade level (71) than any other grade level, followed by 1st grade (69), 2nd grade (62), and 4th grade (62). The fewest number of teachers reported teaching 7th grade (34) and 8th grade (35).

Table 5. Number of 6E Teachers at Each Grade Level

Grade Level	Number of Teachers
Kindergarten	58
First Grade	69
Second Grade	62
Third Grade	71
Fourth Grade	62
Fifth Grade	58
Sixth Grade	59
Seventh Grade	34
Eighth Grade	35

The number of grade levels that each teacher has is dependent upon student ages and enrollment numbers. For teachers in these 6E schools, they may teach from one to nine grade levels. Six teachers were teaching only one grade level, while two teachers were teaching at all nine grades. Thirty-four teachers were teaching three grade levels, the most frequent response, followed next by four grade levels (32 teachers) (Table 6).

Table 6. Number of Grade Levels Taught by Number of Teachers

Number of Grade Levels	Number of Teachers
One grade level	6
Two grade levels	11
Three grade levels	34
Four grade levels	32
Five grade levels	17
Six grade levels	12
Seven grade levels	8
Eight grade levels	1
Nine grade levels	2

Open-Ended Responses

As indicated previously, in response to the question "As you think of your life before you began teaching, would you say that you have a rural background?," the majority (or 73%) responded affirmatively. To gain a sense of understanding about what "rural background" meant to these teachers, an open-ended response allowed participants to describe what meaning they attached to "rural background." The content of the responses was coded by categories that revealed a majority of teachers liked a rural background to be oriented to occupations such as farming/ranching (42) or agriculture (19). Demographic estimates of population size were also a frequent response using either non-quantifiable descriptions such as "small town/community," "sparse population," or quantifiable estimates as "less than 5,000," or "under 1,000."

Other teachers' responses indicated that rural background referred to location such as "out of town," "living in the country," or distance as in "closest city was 100 miles away," "five miles from my mailbox and 30 miles from a gallon of milk," and "need to drive at least 60 miles for a Wal-Mart." In some cases, comments equated

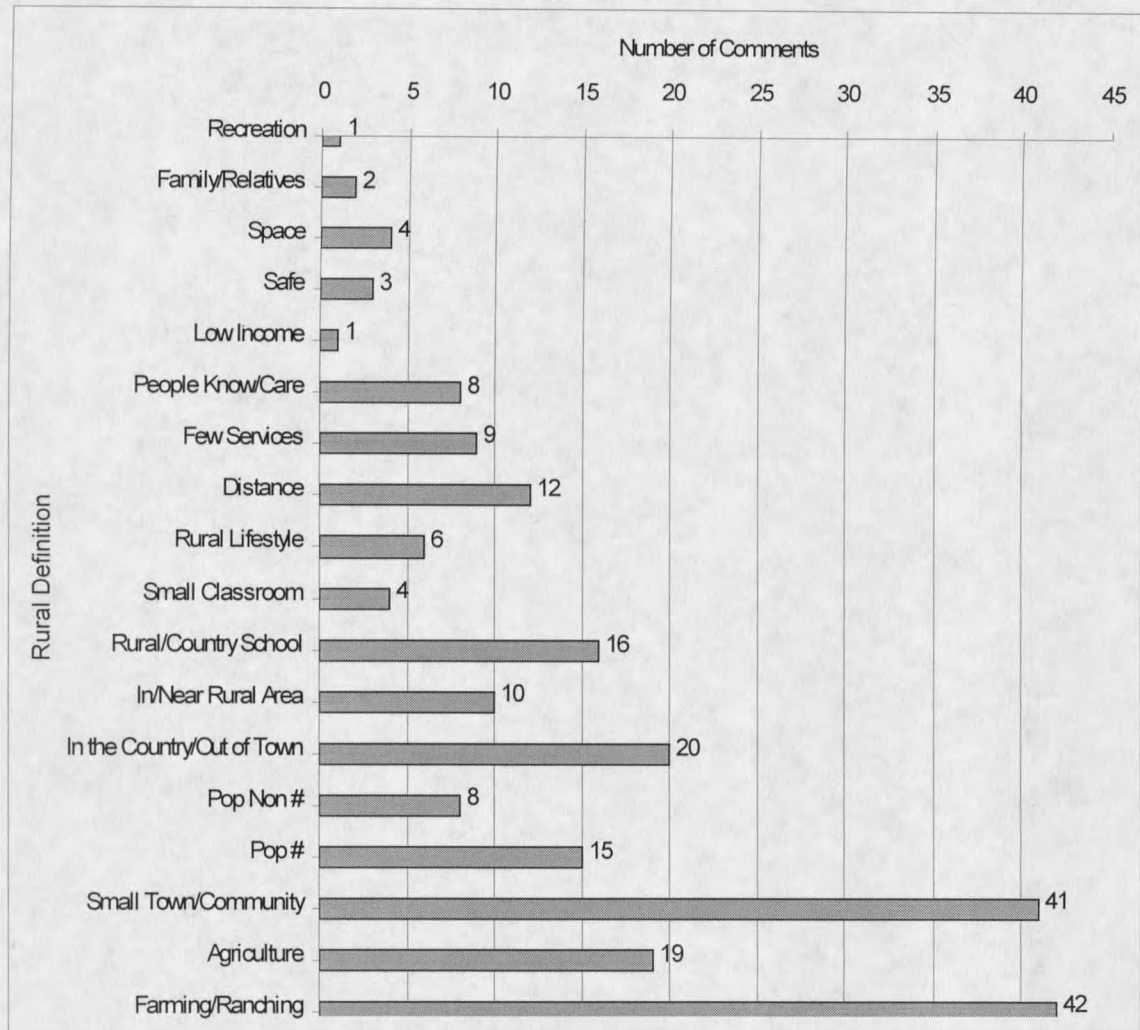
distances with availability of few services: “an area that provides few services in town (e.g., post office and grocery store) or not at all,” “minimum access to stores, entertainment, libraries,” and “limited exposure to ‘city life.’”

Still others characterized a rural background in terms of socio-cultural distinctions. For example, “people know many of their neighbors,” “friendly environment where your neighbors help you whenever you need help and vice versa,” “a place where everyone knows one another by face and name,” and “areas where people know and care about each other” (see Appendix I for complete comments). Figure 4 provides a graphic display of frequencies for each content category of the written comments.

The Study's Research Outcomes

This study sought to gather data from 6E elementary teachers to address three research questions. Factors that may influence teachers to accept employment and/or remain teaching were extracted from various studies conducted in rural education over the last 15-20 years. Thirteen factors were related to teachers' decisions to accept employment. Fourteen factors were related to teachers' decisions to continue or remain teaching. Each group of factors was then further categorized into four groups identified by Boylan et al. (1993) as the four spheres of influence: Within Classroom, Whole School-Level, Community, and Family/Personal to determine how they ranked as influencing teachers' decisions to accept employment or remain teaching and if differences between them existed.

Figure 4. Rural Background Categories Defined by Study Participants



Research Questions

Research Question #1

How much influence did each of 13 factors have on teachers' decisions to accept employment in their present school as reported by teachers in the "Teaching in Montana's Small Rural Schools Survey?"

Factors Influencing Teachers' Decisions to Accept Employment. Teachers were presented with 13 influencing factors related to accepting employment identified through existing research and the expert opinions of rural education professionals. They were asked to rate the extent of influence for each using a Likert scale of 1 to 5, where 5 meant "a very large influence" and 1 meant "no influence." The number "0" was used to indicate missing or refused responses. Calculated frequencies by scale for each factor are displayed in Table 7.

Table 7. Frequencies of Responses to Influencing Factors to Accept Employment

	Missing	No Inf.	Little Inf.	Some Inf.	Good Deal of Inf.	Very Large Inf.
Factor	0	1	2	3	4	5
Best or only job offer	4	25	14	25	25	33
Satisfaction with salary & benefits	1	44	30	25	21	5
Access to recreational activities	5	72	15	22	10	2
Family and/or home is close by	1	33	8	17	20	47
Small class size	4	18	14	38	28	24
Safe environment	2	19	12	28	37	28
Challenge of the teaching position	1	12	12	24	48	29
Enjoy the rural lifestyle	2	11	7	11	34	61
Good reputation of the school	4	35	20	28	20	19
Spouse/partner employment	1	71	4	10	12	28
School's recruiting program	1	103	10	8	2	2
Opportunity to practice multiage teaching	6	31	10	29	24	26
Materials & resources available	3	69	25	17	8	4

Factors that had the highest and second highest number of responses indicating a large deal of influence were "enjoy the rural lifestyle" (61) and "family and/or home is close by" (47). Four factors had large responses as having no influence and included "the school's recruiting program" (103), "access to recreational activities" (72), "spouse/partner employment" (71), and "materials and resources available" (69).

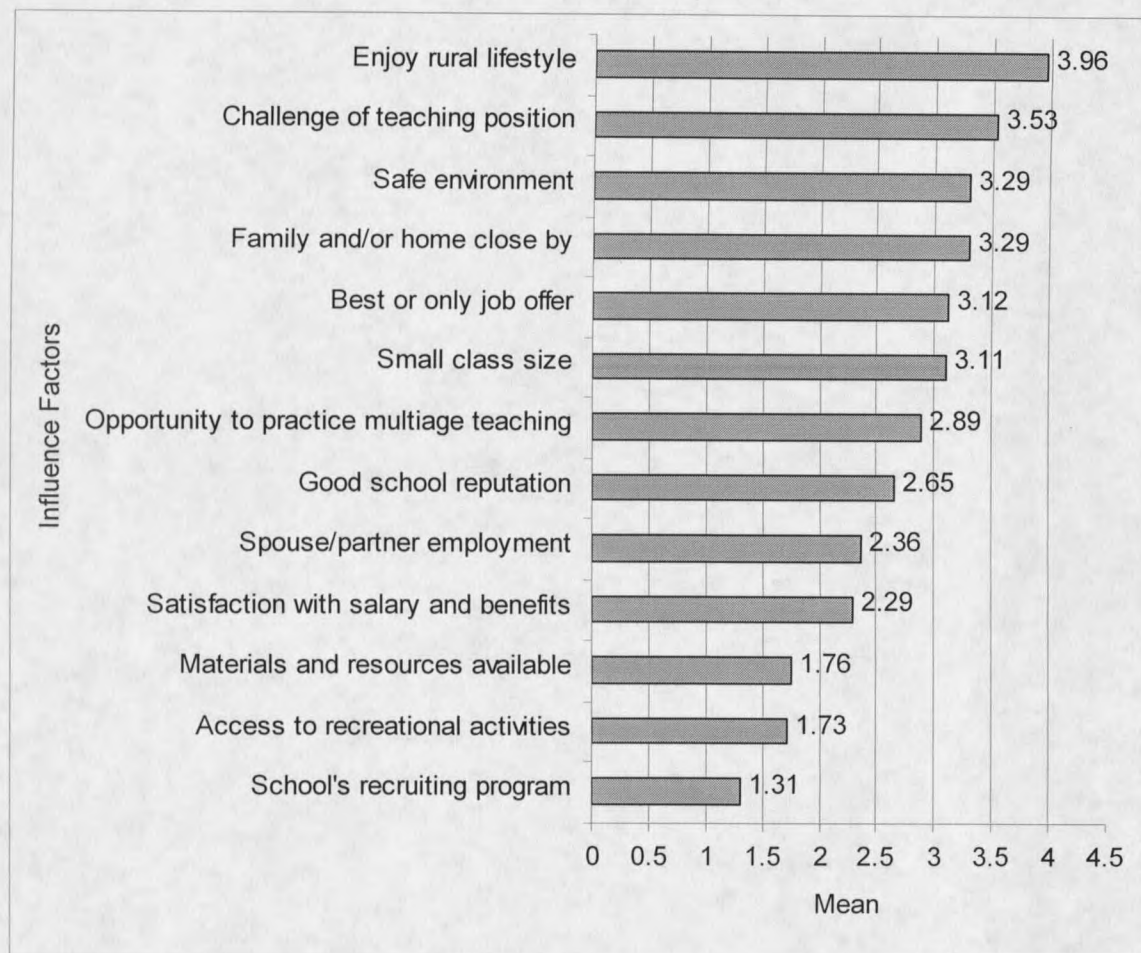
Means and standard deviations for each factor were calculated (see Table 8).

Table 8. Influence Factors to Accept Employment by Mean and Standard Deviation

Factor	Mean	Standard Deviation
Best or only job offer	3.12	1.56
Satisfaction with salary & benefits	2.29	1.24
Access to recreational activities	1.73	1.14
Family and/or home is close by	3.29	1.66
Small class size	3.11	1.40
Safe environment	3.29	1.40
Challenge of the teaching position	3.53	1.26
Enjoy the rural lifestyle	3.96	1.36
Good reputation of the school	2.65	1.49
Spouse/partner employment	2.36	1.72
School's recruiting program	1.31	.80
Opportunity to practice multiage teaching	2.89	1.59
Materials & resources available	1.76	1.13

The factors having the four highest means were “enjoy the rural lifestyle” (3.96), “challenge of the teaching position” (3.53), “safe environment” (3.29) and “family and/or home is close by” (3.29). Three factors that had the lowest means were “materials and resources available” (1.76), “access to recreational activities” (1.73), and “the school’s recruiting program” (1.31). Means for each factor in descending order ranked the 13 factors to address research question #1 (see Figure 5).

Figure 5. Rank Order of Influence Factors to Accept Employment



Responses to Open-Ended Question. Teachers were afforded the opportunity to indicate other factors that influenced them in accepting their positions in their current schools. Of the 126 teachers responding, 36 (28.5%) chose to do so. Most offered one comment, while others offered two or more comments in the space provided, totaling 50 in all. Boylan's four spheres of influence served as a useful framework in organizing these comments. Data are presented in Table 9.

Table 9. Written Comments Categorized by Four Spheres Related to Accepting Employment

Sphere of Influence	Responses		Examples of Comments Made
	N	%	
Whole School	18	36	Just wanted a country school. Teacherage on site. Opportunity to administer operations. Free rent. Indication of inner peace at being at the site. Non-union controlled school.
Family/ Personal	12	24	My own children are raised. Mother taught in rural school. Out of the number of job offers this was the best for my family and me. The love of teaching.
Community	11	22	Quality of life in rural Montana. Friendly people. Perfect place to live. Location. Community participation
Within Classroom	9	18	No set schedule. Most decisions are left up to you. Wanted to teach and have some control over what and how. Strong belief in this type of teaching situation.
Total	50	100	

For some participants, they reinforced the school-related factor "best or only job offer" listed previously by their comments such as "only job offer," and "only teaching job in Missoula area." Some respondents used the opportunity to further strengthen a factor contained on the survey instrument itself. For example, the following comments made by participants were an extension of the factor "family and/or home is close by," "close to my ranch," "own family business," and "place bound."

Classroom-related comments were the fewest in number as might be expected since teachers would tend to have less actual knowledge about it prior to accepting a

teaching position. Comments made may be more representative of their perceptions about what the classroom experience would be like. The following serve as examples: "I wanted to teach and have some control over what and how [I do things];" "Efficient manner for individual student progress that the rural setting offers;" "Wanted to fully use my degree and not be limited to one grade;" and "Freedom allowed for planning and teaching" (complete comments found in Appendix I).

Research Question #2

How much influence did each of 14 factors have on teachers' decisions to remain teaching in their present school as reported by teachers in the "Teaching in Montana's Small Rural Schools Survey?"

Factors Influencing Teachers' Decisions to Remain Teaching. Teachers were presented with 14 influencing factors related to teacher retention identified through existing research and expert opinion of rural education professionals. They were again asked to rate the extent of influence for each using a Likert scale of 1 to 5, where 5 meant "a very large influence" and 1 meant "no influence." The number "0" was used to indicate missing or refused responses. Frequencies were calculated as shown in Table 10.

Table 10. Frequencies of Responses to Influencing Factors to Remain Teaching

	Missing	No Inf.	Little Inf.	Some Inf.	Good Deal of Inf.	Very Large Inf.
Factor	0	1	2	3	4	5
Small class size	0	19	10	39	34	24
Support from supervisor	5	38	14	25	17	27
Support from parents & community	0	9	10	25	35	47
Relationships with students	0	3	4	13	34	72
Enjoy the rural lifestyle	1	11	8	17	29	60
Spouse/partner employment	2	61	4	13	14	32
Challenge of the teaching position	0	15	9	36	41	25
Professional development opportunities	1	45	29	28	16	7
Recognition for job well done	1	22	22	30	23	28
Family and/or home is close by	2	29	11	20	17	47
Satisfaction with salary & benefits	2	47	15	26	26	10
Safe environment	0	14	12	27	42	31
School facility	3	33	17	35	21	17
Materials & resources available	1	48	19	34	17	7

The factors of “relationships with students” (72) and “enjoy the rural lifestyle” (60) had the highest and second highest number of responses to “a very large influence,” while spouse/partner employment (61), materials and resources available (48), and satisfaction with salary and benefits (47) had the highest responses of “no influence.” Means and standard deviations for each factor were calculated (see Table 11).

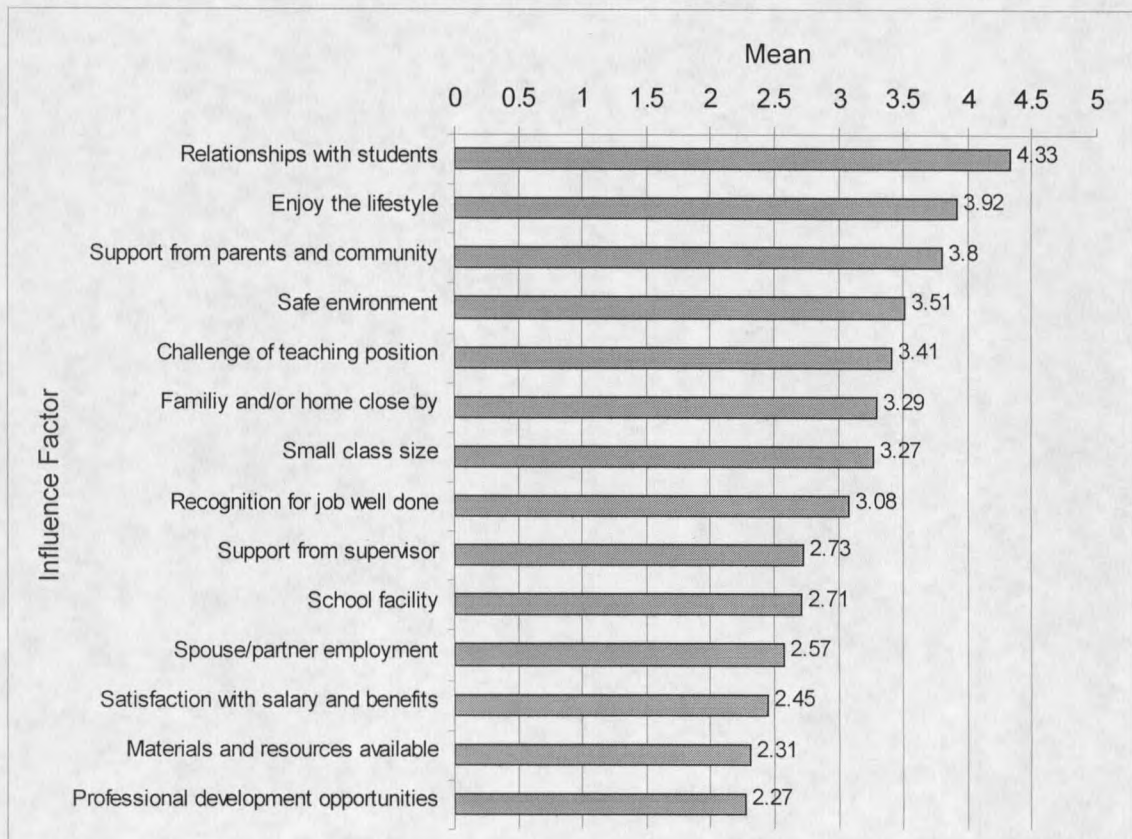
Table 11. Influence Factors to Remain Teaching by Mean and Standard Deviation

Factor	Mean	Standard Deviation
Small class size	3.27	1.29
Support from supervisor	2.73	1.62
Support from parents and community	3.80	1.23
Relationships with students	4.33	0.95
Enjoy the rural lifestyle	3.92	1.34
Spouse/partner employment	2.57	1.75
Challenge of the teaching position	3.41	1.23
Professional development opportunities	2.27	1.25
Recognition for job well done	3.08	1.42

Family and/or home is close by	3.29	1.65
Satisfaction with salary and benefits	2.45	1.41
Safe environment	3.51	1.27
School facility	2.71	1.43
Materials and resources available	2.31	1.28

Factors are presented in descending order by their means in Figure 6. As indicated by Figure 6, “relationships with students” as reported by teachers had the greatest influence with a mean of 4.33, followed by “enjoy the rural lifestyle” (3.92), “support from parents and community” (3.80), and “safe environment” (3.51). Two factors that had the lowest means were “materials and resources available” (2.31) and “professional development opportunities” (2.27).

Figure 6. Rank Order of Influence Factors to Remain Teaching



Responses to Open-Ended Question. Teachers were again provided an opportunity to list other factors that influenced them or will influence their decisions to remain teaching in their current schools. Nineteen teachers (15%) of the 126 teachers chose to offer single and/or multiple comments (27 in all). Comments were organized by the four spheres of influence: Within Classroom, Whole School-Level, Community Level, and Family/Personal. Data are represented in Table 12.

Table 12. Written Comments Categorized by Four Spheres Related to Teacher Retention.

Spheres of Influence	Responses		Examples of Comments Made
	N	%	
Within Classroom	7	26	Continuation of successful program. Number of grades [I] teach. Most decisions are up to [the] teacher.
Family/Personal	6	22	Enjoy solitude. Committed to finish [the] job. After putting in all this time and energy, I want to have an "easier" second year.
Whole School	6	22	Good support from board. Relationship with other faculty members. Housing on site.
Community	3	11	Involved parents. Irrational parent. Ease in traveling to and from school.
Other	5	19	Rural schools need to try to offer some kind of group health insurance. After 2 years [students] need a different teacher. If you are doing a job with a low salary and low benefits, you need a lot of recognition.
Total	27	100	

School-related comments tended to reflect the importance of others as in these remarks: "good support from board;" "relationship with other faculty members;" "support from other professional staff;" and "staff relations." The Family/Personal-

related remarks generally expressed a sense about the work such as “[I am] committed to finish [the] job” and “After putting in all this time and energy, I want to have an easier second year.” Rather than provide reasons for remaining in their current school, three respondents used the opportunity to express opinions about salary and benefits and/or the rural school experience itself. As already observed, satisfaction with salary and benefits ranked third from the bottom as influencing teachers to remain teaching. It seemed necessary for these individuals to reinforce their belief that salaries and benefits for rural teachers was a serious concern (complete comments in Appendix I).

Research Question #3

When individual factors were categorized by the four spheres of influence identified by Boylan et al. (1993) (e.g., Within Classroom, Whole School-Level, Community Level, and Family/Personal), how did they rank as having influenced teachers’ decisions to accept employment and remain teaching in their present schools?

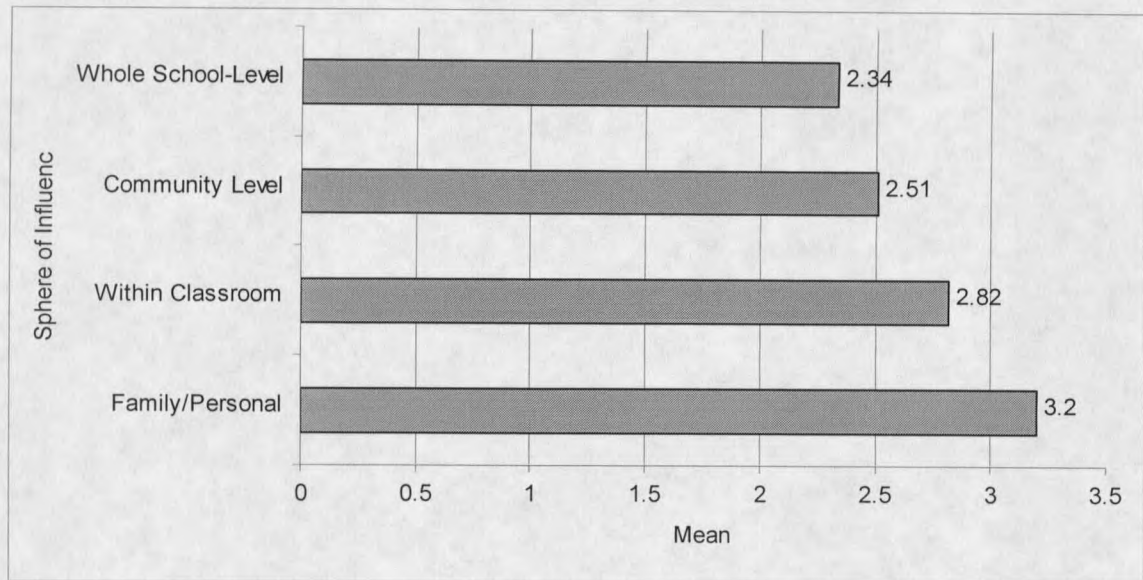
The 13 individual factors presented to teachers in Section I, Question 1 of the survey, “Teaching in Montana’s Small Rural Schools Survey,” were categorized according to their respective spheres of influence (i.e., Within Classroom, Whole School-Level, Community Level, and Family/Personal) to identify how they ranked as having influenced teachers’ decisions to accept employment in their present school. A single mean score for each sphere and their standard deviations was calculated based on the responses to the individual factors that comprised each grouping (Table 13).

Table 13. Means and Standard Deviations of Spheres of Influence Related to Acceptance of Employment

Spheres of Influence	Mean	N	Standard Deviation
Family/Personal	3.2037	126	1.0532
Within Classroom	2.8234	126	.9727
Community Level	2.5119	126	.9497
Whole School-Level	2.3413	126	.8600

Each sphere's mean score in descending order (rounded to the nearest hundredth), ranked them to indicate the amount of influence each had on teachers' decisions to accept employment at their current school (Figure 7). As reported by 6E teachers, the Family/Personal sphere of influence was ranked highest (3.20). This was followed by Within Classroom (2.82), Community Level (2.51) and Whole School-Level (2.34). While Family/Personal was ranked highest, that sphere's standard deviation (1.0532) indicates the greatest amount of variability in individual scores, while the standard deviation for the lowest ranking sphere, Whole School-Level, represents the least amount of variability (.8600). This would suggest that the 6E teachers were more in agreement that Whole School related factors were less influential in their decisions to accept employment.

Figure 7. Rank Order of Mean Scores of Factors Related to Acceptance of Employment Categorized by Four Spheres of Influence



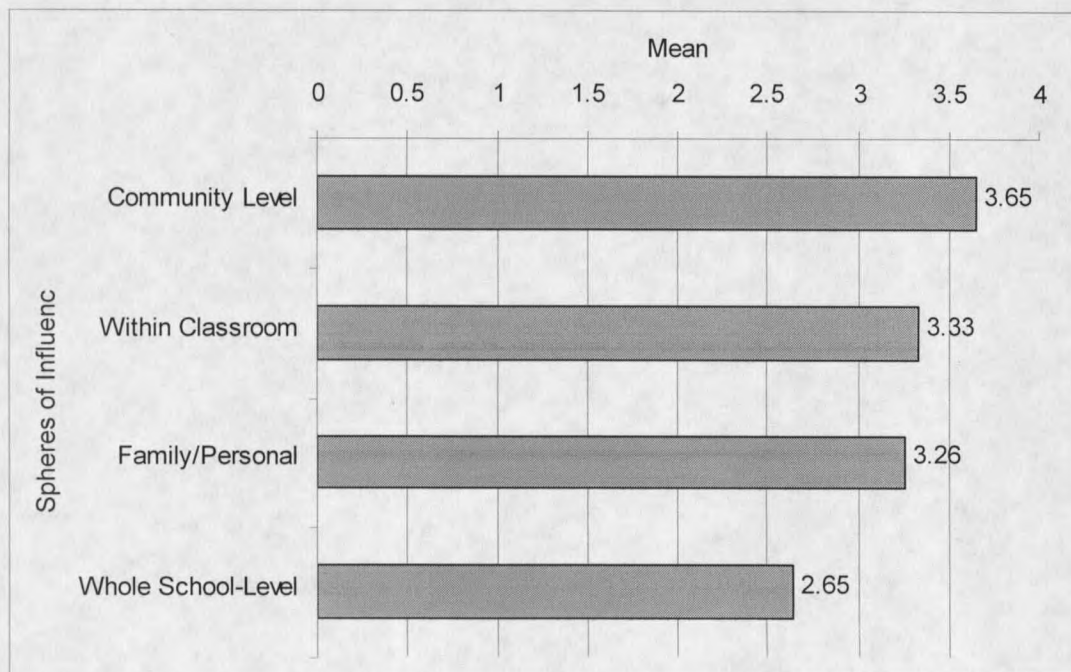
Next, the 14 individual factors presented to teachers in Section I, Question 2 of the survey “Teaching in Montana’s Small Rural Schools Survey” were categorized according to their respective spheres of influence (i.e., Within Classroom, Whole School-Level, Community Level, and Family/Personal) to identify how they ranked as having influenced teachers’ decisions to remain teaching in their current school. A single mean score for each sphere and their standard deviations were calculated based on the responses to the individual factors that comprised each grouping (Table 14).

Table 14. Means and Standard Deviation of Spheres of Influence Related to Retention

Spheres of Influence	Mean	N	Standard Deviation
Community Level	3.6548	126	1.0246
Within Classroom	3.3313	126	.8043
Family/Personal	3.2593	126	1.1917
Whole School-Level	2.6476	126	1.0025

Each sphere's mean score in descending order (rounded to the nearest hundredth) ranked them to indicate the amount of influence each had on teachers' decisions to remain teaching in their present school (Figure 8). As reported by 6E teachers, the Community Level sphere of influence was ranked highest (3.65). This was followed by Within Classroom (3.33), Family/Personal (3.26), and Whole School Level (2.65). Within Classroom, while the second highest in ranking, had the smallest standard deviation indicating the least amount of variability in individual factors for that sphere. This suggests that teachers' responses concerning the extent of influence classroom-related factors had were more similar than those in the other spheres of influence.

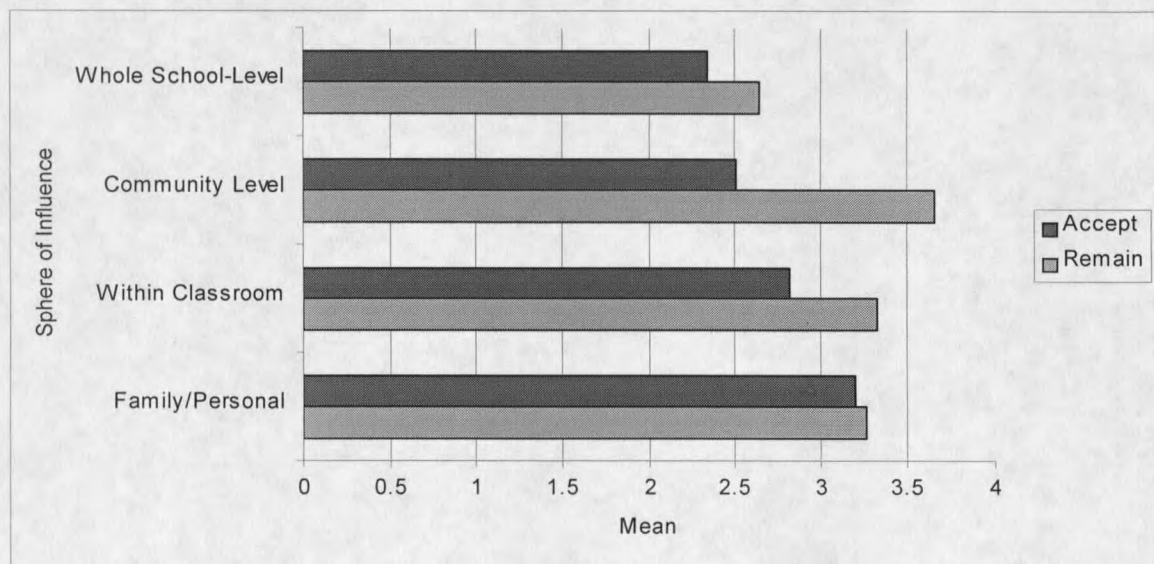
Figure 8. Mean Scores of Factors Related to Teacher Retention Categorized by the Four Spheres of Influence



Four Spheres of Influence Comparison

As indicated by Figure 9, mean scores for the four spheres of influence related to teachers' decisions to accept employment and remain teaching in their present schools are compared. Mean scores were consistently higher across all spheres for the factors related to teacher retention than for spheres of influence related to accepting employment. Factors related to the Family/Personal sphere of influence are quite similar in their ranking of influence for both accepting employment and remaining teaching. Community Level factors as reported by 6E teachers rank higher in their influence to retain teachers than they do for acceptance of employment. The same is true for Within Classroom and Whole School-Level, although the differences are smaller. It is clear that the Whole School-Level sphere of influence ranked as having the least amount of influence in teachers' decisions to both accept employment and remain teaching in their present schools.

Figure 9. Four Spheres of Influence: Comparison of Mean Scores



Paired T-Tests

Paired T-tests were performed to determine if actual differences existed between the mean scores of each grouping of factors by the spheres of influence ($\alpha = .05$).

Null Hypothesis

There are no significant differences between the mean scores of the four spheres of influence related to teachers' decisions to accept employment.

Table 15. Paired T-Test Results: Four Spheres Related to Accepting Employment

Pairs	Paired Differences					
	Mean	Standard Deviation	S. Error Mean	t	Df	Sig.(2 tailed)
Family/Personal-Whole School	-.8624	1.0417	9.280E-02	-9.294	125	.000
Family/Personal-Community	-.6918	1.1255	.1003	-6.90	125	.000
Community-Within Classroom	-.3115	.8635	7.693E-02	-4.049	125	.000
Family/Personal-Within Classroom	.3803	1.2480	.1112	3.420	125	.001

Indicated in Table 15, the significance level between each pair equated to .000 with the exception of Family/Personal-Within Classroom which was .001. Therefore, these tests provided evidence that the null hypothesis should be rejected. Thus, it was concluded that there were significant differences between the four spheres of influence ($\alpha = .05$) as related to teachers' decisions to accept employment within the population of 6E teachers.

Null Hypothesis

There are no significant differences between the mean scores of the four spheres of influence related to teachers' decisions to remain teaching.

Table 16. Paired T-Test Results: Four Spheres Related to Teacher Retention

Pairs	Paired Differences					
	Mean	Standard Deviation	S. Error Mean	t	Df	Sig.(2 tailed)
Community-Whole School	1.0071	.8941	7.965E-02	12.644	125	.000
Community-Family/Personal	.3955	1.2325	.1098	3.602	125	.000
Within Classroom-Family/Personal	7.209E-02	1.1397	.1015	.710	125	.479
Community-Within Classroom	-.3234	.8149	7.260E-02	-4.455	125	.000

Indicated in Table 16, the significance level between each pair equated to .000 with the exception of Within Classroom-Family/Personal which was .479. Therefore, these tests provided evidence that for the pairs Community-Whole School, Community-Family/Personal and Community-Within Classroom, the null hypothesis should be rejected. There were significant differences between the means of three pairs ($\alpha = .05$) as related to teachers' decisions to remain teaching within the population of 6E teachers. However, for the pair Within Classroom- Family/Personal, the t-test failed to indicate that the null hypothesis should be rejected. There is no significant difference between the means for this pair related to teachers' decisions to remain teaching within the population of 6E teachers.

Additional Information About the Population

Two sections were included in the survey instrument to gather information unrelated to the research questions for the study but of interest to the researcher. These data may provide useful information for those who work with small rural schools in Montana. Section II of the survey instrument gathered opinions from teachers about potential strategies for recruitment and retention. Section III contained three items by which teachers indicated their satisfaction with their profession.

Teacher Opinions About Effective Recruitment and Retention Strategies

A number of steps that school districts could take to recruit and retain teachers were identified in the literature reviewed for this study, several from publications by individuals and/or groups within Montana. Teachers were asked to review a list of sixteen steps that might encourage teachers to remain teaching in small elementary schools in rural Montana. They were instructed to identify the “most effective,” “second most effective,” and “third most effective” steps that schools could take. Table 17 reflects the frequency and percent of responses for each step according to their effectiveness as perceived by the 6E teachers.

Table 17. 6E Teacher Opinions About Most Effective Recruitment and Retention Strategies

Steps School Could Take	Most Effective Step		Second Most Effective Step		Third Most Effective Step	
	N	% of Responses	N	% of Responses	N	% of Responses
0. Missing/Refused	1	.8			2	1.6
1. Help w/student loan payments	8	6.3	16	12.7	18	14.3
2. Insurance benefits	16	12.7	34	27	26	20.6
3. Financial assistance for advanced college or additional endorsements	4	3.2	6	4.8	8	6.3
4. Mentoring and support programs for new teachers	4	3.2	5	4.0	2	1.6
5. Student teacher involvement in community activities	0	0	1	.8	0	0
6. Help with finding housing or w/ low-interest loans to buy house	1	.8	3	2.4	4	3.2
7. Cooperative programs to train people locally. Bringing certification programs to community members already committed to being part of the community	1	.8	2	1.6	0	0
8. Marketing of whatever the district has to offer—location, recreation, cost of living, safe & healthy environment	1	.8	1	.8	0	0
9. High quality professional development opportunities & opportunities to travel for professional growth	1	.8	4	3.2	5	4.0
10. More flexibility with scheduling, including flexible personal days	0	0	1	.8	6	4.8
11. State funded, \$500 salary increase for all teachers in Montana	4	3.2	13	10.3	16	12.7
12. State funded mentoring/ induction program during first 5 years of employment	2	1.6	2	1.6	2	1.6
13. Loan forgiveness program offered to teachers who accept jobs in high demand/low supply areas—up to \$3,000 per year for up to four years	7	5.6	16	12.7	14	11.1
14. Increase retirement benefit multiplier to 2% for TRS members who retire with 30 years or more years of service	1	.8	9	7.1	10	7.9
15. Stipend for teachers who earn National Board Certification and continue teaching in the state	0	0	5	4.0	5	4.0
16. Salaries competitive with other states	75	59.5	8	6.3	8	6.3

"Salaries competitive with other states" (59.5%) and insurance benefits (12.7%) accounted for 72.2% of responses from 6E teachers as the most effective steps schools could take to recruit and/or retain teachers. Two additional steps help with student loans (6.3%) and loan forgiveness programs for high demand/low supply areas (5.6%), comprised another 11.9% of responses (Table 17) (Figure 10).

Five steps encompassing 73% of teacher responses were viewed as the second most effective step that schools could take. These included insurance benefits (27%), help with student loans (12.7%), loan forgiveness programs for high demand/low supply areas (12.7%), state funded \$500 salary increase for all teachers (10.3%), and state funded mentoring/induction program (10.3%) (Table 17) (Figure 11). Four of these steps were also viewed as the third most effective step by 58.7% of teachers: insurance benefits (20.6%), help with student loan payments (14.3%), state funded \$500 salary increase for all teachers (12.7%), and loan forgiveness programs for high demand/low supply areas (11.1%) (Table 17) (Figure 12).

Frequencies for all steps were totaled. As Figure 13 demonstrates, the most effective steps school districts could take to encourage teachers to remain teaching in small elementary school districts in rural Montana are to provide salaries competitive with other states (91), arrange for some level of insurance benefits (76), help with student loans (42), and establish a loan forgiveness program for high demand/low supply areas (37). Figure 13 presents frequency totals for all steps in descending order.

Figure 10. Most Effective Step Schools Could Take to Retain Teachers

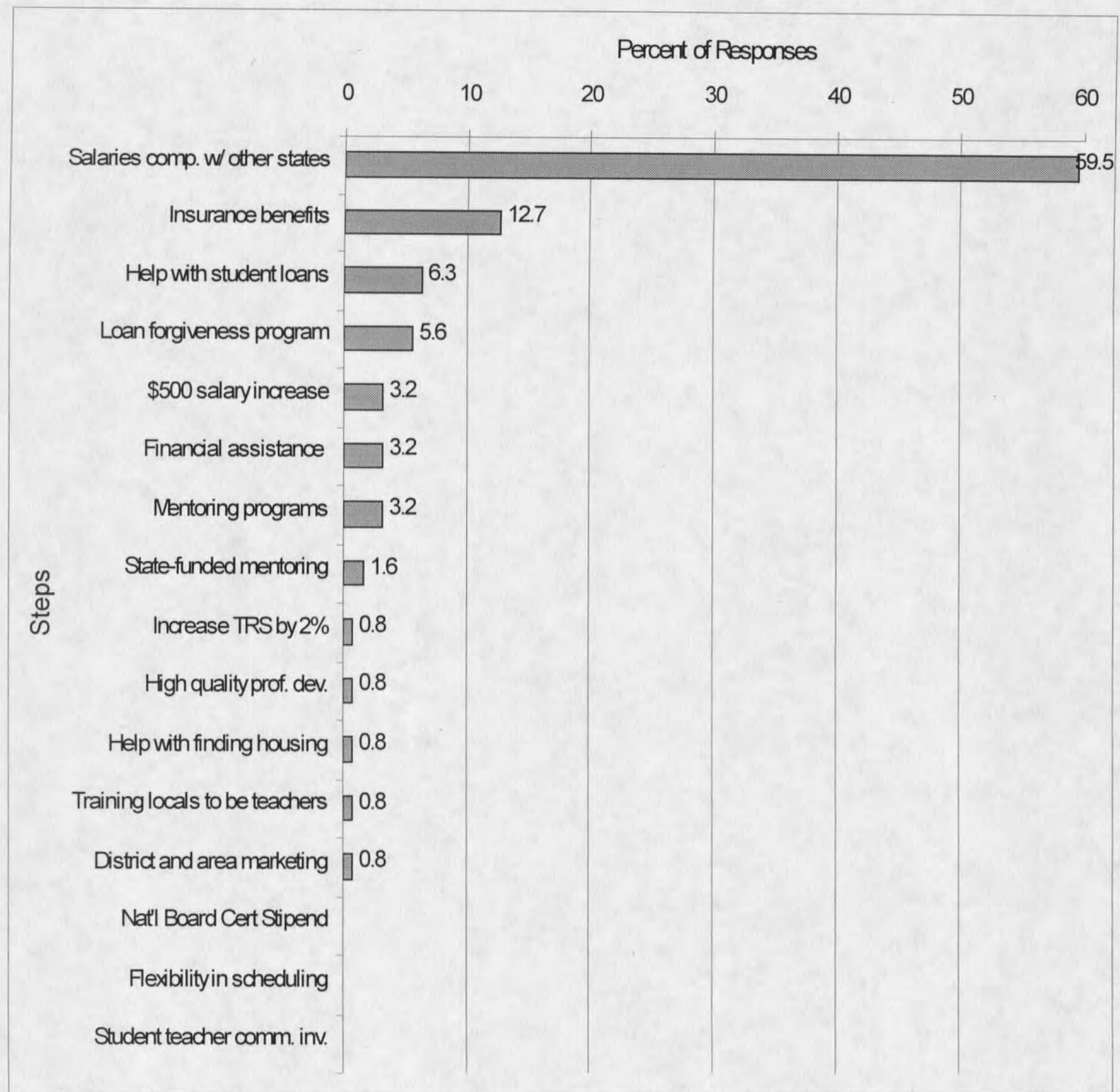


Figure 11. Second Most Effective Step Schools Could Take to Recruit and/or Retain Teachers

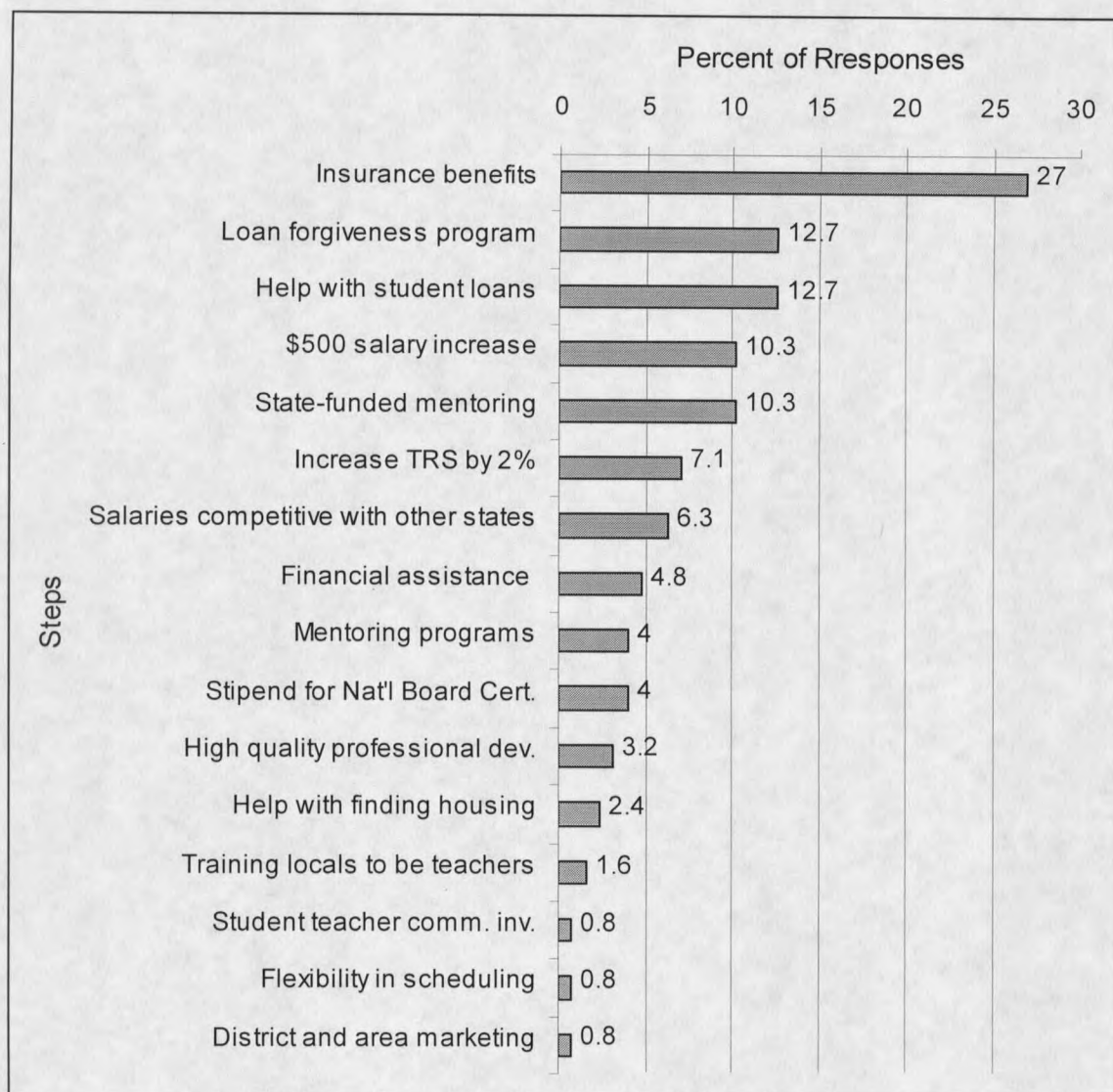


Figure 12. Third Most Effective Step Schools Could Take to Recruit and/or Retain Teachers

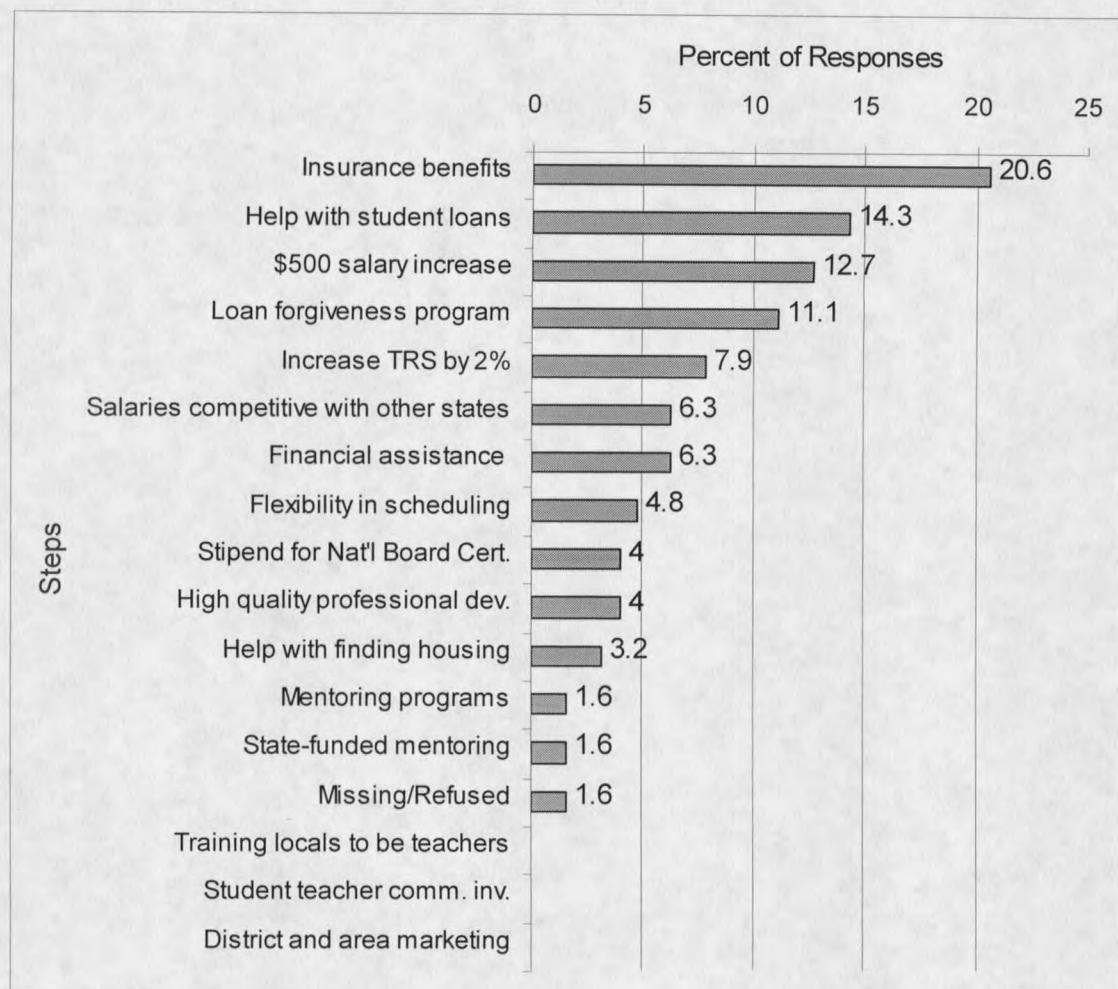
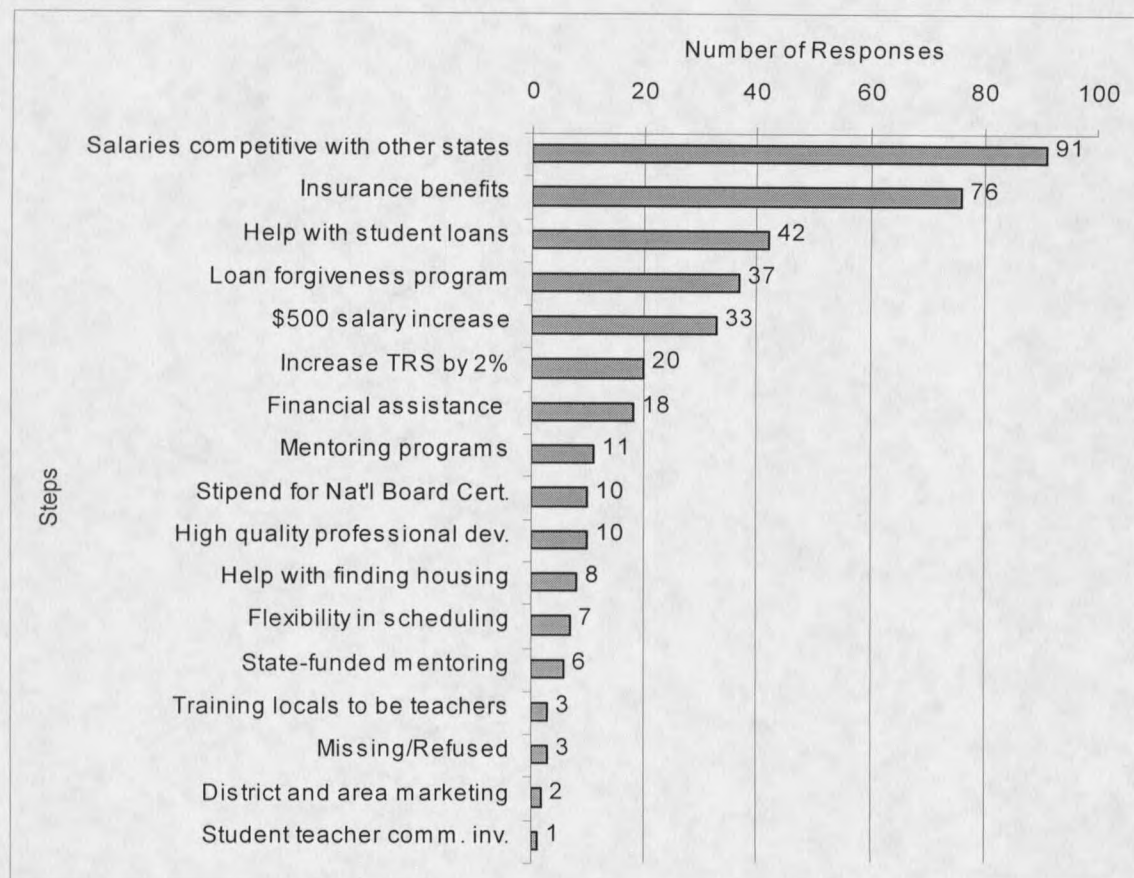


Figure 13. Total Responses of 6E Teachers About Most Effective Steps to Recruit and/or Retain Teachers



Open-Ended Responses

As an option, teachers were asked to list other suggestions that they might have to retain and/or recruit teachers. Thirty-six percent or 45 teachers chose to do so. Many took the opportunity to strengthen steps already listed. The most frequent remarks had to do with compensation. Typical comments included: "If pay was more comparable to other states and we were offered good benefits, I know I would be more willing to stay;" "I have a real problem understanding why some teachers are worth less money. Montana should have a base salary scale...;" "Rural school districts should be capable of offering

teachers in their districts pay that is closer to the larger districts around them;" "Small schools need enough money to provide for salaries, insurance and maintenance of the physical plant. Just because the number of students is small, that doesn't mean teachers should be given salaries that can't keep up with the cost of living and receive no insurance;" and "Higher salaries and benefits—we have none right now."

Several teachers addressed levels of support from community, parents, school board, and the state level as important to them in retaining teachers. Comments included: "I believe the most effective step to encourage teachers to remain is to teach parents and school boards to accept the teacher. Many teachers are run off from a school just because one parent doesn't like the teacher;" "Get literature to parents to stress importance about supporting teachers;" "Back teachers—more support from state—more interaction at teaching level;" and "When teachers are earning a lower salary, they need to be supported more and recognized for their efforts."

Others addressed teacher preparation, professional development and certification as potential effective steps. These comments were quite varied. The following serve as examples: "Get rid of the eternally dull education curriculum...recruiting 'real teachers' from all professions would improve the quality of student education in public schools;" "[Provide] online opportunities for Master's degree in areas of multiage teaching;" "Combine the regular education and special education endorsements into one endorsement. This will give any new teacher some tools to work with children who don't necessarily require special education, but who need specific one-on-one help;" "Teachers teaching in rural areas making less than poverty level salaries with several years of

experience should be given special consideration when trying to acquire a Montana teaching credential;" and "Initiate a cadet teacher program for high school juniors—they spend 1 hour a day working/learning in an elementary classroom." A few spoke about bonuses for end of the year or at Christmas and sign on bonuses that some states are currently offering.

Paying teachers a decent salary and providing benefits reflected the majority of comments offered by teachers and mirrored the results reflected in Figures 10-13. They offered other salary-related ideas such as federal and state tax breaks, bonuses, and loan forgiveness for staying in state to teach. Teachers indicated their desire to feel supported by various entities and to be recognized as professionals for the work they are doing. One teacher offered this personal note: "You go to a country school because you enjoy it—not to make big bucks."

Teacher Satisfaction

Three items derived from the NCES 1993-94 Schools and Staffing Survey (SASS) were used in the survey to gather information related to the satisfaction of the 6E teachers with the teaching profession. These questions were utilized in a national analysis report in 1997, "Job Satisfaction Among America's Teachers: Effects of Workplace Conditions, Background Characteristics, and Teacher Compensation." Although a thorough analysis of these items was beyond the scope of this study, they are included because the level of teacher satisfaction is consistently cited in the literature as an important factor in the retention of teachers. According to Boylan and McSwan (1998), "The level of satisfaction with and commitment to teaching are important

determinants of teacher morale and influence the teacher's decision to remain or leave a rural appointment" (p. 56). The three questions were:

- How long do you plan to remain teaching?
- If you could go back to college days would you choose teaching as a career again?
- To what degree do you agree or disagree with the statement, "I sometimes feel it is a waste of my time to try to do my best as a teacher"?

Frequencies and percent of responses for each question are contained in Table 18.

Table 18. Teacher Satisfaction Items: Frequencies and Percent of Responses

Questions/Responses	N	Percent
4.How long do you plan to remain teaching?		
As long as I am able	70	55.6
Until I am eligible for retirement	22	17.5
I'll continue teaching unless something better comes along	11	8.7
I definitely plan to leave teaching	3	2.4
Undecided	17	13.5
Missing or refused	3	2.4
5.If you could go back to your college days would you choose teaching as a career again?		
Certainly would	64	50.8
Probably would	24	19
Chances about even	21	16.7
Probably would not	13	10.3
Certainly would not	4	3.2
Missing or refused	0	0
6.To what extent do you agree or disagree with the statement "I sometimes feel it is a waste of my time to do my best as a teacher"?		
Strongly agree	1	.8
Somewhat agree	19	15.1
Somewhat disagree	16	12.7
Strongly disagree	89	70.6
Missing or refused	1	.8

More than 50% of the teachers selected the most positive response possible to questions 4 (55.6%) and 5 (50.8%), while 70.6% of teachers did so in response to question 6. Compared to the national analysis report indicated above, the percent of response to these questions is considerably higher for Montana's 6E teachers. Just over 20% of teachers gave the most positive responses to all three questions in the national study (NCES 97-471). Nationally, almost 9% of teachers indicated extremely negative responses. For Montana's 6E teachers, lower percentages are observed for all three questions: Q4-2.4%; Q5-3.2%; and Q6-.8%.

Collapsing the two most positive responses for each question together reveals that 73.1% of the 6E teachers plan to continue teaching as long as they are able or until retirement; 69.8% certainly or probably would choose teaching as a career again; and 83.3% do not believe that doing their best is a waste of their time. Figures 14-16 provide graphic displays of the data for these three questions.

Figure 14. How Long Do You Plan to Remain Teaching?

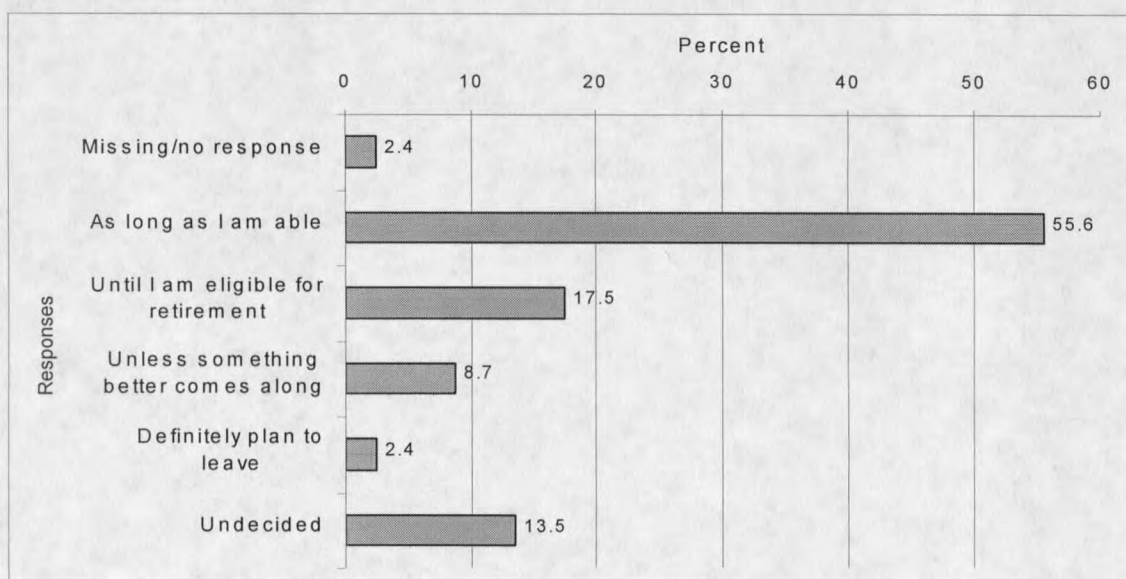


Figure 15. If You Could Go Back to Your College Days, Would You Choose Teaching as a Career Again?

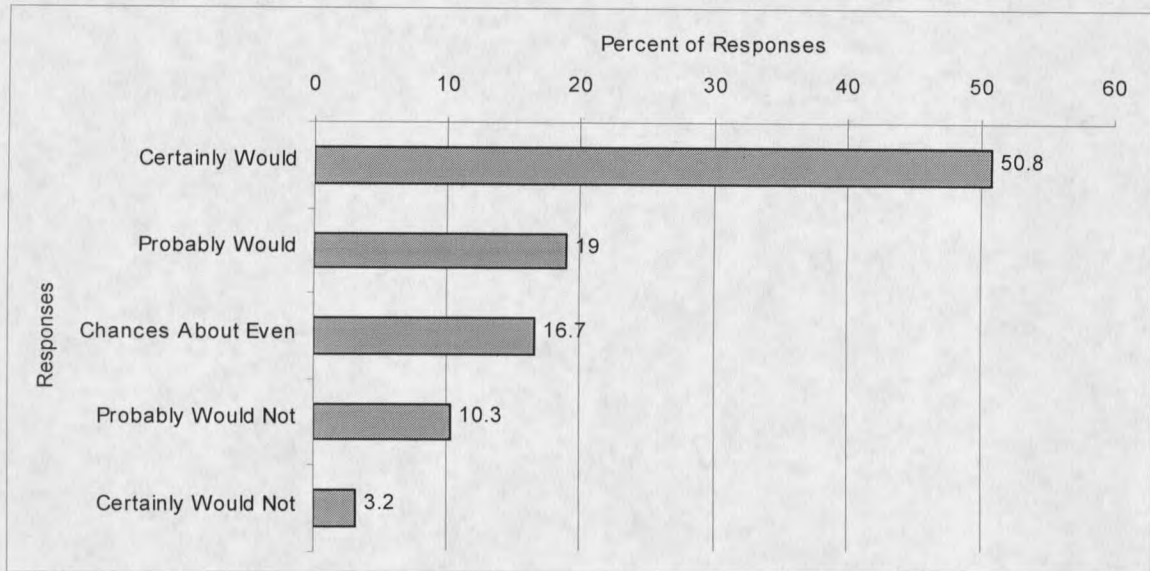
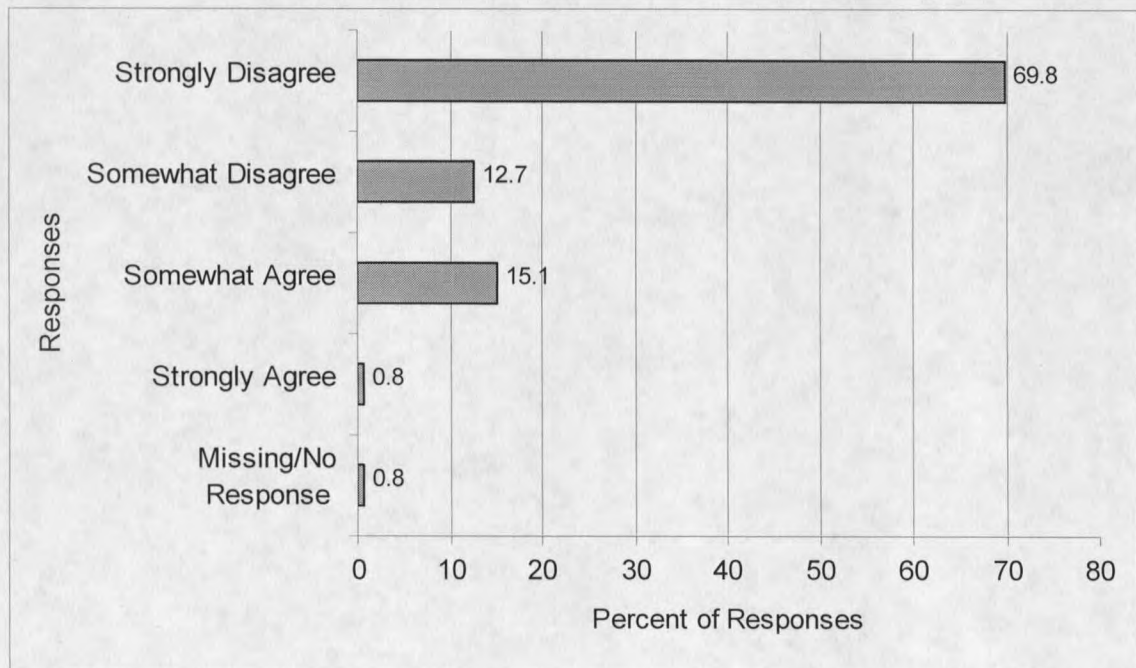


Figure 16. To What Extent Do You Agree or Disagree with the Statement, "I Sometimes Feel It Is a Waste of My Time to Do My Best as a Teacher?"



Summary of Findings

This descriptive study of certified elementary teachers (126) in 107 of Montana's smallest elementary school districts sought to identify factors that most highly influenced teachers' decisions to accept employment and remain teaching in their current schools. The majority of teachers (65), or 52%, were from single teacher elementary school districts within 40 counties across Montana. Additionally, most teachers were female (93.7%), white (97.6%), married (65.1%), and 73% considered themselves to have a "rural background." Only 5.6% of teachers were part-time and 9.5% held degrees beyond a Bachelor's. Ages of participants were distributed across all age groupings. While 38.8% were in their first three years of teaching at their current school, 23% were in their first three years of public school teaching. This may support teacher comments that indicated "teachers with more than a few years of experience are not hired because [the district] can't afford to hire experienced teachers."

As reported by teachers, a factor that influenced teachers to accept employment more than the others was "enjoy the rural lifestyle." This finding would be consistent with the high percentage of teachers who had a rural background. Other factors that followed next in the level of influence were the "challenge of the teaching position," "safe environment," and "family and/or home is close by." A factor identified by teachers as having the least influence on their decisions to accept employment was the "school's recruiting program." A likely reason for this is that few, if any, of these small elementary districts have such a program or the funding necessary to establish one.

“Access to recreational activities” and “materials and resources available” were also identified as having little influence on teachers’ decisions.

The factor that teachers identified as most influential for them to remain teaching was their “relationships with students.” Previous research studies have also found teacher-student relationships to be highly correlated with teacher retention. In addition, “support from parents and the community” and “enjoyment of the rural lifestyle” ranked second and third highest factors that influence teachers to remain teaching. “Professional development opportunities” ranked lowest as a factor that influenced teachers to remain teaching. It is likely that for many of these teachers, especially those from single teacher schools, limited opportunities for professional growth exist. Two other factors that had the least influence for these teachers were “materials and resources available” and “satisfaction with salary and benefits.” Teachers in these schools were highly concerned about their low salaries and even more so if the district provided few or no insurance benefits.

The 13 factors related to teachers’ decisions to accept employment and the 14 factors related to teachers’ decisions to continue or remain teaching were further categorized into four groups for each set of factors. These groups were named the “four spheres of influence” based on the work of Boylan et al. (1993). Mean scores for each sphere revealed that for this population of teachers, Family/Personal factors ranked highest in influencing teachers to accept teaching positions while whole-school factors had the least amount of influence. Mean scores for the second group of spheres of influence indicated that community factors ranked highest in influencing teachers to

remain teaching. Whole-school factors also ranked as having the least amount of influence for the 6E teachers.

Mean differences for each set of the "spheres of influence" were tested through paired T-tests. It was determined that significant differences existed between the means within the population related to the level of influence on teachers' decisions to accept employment, thus rejecting the null hypothesis. Mean scores for the spheres of influence related to teacher retention were significantly different for three of the four pairs tested. The pair, Within Classroom-Family/Personal, failed to provide evidence that differences between their two means were significant within the population.

Supplemental information collected demonstrated that despite teachers' dissatisfaction with their salary and benefits, 6E teachers are quite satisfied with their chosen profession. Content analysis of written comments disclosed a dedication and commitment of these teachers to serve rural children, an appreciation for the unique experience provided in a "country school," and contentment with the flexibility and control over various teaching decisions made each day. Living in Montana, and particularly the quality of life represented by rural areas, is important as viewed by many of these teachers in the smallest of Montana's rural school districts.

Data collected and analyzed in this research study represent a contribution to the limited research that exists about Montana's small rural schools and the elementary teachers who provide instructional services to students. Information gathered clarified an understanding of factors that exist for teachers of Montana's 6E elementary schools that have the greatest influence on teachers' decisions to accept and/or remain teaching in

these schools. The data also provided support for the design of recruitment strategies that will aid districts in identifying teacher candidates who are more closely matched to the lifestyles, interests, and attitudes consistent with the cultural norms within the community (Luft, 1991).

CHAPTER 5

FINDINGS, CONCLUSIONS, AND RECOMMENDATIONS

Introduction

The problem addressed in this study was the lack of knowledge that exists about the reasons teachers in Montana's smallest elementary schools, those with 40 students or less, accept teaching positions and remain teaching in these schools. While salary and benefit data are available (Morton, 1999; Nielson, 2000, 2001), little is known about the characteristics, experiences and perspectives of these teachers in 6E school districts. As teacher shortages in Montana appear to be imminent, these data may be essential for designing strategies to staff schools in the future. The researcher sought to identify factors inherent in these schools that attract and retain teachers and ascertain the amount of influence each had on teachers' decisions to accept employment and remain teaching in their present schools. Secondly, the factors categorized as the "four spheres of influence" based on the work of Boylan et al. (1993) were analyzed to determine if there were significant differences as to their influence on teachers' decisions to accept employment and remain teaching in these schools.

One hundred and forty-seven (147) certified elementary teachers in 107 elementary school districts, classified as 6E (40 students or less) by the Office of Public Instruction were invited to participate in the study. Participants (126) completed a survey

asking him/her to indicate, using a Likert scale, the extent of influence that each factor had on their decisions to accept employment (13 factors) and remain teaching (14 factors) in their present schools. Opportunity was provided for respondents to list additional factors that influenced their decisions. Additional information was gathered regarding teachers' opinions on potential retention strategies and teacher satisfaction with their profession.

Content and construct validity of the instrument developed for this study was established through a three-step process that comprised a review of the literature, solicitation of expert opinion from rural education professionals, and a pilot test of the survey with eight individuals similar to the study's population. A reliability analysis procedure (Cronbach) was conducted and resulted in an alpha of .88 on the 27 individual factors and .86 when combinations of factors were grouped by the "four spheres of influence." Individual factors were ranked by their means to identify those reported by teachers to have the highest extent of influence on their decisions. Factors were categorized using the "four spheres of influence:" Family/Personal, Within Classroom, Community Level, and Whole School-Level and analyzed utilizing paired t-tests of dependent means to determine if differences existed between them in their influence on teachers' decisions to accept employment and remain teaching in their present schools.

Findings

Results of the data analyses provide the following description of a typical elementary instructor teaching in a 6E school district in Montana.

The average teacher works in a single teacher school and is a white married female. Her age ranges from approximately 25 to just under 60. She comes from a rural background, which, for her, means that she has a connection with farming or ranching. She holds a Bachelor's degree and has been at her current school for a little over six years but has had 10 years of public school teaching experience.

When asked to suggest steps that school districts could take in order to retain teachers in Montana's small rural schools, she strongly voices her belief that teachers should be paid a comparable salary with those paid in other states—or at least within Montana. She also maintains that teachers in 6E schools should all have insurance benefits. She favors providing help with student loans or some type of loan forgiveness program for areas in the state experiencing high demand/low supply of teachers.

While concerned about salary and benefits, this average 6E teacher is very satisfied with her career in teaching. She plans to continue teaching as long as she is able to and would probably choose teaching as a career again if given the choice. She believes firmly that teaching is not a waste of her time.

Data analyses related to the research questions of this study resulted in the following general findings:

1. Elementary teachers in Montana's 6E schools reported that they were most strongly influenced to accept their present teaching positions because they "enjoy the rural lifestyle." Ninety-five teachers reported that this factor had "a very large influence" or "a good deal of influence" on their decisions. These teachers were also strongly influenced by the "challenge of the teaching position," the safety of the environment and the fact that their family or home was close by.

2. As reported by teachers in this study, they were least influenced by the school's recruiting program, either because it was not effective or did not exist. The majority of teachers also reported that they were not influenced or weakly influenced by the availability of recreational activities, the existence of materials and resources at the school site or by employment for their spouse or partner.
3. These teachers reported that the strongest influence for them to remain teaching in their present school was their relationships with their students. One hundred and six teachers reported that this factor had a "very large influence" or "a good deal of influence" on their decisions to remain teaching in their present school. Also influencing them quite strongly was their enjoyment of the rural lifestyle, the support they received from parents and the community, and the safety of the environment.
4. Teachers indicated that spouse/partner employment was least influential on their decisions to remain teaching. They also indicated that they were not strongly influenced by the materials and resources available at the school site, the professional development opportunities provided, and the salary and/or benefits they received.
5. When the 13 factors related to acceptance of employment were categorized by their respective spheres of influence (Within Classroom, Whole School-Level, Family/Personal and Community Level), teachers were most influenced by those factors that related to the Family/Personal sphere of influence. Factors related to the Whole School-Level sphere of influence held the least influence when mean scores of the four spheres were compared.

6. When the 14 factors related to teacher retention were categorized by their respective spheres of influence (Within Classroom, Whole School-Level, Family/Personal and Community Level), teachers were most influenced by those factors that related to the Community Level sphere of influence. Factors related to the Within Classroom and Family/Personal spheres of influence were similar in influence and the Whole School-Level sphere of influence factors were least influential on teachers' decisions to remain teaching as indicated by their mean scores.
7. Statistically significant differences were found between all paired mean scores of the four spheres of influence related to acceptance of employment supporting the hierarchical ranking of influence that each sphere had on teachers' decisions: Family/Personal (3.20), Within Classroom (2.82), Community Level (2.51) and Whole School-Level (2.34).
8. Statistically significant differences were found between three of the four paired mean scores of the four spheres of influence related to teachers' decisions to remain teaching. No significant difference was found between the mean scores of Within Classroom and Family/Personal spheres of influence within the population of 6E teachers.

Conclusions

These findings answered the study's research questions that asked:

1. How much influence did each of 13 factors have on teachers' decisions to accept employment in their present school as reported by teachers in the "Teaching in

Montana's Small Rural School's Survey?"

2. How much influence did each of 14 factors have on teachers' decisions to remain teaching in their present school as reported by teachers in the "Teaching in Montana's Small Rural School's Survey?"
3. When individual factors were categorized by the four spheres of influence identified by Boylan et al. (1993) (e.g., Within Classroom, Whole School-Level, Community Level and Family/Personal), how did they rank as having influenced teachers' decisions to accept employment and remain teaching in their present schools?

Based on the study's findings, the following conclusions are made:

1. Mean scores of individual factors ranked them as to the amount of influence each had on teachers' decisions to accept employment in their present schools. The factors ranked in descending order as follows: enjoy the rural lifestyle (3.96), challenge of the teaching position (3.53), safe environment (3.29), family and/or home is close by (3.29), best or only job offer (3.12), small class size (3.11), opportunity to practice multiage teaching (2.89), good reputation of the school (2.65), spouse/partner employment (2.36), satisfaction with salary and benefits (2.29), materials and resources available (1.76), access to recreational activities (1.73), and school's recruiting program (1.31) (Figure 4).
2. Mean scores of individual factors ranked them as to the amount of influence each had on teachers' decisions to remain teaching in their present schools. The factors ranked in descending order as follows: relationships with students (4.33), enjoy the rural lifestyle (3.92), support from parents and community (3.80), safe

environment (3.51), challenge of the teaching position (3.41), family and/or home is close by (3.29), small class size (3.27), recognition for job well done (3.08), support from supervisor (2.73), school facility (2.71), spouse/partner employment (2.57), satisfaction with salary and benefits (2.45), materials and resources available (2.31), and professional development opportunities (2.27) (Figure 5).

3. When individual factors were categorized by their respective spheres of influence related to acceptance of employment, mean scores ranked them in descending order as follows: Family/Personal (3.20), Within Classroom (2.82), Community Level (2.51), and Whole School-Level (2.34) (Figure 7). Statistically significant differences between the means for each sphere were found utilizing paired t-tests and support the ranking of influence established (Table 15).
4. When individual factors were categorized by their respective spheres of influence related to teacher retention, mean scores ranked them in descending order as follows: Community Level (3.65), Within Classroom (3.33), Family/Personal (3.26), and Whole School-Level (2.65) (Figure 8). While the Within Classroom sphere of influence ranked second by its mean score, it had the smallest standard deviation of the four spheres suggesting that teachers' responses to classroom related factors were the most similar. Statistically significant differences between the means were found for three of four pairs of spheres tested utilizing paired t-tests (Table 16). These results necessitated adjustment in the ranking of influence for each sphere. No difference was found between Family/Personal and Within Classroom; therefore, each of these spheres should be interpreted to have an equal amount of influence on teachers' decisions.

5. Mean scores for the four spheres of influence related to teachers' decisions to accept employment were compared to those related to teacher retention.

Consistently higher mean scores were found across all spheres of influence for factors related to retention than for those related to accepting employment. This may suggest that for 6E teachers, the strength of influence increases over time.

Discussion

Results of this study support many of the findings from previous studies investigating teachers and the rural school experience. Female teachers dominate these elementary schools in Montana. Few teachers held degrees beyond a Bachelor's. As in previous studies, the majority of teachers had a rural background that together with their family or home being close by influenced their decisions to accept employment and remain teaching in these small rural schools (Storey, 1993; Ciscell, 1989; Anschutz, 1987; Murphy & Angelski, 1986-87). The classroom experience and in particular their relationship with students motivated teachers to continue their teaching (Storey, 1993; Matthes & Carlson, 1986; Boylan & McSwan, 1998). As reported by Matthes and Carlson (1986) and found by Anschutz (1987) and Squires (1992), the role of the community was an influential factor in the continued employment of teachers.

Unlike other studies, the results of this study found that spouse/partner employment for these teachers held little or no influence in their decisions to either accept employment or remain teaching (Bull & Hyle, 1989). Recreational opportunities were also not very important to Montana's teachers (Storey, 1993; Bull & Hyle, 1989), nor was administrative support as others have reported. Rural teachers tended to be

characterized as inexperienced and young (Stone, 1990; Cotton, 1987). Teachers in these schools did not tend to be inexperienced. Only eight were in their first year of teaching and the average years of experience in public school teaching was more than ten. Their ages were widely distributed across most age groupings but very few were below 25.

Recommendations Related to Practice

Based upon the study's findings and conclusions, the researcher recommends the following:

1. Nearly three-quarters of the teachers in Montana's 6E elementary school districts claimed to have a rural background. Enjoyment of the rural lifestyle ranked first among the factors that influenced teacher decisions to accept employment and second in the extent of influence to remain teaching. Local school districts and educational organizations should begin to identify potential teachers within small rural schools. Programs should be developed to encourage high school students to enter the teaching profession. Local districts might provide some assistance with student loans in exchange for an assurance that the student would come back to teach in the district for a specified number of years. Teacher aides and other potential candidates within a community might be encouraged to pursue a teaching degree. Again some assistance with student loans or small stipends to assist with tuition could be an attractive incentive for some potential teachers. These individuals already possess a stake in the community and are likely to remain there. As McIntosh (1989) suggests.

Recruitment to, and retention in, rural areas may often best be accomplished by pursuing those teachers who truly are interested in the rural way of life (p.26).

2. Montana colleges and universities could also play a role in efforts to recruit potential teachers for rural areas by offering coursework or seminars that are designed to address the challenges inherent in small rural schools. Content might include: teaching strategies to address curriculum and instruction for a variety of ages and abilities within the classroom, strategies to address isolation and lack of peer contact, and strategies to develop relationships with the community. An early field experience could be provided for pre-service teachers in a small rural school that would allow them to become familiar with this setting. Williams and Cross (1987) state that "if rural teachers were going to be retained over time, they would either need to be screened carefully or educated to the nature of rural living and teaching" (p. 22).
3. While support from the supervisor was not a factor that had a strong influence on teachers' decisions to remain teaching in this study, other studies have found administrative support to be strongly related to teacher retention (NCES 97-471; Pierczynski, 1994; Anschutz, 1987). School boards and County Superintendents should provide strong support of their teachers in small rural schools by providing instructional leadership, supervision and recognition of teachers' performance. The Office of Public Instruction should take extra steps to inform teachers in these small schools about the services available to them for technical assistance. Through increased collaboration and partnership with the Small Schools Alliance and the Montana Rural Education Association, the Office of Public Instruction

could facilitate improved services for professional development opportunities and curriculum development.

4. Since approximately 90% of the teachers in 6E schools have received only a Bachelor's degree, the potential exists for higher education institutions to make Master's degree programs available for these teachers. Opportunities for on-line coursework during the school year coupled with summer work on campus may be an attractive incentive to aid in retention. Additionally, this would enhance networking with colleagues to provide an additional level of support.
5. The results of this study and others (Anschutz, 1987; Squires et al., 1992; Boylan & McSwan, 1998) indicate that the community contributes to the retention of teachers in small rural schools. School boards and County Superintendents should do all they can to ensure that teachers are provided with the opportunities to be known by the community and valued for their contributions. Teachers should be afforded assistance in dealing with parent conflicts that may arise.
6. Since more than 63% of the school districts in Montana are designated as rural when the U.S. Census definition of populations of 2,500 or less is applied, it may be reasonable to consider the possibility of a certification endorsement for rural education. The Montana Rural Education Association, the Small Schools Alliance, and curriculum consortia that work with the small rural schools in the state could establish a task force to investigate its feasibility and offer recommendations to higher education institutions about the design of coursework appropriate to meet the needs of teachers and students in rural areas.

7. The Montana Office of Public Instruction in collaboration with higher education institutions should thoroughly examine the current teacher certification system to determine what steps could be taken that would allow alternative entry options for individuals that have non-education degrees. Nielson (2001) reports:

Currently, most college graduates need to spend at least two years becoming certified to teach, no matter how much education or experience they have in their fields (p. 14).

Individuals may be more encouraged to explore teaching as a second career, for example, if the process for gaining certification was less costly in terms of time and money.

8. The Montana State Legislature must find solutions to the salary disparity across the state. Adequate school funding is the heart of the issue. Teachers in 6E schools according to Morton (1999) are earning substantially less than the average salary of teachers in the next size school district.

“The Last Best Place” may not be able to court and keep teachers because of the scenery and small class size unless salaries and benefits are improved for this group of teachers who teach in Montana’s most remote schools and for all the others as well (Morton, 1999, p. 10).

9. The Montana School Board Association and/or the Montana Education Association should explore strategies to ensure that all teachers in the state have adequate health insurance benefits. By pooling their efforts, small school districts could perhaps offer more affordable and attractive insurance coverage. A statewide system similar to what Montana state employees have available to them might be possible.

Recommendations for Further Research

Based upon this study's findings, conclusions, and recommendations related to practice, the researcher recommends the following for further research:

1. Vast and varied is an apt description of Montana's landscape. The 107 schools, represented by elementary teachers in this study, reflect 42 of the state's 56 counties (Appendix D). A study to determine if geographical differences impact teacher retention is recommended. Stroh (1999) in her study of bush schools in Alaska concluded that school district geographic locations within Alaska were not related to teacher attrition. A similar study for Montana may yield results helpful in planning local and statewide recruitment strategies.
2. A qualitative case study of three to five teachers with more than 10 years of experience in the same 6E school is recommended to gain in-depth knowledge about factors related to Within Classroom, Whole School-Level, Community Level, and Family/Personal spheres of influence and their impact on teacher retention.
3. Similar size elementary school districts in other states should be identified and a similar study conducted to determine whether findings from this study are comparable to teacher populations in other rural states.
4. The finding that 61% of the teachers in these schools were in their first three years at their current school, coupled with the fact that only 29.3% of teachers were actually in their first three years of public school teaching may suggest conditions worthy of exploration. Several reasons may account for this

percentage of teachers who have gained experience elsewhere but are now only in their first three years of teaching at their present school. These may include fiscal issues, teacher/community mismatch, teacher competence, teacher tenure or others. A study that investigates these conditions through follow-up interviews with this cohort of teachers, together with data collected from the school districts where these teachers are located, may provide information needed to explain this discrepancy.

5. Less than 10% of teachers in this study held a degree beyond a Bachelor's.

Advanced degrees are oftentimes an indication of more qualified teachers. A study that looks at the issue of teacher quality in 6E schools is recommended. Specific information pertaining to the preparation, qualifications and teaching practices of teachers in 6E schools would provide useful information to determine the state of teacher quality in Montana's smallest rural schools.

6. Sher (1983) reports that "reliable and hard data about the quality of small rural schools are scarce" (p. 259). Small schools are often criticized as lacking in the breadth of educational programming. At the same time, there is anecdotal evidence that indicates that some of Montana's best students hail from very small schools. A study that examines achievement outcomes of students in 6E schools is recommended to yield data that provide evidence about how well students are performing in these small rural school districts.

Summary

Data collected and analyzed in this research study represent a contribution to the limited research that exists about Montana's smallest elementary school districts and the elementary teachers who provide instructional services to students. Information gathered clarified an understanding of factors that exist for teachers of Montana's 6E elementary schools that have the greatest influence on teachers' decisions to accept and/or remain teaching in these schools. These factors categorized by "four spheres of influence" developed by Boylan et al. (1993) indicated that those associated with the Family/Personal sphere had the greatest influence on teachers' decisions to accept employment. Factors related to the Community Level sphere were influential in teachers' decisions to remain teaching in their current school.

Based upon this study's findings, recommendations were formulated for educational practice in Montana and for further research needed concerning Montana's 6E elementary school districts. While "small" in terms of the number of students they enroll and the teachers who staff them, they represent 24% of Montana's 448 operating public school districts in school year 2001-2002. "These smallest school districts exist because rural children would have to travel extreme distances to the next closest school," reports Nielson (2001, p. 10). It is the hope of this researcher that the results of this study will generate action toward the development of a thorough knowledge base of retention strategies to ensure that the children of Montana continue to receive the highest quality education.

REFERENCES CITED

- Allen, M. (2000). Focusing policy on hard-to-staff schools. State Education Leader (Education Commission of the States), 18(2).
- Anschutz, J. (1987). Conditions influencing recruitment and retention of teachers in rural areas. Unpublished doctoral dissertation, Kansas State University.
- Barker, B. (1986). Efforts to improve the preparation of teachers for rural schools. Paper presented at the Annual Conference of the Southwest Educational Research Association. Houston: TX, January 30–February 1, 1986 (ERIC Reproduction Service No. ED 265 993).
- Barker, B., and Beckner, W. (1987). Preservice training for rural teachers: A survey. Rural Educator, 3, 1-4.
- Beeson, E. and Strange, M. (2000). Why rural matters: The need for every state to take action on rural education. Washington, DC: Rural School and Community Trust.
- Boylan, C. (1991). The identification of factors that influence rural teachers to choose to remain teaching in the Riverina region of New South Wales for extended periods of time. Unpublished doctoral dissertation, James Cook University of North Queensland.
- Boylan, C. et al. (1993). Retaining teachers in rural schools: Satisfaction, commitment, and lifestyle. (ERIC Reproduction Service No. ED 365 495).
- Boylan, C., and Bandy, H. (1994). Education and training for rural teachers and professionals. Issues affecting rural communities. In Proceedings of An International Conference Held by the Rural Education Research and Development Centre. Townsville, Queensland, Australia: Rural Education Research and Development Centre, James Cook University. (ERIC Document Reproduction Service No. ED 390 603).
- Boylan, C. and McSwan, D. (1998). Long-staying rural teachers: Who are they? Australian Journal of Education, 42(1), 49-65.
- Burke, E. (2000). Governor's task force on teacher shortage/teacher salaries final report. State of Montana, Office of the Governor, Helena.
- Bull, K., and Hyle, A. (1989). Recruiting and retaining rural teachers: Some reported alternatives. Journal of Rural and Small Schools, 3, 22-27.
- Carlson, R. (1992). What does it mean to work in a rural setting? A study of rural influences. Journal of Rural and Small Schools, 5, 41-47.

- Chaika, G. (2000). Scrambling for staff: The teacher shortage in rural schools. Education World [On-line]. Available: http://www.educationworld.com/a_admin/admin142.shtml.
- Ciscell, R. (1989). Who will teach in rural schools? Demographic preferences among prospective teachers. Journal of Rural and Small Schools, 3(2), 7-11.
- Clarke, R. and Keating, W. (1995). A fresh look at teacher job satisfaction. (ERIC Document Reproduction Service No. ED 391 795).
- Collins, T. (1999). Attracting and retaining teachers in rural areas. ERIC Digest. Clearinghouse on Rural Education and Small Schools [On-line]. Available: www.ael.org/eric/digests/edorc997.htm.
- Cotton, K. (1987). Reducing teacher turnover in reservation schools: A guide for Administrators. Portland: OR. Northwest Regional Educational Laboratory. (ERIC Reproduction Service No. Ed 288 686).
- Creswell, J. (1994). Research design: Qualitative and quantitative approaches. Thousand Oaks, CA: Sage Publications.
- Croasmun, J., Hampton, D., and Herrmann, S. (2000). Teacher attrition: Is time running out? Horizon [On-line]. Available: <http://horizon.unc.edu/projects/issues/papers/Hampton.asp>.
- Darling-Hammond, L. (1999). Solving the demands of teacher supply, demand, and standards: How we can ensure a competent, caring, and qualified teacher for every child. Columbia: National Commission on Teaching and America's Future [On-line]. Available: <http://www.tc.columbia.edu/~teachcomm/CONFERENCE-99/SOLVING>.
- Davis, J. (1987). Rurality and isolation in education. The Rural Educator, 9(1), 11-14.
- DeYoung, A. (1987). The status of American rural education research: An integrated review and commentary. Review of Educational Research, 57(2), 123-148.
- Dillman, D. (1978). Mail and telephone surveys: The total design method. New York, NY: John Wiley & Sons.
- Farkas, S., Johnson, J., and Foleno, T. (2000). A sense of calling: Who teaches and why? A report from Public Agenda. New York, NY: Thomas B. Fordham Foundation and the Open Society Institute.

- Fideler, E., and Haselkorn, D. (1999). Learning the ropes: Urban teacher induction practices in the United States. A national study conducted by Recruiting New Teachers. Belmont, MA: Recruiting New Teachers.
- Fox, J., and Certo, J. (1999). Recruiting and retaining teachers: A review of the literature. Richmond, VA: Metropolitan Educational Research Consortium (MERC).
- Fox, J. and Certo, J. (2001). Retaining teachers across the professional continuum: A review of the literature. Richmond, VA: Metropolitan Educational Research Consortium (MERC).
- Gay, L. (1996). Educational research: Competencies for analysis and application. (5th ed.). Columbus, OH: Merrill Publishing.
- Gibson, I. (1994). Policy, practice, and need in the professional preparation of teachers for rural teaching. Journal of Research in Rural Education, 10(1), 68-77.
- Gleadow, N. and Bandy, H. (Winter 1982-83). The teacher, the community and the rural schools. The Rural Educator, 4(2), 17-21.
- Horn, J. (1985). Importance of areas of preparation for teaching in rural/small schools. Research in Rural Education, 3(1). 23-29.
- Hussar, W. (1999). Predicting the need for newly hired teachers in the United States to 2008-09. Washington, DC: United States Department of Education, National Center for Education Statistics.
- Ingersoll, R. and Rossi, R. (1995). Which types of schools have the highest teacher turnover? Issue Brief: National Center for Educational Statistics, 23, 3 & 4. Washington, DC: American Institute for Research.
- Jess, J. (1985). Local leadership and quality in rural education. Paper presented at the annual meeting of the National Rural Education Forum, Kansas City, MO.
- Kannapel, P., and DeYoung, A. (1999). The rural school problem in 1999: A review and critique of the literature. Journal of Research in Rural Education, 15, 67-79.
- Luft, V. (1991). Teacher recruitment and retention practices in rural school districts. Rural Educator, 14, 20-24.
- Lunn, S. (1997). Rural strategies project. Brisbane: Priority Country Area Program.

- Marlow, L., Inman, D., and Betancourt-Smith, M. (1997). Beginning teachers: Are they still leaving the profession? Helen Dwight Reid Educational Foundation [Online]. Available: <http://web6.infotrac.galegroup.com>
- Matthes, W. and Carlson, R. (1986). Conditions for practice: Why teachers select rural schools. Journal of Rural and Small Schools, 1, 25-28.
- McIntosh, D. (1989). Retention of teachers in rural areas. The Rural Educator, 11, 26-29.
- Merrow, J. (1999). The teacher shortage: Wrong diagnosis, phony cures. Education Week, October 6, 1999, 64, 48.
- Montana Commission on Teaching. (1999). Quality teaching, quality schools: Strengthening Montana's most important profession. State of Montana, Office of the Governor, Helena.
- Montana Office of Public Instruction. (2001). School laws of Montana, 2001. Helena, MT: Author.
- Montana Office of Public Instruction (2001). Montana school accreditation: Standards and procedures manual. Helena, MT: Author.
- Morton, C. (1993). The rural teacher alive and well? The 1992-93 Montana rural teacher salary and benefits survey. Dillon, MT: Western Montana College of The University of Montana.
- Morton, C. (1999). The last best place, the 1998-99 Montana rural teacher salary and benefits survey. Helena, MT: Montana Small Schools Alliance.
- Murray, R. (2001). Why teachers take up appointments in western Australian remote schools, why they stay and why they leave. Draft doctoral research proposal. University of Western Australia.
- Murphy, P. and Angelski, K. (Winter, 1996-97). Rural teacher mobility: A report from British Columbia. Rural Educator, 18, 5-11.
- Nachtigal, P. (1982). Rural education: In search of a better way. Boulder, CO: Westview Press.
- National Association of State Boards of Education (1998). The numbers game: Ensuring quantity and quality in the teaching workforce. Alexandria, VA: Author.

- National Center for Education Statistics (1993). America's teachers: Profile of a profession. (NCES 93-025). Washington, D.C.: Author.
- National Center for Education Statistics (1995). Schools and staffing survey: Teacher supply, teacher qualifications, and teacher turnover: 1990-91. (NCES 95-744). Washington, D.C.: Author.
- National Center for Education Statistics (1996). Schools and staffing in the United States: A statistical profile, 1993-94. (NCES 96-124). Washington, D.C.: Author.
- National Center for Education Statistics (1996). SASS by state, 1993-94 schools and staffing survey: Selected state results. (NCES 96-312). Washington, D.C.: Author.
- National Center for Education Statistics (1997). Characteristics of stayers, movers, and leavers: Results from the teacher followup survey: 1994-95. (NCES 97-450). Washington, D.C.: Author.
- National Center for Education Statistics (1997). Job satisfaction among America's teachers: Effects of workplace conditions, background characteristics, and teacher compensation. (NCES 97-471). Washington, D.C.: Author.
- National Center for Education Statistics (1999). Teacher quality: A report on the preparation and qualifications of public school teachers. (NCES 1999-080). Washington, D.C.: Author.
- National Center for Education Statistics (1999). The condition of education 1999. Washington, D.C.: U.S. Department of Education, Office of Educational Research and Improvement,
- NEA (1998). Ready or not: A national teacher shortage looms. NEA Teacher Quality Fact Sheet [online]. Available: <http://www.nea.org/teaching/shortage.html>.
- Nielson, D. (1991). The relationship between community size of Montana public elementary and high school districts and selected fiscal and economic characteristics. Unpublished doctoral dissertation, Montana State University, Bozeman.
- Nielson, D. (2000). Montana K-12 schools staff recruitment and retention report. Helena, MT: Office of Public Instruction.
- Nielson, D. (Ed). (2001). Montana statewide education profile. Helena, MT: Office of Public Instruction.

- Nielson, D. (2001). Who will teach Montana's children? Helena, MT: Certification Standards and Practices Advisory Council (CSPAC) of the Montana Board of Public Education.
- Office of Educational Research and Improvement. (1989). Rural education: A changing landscape. Educational Networks Division (PIP 89-840). Washington, D.C.: Author.
- Pesek, J. (1991). Recruiting and retaining teachers in Pennsylvania's rural school districts. Rural Educator, 14, 25-30.
- Pierczynski, M. (1994). Minority teacher recruitment in rural Nevada, 1991-1993. Reno, NV: University of Nevada, Reno.
- Quality Counts (2000). Education Week, January 13, 2000, 19, 18.
- Queitzsch, M. and Hahn, K. (1995). Great expectations: Preparing rural teachers for educational reform. Portland, OR: Northwest Regional Educational Laboratory.
- Recruiting New Teachers, Inc. (1998). The essential profession: A national survey of public attitudes toward teaching, educational opportunity, and school reform. Belmont, MA: Author.
- Sher, J. (Ed.) (1977). Education in rural America: A reassessment of conventional wisdom. Boulder, CO: Westview Press.
- Sher, J. (1983). Education's ugly duckling: Rural schools in urban nations. Phi Delta Kappan, 65, 257-262.
- SPSS Base 10 Applications Guide (1999). Chicago, IL: SPSS, Inc.
- State of Montana, (September 11, 2000). Governor's Task Force on Teacher Shortage/Teacher Salaries, Final Report. Helena, MT: Author
- Squires, D. et al. (1992). Teacher satisfaction and community action: Improving education in rural and remote schools. (ERIC Document Reproduction Service No. ED 348 194).
- Stephens, E. (1985). Towards the construction of a research and development agenda for rural education. Research in Rural Education, 2(4), 167-171.
- Stern, J. (1994). The condition of education in rural schools. (PIP 94-1106). Washington, DC: U.S. Department of Education, Office of Research and Improvement.

- Stone, D. (1990). Recruiting and retaining teachers in rural schools. Knowledge Brief: Number 4, San Francisco, CA: Far West Laboratory for Educational Research and Development. (ERIC Document Reproduction Service No. ED 328 383).
- Storey, V. (1993). Factors, issues, and problems in the recruitment and retention of teachers for rural schools. Journal of Research in Rural Education, 9, 160-169.
- Stroh, L. (1999). An investigation of factors related to teacher attrition in Alaska native village schools, as perceived by school administrators. Unpublished doctoral dissertation. Montana State University, Bozeman.
- Taylor, A. (1997). Factors affecting retention of teachers in the teaching profession. Unpublished doctoral dissertation. Georgia State University.
- Texas Education Agency. (1999). Texas teacher recruitment and retention study. Austin, TX: Texas Education Agency, Texas Center for Educational Research.
- Texas Education Agency. (1999). Texas teacher retention, mobility and attrition. Austin, TX: Texas Education Agency, Policy Research Report.
- The National Commission on Teaching and America's Future (1996). What matters most: Teaching for America's future. New York, NY: Author.
- Williams, R. and Cross, W. (1987). Preparing rural teachers in Canada. The Rural Educator, 9(1), 22-25.
- Yarrow, A. et al. (1999). Teaching in rural and remote schools: A literature review. Teaching and Teacher Education, 15, 1-13.

APPENDICES

APPENDIX A

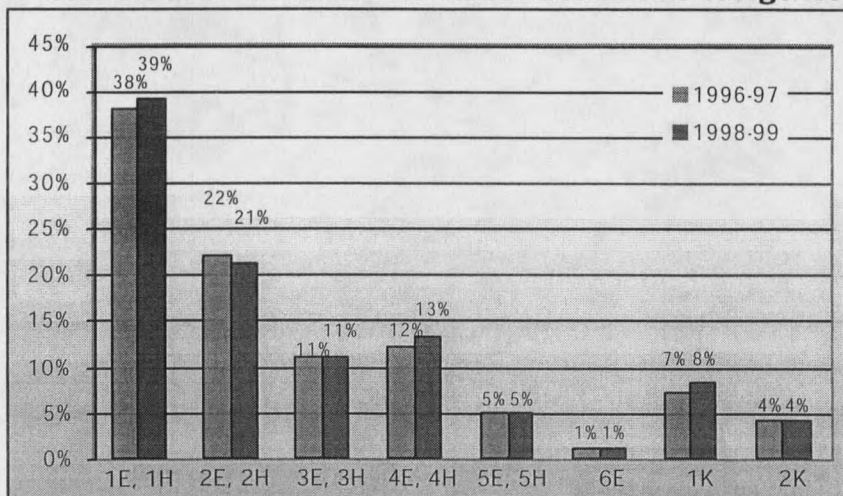
SCHOOL DISTRICT SIZE CLASSIFICATION

Appendix C

School District Enrollment Size Categories

Size Cat.	Category Definitions	Total Enrollment in Elementary		Size Cat.	Category Definitions	Total Enrollment in High School		Total Enrollment Combined	
		1996-97	1998-99			1996-97	1998-99	1996-97	1998-99
1E	Elementary greater than 2,500 students	40,815	39,545	1H	High school greater than 1,250 students	21,732	21,986	62,547	61,531
2E	Elementary 851 to 2,500 students	25,304	23,263	2H	High school 401 to 1,250 students	10,093	10,045	35,397	33,308
3E	Elementary 401 to 850 students	12,927	12,377	3H	High school 201 to 400 students	5,631	5,145	18,558	17,522
4E	Elementary 151 to 400 students	15,414	14,852	4H	High school 76 to 200 students	5,059	5,129	20,473	19,981
5E	Elementary 41 to 150 students	6,372	5,789	5H	High school 75 students or less	1,582	1,422	7,954	7,211
6E	Elementary 40 or fewer students	1,602	1,461					1,602	1,461
1K	K-12 400 students or more			1K	K-12 400 students or more			11,819	12,444
2K	K-12 fewer than 400 students			2K	K-12 fewer than 400 students			6,114	6,355
					Total Students			164,464	159,813

Percent of Total Enrollment for School District Size Categories

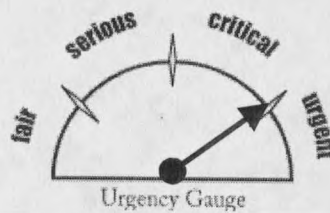
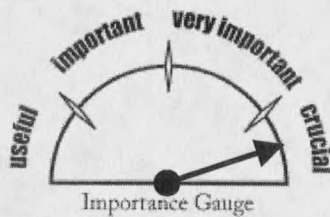


Size Category	Total Districts		Percent Total Students		Size Category	Total Districts		Percent Total Students	
	1996-97	1998-99	1996-97	1998-99		1996-97	1998-99	1996-97	1998-99
1E, 1H	14	14	38%	39%	5E, 5H	106	100	5%	5%
2E, 2H	37	36	22%	21%	6E	115	111	1%	1%
3E, 3H	44	41	11%	11%	1K	12	14	7%	8%
4E, 4H	102	102	12%	13%	2K	34	38	4%	4%

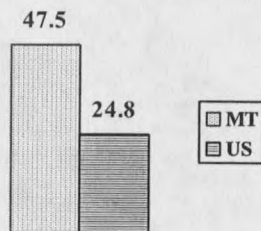
APPENDIX B
RURAL GAUGE RANKINGS FOR MONTANA

Importance Gauge	MT	Rank
<i>A rank of 1 is most important</i>		
Percent of state's population that is rural	47.5%	9
Number of rural people	379,239	41
Percent of public schools in rural areas	63.2%	4
Percent of public school students enrolled in rural schools	32.5%	6
Percent of students enrolled in rural schools who are minorities	13.2%	23
Average number of students to average number of grades	22.9	4
Percent of students attending small rural schools	8.7%	24
Percent of rural students in poverty	23.4%	11
Urgency Gauge	MT	Rank
<i>A rank of 1 is most urgent</i>		
Average rural teacher's salary	\$22,988	5
Difference between rural teacher salaries and teacher salaries in the rest of the state	\$4,519	15
Percent of rural students who are free lunch eligible	29.8%	21
Percent of rural communities scoring below average on the Education Climate Index	5.6%	35
Average rural student to teacher ratio	13.5	39
Percent of rural householders with less than 12 th years of school	24.2%	36
Percent of rural schools with Internet access	61.8%	8
Percent of teachers teaching out-of-field who are rural	43.9%	4
Percent of rural expenditures spent on instruction	58.9%	46
Percent of rural schools with declining enrollments of at least 10%	32%	5

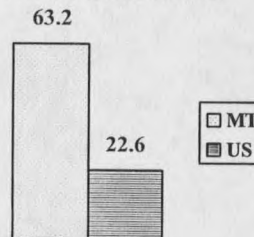
Quintessentially rural, **MONTANA** ranks in the top ten among states in the percentage of its population living in rural communities, the percentage of public schools and students in rural areas, the percentage of out-of-field teachers who are in rural schools, low average rural teacher salaries, small average rural school size, and the percentage of rural schools with declining enrollment. Rural education is crucial to Montana, and the need for an explicit rural education policy is critical.



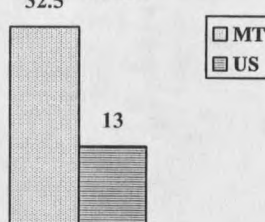
Percent of population living in rural places



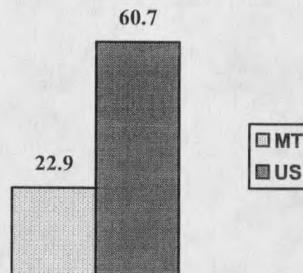
Percent of public schools in rural areas



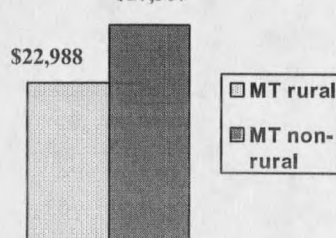
Percent of public school students enrolled in rural schools



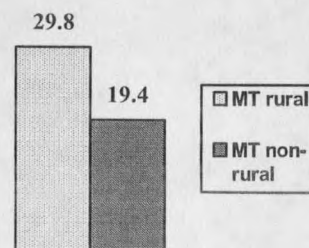
Average number of rural students to number of grades



Average base teacher salary



Percent of students who are free lunch eligible



APPENDIX C

LIST OF 6E SCHOOL DISTRICTS - 2001-2002

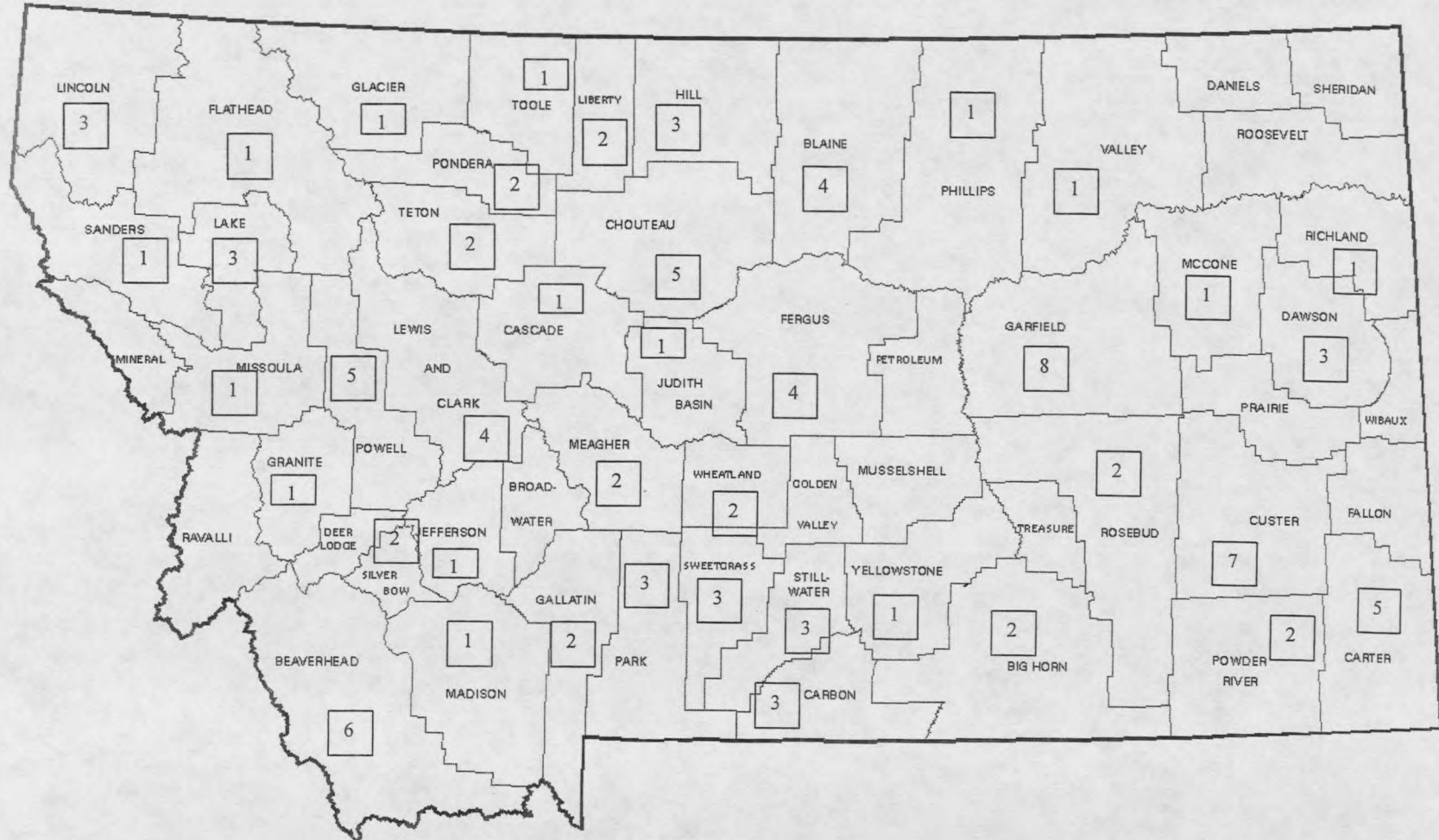
County	School	Student Enrollment 2000-2001
Beaverhead	Grant	19
	Wise River	23
	Wisdom	20
	Polaris	2
	Jackson	27
	Reichie	24
Big Horn	Spring Creek	9
	Community	13
Blaine	North Harlem	8
	Cleveland	7
	Lone Tree Bench	1
	Bear Paw	6
Carbon	Edgar	17
	Boyd	19
	Luther	33
Carter	Hawks Home	7
	Hammond	7
	Johnston	2
	Coal Creek	5
	Alzada	10
Cascade	Deep Creek	5
Choteau	Loma	5
	Warrick	1
	Carter	5
	Knees	2
	Benton Lake	6
	Trail Creek Elementary	3
	Spring Creek	3
Custer	Cottonwood-Knowlton	3
	Moon Creek	3
	Twin Buttes	3
	SH	7
	SY	3
	Bloomfield	8
	Deer Creek	15
Dawson	Lindsay	9
	Deerfield	3
	King Colony	12
	Spring Creek Colony	12
	Ayers	14
Flathead	Pleasant Valley	4
Gallatin	Pass Creek	14
	Springhill	15
Garfield	Big Dry Creek	6
	Van Norman	8

County	School	Student Enrollment 2000-2001
Garfield (continued)	Pine Grove	4
	Kester	2
	Cohagen	12
	Benzien	3
	Sand Springs	5
	Ross	4
Glacier	Mountain View	21
Granite	Hall	20
Hill	Gildford Colony	9
	Cottonwood	13
Jefferson	Davey	10
	Basin	25
Judith Basin	Raynesford	14
Lake	Up. West Shore	11
	Valley View	21
	Swan/Salmon	13
	Trinity	10
Lewis & Clark	Craig	8
	Wolf Creek	20
	Auchard Creek	35
	Whitlash	4
Liberty	Liberty	12
	McCormick	5
Lincoln	Sylvanite	9
	Yaak	16
	Alder	29
Madison	Vida	21
McCone	Ringling	3
	Lennepe	7
Meagher	Sunset	4
	Cooke City	10
Missoula	Springdale	12
	Pine Creek	32
	Landusky	6
Phillips	Miami	14
Pondera	Dupuyer	10
	Biddle	10
Powder River	South Stacey	5
	Ovando	28
Powell	Helmville	39
	Garrison	16
	Elliston	40
	Gold Creek	4
	Brorson	29
Richland	Birney	12
Rosebud	Rock Spring	2

County	School	Student Enrollment 2000-2001
Sanders	Camas Prairie	11
Silver Bow	Melrose	16
	Divide	18
Stillwater	Fishtail	23
	Nye	13
	Molt	9
Sweet Grass	Melville	23
	Grey Cliff	36
	McLeod	20
Teton	Pendroy-Rockport Colony	25
	Golden Ridge	35
Toole	Glalata	12
Valley	Lustre	38
Wheatland	Two Dot	6
	Shawmut	15
Yellowstone	Morin	31

APPENDIX D
MAP OF 6E SCHOOLS BY COUNTY

Number of Montana 6E Schools by County



APPENDIX E
QUESTIONNAIRE

TEACHING IN MONTANA'S SMALL RURAL SCHOOLS SURVEY

This questionnaire is designed to reveal your insights about factors that were important to you as you made career decisions to accept employment and/or continue teaching in small rural elementary schools in Montana. **Section I** addresses factors that influenced your decisions about your present teaching position; **Section II** explores your opinions about effective teacher recruitment and retention strategies; **Section III** addresses questions concerning your satisfaction with teaching; and **Section IV** asks for background information about you and your school.

Participation in this questionnaire is completely voluntary. No individual participant will be identified in any report of the findings. The coding is being utilized to assist in follow-up purposes only.

Section I: Factors Influencing Decisions to Accept and Remain Teaching

1. Using the scale of 1-5, where 1 means "No influence" and 5 means "A very large influence," to what extent was your decision to accept a position in your present school influenced by each of the following: *(Circle only one number for each item. Do not write in a number such as 2.5).*

	No Influence	A little Influence	Some Influence	Good deal of Influence	Very large Influence
a. <u>Best or only job offer</u>	1	2	3	4	5
b. <u>Satisfaction with salary and benefits</u>	1	2	3	4	5
c. <u>Access to recreational activities</u>	1	2	3	4	5
d. <u>Family and/or home is close by</u>	1	2	3	4	5
e. <u>Small class size</u>	1	2	3	4	5
f. <u>Safe environment</u>	1	2	3	4	5
g. <u>Challenge of the teaching position</u>	1	2	3	4	5
h. <u>Enjoy the rural lifestyle</u>	1	2	3	4	5
i. <u>Good reputation of the school</u>	1	2	3	4	5
j. <u>Spouse/partner employment</u>	1	2	3	4	5
k. <u>School's recruiting program</u>	1	2	3	4	5
l. <u>Opportunity to practice multiage teaching</u>	1	2	3	4	5
m. <u>Materials & resources available</u>	1	2	3	4	5

Please list any other factors and rate their extent of influence:

n. _____	1	2	3	4	5
o. _____	1	2	3	4	5

2. Using the scale of 1-5, where 1 means “No influence” and 5 means “A very large influence,” to what extent is or will your decision to remain teaching in your present school be influenced by each of the following: (Circle only one number for each item. Do not write in a number such as 2.5).

	No Influence	A little Influence	Some Influence	Good deal of Influence	Very large Influence
a. Small class size	1	2	3	4	5
b. Support from supervisor	1	2	3	4	5
c. Support from parents & community	1	2	3	4	5
d. Relationships with students	1	2	3	4	5
e. Enjoy the rural lifestyle	1	2	3	4	5
f. Spouse/partner employment	1	2	3	4	5
g. Challenge of the teaching position	1	2	3	4	5
h. Professional development opportunities	1	2	3	4	5
i. Recognition for job well done	1	2	3	4	5
j. Family and/or home is close by	1	2	3	4	5
k. Satisfaction with salary and benefits	1	2	3	4	5
l. Safe environment	1	2	3	4	5
m. School facility	1	2	3	4	5
n. Materials & resources available	1	2	3	4	5

Please list any other factors and rate their extent of influence:

o. _____ 1 2 3 4 5

p. _____ 1 2 3 4 5

Section II: Your Opinions about Effective Recruitment and Retention Strategies

The Governor's Task Force on Teacher Shortage/Teacher Salaries in September 2000 identified a number of steps that might encourage teachers to remain teaching in small elementary schools districts in rural Montana. Using the code numbers (01-16), choose three that you feel would be most effective for items **3a**, **3b**, and **3c**.

Code #	Steps Schools Could Take
01	Help with student loan payments;
02	Insurance benefits;
03	Financial assistance for advanced college or additional endorsements;
04	Mentoring and support programs for new teachers;
05	Student teacher involvement in community activities;
06	Help with finding housing, or help with low-interest loans to buy a house;
07	Cooperative programs to train people locally. Bringing certification programs to community members already committed to being part of the community;
08	Marketing of whatever the district has to offer—location, recreation, cost of living, safe and healthy environment;
09	High quality professional development opportunities and opportunities to travel for professional growth;
10	More flexibility with scheduling, including flexible personal days;
11	State funded, \$500 salary increase for all teachers in Montana;
12	State funded mentoring/induction program during first 5 years of employment;
13	Loan forgiveness program offered to teacher who accept jobs in high demand/low supply areas—up to \$3,000 per year for up to four years;
14	Increase retirement benefit multiplier to 2% for TRS members who retire with 30 or more years of service;
15	Stipend for teachers who earn National Board Certification and continue teaching in the state; or
16	Salaries competitive with other states.

3a. What would be the most effective step schools might take to encourage teachers to remain teaching?

code #

_____ Most effective step

3b. What would be the second most effective step?

code #

_____ Second most effective step

3c. What would be the third most effective step?

code #

_____ Third most effective step

- 3d. **Optional:** List any other suggestions that you have for the retention and/or recruitment of teachers.

Section III: Your Satisfaction with Teaching

The three items (4, 5 & 6) below were used by the National Center for Educational Statistics in its Schools and Staffing Survey (SASS) to create a satisfaction index.

4. How long do you plan to remain in teaching?
Circle only one.
- a. As long as I am able
 - b. Until I am eligible for retirement
 - c. I'll continue teaching unless something better comes along
 - d. I definitely plan to leave teaching
 - e. Undecided
5. If you could go back to your college days would you choose teaching as a career again?
Circle only one.
- a. Certainly would
 - b. Probably would
 - c. Chances about even
 - d. Probably would not
 - e. Certainly would not
6. To what extent do you agree or disagree with the statement "I sometimes feel it is a waste of my time to do my best as a teacher"?
Circle only one.
- a. Strongly agree
 - b. Somewhat agree
 - c. Somewhat disagree
 - d. Strongly disagree

Section IV: Background Information

Please provide the following background information about you and your school. Circle the letter for each question.

7. Are you male or female?

- a. male
- b. female

8. What is your race?

Circle only one.

- a. American Indian or Alaska Native
- b. Asian or Pacific Islander
- c. Black
- d. Hispanic
- e. White

9. What is your age range?

Circle only one

- a. Less than 25
- b. 25-29
- c. 30-39
- d. 40-49
- e. 50-59
- f. 60 or over

10. What is your current marital status?

Circle only one.

- a. Married
- b. Widowed, divorced, or separated
- c. Never married

11. As you think of your life before you began teaching, would you say that you have a "rural background?"

Circle one.

- a. yes
- b. no

12. What does "rural background" mean to you?

13. What grade levels are you teaching this year?

Circle all that apply.

- 1. Kindergarten
- 2. 1st
- 3. 2nd
- 4. 3rd
- 5. 4th
- f. 5th
- g. 6th
- h. 7th
- i. 8th

Answer the following questions by completing the blank.

14. How many years have you taught in this school (to the nearest full year)?

_____ year(s)

_____ This is my first year at this school.

15. How many years have you worked as an elementary teacher in public schools (include the current

school year. Record whole years)?

_____ year(s)

_____ This is my first year of teaching.

16. Check the blank that represents your current contracted position.

_____ full-time teacher

_____ part-time teacher

17. What type of degree do you hold?

Circle all that apply

1. Less than a bachelor's
2. Bachelor's
3. Master's
4. Education specialist
5. Doctorate

18. Would you like a summary of this survey's findings? ____yes ____no

If yes, please provide the following information:

Name: _____

Address: _____

City/Zip: _____

E-mail: _____

**Thank you for taking the time to complete and return this
questionnaire.**

**Please use the enclosed envelope to mail back your questionnaire by
December 18, 2001.**

**Marsha Davis
PO Box 1213
Helena, MT 59624
msdavis@state.mt.us**

APPENDIX F

COVER LETTERS TO RURAL EDUCATION EXPERTS

Marsha Smith Davis
PO Box 1213
Helena, MT 59624

October 1, 2001

Rural Education Expert
Title
Address
City, State, Zip

Dear

Montana is facing challenges ahead related to the recruitment and retention of its teachers. In a recent report analyzing teacher shortages in Montana, Nielson reported that "the problem is here, right now, and it's big." This is of special concern for our small rural schools. While information has been gathered about salaries and benefits of the teachers who work in our smallest schools, little is known about the perspectives of teachers who persevere in teaching in rural school in Montana.

As an individual with expertise in the area of rural education, I would greatly appreciate your assistance in the review of a survey instrument that I have developed to study this topic. The purpose of my study is to examine the reasons why teachers are attracted to and remain teaching in the smallest elementary school districts in rural Montana. Elementary teachers currently teaching in 108 schools with fewer than 40 students will be surveyed to collect data concerning the four spheres of influence (Boylan, et al 1993) to identify those that might help explain reasons teachers are attracted to and remain teaching in these smallest of Montana's rural elementary school districts.

Please review the attached survey instrument and provide me with some feedback on any of these issues:

- ♦ Clarity in directions;
- ♦ Reading vocabulary and sentence structure difficulty;
- ♦ Inappropriate level of difficulty of questionnaire;
- ♦ Poorly constructed questions;
- ♦ Ambiguity;
- ♦ Appropriateness of survey items for the outcomes to be measured;
- ♦ Survey item length;
- ♦ Inappropriate arrangement of items; and
- ♦ Identifiable patterns of answers.

Thank you for your willingness to provide assistance. I look forward to your thoughts and ideas.

Sincerely,

Marsha Davis

APPENDIX G

COVER LETTER TO PILOT TEST TEACHERS

Marsha Smith Davis
PO Box 1213
Helena, MT 59624

November 4, 2001

Teacher's Name
School Name
School Address
City, MT Zip code

Dear

Thank you for agreeing to pilot test the enclosed survey, "Teaching in Montana's Small Rural Schools." Montana is facing challenges ahead related to the recruitment and retention of its teachers. While information about teacher salaries and benefits for the small rural schools in Montana has been collected, little is known about the perspectives of teachers who persevere in teaching in rural schools in Montana. As a concerned educator in Montana, I have chosen this subject as the topic of my dissertation. The purpose of my study is to examine why teachers are attracted to and remain teaching in small elementary school districts in rural Montana.

The survey instrument was designed based on a review of the research literature as well as various instruments from related studies. Additionally, rural education experts were consulted and provided suggestions reflected in this revised version. Teachers in schools with an enrollment of 40 students or less will be the participants in the actual study.

I ask that you complete the survey and consider the following questions:

- Are the directions clear?
- Do you see any difficulties with reading vocabulary or sentence structure?
- Are any questions poorly constructed or ambiguous?
- Do you feel any survey items are inappropriate for the outcomes being measured?
- Are there identifiable patterns of answers?

After completing the survey, please include any comments or suggestions you may have to me in the enclosed self-addressed, stamped envelope. Your reply by November 14, 2001 would be greatly appreciated. Thank you again for your willingness to participate in the review and pilot test of the proposed survey for my study.

Sincerely,

Marsha Davis

APPENDIX H
COVER LETTER TO 6E TEACHERS

Marsha Smith Davis
PO Box 1213
Helena, MT 59624

November 26, 2001

Teacher
School
Address
City, MT Zip

Dear,

Montana is facing challenges ahead related to the recruitment and retention of its teachers. In a recent report analyzing teacher shortages in Montana, Nielson reported that "the problem is here, right now, and it's big." This is of special concern for our small rural schools such as yours. Morton has gathered information about teacher salaries and benefits for the small rural schools in Montana. Little is known, however, about the perspectives of teachers who persevere in teaching in rural schools in Montana. As a concerned educator in Montana, I have chosen this subject as the topic of my dissertation. The purpose of my study is to examine why teachers are attracted to and remain teaching in selected small elementary school districts in rural Montana.

You have been verified by your county superintendent to be a classroom teacher in a school district with an enrollment of less than 40 students. I would greatly appreciate your participation in my study. The enclosed questionnaire is anonymous and your participation is of course voluntary. No individual participant will be identified in any report of the findings. The coding assigned to the questionnaire is to assist in follow up only.

Approximately 150 teachers are being asked to complete the same questionnaire. A high rate of return will lend validity to the results. Please complete the enclosed questionnaire and return in the self-addressed, stamped envelope by December 12, 2001.

Thank you very much for your assistance.

Sincerely,

Marsha Davis

APPENDIX I
SURVEY OPEN ENDED RESPONSES

Open-Ended Responses

1. Other Factors Influencing Teachers' Decisions to Accept Employment

ID#	Comment
13	My own children are raised. Previously taught at another school in district. Teacherage on site.
15	Only job offer.
18	No set schedule. Most decisions are up to you.
19	Like rural children. Wanted to teach and have some control over what and how.
26	When I started teaching in a public school, I wanted country schools.
32	Community involvement. Board Members
33	Close parental involvement.
40	Freedom allowed for planning and teaching. Efficient manner for individual student progress that the rural setting offers.
41	Mother taught in rural school.
53	Just wanted country school. They needed a teacher.
55	Family stability. Community participation.
64	Hutterite colony school. Few discipline problems.
65	Great staff to work with.
66	Own family business. Place bound.
70	Opportunity to administer school operations.
71	Unique experience.
73	Quality of life on rural Montana.
75	Living in Montana.
78	Interview questions that indicate a "previously wounded" or distrustful school board. Indication of inner peace at being at the site.
84	Experience teaching in 1 room school.
85	Free rent. Good future reference.
91	Wanted fully use my degree and not be limited to one grade.
93	Out of a # of job offers this was the best for my family and I.
106	Close to my ranch. Desire to always live here.
112	Friendly people.
114	Moved to area.
131	The love of teaching. Personal aptitude.
132	Enjoy my work.
135	Location
139	Quality of interaction. Value of community.
143	Kind treatment of school board and supervising teacher during interview. Non-union controlled school.

141	10 days to use for medical or personal. .
51	Strong belief in this type of teaching situation. The opportunity to see the long term growth of students.
115	Montana has limited employment opportunities
83	Perfect place to live
94	Only teaching job in Missoula area

2. Other Factors Influencing Teachers' Decisions to Remain Teaching

ID#	Comment
13	Housing on site. Good support from board. Enjoy solitude.
18	Not set schedule. Most decisions are up to teacher.
19	Like rural children. Wanted to teach and have some control over what and how.
20	Rural schools need to try and offer some kind of group health insurance. Rural school salaries need to increase. This is my 5 th year and I do not make \$20,000.
33	Involved parents.
40	Continuation of successful program. One year merges into next-when your student "class" remains the same it's hard to quit!
41	Staff relations.
53	After 2 years need a different teacher. Not effective for all subject areas.
64	Number of grades teach.
65	Staff continues.
78	Relationship with other faculty members. My evaluation of my work performance.
85	Irrational parent.
93	Support from other professional staff (teacher).
114	Committed to finish job.
131	After putting in all this time and energy, I want to have an "easier" second year.
132	Unable to get into larger district/same superintendent for years—wants coaches.
143	Ease in traveling to and from school—terrible gravel ruins your vehicle.
16	No other job offers in area.
115	If your doing a job with a low salary and low benefits, you need a lot of recognition.

3d. Teacher Suggestions to Recruit and Retain Teachers in Montana's Small Rural Schools.

ID#	Comment
1	The lack of benefits and pay make it impossible to work in this state unless your spouse has a good paying job. If pay was comparable to other states and we offered good—gov. job type benefits, I know I would be more willing to stay.
8	Board members who trust the teachers they hire.
13	Initiate a "cadet teacher" program for high school juniors—they spend 1 hour a day working/learning in an elementary classroom(s). Elementary principal supervised and assigns to a variety of levels within the elementary building. (This was my experience at Arsenal Technical High School in Indianapolis in the 60's when there was a national teacher shortage.)
14	Higher salary and benefits—we have none right now.

18	I have a real problem understanding why some teachers are worth less money. Montana should have a base salary scale which a district could not go below. Just because you teach in a rural area doesn't mean you are worth less.
24	Competitive pay in comparison to other professions requiring a comparable amount of education & commitment. This to me, is a reflection of the importance/priority that our society places on education.
26	I believe the most effective step to encourage teachers to remain is to teach parents and school boards to accept the teacher. Many teachers are run off from a school just because one parent doesn't like the teacher. I have 9 years experience in 3 country schools.
28	Job placement.
37	In this part of the state (Eastern Mt-Miles City), teachers with more than a few years experience are not hired because "we can't afford to hire experienced teachers." Some rural (very small) pay less because of funding, others like Kircher" to protect the taxpayer. This all shows lack of respect for the professional teacher.
40	Online opportunities (fellowship) for Master's degree in areas of multiage teaching.
53	You go to a country school because you enjoy it—not to make big bucks.
54	Advertise in other states about rural MT and its country schools.
55	Get rid of the eternally dull education curriculum. Teachers are rarely "made" through endless seminars. Many professional are natural teachers. Recruiting "real teachers" from all professional would improve the quality of student education in public schools.
59	Get literature to parents to stress importance about supporting teachers. If we had parent support, our job would be less stressful because we could spend more time teaching and less time disciplining. Also, if a school has a high teacher turnover rate, look into the actions of the school board. Sometimes, we do our best, the kids are learning, yet supervisors or board members have the power to make life very difficult. These may not be what your are looking for, but I do know that these are two of the main reasons why some of my friends and colleagues are considering quitting the teaching profession.
61	Back teachers—more support from state—more interaction at teaching level.
64	Signing bonuses. Let teachers get tenure in small country schools. There are many small rural schools that only keep a teacher 2 or 3 years because they don't want them to get tenure because they would have to pay them more.
65	Take off student loans if you stay in state to teach.
68	Salary, benefits, recognition for amount of work multigrade teachers do.
72	Overall more support. Planning time. Salary equivalent to schools in town and salary that reflects my experience and educational level (currently it's \$19,000).
73	Medical benefits and professional development are a high priority.
75	Access to qualified substitutes. Prep time during the day.
78	Salary is a large factor for me. I have turned to multi-level marketing to supplement my income. I believe I would do better if my tax deductions did not include a retirement payment. I need it to pay my student loan and other debts. I can't see me living on a teacher's retirement salary anyway.
80	Salaries being competitive with other states may help—more insurance or at least offer insurance.
84	MSBA or state policies developed to better suit rural—1 to 2 room schools—for guidance in handling issues where there is no principal.
85	Having an aide(s).
90	I feel that the Montana public needs to look at teachers as the professional people they are instead of public servants that are expected to give back to society for little or nothing.
107	Salaries must be competitive with other states and other degrees. More money will attract more

	people making increased competition, therefore the better people will be employed.
111	Federal tax break and state as well. Having salaries competitive with town schools would be nice.
112	As low as our salaries are, a tax federal and state tax break would be helpful.
113	Federal tax break and/or state tax break.
114	Pay equal to larger areas in state even.
120	I am planning to leave the state of Montana after the 2001-2002 school year to seek a teacher position in a higher salaried state, if Montana wages do not catch up for teachers.
122	Bonuses—Christmas and/or end of the year.
128	Montana colleges need to direct future teachers in the degrees and endorsements (in combination) that they will need to fit the job market. Small schools need enough money to provide for salaries, insurance and maintenance of the physical plant. Just because the number of students is small, that doesn't mean teachers should be given salaries that can't keep up with the cost of living and receive no insurance.
132	Salaries competitive with other professional fields.
136	Insurance benefits for the whole family, not just the employee.
138	My position in a rural MT school is most enjoyable—but the salary with no insurance benefits, makes me consider other options—also the enrollment in the school makes it impossible to plan for long term employment.
143	Combine the regular education and special education endorsements into one endorsement. This will give any new teacher some tools to work with children who don't necessarily require special education, but who need specific one-on-one help. Shorten the school day. Lengthen the school year. If you do these things, you will weed out the people going into education because they like kids but don't have the patience or ingenuity to teach them.
110	Rural school districts should be capable of offering teachers in their districts pay that is closer to the larger districts around them. Change funding so teachers are able to be paid for the long hours they spend outside of the classroom.
115	When teachers are earning a lower salary, they need to be supported more and recognized for their efforts.
83	Teachers teaching in rural areas making less than poverty level salaries with several years of experience (let's say 30) should be given special consideration when trying to acquire a Montana teaching credential. I have 2 CA credentials, a Montana music credential and I'm having a real hard time getting an elementary teaching credential from Montana.
52	Paying teachers a decent salary according to their teaching performance.
129	Acknowledgement of a job well done.
16	State help with Teacher's Aide to relieve teachers a little from recess duty and to allow more prep time during day instead of only after hours.
9	It is hard for younger teachers to come to an isolated country school as there is nothing there for them other than teaching and some do not like being alone.

12. Teacher responses to: What does rural background mean to you?

ID#	Comment
1	Growing up in a small community with a small school.
2	Small towns—areas where people know and care about each other.
4	Country life away from a town or city. Agricultural
5	Grew up on a farm and went to a small "B" school and a rural school first 2 years.
8	Small farming community
10	Living in a small town or in the country.
11	Living or being exposed to a small community. I grew up in Dallas, TX.
12	No response

13	Not big city. (grew up –mentions 4 large metropolitan areas).
14	Living in an area outside a small town, living an independent rural lifestyle.
15	Farming/ranching—small population.
17	Living in or near a rural area and having the opportunity to go to a rural school.
18	I came from Bozeman to ranch with my husband. Once my children were old enough, I began teaching. They had gone to a rural school and done very well. After 13 years of ranching I considered myself rural.
19	It means that at least 50% of the family income is derived from agricultural endeavors.
20	No response
21	An understanding & experience with people and a lifestyle when agriculture and land based activities are the focus.
22	Country living or in a small town.
24	Living and working in the country.
25	A “rural background” to me means coming from a town with fewer than 5,000 people which has its economy based on agriculture and ranching.
26	I lived in a small town, went to a country school. Later I lived in the country and went to a bigger jr & high school. I now live on a ranch.
28	A community of 500 or less people. An area that provides a few services in town (ex. post office and grocery store) or none at all.
29	Living out of town. Growing up on a farm/ranch.
31	Rural background means coming from a farm or ranch setting. Being raised in the country and respecting the values and opportunities that lie ahead. Agriculture plays a vital role in rural. Lifestyle and whether there will be students to attend these small schools in the future.
32	Town of less than 800. Live on a farm or ranch.
33	Growing up with a family that actively ranches or farms.
35	I grew up on a ranch and I was raised to be a good country citizen. I love the hills, outdoors, and rural atmosphere.
37	An understanding of the rural lifestyle and how it affects the student’s attitude toward education.
40	Raised with knowledge of agrarian lifestyle—stewardship of land and respect for those who have and still dedicate their lives to this type of daily work—attends a one-room school through 6 th grade.
41	Living in the country—not a rural town—being involved with livestock and farming.
42	“Rural background” means living in a small town, mostly agriculturally based and low-income area.
43	Small town (less than 5,000), everyone knows each other—farming community.
44	No response
45	Small communities and small classrooms.
46	Coming from a community that’s main occupation is agriculture or related field and towns have less than 10,000 people and usually the number is in the low thousands or hundreds.
48	Living in a small area.
49	Living out of town in the country. Being able to jump on a horse and ride for hours with no houses or traffic.
50	Growing up in a small Montana town in the mountains. Economy was based on natural resources-lumber and farming. Closest city was 100 miles away.
53	Know all—not afraid.
54	Any place with farms or dirt roads. I grew up in the suburbs of Richmond, VA all of MT, even the cities seem rural to me.
55	Living close to sources of food production—ranching and farming.
59	Living in an area that the community is mostly centered around agriculture.
61	Country schools – small student load. Relaxed atmosphere—interaction with parents & community.
63	Growing up in a rural area.

64	Living in the country or in a small town that is mainly supported by agriculture or ranching.
65	Teaching in a rural location or in low populated areas.
66	Living out of town, being involved in farming/agriculture or other similar interests.
67	Small town in farming/ranching area.
68	Small community, under 500 people.
70	A lifestyle based on an agriculture backdrop. A person with a rural background has some understanding of farming and ranching practices.
71	Living in a small community—fewer resources available but more space.
72	Low population—agrarian lifestyle or natural resource community.
73	Living in a rural location. Growing up on a rural location.
74	I grew up 40 miles from a town, went to a rural school for 6 years. The atmosphere was relatives going to my school and church.
75	Small towns of less than 35,000, minimum access to stores, entertainment, libraries.
76	Opposite of being in a town or city.
77	Friendly, people-oriented, safe, recreational
78	Rural background means growing up on a farm and experiencing a meaningful life while learning to be self-sufficient and a jack of all trades.
80	Raised in a rural area, being comfortable living in small towns or in a country area.
84	Small town—under 10,000—country areas out of town.
85	It means living in an area where there is only 1 store.
87	Small town <500 residents; primarily agriculture
88	Raised on a farm in rural MT; attended rural MT school; continue to live in another part of rural MT
89	Being brought up in a rural area and knowing and understanding the environment in which the students are living in.
90	Rural background to me means working with children in small communities.
91	Towns with less than 2000 people.
92	Live in the country-children attended 1 room school (gr K-8).
93	Small communities (who care about education as well as the ones around you). Agriculture background and the importance of agriculture. A one room school setting with lots of one-on-one interaction with teacher student as well as peer involvement (at a # of different levels).
95	No response.
96	Someone who may have come from a rural school or setting.
99	This means that you have a background in farming and ranching.
101	Born and raised in rural area.
103	Lived rural.
104	It is definitely one of the reasons I have stayed in a rural school. The freedom to vary time constraints is very rewarding when working with students.
105	To me, it means that a person grew up in an area far from a city.
106	Living in a ranching community—small town with a school, post office and bar! This is where I was raised and wanted to stay forever. This was rural to me.
107	Living outside of a large urban area.
108	I was born and raised on a ranch but living in a small community that supports itself mainly by ranching, logging, etc. gives anyone a rural background.
109	Having a rural background refers living in an area with less than 5000 people and traveling 80 miles to “the city.”
111	From a small community with less than 200 people in town. Outlying areas consist of ranches/farms.
112	It means coming from a small community (less than 1,000 people). Needing to drive at least 60 miles for a Wal-Mart.
113	Attending a small school, growing up in a small town.
114	Grew up inn country-ranch raised kid—“hay seed.”

118	Exposure to rural (lifestyle—distance from “town” helping each other out when needed—relying on yourself—being able to do without or make do.
119	Brought up on a ranch or farm.
120	Living out of town with access to land for my horses or other animals.
122	I have lived in Montana all of my life. My family is in the ranching industry—small town living. Understanding of the rural life.
123	Come from an area of very small population. I lived in the country, 16 miles from school. The place I teach is a farm/ranch community with 15 students enrolled consisting of 10 different families.
125	Living and attending rural school in a rural community as a youngster.
126	Rural background means growing up in a small farming or ranching community, far away from city life.
127	Growing up in a farming/ranching community.
128	Born, raised, and lived in the country or small town.
131	Agricultural based for property taxes; value of animals and land stewardship a local norm; removed from retail stores and populations greater than 5,000 people.
132	Small community upbringing—a place where everyone knows one another by face & name.
133	Growing up on a farm/ ranch/rural area.
134	When I think of “rural” I think of a low populated area with limited exposure to “city life.” So having a rural background would mean you have experienced living or working in such a situation.
135	No response.
136	Being brought up in an environment where you are exposed to wide open spaces, animals, blue skies, etc. (often you are related to everyone within 5 miles).
137	Living in rural America.
138	Growing up in rural area with appreciation for rural population.
139	Community strength and values
140	Isolation, small town, country/farming.
143	I grew up in a small town, but I found out that this has nothing to do with a “rural background.” It is way too isolating for me to live on a farm and ranch. I’m 5 miles from my mailbox, 30 miles from a gallon of milk and 22 miles from school which is also located in the middle of a vast prairie. If it weren’t for the cheerfulness of the students and faculty, it would swallow me right up. A “rural background” to me means you actually do appreciate water in any form) and you know where your food comes from.
144	Rural background to me means an area that is not heavily populated, and is centered around the community.
145	Raised on a farm or ranch or working and spending a lot of time such as summers on a farm or ranch.
146	No response.
148	Small town—everyone knows everyone.
149	Small community/small schools/ranching & farming—spread out area.
3	Rural background means you can deal with small town business of everybody in town trying to tell you everyone else’s business but keeping your eyes and mouth to yourself and doing your job in the best way possible for the students!
110	Rural means raised in an area outside towns or large cities.
16	Growing up in a small town area and living in the country.
141	A distance from a town.
51	Agricultural based economy with sparse population.
115	Farm or ranch
83	Living in an area with a small population
52	Rural background to me means living in a safe and friendly environment where your neighbors

MONTANA STATE UNIVERSITY - BOZEMAN



3 1762 10358936 0