



An investigation of factors related to teacher attrition in Alaska native village schools, as perceived by school administrators
by Lisa Jean Stroh

A dissertation submitted in partial fulfillment of the requirements for the degree of Doctor of Education
in School Administration
Montana State University
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Abstract:

The purpose of this study was to identify the factors inherent in Alaska bush schools that related most highly to teacher turnover. These factors were examined in relation to each school district's geographic location within Alaska to determine if specific identified factors were related to school district location.

The Superintendent, or designee, in each of the 46 Alaska bush school districts completed a survey, indicating on a Likert-type scale, their perceptions of each item's level of relationship to teacher turnover. Once the survey's reliability was established, a Principal Components Analysis was applied to the responses of the 23 survey items. Examination of the unrotated factor structure indicated that a single factor was measured by the survey. The single factor was a combination of four sub-factors—all present to varying degrees. The sub-factors included professional, personal/family, geographic, and socio-cultural issues.

A one-way analysis of variance was conducted on the categorized survey items to determine if a relationship existed between the five Alaska regions and reasons for teacher turnover in Alaska bush schools. The findings indicated that, statistically, there was no significant difference between specific identified factors and location of the school district within Alaska.

The means for each of the 23 survey items were calculated within their respective sub-factors to examine tendencies and trends among the sub-factors. While each region had a unique ranking of the 23 items, the means of the items were so similar that they did not reflect significant differences.

This study's respondents made several comments following the survey's open-ended question. Some comments centered upon the multi-dimensional role of a bush teacher and the sheer volume of stressful situations those teachers tended to confront on a regular basis. This study's respondents also perceived that in many situations family issues tended to be one of the main reasons why teachers left their bush jobs.

Based upon these findings, it is concluded that: (a) there is no single reason that is individually associated with Alaska bush teachers leaving their current teaching positions; (b) the reasons why teachers leave their current teaching positions are due to a combination of sub-factors which include professional, personal/family, geographic, and socio-cultural issues; and (c) the reasons why teachers leave their teaching positions does not appear to be related to their respective school district's geographic location within Alaska.

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AS PERCEIVED BY SCHOOL ADMINISTRATORS

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MONTANA STATE UNIVERSITY - BOZEMAN
Bozeman, Montana

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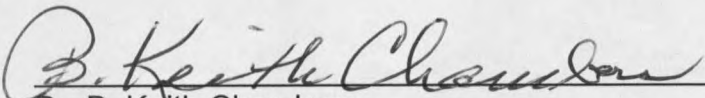
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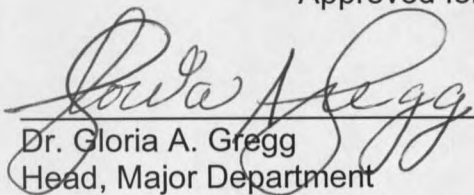
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This thesis has been read by each member of the thesis committee and has been found to be satisfactory regarding content, English usage, format, citations, bibliographic style, and consistency, and is ready for submission to the college of Graduate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


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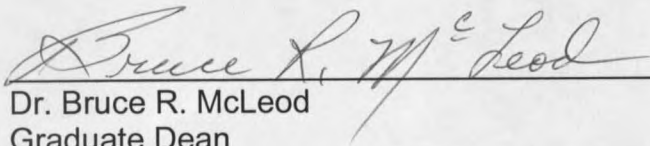
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Date March 31, 1999

I wish to dedicate this dissertation to my very dear husband of fifteen years, Robin, and our wonderful sons, Robert (age 7) and Benjamin (age 5). They have wholeheartedly supported this endeavor and have helped me to maintain my focus on this project. For the boys, they only knew that Mom was going to the "duck pond" (on the MSU campus) to study. I love them so much and look forward to having more quality time to spend with them. This accomplishment has only been obtained through their love, understanding, and encouragement. May they truly realize they were the *wind beneath my wings*.

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This accomplishment has been a combined effort of many people. I appreciate my many friends and family, who have generously given of their time and talents, so that I was able to concentrate on my studies. This is truly a celebration for us all!

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ABSTRACT

The purpose of this study was to identify the factors inherent in Alaska bush schools that related most highly to teacher turnover. These factors were examined in relation to each school district's geographic location within Alaska to determine if specific identified factors were related to school district location.

The Superintendent, or designee, in each of the 46 Alaska bush school districts completed a survey, indicating on a Likert-type scale, their perceptions of each item's level of relationship to teacher turnover. Once the survey's reliability was established, a Principal Components Analysis was applied to the responses of the 23 survey items. Examination of the unrotated factor structure indicated that a single factor was measured by the survey. The single factor was a combination of four sub-factors—all present to varying degrees. The sub-factors included professional, personal/family, geographic, and socio-cultural issues.

A one-way analysis of variance was conducted on the categorized survey items to determine if a relationship existed between the five Alaska regions and reasons for teacher turnover in Alaska bush schools. The findings indicated that, statistically, there was no significant difference between specific identified factors and location of the school district within Alaska.

The means for each of the 23 survey items were calculated within their respective sub-factors to exam tendencies and trends among the sub-factors. While each region had a unique ranking of the 23 items, the means of the items were so similar that they did not reflect significant differences.

This study's respondents made several comments following the survey's open-ended question. Some comments centered upon the multi-dimensional role of a bush teacher and the sheer volume of stressful situations those teachers tended to confront on a regular basis. This study's respondents also perceived that in many situations family issues tended to be one of the main reasons why teachers left their bush jobs.

Based upon these findings, it is concluded that: (a) there is no single reason that is individually associated with Alaska bush teachers leaving their current teaching positions; (b) the reasons why teachers leave their current teaching positions are due to a combination of sub-factors which include professional, personal/family, geographic, and socio-cultural issues; and (c) the reasons why teachers leave their teaching positions does not appear to be related to their respective school district's geographic location within Alaska.

CHAPTER 1

INTRODUCTION

The goal of the National Commission on Teaching and America's Future (1997) is to ensure that "all communities have teachers with the knowledge and skills they need to teach so that all children can learn, and all school systems are organized to support caring, competent, and qualified teachers in this work"

(p. 16). This commission believes in three simple principles, as follows:

1. What teachers know and can do is the most important influence on what students learn.
2. Recruiting, preparing, and retaining good teachers is the central strategy for improving our schools.
3. School reform cannot succeed unless it focuses on creating the conditions in which teachers can teach, and teach well. (p. 6)

The Commission believes these three principles are essential in order for schools to provide quality education to students so that they will possess the needed skills to successfully live in the twenty-first century. As stated above, the teacher is a critical factor in the success of students. Good teachers must be trained properly and recruited. They must encounter working conditions that foster retention.

However, Barnhardt, Director of Cross-cultural Studies at the University of Alaska Fairbanks, reports in his research that the turnover of teachers in Alaska's bush schools is disproportionately high as compared to urban schools within Alaska, as well as nationally. He goes on to explain that throughout the United

States, including Alaska, the teacher turnover rate is 13.7% while the teacher turnover rate in Alaska's bush schools averages 30-50% each year (Barnhardt, 1999). Dr. John Antonnen, longtime Alaskan educator and recent retiree from the position as Director of Rural Education Preparation Program (REPP), also reports the 30-50% teacher turnover rates in Alaska's villages. Dr. Ray Barnhardt, University of Alaska Fairbanks professor, points out:

Of the 2,368 teachers in Alaska's bush schools during the 1998-99 school term, nearly one-third are new to their positions. That compares with about 12% in the urban schools [in Alaska] (including 104 brand new positions in Anchorage). While rural schools employ only one-third of all the teachers in the state, they typically hire over two-thirds of the new teachers each year, most which originate from outside the state. This means that at the present time, the potential for improving the quality of education in the rural schools has an upper limit that is established by the average three-year cycle of staff turnover. (1999, p. 2)

The focus of this study was to identify the factors most highly related to teacher turnover in Alaska's bush schools. Subsequently, through this research, recommendations were formulated which will provide universities and colleges insights about the preparation of prospective teachers for the bush, and will assist bush school districts in recruiting efforts, as well as in retaining exceptional teachers. "Through these efforts, [Alaska's] students may come closer to gaining their educational birthright—access to competent, caring, qualified teachers in schools organized for success" (p. 3).

Statement of the Problem

The problem addressed in this study is the high teacher turnover rate in Alaska's bush schools. In order for students within Alaska to fully benefit academically, these students must be taught by qualified, caring teachers who provide a cohesive education program (National Commission on Teaching and America's Future, 1996). Unfortunately, a cohesive program can not be achieved when Alaska's bush schools experience a teacher turnover rate up to four times that of the national average (Barnhardt, 1999).

Purpose and Significance of This Study

The purpose of this study was to identify the factors inherent in Alaska bush schools that related most highly to teacher turnover. Secondly, these factors were examined in relation to each school district's geographic location within Alaska in order to determine if specific identified factors were related to school district location.

Although some teacher turnover in public schools may be unavoidable, normal, and even beneficial, high rates of turnover are of concern. They may indicate underlying problems, and because in and of themselves, they can disrupt the effectiveness of the school program. (National Center for Education Statistics, 1995). Given national and state educational reforms which issue high school diplomas contingent upon the exhibition of specific student standards (National Commission on Teaching and America's Future, 1996), Matthes (1987)

believes that a stable core of teachers is absolutely essential to achieving effective schools, which provide students with opportunities to achieve these national and state standards. He writes, "Teacher stability within the job is critical!" (1987, p. 27). Sher (1981) believes research must look closely at teachers. He states, "After all, neglecting teachers in an examination of rural education is like discussing rural health care and overlooking doctors or discussing agriculture and ignoring farmers" (p. 261).

In order for students to fully reach their academic potential, teachers must provide continuity with the curriculum. That can only be achieved through a stable workforce (Matthes, 1987). However, this notion seems rather unlikely, given Alaska's 30-50% rate of teacher turnover in bush school districts (Antonnen, 1998).

Research Questions

Specifically addressing the problem of teacher turnover in Alaska bush schools, this study was designed to answer two questions:

1. Which factors inherent in Alaska's bush schools are related most highly to teacher turnover?
2. Is there a difference in the rankings of importance in the identified factors across the five regions of Alaska (i.e., Northwest, Interior, Southwest, Southcentral, and Southeast regions)?

Definition of Terms

Definitions used in this study were formulated after a thorough review of related literature and from the expert opinion of Ms. Laura Walters, Research and Data Analyst for the State of Alaska, Department of Community and Regional Affairs, Municipal and Regional Assistance Division (Walters, 1998).

In order to address the research questions above and to arrive at valid answers, it is of utmost importance for this study's definitions to accurately and appropriately represent the concepts upon which this study is based. For example, diverse cultures and underlying infrastructures within communities help to define its degree of ruralness. Likewise, no *one* of the factors such as community population, road accessibility, economy, ethnicity, or school size can serve as the single factor when defining an area (Walters, 1998).

Teacher Turnover: Caused when a teacher either does not choose to return to employment in the same school the following year, or the school district chooses to non-retain the teacher for the next school year; the teacher may teach in another school district the subsequent year, or the teacher may leave the teaching profession entirely; synonymous with the term *teacher attrition*.

Regions of Alaska: For the purpose of this study, Alaska school districts were divided into five distinct geographical regions per the Alaska Teacher Placement Department, University of Alaska Fairbanks (Appendices A, B, and C). These regions are also noted in the Alaska Department of

Tourism's Web page and various brochures that are widely distributed.

The five distinct geographical regions are:

- Region 1: Northwest
- Region 2: Interior
- Region 3: Southwest
- Region 4: Southcentral
- Region 5: Southeast

Factors: Elements inherent in an Alaska Native village and school, which may be related to teacher attrition; Sher (1983) describes these general factors as *conditions, characteristics, and compensation*.

Sub-Factors: Specific categories, when in combination with each other, define the *factors* as stated above.

Professional Sub-Factors: lack of adequate lesson planning, poor student management skills, lack of collegial spirit when dealing with peers and others, desire to seek professional growth opportunities elsewhere;

Personal/Family Sub-Factors: spouse not content living in the village setting, a feeling that one's own children are not living in a safe/healthy environment; and

Geographic Sub-Factors: isolation from own culture and friends, goods and services not readily available, cold/harsh climate, inadequate housing situations;

Socio-Cultural Sub-Factors: lack of cultural sensitivity, lack of ability to deal with community "politics," religious affiliation not congruent

with community standards, and lack of ability to deal with disheartening social issues (e.g., child abuse, suicide).

Alaska Native: A person whose ethnicity includes Eskimo, Aleut, or Native Alaska

Indian. The Native Alaska Indian group is comprised of two sub-groups, the Southeast Indians (comprised of the Tlingits, Haidas, and Tshimshian Indians) and the Athabascan Indians who reside in central Alaska.

Although Alaska has three very distinct Native cultures, sometimes they are all simply referred to as *Indians*. This is primarily done when grouping Alaska Natives with the American Indians who live in the contiguous United States. Due to the small student population nationwide, these students are rarely represented in sufficient numbers in national education surveys to permit reliable and valid generalizations concerning their characteristics. However, this group was included in the 1990-91 and 1993-94 national studies conducted by the National Center for Education Statistics. A summary of findings is included (Appendix D).

Indian: Refers to people of an indigenous culture. For purposes of this study, this term will refer to all Native Alaskans (i.e., Eskimos, Aleuts, and Native Alaska Indians).

Alaska Native Village: A small Alaska community of usually less than 1,000 people, generally predominantly Alaska Native residents; they are a tribe because they share common ancestors, a common language, and live together in a group; this community is usually not accessible by road.

For purposes of this study, the term *Alaska Native village* is synonymous with the following terms: *bush*, *Alaska bush*, *bush village*, *bush community*, *village*, *Alaska village*, and *school communities in Alaska*.

Public School: A school within Alaska that is funded by federal, state, or local monies.

Alaska Bush School: A remote school in Alaska usually having a student enrollment of less than 100 students; most, but not all, bush schools are primarily comprised of students of Alaska Native origin; these school districts are the focus of this study (Appendix E).

Alaska Native School District: A public school district located in Alaska whose combined student population is predominantly composed of Alaska Native students with most of its schools located in very remote areas of the state usually not accessible via the road system. These school districts are the focus of this study, with their respective superintendents participating as the study's population. Two school districts, Kenai Peninsula Borough Schools and Kodiak Island Borough Schools, have some schools which fit the definition of Alaska Native villages and some schools which fit the definition of an Alaska Urban School as defined below. These two school districts were included in the study. However, the participants in these two school districts were directed to respond to the survey's questions as they

pertained to only the Native village schools within their respective school districts.

Native Alaska Teacher: A certified teacher who holds a Type A, Provisional, or Temporary Alaska teaching certificate *and* teaches in a public school in Alaska *and* ethnically identifies with one of the Alaska Native ethnic groups (i.e., Indian, Eskimo, Aleut) as described above.

Non-Native Alaska Teacher: A certified teacher who holds a Type A, Provisional, or Temporary Alaska teaching certificate *and* teaches in a public school in Alaska *and* claims a type of ethnicity different from the Indian, Eskimo, or Aleut groups. The non-Native teacher is usually thought of as being Caucasian. However, other ethnic groups are included in this category.

Bush Teacher: A certified teacher who holds a Type A, Provisional or Temporary Alaska teaching certificate *and* also teaches in a remote area in Alaska. A person may be of any ethnical origin for purposes of this study.

School Administrator of Alaska Bush Schools: An employee of an Alaska school district, who currently holds a Type B Alaska Administrative certificate, *and* is either currently working as a school administrator, *or* has been responsible for the overseeing of an Alaska bush school. This person may include the school district superintendent or his/her designee.

Indigenous: Native; living naturally in a particular region or environment. This term refers to the Alaska Natives absent from the Western world influence.

Culture: Customs and traditions inherent in a group of people.

Alaska Urban School: A school in Alaska, commonly on the road system, located in a community of usually over 1,000 residents in a community where goods and services are readily available. However, exceptions include the towns of Juneau and Kodiak proper—both islands, but each with a flourishing economic base with goods and services readily available.

Alaska Urban School District: A public school district in Alaska comprised of only urban schools (see definition above); for purposes of this study, urban school districts were excluded from the sample (Appendix F).

State-owned School Districts: School districts which have a specific purpose as set forth by the state; for purposes of this study, they were excluded (Appendix F).

Lower 48: Slang word usually meaning the *contiguous forty-eight states in the United States*.

Outside: Slang word for *outside the State of Alaska*, usually refers to the *contiguous forty-eight states in the United States*; however, it may also mean the state of Hawaii.

Road System: The conventional roads in Alaska.

Remote: Not on the Alaska road system; inaccessible by conventional means (e.g., car, and pickup).

Summary

Teachers are critical to the process of providing quality education for students. The retention of teachers plays a major role in developing cohesive educational programs in which students can thrive academically (McIntosh, 1989). The purpose of this study was to identify factors inherent in Alaska bush schools that related most highly to teacher turnover. Secondly, this study sought to determine if a significant difference exists between school district geographic location and the specific identified factors.

In the next chapter, a comprehensive review of literature will provide the reader with insights regarding teacher attrition in general, as well as teacher recruitment and retention. Conditions, characteristics, and employee compensation of Alaska's bush schools and communities will be examined. Finally, a comparison will be made between Alaska bush schools and rural schools of the Lower 48.

CHAPTER 2

REVIEW OF RELATED LITERATURE

Introduction

In Chapter 2, employee attrition in general, is discussed, as well as national research concerning teacher turnover in public schools. Teacher recruitment and retention in Alaska is analyzed according to Sher's (1983) three factors: *conditions*, *characteristics*, and *compensation*. A comparison will be made between school and social factors in Alaska's schools, as well as those found in schools in the Lower 48. Finally, this chapter will include an overview of several programs that are focused on Alaska bush teaching.

Teacher Attrition: Related Research

Bluedorn (1978) defines teacher attrition as any change in the membership state of an individual. This process may mean that teachers leave their current positions in a school district on their own initiative (e.g., changing school districts, but remaining in the teaching profession; quitting the teaching profession for a job outside the field of education; retiring). Teacher attrition may also include teachers leaving their jobs as a result of actions taken at the school's initiative, such as non-retention or dismissal of teachers. Bluedorn (1978) refers to two types of teacher attrition—voluntary (teacher initiated) or involuntary (school initiated).

Employee attrition in any organization can have a positive or a negative effect upon the organization and/or the specific employee. In terms of the public school system, much emphasis is placed upon the importance of the classroom teacher and his/her role in providing a safe, stable and enriching environment for students (Matthes, 1987). Naturally, the most common time for teacher attrition is between school terms. However, due to extreme conditions in some of Alaska's villages, some teachers may not choose to stay the entire year. Thus, the stability, of the organization suffers (Matthes, 1987).

Cotton and Tuttle (1986) discuss the financial aspects associated with employee attrition. These expenses may include costs associated with recruitment, selection, and training of new employees. Although these initiation costs may be somewhat substantial in terms of time and money, Cotton and Tuttle (1986) point out that one of the positive aspects of attrition in an organization is the subsequent ability of the organization to replace the position with a less experienced, less costly employee. However, the authors also warn that when attrition rates get too high, the effectiveness of the organization suffers.

When examining various attrition models, March and Simon (1958, as cited in Weise, 1990) believe the voluntary choice to leave a position is based upon the individual's perception of the current situation and the desirability and ease of movement. They also contend there is a "critical level of satisfaction-

dissatisfaction that determines whether an individual begins to search for another position or decides to remain in his/her current placement " (p. 53).

As previously stated, job attrition does not necessarily mean the employee resigns from the organization. Jackofsky and Peters (1983) distinguish between inter- and intra-organizational movement. As this relates to the school setting, one might surmise the high teacher turnover rates in small schools are higher than turnover rates in big schools simply due to lack of available intra-organizational movement opportunities.

Herzberg (1968) and Flowers & Hughes (1973) note that there is a difference between *job dissatisfaction* and *lack of job satisfaction*. For example, a teacher may remain in a position he/she enjoys, even though there may be much external dissatisfaction being exerted by the community. However, if job satisfaction is not present, he/she will likely desire to change positions (as cited in Weise, 1990).

McIntosh, in his article, Retention of Teachers in Rural Areas, points out, "Many rural recruiters readily admit that successful recruitment is much easier to accomplish than successful retention." Helge (1984), on the basis of a national survey, asserts that recruiting and retaining qualified staff is the greatest problem facing rural educators [and schools]. Although there is very little research available concerning teacher retention, this seems to be the main problem rural schools are facing today (McIntosh, 1989, p. 19). According to Matthes & Carson (1989), little is known about those factors that attract an individual to a

particular school district. Furthermore, even less is known about the factors that might cause an individual to consider a position in another school district.

Encouraging the best available teachers to come to schools in sparsely populated areas and then making the position attractive for them to remain there long enough to provide a lasting, positive contribution is a long-standing problem. Sher (1983) suggests that attracting and keeping competent individuals to teach the *three Rs* in rural schools is largely a function of the *three Cs: conditions, characteristics, and compensation*.

- *Conditions* include environmental surroundings, including cultural, housing, and recreational facilities.
- *Characteristics* refers to the quality of personnel produced by pre-service programs, and whether they are oriented toward rural teaching through either background or training.
- *Compensation* includes not only a reasonable salary, but also incentives for choosing a rural career and rewards for excellence in teaching.

In this study, Sher's (1983) framework guided the review of literature and analysis of a survey to identify the factors most highly related to teacher turnover and to determine the relationship of these factors to geographic location within the State of Alaska.

Next, an overview of Alaska and its public school system will be examined through Sher's (1983) framework of *conditions, characteristics, and compensation*.

ConditionsAlaska: Its Location and Its Communities

"When Alaska is described to people who have not visited it, the most frequently used word is *unique*. Numerous factors intertwine to make Alaska an exciting, rapidly changing, diverse, and complex place" (Hecht, 1981, p. 186).

Alaska is the largest of the United States in area, twice the size of Texas (Alaska Department of Tourism, 1998), and equal to one-fifth the size of the contiguous 48 states (Hecht, 1981) (Appendix G). It also boasts the northernmost (Point Barrow), the easternmost (Simisopchoi Island in the Aleutians) and the westernmost (Little Diomed Island) points of the U.S. This is possible because Alaska straddles the international dateline (Alaska Department of Tourism, 1998).

Alaska competes with Wyoming for the smallest population in the nation (People's Almanac, 1997). With its current population of 606,000 people, Alaska has less than one person per square mile, as compared to 72 people per square mile, which is the national average (Alaska Department of Tourism, 1998).

Approximately half of the population lives in Anchorage, Alaska's largest city, which claims a population of approximately 250,000 people (People's Almanac, 1997). "The rest of the Alaska citizens reside in or near the 200+ small towns and villages which are scattered throughout this immense state" (Hecht, 1981, p. 186). Hecht (1981) writes,

Alaska's landscape ranges from rugged mountains to flowery tundra to rain forests. The climate varies from the extreme winter cold of the north to the milder rainy weather of the Southeast, and 90 degrees Fahrenheit summer temperatures are not infrequent in the Interior. (p. 186)

Not surprisingly, Alaska's location contributes to its uniqueness. It shares no common boundary with the rest of the United States (Appendix H). It is a member of the circumpolar community, if one were to view the area from above the North Pole (Appendix I); and "culturally, racially, and linguistically, its original inhabitants are closer to those northern neighbors than to the peoples of their own nation" (Hecht, 1981, p. 186).

The State of Alaska is rich with natural resources. The Alaska Department of Tourism reports (1998),

- Proceeds from natural resources within Alaska generate 90% of its state's revenues;
- Twenty-five percent of the oil produced in the United States comes from Alaska;
- The seafood processing and fishing industries are also important to Alaska's economy, as the waters are rich in salmon, crab, halibut, and herring;
- Forestry is especially important in the Southeastern region of the state, as it provides thousands of jobs and hundreds of millions of dollars in revenue to Southeast Alaska; and
- Monies generated from tourism are increasing, as the state attracts over 1.1 million visitors annually. (p. 35)

Ground transportation is very limited throughout the state. Therefore, people rely heavily upon air and water travel for transportation from place to place. In fact, Juneau is the only state capital in the Union which can be reached

solely by boat or plane. Boats, snowmobiles, and four-wheelers are invaluable means of transportation within the various villages, as the extent of conventional roads is quite limited (Darnell, 1994; Hecht, 1981).

Perhaps what makes Alaska truly unique is its Native population. In 1996, Alaska Natives constituted 16.5% (approximately 100,000) of the state's total population. Eighty percent of the Native population resides within one of the six urban cities, while about 20% of Alaska's Natives live within the 200+ villages scattered throughout remote areas of the state (Darnell, 1992). Furthermore, there are over 20 different Alaska Native languages spoken throughout the state (Kawagley, Norris-Tull, & Norris-Tull, 1998). Most, but not all, bush communities in Alaska are primarily comprised of Alaska Natives (i.e., Indians, Eskimos, or Aleuts).

Alaska Bush Communities: Then and Now

Most of today's Alaska Natives are descendants from the nomadic hunters and gatherers who crossed from Siberia to North America over the Bering Land Bridge that connected the two continents. These original Alaska Natives developed into three distinct groups: Indians, Eskimos, and Aleuts. In fact, the term, Alaska Native, refers to these three racial/cultural groups (Hecht, 1981). However, in some studies (e.g., Schools and Staffing Survey as conducted by the National Center for Education Statistics), these three groups are classified as simply *Indians*, and are therefore, considered synonymous with the American

Indians of the Lower 48. A brief history of each Alaska Native group is described below:

- Indians – The Indian nations settled in Southeast Alaska. This region had lush forests, a mild climate, as well as abundant fish, game, and edible plants. The Tlingits (pronounced Klinkits), Haidas, and Tshimshian Indians thrived in this area. Their highly developed culture produced totem poles, ceremonial costumes, and exquisite blankets. The Tlingits were also fierce warriors. When the first Russians tried to settle in Southeast Alaska, the Tlingits drove them out, despite the guns and cannons brought by the intruders.
- Eskimos – The Eskimos scattered throughout the Northern and Western Regions of Alaska. In this harsh land they hunted, fished, and gathered the berries that grew during the brief, cool summers. Eskimo hunters harpooned whales from small, skin covered canoes called *umiaks*. Eskimos also hunted for walrus, seals, and polar bears. They followed the herds of caribou that migrated across the tundra.
- Aleuts – The smallest group of Alaska Natives, the Aleuts, settled mainly on the land named for them, the Aleutians. They were hardy people who lived off the sea. Their food, clothing, shelter, and tools came from creatures living in the ocean or along its shoreline. Exceptional sailors, the Aleuts sometimes paddled hundreds of miles in skin-covered canoes, called *bidarkas*, to trade, visit, or stage daring raids on enemy villages. (Alaska Department of Tourism, 1998, p. 1)

While Native culture remains strong in these remote villages of Alaska, rapid advances in communications, transportation, and other services have dramatically changed the lifestyles of many Natives. Many families in rural Alaska maintain the traditional indigenous lifestyle that is largely dependent on subsistence hunting and fishing. Wild foods (e.g., salmon, caribou, moose, and numerous wild berries and herbs) form a major portion of their food supply, and many rural residents rely on commercial fishing in the summer months as their

main financial support (Kawagley, Norris-Tull, & Norris-Tull, 1998). Some Natives still carry on the traditional folklore such as basket weaving and ivory carving. These items are usually sold to tourists instead of being used for everyday tasks.

Some Natives manage and staff multi-million dollar businesses such as complex social programs or their respective Native Corporation headquarters (Kleinfeld, 1992; Alaska Department of Tourism, 1998). These Native corporations were formed after the 1971 Alaska Native Claims Settlement Act (ANCSA) was passed by U.S. Congress. In this Act, Alaska Natives received 44 million acres of land and almost \$963,000 in exchange for the extinguishment of their aboriginal land claims. The cash and lands became the property of the 13 regional, 4 urban, and the 200+ village Native corporations formed by the Act. Any Native Alaskan born before passage of the Act, *and* who could prove one-quarter Native blood ancestry, was eligible to enroll in a local and regional corporation. This entitled him/her to 100 shares in both the local and the regional corporations (Alaska Department of Tourism, 1998).

The use of modern conveniences is increasing in rural Alaska. Technology such as computers, televisions, satellite dishes, telephones, guns, steel traps, microwave ovens, refrigerators, powered boats, four-wheelers, and snow machines are all commonplace in Alaska villages of the 1990s. However, many of these conveniences which make life tasks easier, also produce noise, which is very disconcerting to some of the traditional village residents (Kawagley,

1995). Kawagley, in his book, A Yupiak Worldview: A Pathway to Ecology and Spirit (1995), discusses this situation:

It always surprises me to see houses falling into disrepair, rifles and shotguns rusting, and many other modern tools and appliances lying about, not being cared for, while Native artifacts, such as harpoons, ice picks, adzes, and crooked knives, seem to be much better cared for.

One elder said that fur hats are "so much more efficient, warming, and closer to the heart" than manufactured hats made of man-made materials. Maybe there is still a oneness with nature and all beings that governs the modern Yupiak worldview. (p. 84)

Some Natives are working closely with huge corporations, paving the way for increased oil exploration and development, especially on the North Slope. At the same time, other Natives feel "overwhelmed and displaced of their land" (Kawagley, 1995, p. 12). According to Kawagley,

The Native people are considered transmutable and physical elements of the environment and objects that can be removed to a new village site, where they often become "human animals in a cultural zoo." . . . Already, there are several villages where affluent outsiders can fly in to view the Natives in their natural habitat, a demeaning practice to the people on display. (p. 13-15)

As noted in the above excerpt, there is a feeling of uneasiness between fellow villagers when discussing progressiveness or preservation of their culture (Kawagley, 1995). In Kawagley's book, A Yupiak Worldview: A Pathway to Ecology and Spirit (1995), he describes the village life in these changing times:

The Yupiak people have found many ways to adapt to changing times through a blending of old and new. Sometimes the blend has been met with success and other times it has not. For example, most villages have no qualms about taking advantage of federal and state grants for generating electricity, roads, airports, housing, and assistance to the needy. This has brought new opportunities to the village, and local administrators have learned to

account, budget, report on activities, and to live by the rules and regulations attached to these new institutions.

From the point of view of some elders, however, this is seen as a disease of the newer generation, especially with respect to assistance to the needy. In their view, it has effectively relieved villagers of their self-esteem, self-reliance, self-sufficiency, and self-determination. (p. 79)

These changes in technology, economy and lifestyles for the Alaska Natives have not come without a price. Statistics obtained from the last published annual reports from the Alaska State Division of Family and Youth Services (1996), are evidence that many Alaskan families are under extreme stress and that many Alaskan children are at great risk of harm or delinquency (P. Nakamura, personal communication, June 26, 1998) (Figure 1).

While the role of the State of Alaska Department of Youth and Family Services is to protect children at risk of abuse or neglect and to rehabilitate youthful offenders while protecting communities, this agency writes, "This mandate is greatly influenced by Alaska's geographic size and complexity, unevenly distributed population, cultural diversity, and relative inaccessibility to rural villages" (1996, p. 4).

In summary, Alaska is a state of much uniqueness (Hecht, 1981). However, with this uniqueness come situations and conditions which create tensions and stress in the lives of its residents (Kawagley, 1995; Darnell, 1992; Kleinfeld, 1992). Conflicts also arise when Native children are being taught in school by predominately non-Native teachers (Lipka, 1994). McIntosh (1989) cautions:

Those being recruited need to know not only the strong points of the district and community, but also any limitations which might affect either their willingness to sign a contract or remain after the first year of teaching. A high level of awareness of teaching and living conditions before the contract or remain after the first year of teaching. A high level of awareness of teaching and living conditions before the contract is signed will certainly eliminate some of the unhappiness that may result after a teacher arrives in the community. (p. 26)

Figure 1. Alaska Statewide Statistics Relating to Children

EACH YEAR . . .	
1 in every 2,198 children	Dies of either homicide, suicide, or unintentional injuries
1 in every 65 babies	Is born with Fetal Alcohol Syndrome (FAS) or Fetal Alcohol Effect (FAE)
1 in every 18 babies	Is born with low birth weight
1 in every 12,454 children	Commits suicide
1 in every 207 children (ages 6-18)	Is admitted for inpatient psychiatric care
1 in every 11 babies	Is born to mothers with fewer than 12 years of education
1 in every 8 babies	Is born to teenage mothers
1 in every 89 children (ages 6-18)	Is arrested for felony offenses
1 in every 14 children	Drops out of school
1 in every 17 babies	Is born to unmarried parents (ages 13-18)
1 in every 35 children (ages 6-18)	Is reported runaway
1 in every 52 children	Is abused and neglected (substantiated reports)
1 in every 5 preschoolers	Is living below the poverty level
1 in every 9 children	Has no health insurance
1 in every 8 children	Receives Aid to Families with Dependent Children
1 in every 6 children	Is living in single parent households
<i>Source: Alaska's Health and Welfare, 1993; Public Health Background DPH, June 1993; Alaska Bureau of Vital Statistics, 1990 Annual Report; 1990 Census of Population, General Population Characteristics, Alaska, 1992; Alaska's Adolescents, A Plan for the Future, 1994, as cited in the Alaska Department of Health & Human Services, 1996).</i>	

Historical Background of Alaska's Public School System

The parents, grandparents, and ancestors of today's public school students have experienced a shifting of administrative objectives and structure since schools began in Alaska during the 1700s. Kleinfeld, McDiarmid, & Hagstrom (1985) and Darnell (1970) complement each other's views when describing this ever-changing history of public schools in Alaska.

- Traditionally, the education of Alaska Native children reflected indigenous values and prepared children to live as their ancestors had lived. The boys were taught how to hunt and the girls were taught skills concerning food preparation.
- During the 1700s to mid 1800s, Russian missionaries with the purpose of Christianizing the Native population founded religious schools. The main emphasis was on religion and literacy so Native children could read Scriptures.
- In 1867, the United States purchased Alaska from Russia and many of the Russian missionaries withdrew from the state, leaving Native education very neglected for many years.
- Almost twenty years later, in 1884, the Organic Act appropriated \$15,000 to the education of Indian children. This money was distributed throughout the state, primarily to any of the mission schools still in existence.
- In 1894, the U.S. Bureau of Education took over the administrative responsibilities of Alaska's schools in order to provide a separation of church and state. The educational objectives assigned to these schools were that the children must be kept in school until they acquired what was termed a common-school education (practical knowledge of some useful trade). The law stated, "We believe in reclaiming the Natives from improvident habits and in transforming them into ambitious and self-helpful citizens." (as cited in Darnell, 1970, p: 4)
- In 1905, the Territory of Alaska took over the education of the White children, but the Secretary of the Interior (located in Washington,

D.C.) continued to take responsibility for education of the Native children in Alaska.

- In 1931, the Secretary of the Interior transferred responsibility for education of Alaska Natives from the Bureau of Education to the Bureau of Indian Affairs (BIA). With the appointment of John Collier as Commissioner of Indian Affairs in 1934, the BIA adopted a dual-purpose education for all Native Americans, including Alaska Natives. Upon taking office, Commissioner Collier proclaimed, "Indians whose culture, civic tradition, and inherited institutions are still strong and virile shall be encouraged and helped to develop their life in their own patterns, not as segregated minorities but as noble elements in common life. At the same time, the individual Indian is entitled to every opportunity that the nation offers to any citizen. This means that he is entitled to the fullest educational privileges, not in sequestered institutions but in the schools and colleges which serve us all." (as cited in Darnell, 1970, p. 7)
- Until the 1970s, many of the native schools were operated by the Bureau of Indian Affairs who placed predominately non-Native administrators in leadership positions within predominately Native schools. At this time, the State of Alaska assumed financial responsibility for the elementary and boarding schools.
- In 1976, while school consolidation in most of the United States was creating larger administrative units, the Alaska legislature divided the former State Operated School System into 21 small, regionally controlled school districts called REAAs—Regional Education Attendance areas. Although these small districts created potential opportunities for local control, their small size created problems with their ability to obtain necessary materials to adequately teach the small numbers of students and with their ability to develop programs to serve children with special needs such as those with fetal-alcohol syndrome. Also, secondary students who sought an education were forced to leave home and enter boarding schools or attend town high schools through the boarding home program.
- Students' inability to fit comfortably back into village life after attending the regional high schools and the appalling alcohol abuse and suicide rates in the student populations, led policy-makers to reevaluate the regional high school concept.

- Finally, in the lawsuit *Tobeluk v. Lind*, the State of Alaska (in an out-of-court settlement) agreed to provide high schools in all Alaska bush communities that requested them. Most bush communities, 126 in all, wanted local high schools. High schools were constructed in dozens of villages. Parents wanted their children at home and valued the opportunity to have more control over staffing and curriculum. But these small high schools found it difficult to provide diversity of teachers, specialized courses, and a variety of extracurricular activities. As a result, the state government re-opened Mt. Edgecumbe, formerly a Bureau of Indian Affairs boarding school in Southeast Alaska, as an option for rural secondary students. (Darnell, 1992, p. 28)
- At the present time, student applications for Mt. Edgecumbe exceed the school's capacity. There is a movement to provide new boarding schools for Native students. However, providing more boarding schools creates a problem in that the loss of students and student revenues from the small high schools would make it even more difficult for these small schools to offer high quality education to its existing students.
- Although many effective programs have been developed for Native students, the small size of many rural communities and school districts, the stress caused by rapid cultural change, and the tension between the western and indigenous world-view still create policy problems which need attention. (Kleinfeld, McDiarmid, & Hagstrom, 1985, p. 1-6; Darnell, 1994, p. 1 -37)

At the present time, the structure of Alaska's public school system is as

follows:

- The state consists of 52 school districts and six state-owned schools. Of the 52 school districts, the student population ranges from nearly 50,000 students in the Anchorage Public Schools to less than 50 students in the Pelican City School District. By the criteria, as defined in this study, six school districts are considered urban and 46 are considered bush schools. However, two of 46 bush school districts are comprised of both urban and bush schools, as defined by this study, by using the data from the Alaska Department of Community and Regional Affairs (1998).
- Prior to the 1990s, Alaska was not considered in national school reform efforts, primarily due to its "separation from the contiguous

forty-eight states and because of its distinctive characteristics."
(Hecht, 1981, p. 192)

For example, in 1978 a memo was sent by the Rural Education Project Director to the Center for Northern Educational Research (as cited in Hecht, 1981). This memo stated: "Alaska's situation is considered too unique to be of general applicability elsewhere... Alaska was one of "those situations in rural America where cultural/social and geographical conditions are sufficiently unique [that it] requires very different approaches to improving education." (as cited in Hecht, 1981, p. 208)

However, the State of Alaska, and the Native villages in particular, have *not* been left off any of the national, state, or local educational reform movements of the 1990s, no special provisions have been made concerning the unique cultural/social or geographical conditions. With these reforms, come a great deal of added accountability and pressure for teachers to prepare *all* students for post-secondary pursuits. These standards have been set forth by national and state committees for *all* school age children, with no differentiation between teaching/learning abilities, styles, or situations.

- In conclusion, throughout the history of the many, varied school systems of Alaska public education's past, non-Natives have consistently determined policy and have developed the programs. They have done so under the premise that "they know what was best for Native education." (Darnell, 1970, as cited in Norris-Tull, 1957, p. 132)

Students and Classrooms of Bush Alaska in the 1990s

What is the profile of students attending today's Alaska bush classrooms?

Research indicates that:

- One third of Alaska's school age population fits one of the various definitions of "students at risk" (Darnell, 1992).
- Poverty is a factor in many children's lives. In fact, children living in poverty are one-third less likely to graduate from high school than other children. Over 47% of village students lived in poverty during

the 1990-91 school year, as compared to only 17% of students in Alaska non-bush school districts (Alaska Economic Trends, 1992).

- In some school districts, up to 30% of the elementary age Native children are academically functioning below grade level. In grades 7-12, the number increases to over 40% (Alaska Department of Education, Extent of the At-Risk Population, 1990). This figure is also consistent with the 1996 report that notes the latest figures available (Report Cards to the Public, 1996).
- Based on the last census, which was completed in 1990, approximately one in seven Alaskans is functionally illiterate in English (Darnell, 1992).
- Nearly 40% of students are classified as *bilingual/ bicultural* as compared to less than 4% of students attending non-bush schools in Alaska (Alaska Department of Education, 1997).
- Over 12% of all school-age students are classified as "Chapter 1" pupils. This means their educational attainment is below the level appropriate for children of their age, according to the regulation of the U. S. Department of Education. In Alaska's non-bush schools, less than 4% of the student population is classified as Chapter 1 pupils. While considering that Native students, in general, make up 16% of the total school population statewide, they make up over 49% of Chapter 1 students statewide (Alaska Department of Education, 1993).
- Approximately 30% of freshmen entering Alaska's high schools, statewide, will not graduate (Alaska Department of Education, 1990).
- In some school districts, especially in the Southeast and coastal districts, the student transience rate is as high as 48% per year (Alaska Department of Education, Report Card to the Public, 1998).
- In a national survey of Indian and Native Alaskan youth, 21% of the girls and 12% of the boys had attempted suicide, 46% of the girls and 56% of the boys had used hard liquor, and 26% of the girls and 9% of the boys had been sexually abused. (Whitney, 1992, p. A-1, A-10)

Characteristics

According to the Alaska Teacher Placement Department, University of Alaska Fairbanks (1997), each year approximately 85% of all Alaska teachers hired for the upcoming school term are *imports*—hired from out of state, usually from the Northwestern United States. Although Alaska villages are comprised of up to 95% Native students, 95% of all Alaska bush teachers are non-Natives (Alaska Natives Commission, 1993). Darnell (1992) and Norris-Tull (1997) explain Alaska's bush teaching situation:

In many cases, unfortunately, newly-graduated teachers or outstanding teachers from other areas are simply not prepared or do not have the background to succeed under the demanding conditions found in many rural [Alaska] villages" (Darnell, 1992 p. 9; Norris-Tull, 1997, p. 137).

Who are these prospective teachers and why do they seek a teaching position in Alaska? Some of these candidates are seeking the *adventure* of The Last Frontier and others are simply seeking the *salary* of The Last Frontier (Anttonen, 1998). Carol Barnhardt (1982), researcher and author, describes these new teachers to Alaska as having,

. . . missionary zeal. The lures of high salaries or quests for adventure have often been the motivating forces responsible for the steady influx of teachers from Outside. . . . The importation of teachers from Outside has had its advantages and disadvantages. They usually bring with them new perspectives, new ideas, and very often a great deal of enthusiasm. However, those qualities are almost invariably dampened by the reality of long, harsh winters and the prolonged isolation from familiar people, places and goods.

Adjustment to the physical environment is minor, however, compared to the complications that are created by the fact that Alaska is composed of diverse groups of people whose cultural

backgrounds often differ radically from those of teachers from Outside. It doesn't take teachers long to discover that their own value systems, life styles and ways of teaching and learning are often not shared or even appreciated by the students and families in the communities they are trying to serve. This discovery can quickly lead to feelings of frustration, anger, inadequacy and anxiety for teachers and students, which in turn often leads to dropping out--by teachers and students. (p. 12)

Alaska Bush Schools – Are They Meeting the Needs of Their Students?

One might ask, "Why do the students in bush Alaska experience so many academic and social difficulties?" According to Philips (1972), "The cultural incongruence between the home and school learning environments make it very difficult for Native students to learn to their full potential (p. 97). These complexities come into play when two fundamentally different worldviews converge and present a formidable challenge for students, as well as for teachers. To better illustrate this point, Knudtson and Suzuki (1992) have identified the distinguishing characteristics of both worldviews--of those of the indigenous peoples and those of the Western world in which most Alaska bush teachers have been raised and trained (Appendix J).

As Burgess (1978) points out, "Unfortunately, many instructors ignore culture and its impact on learning both in *content* and in *style*, rather than devising methods and techniques through which culturally diverse individuals approach problem solving" (p. 9). For example,

- Western education tends to emphasize compartmentalized knowledge (by disciplines) which is often decontextualized and taught in the detached setting of a classroom (Kawagley, 1995; Berger, 1977; Franklin, 1990; Livingston, 1981). Native people

have traditionally acquired their knowledge through direct experiences in the natural environment. For them, the particulars come to be understood in relation to the whole, and the laws are continually tested in the context of everyday survival. (Kawagley, 1995)

- According to Swisher and Deyhle (1987), Indian [Alaska Native] children tend to learn visually, by observation, manipulation, and experimentation in their Native setting (John, 1972; Kleinfeld, 1973; Rohner, 1965; Wolcott, 1967; Felon & Galloway, 1969). Rohner (1965) contends that in their school classroom, Native students must learn by verbal instruction, reading, and writing. The Western world approach to teaching is incongruent with their learning styles and affects their knowledge and demonstration of material taught.

Werner & Begishe (1968) also present evidence that many strategies of Western world trained teachers are incongruent with the traditional culture's practices. For example,

- Indians [or Native Alaskans] seem to be unprepared or ill at ease if pushed into early performance without sufficient thought or the acquisition of mental competence preceding the actual physical activity. . . . This philosophy of learning for indigenous peoples can be summed up in the following proverb: *If at first you don't think, and think again, don't bother trying*. The non-Native approach stresses performance as a prerequisite for the acquisition of competence . . . This philosophy of learning can be summed up . . . *If at first you don't succeed, try, try again*. (p. 45)
- Western thought also differs from Native thought in this notion of competency. In western terms, competency is based on predetermined ideas of what a person should know, which is then measured indirectly through various forms of objective tests. Such an approach does not address whether that person is really capable of putting the knowledge into practice (Franklin, 1990). In the traditional Native sense, competency has an unequivocal relationship to survival or extinction. You either have it or you don't, and survival is the ultimate indicator. (Barnhardt & Kawagley, 1997, p. 1)

Kleinfeld, McDiarmid, & Hagstrom (1985) suggest,

The lists of effective teaching practices are disappointing, that such teacher behaviors as holding high expectations have ambiguous meaning. For example, what about a teacher who is working with an Eskimo child who reads a story over and over and knows all the words but can't figure out what the story means? . . . The research of effective teaching attempts to specify universal scientific rules, but in many situations the rules do not apply [to the learning style of Alaska Native students]. (p. 93)

Although the researcher realizes there is no way to precisely pinpoint every teaching technique of non-Native teachers that tend to be incongruent with Native students, there is literature that addresses some of the differences between non-Native and Native teachers' teaching styles, due to cultural factors. For example, Native teachers tend to differ from mainstream non-Native teachers in the organization of classroom space and time (e.g., the way physical and personal spaces are arranged, and the pacing of lessons) and in the organization of classroom discourse (the culturally patterned ways of speaking in a classroom) (Barnhardt, 1982; Erickson & Mohatt, 1982; Lipka, 1994; Van Ness, 1992). Native teachers tend to use slower pacing of lessons and closer physical contact with students than do mainstream teachers. Native teachers also use a discourse style that includes a more even distribution of speech among students and teachers, speaking to a group instead of nominating individuals, and allowing multiple speakers to talk at once. Native teachers are more likely than mainstream teachers to use content related to the local environment. At the risk of over-generalizing, the differences in classroom organization and discourse

reflect important indigenous values of individual autonomy and group harmony (Lipka, 1994).

In summary, many Indian students come to school with a learning and interactional styles that are very different from the situations they encounter in the classroom (Swisher & Deyhle, 1987). This incongruity not only places students at risk, but it also places the teacher, usually a non-Native teacher, at risk as well (Gjelten, 1978).

However, many Natives are beginning to realize the need for students to be taught both traditional cultural material as well as academic curriculum as seen by the Western world. Kawagley (1995) writes:

In the past, Native people have tended to view formal education as a hindrance to their traditional ways, but they have begun to look at it in a different light. They are seeking to gain control of their education and give it direction to accomplish the goals they set for it. [They are] strengthening their own culture while simultaneously embracing Western culture as a second force that can help them maintain themselves with as much self-reliance and self-sufficiency as possible. Having always had to thrive in a tough environment, they know that knowledge can make it easier and less harsh . . . with a carefully developed technology supported by an attuned educational system. (p. 89)

Norris-Tull (1992), a professor and author regarding Alaska Native issues, believes there needs to be a balance between cultures, with each complimenting the other. He writes:

Children are the most important segment of any community, for each community's future lies in its children. To assure that future, the children must be given, through education, the skills that will enable them to succeed in life and the understanding that will continue the community's values. For Alaska Native children, this

means that they must receive an integrated education that encompasses two sets of skills and two sets of values.

The first set of skills is that necessary for the children to succeed in traditional Native lifeways. The second set of skills is that necessary for the children to succeed in Western society. The children's education must also integrate Native and Western values so that they are empowered in both cultures. The skills and values are inseparable, for mastery of one cannot be obtained without mastery of the other. (Norris-Tull, 1997, p. 143)

Compensation

Supply and Demand of Teachers in Alaska

According to Alaska Teacher Placement, the demand for educators in the State of Alaska continues to exceed the supply. In 1997, there were 1,330 new hires statewide and teacher shortages remain a problem (1998). Certain high demand areas such as special education and speech pathologist positions continue to remain unfilled, adversely impacting the consistency and quality of education in Alaska's classrooms (1998).

Projections indicate that Alaska's demand for teachers will be great in the years to come. The Alaska Teacher Placement's Statewide Educator Supply & Demand Report (LaBarge, 1998), states that,

In spite of a declining military deployment in the state, Alaska's population continues to grow. With the last four years' steady increase, and with the largest growth in Alaska's population being in the school-age category, school enrollments are expanding annually. This growth and other contributing factors increase the demand for more qualified teachers. Meeting such a demand is now problematic, according to the Alaska Teacher Placement Department at the University of Alaska Fairbanks.

In addition to growing enrollments and teacher retirements, several other factors contribute to the difficulty in [the] recruitment [of quality teachers]. Declining school district budgets, static or declining salaries, reduced benefit packages, and drastic increases in certification costs has all impacted the recruitment of teachers to Alaska's schools. Alaska has lost much of its competitive advantage in attracting qualified educators. With the impending retirement of approximately 6% of the current education labor force, departing teachers could create more than 450 possible vacancies for each of the upcoming years. In addition, new positions will have to be created to deal with expanding enrollments and new programs. For these reasons, Alaska's demand for educators will continue to be high. (p. 20) (Appendix K)

Salaries and Incentives

On an average, Alaska teacher salaries are 128% that of the national average (LaBarge, 1999) (Appendix L). Some school districts provide other incentives such as district housing, longevity increments, tuition reimbursements, non-business travel, disability insurance, professional liability, travel insurance, and family medical insurance benefits (Appendix M).

Rural Schools: A comparison between Alaska and Lower 48

While some similarities exist between Alaska bush schools and rural schools located in the Lower 48, Alaska bush schools represent the extremes of many situations (Darnell, 1992). Miller (1988), in his article entitled, Teacher Preparation For Rural Schools, discusses some of the issues encountered by rural teachers across the nation. Sher (1977) warns the reader to not over-generalize characteristics of rural teachers or their community's situations. He states that there is often greater diversity found when comparing rural schools

among themselves than the difference found when comparing urban and suburban environments. He writes:

Rural America may well represent the single most diverse and heterogeneous group of individuals and communities in our society. The island village off the coast of Maine, a coal mining town in West Virginia, a ranching area in Wyoming, a college town in Minnesota, an impoverished community in the Mississippi Delta region, a ski-resort section of Vermont, a migrant-worker settlement in Texas, an Alaskan Native village near the Arctic Circle, and a prosperous grain-farming area in Iowa have little in common except that they are all classified as rural areas of the United States. (p. 63)

School Factors

Similarities. The similarities between the responsibilities of a teacher in an Alaska Native village or a rural school in the Lower 48 may be very encompassing. Teachers may find themselves teaching multi-age/multi-grade classes, have small student-to-teacher ratios, and may be responsible for the preparation and teaching of several different subjects (in which the teacher may or may not be qualified to teach). The rural schoolteacher usually is the main teacher for all students assigned to him/her, including the special needs children. Other similarities include extensive administrative, supervisory, extra-curricular, and maintenance responsibilities, coupled with fewer defined rules and policies, and a more informal administrative structure (Miller, 1988). As applicable in both areas, Rusyniak (1990) views many duties of a rural teacher or administrator as being "duties—some assigned, but most assumed" (p. 17).

Miller (1988) also comments, "If teachers come to a small, rural school with expectations predicated upon factors which relate to urban or suburban

schools, duties often defined by a negotiated master contract, they are likely to be sorely disillusioned" (p. 17).

Differences. In Alaska, unlike most Lower 48 states, a teacher is allowed to teach classes for which he/she is not certified if the school district believes the teacher has the skills to effectively teach those classes (Alaska Department of Education, Teacher Certification, 1998). One main difference between Alaska Native village schools and rural schools in the Lower 48 is the amount and quality of the curricular materials and the condition of the school facility. Given that Alaska's state expenditures per student is 149% that of the U.S. average, most schools within the state are very well advanced in terms of technology, with updated curricular materials and supplies (Alaska Department of Education, Report to the Public, 1997). Because of the extreme remoteness of the state, there are many distance delivery opportunities via the telephone, television, or via the computer for students and teachers (Anttonen, personal communication, 1998). The school facilities in most villages are very well built and maintained. In the 1976, out-of-court settlement for the case, *Tobeluk v. Link*, the State of Alaska agreed to build high schools in all the villages who requested them. Soon after this decision, dozens of villages received new facilities (or new additions built on to their existing facilities). As most of the schools in rural Alaska serve K-12 grade students, most Alaskan students continue to benefit from this settlement (Darnell, 1992). However, in many villages, schools are not able to take full advantage of technological advances due to inadequate telephone

service (some villages still use single side-band radios for telephone communication) or fluctuations in electrical current (some villages use a generator as their only source of electrical supply) (Kawagley, 1995).

Another major difference between the schools in Alaska and those in the Lower 48 is the issue of teacher compensation (i.e., salaries and fringe benefits). While rural teachers in the Lower 48 typically earn lower salaries and fewer fringe benefits than their counterparts earn in more populated school districts, cost of living expenses are lower in the rural areas than in the urban areas of the Lower 48. However, this concept is just the opposite in Alaska. Alaska teachers' salaries are higher than their counterparts in the Lower 48. Furthermore, Alaska's bush school districts tend to compensate teachers at a higher rate than Alaska's urban school districts (Alaska Department of Education, Report Card to the Public, 1997). However, according to Alaska Teacher Placement (ATP) at the University of Alaska Fairbanks,

Alaska's salaries have seen very little change since 1994. They are, however, doing better than the U.S. average. Since 1995, Alaska's beginning teacher salaries are the highest in the nation. With the average salaries at 128% of the U.S. average, Alaska's educators have one the highest compensation rates in the nation. However, several districts are no longer compensating for years of experience and are, therefore, bringing in all new hires at entry level. Some districts are only allowing up to four years of experience to new hires in their district. According to statistics compiled by the American Federation of Teachers, after adjustment to the cost-of-living index, Alaska's salaries still rank among the top 25 in the U.S. (Report Card to the Public, 1998, p. 23) (Appendices N and O)

Moreover, unlike rural areas of the Lower 48, the cost of living in bush Alaska is greater than in urban Alaska (LaBarge, 1998). In most cases, food and other needed items are flown to villages via air transport, which is very expensive. Also, air service is very costly if a person (and his/her family) needs to leave the village for any reason (e.g., shopping, medical care, or family related situations). Costs associated with building a house in a village can amount to as much as 132% more than if the same house was built in an urban area with Alaska such as in Anchorage. Also, some Native villages restrict non-Natives from owning property on Native owned land. This makes the opportunity of being a homeowner impossible for some non-Native teachers (Norris-Tull, 1997).

Socio-Cultural Factors

While teachers in bush Alaska and in the Lower 48 often experience difficulty finding, buying, and selling property, both groups experience the *fish bowl* effect. They are scrutinized by community members and have a very high profile within the school and community. Very high expectations exist for teacher involvement within community activities, and there is a great emphasis placed on informal and personal communications. While all rural teachers experience the above conditions to a certain extent, some researchers (Miller, 1988; Sher, 1995) feel Alaska's extreme socio-cultural factors are what truly account for the extremely high teacher turnover rates in these remote Native villages (Darnell, 1994).

Although some bush school districts in Alaska provide subsidized housing for teachers, many times these housing conditions are "far from adequate as compared to typical Lower 48 housing situations" (Anttonen, 1998). And with this subsidized housing comes school district chosen room mates. In an interview with John Anttonen, former Director of the Rural Educator Preparation Partnership Program at the University of Alaska Fairbanks and longtime bush school administrator (1998), he contends that in order for an Outsider to truly be accepted by the community, he/she "must live among the people". Anttonen goes on to explain that when a teacher lives in housing provided by the school district, a superficial barrier is created between the teacher and the local villagers.

Due to lack of roads and other recreational facilities, the school is usually the hub of the community in these remote villages. It is usually an expectation for school personnel to supervise these facilities during their after school hours. "More time at school means less quality time for the teacher to spend with his/her own family" (Anttonen, personal communication, 1998).

The physical, geographic, and climatic conditions of remote Alaska villages are also factors which teachers must learn to overcome. Darnell (1992) writes,

The physical environment of the rural schools is composed of an interrelated combination of dramatic extremes. Great distances separate small, isolated communities. Climatic and physical characteristics of the land are often harsh and unforgiving. There are great geographic, economic, historical, and cultural differences

among these rural areas and many individuals share a strong sense of independence and contrariness. (p. 6)

Bush areas of Alaska experience extreme geographic conditions such as long, dark, harsh winters, inaccessibility to goods and services (e.g., medical services, shopping, etc.), and extreme distances from extended family and friends. These are all part of the "total isolation from one's own culture," which Dr. Peter Nakamura, Director of Public Health Services for the State of Alaska (1998), contends is the single most common reason why teachers leave bush Alaska (P. Nakamura, personal communication, June 26, 1998). Miller (1988) agrees with Nakamura (1998). Miller writes,

When attention is shifted to the rural community as a social and cultural context of the school, these rural-urban differences become even more complex, reflecting differences in shared values and beliefs. It is the cultural context of working in a rural setting that poses the greatest obstacle for preparing teachers to work in isolated communities and this may well be the major cause for teacher turnover. (p. 24)

Gjelton (1978), an author on rural issues, comments,

It is important to see this whole scene, because the most characteristic feature of the rural experience is the interconnectedness throughout it. To be a successful teacher in a rural community requires integration of personal, cultural, professional, and social dimensions. (p. 6)

This integration that Gjelton (1978) refers to is critical for the retention of bush teachers (Fisherman, 1984). As cited in Lipka (1994), Fisherman (1984) describes the volatility of teaching in such an area. He states,

The school serving minority-group children is in reality a two-edged sword, even when it is minority-community controlled. It leads away, out of and, in a sense, partially undermines the very

community that it ostensibly serves. This is all the more so when the minority community really does not control the school, its staff, its curriculum or its more subtle messages. The minority group-school is, therefore, an ambiguous factor. Its real thrust, at any time, depends on the contextual circumstances surrounding it and controlling it. (p. 55)

Existing Programs Dealing with Alaska Bush Teacher Turnover

Programs have been developed through the University of Alaska that help train prospective Alaska bush teachers. Most of these programs operate under the philosophy that "change must come from within the ranks of the people" (Barnhardt, 1999). A discussion of several such programs follows:

- One program makes it possible for local residents, those closest to the situations, to take coursework while continuing to live in their home villages. This coursework is presented via audio conference, site visits by field-based faculty, and attendance at regional and statewide student meetings. Although these programs have helped somewhat to increase the number of Native teachers in bush Alaska, the X-CED (Cross-Cultural Education) Program has been perceived by some teachers, administrators, and campus-based faculty as inferior to campus-based education. This perception is one of several difficulties Native graduates have had in gaining employment as teachers after graduation (Lipka, 1994). In fact, to Native teachers, the most insulting part of the hiring pattern facing them is that some districts are willing to hire the certified Native teachers, but only as aides to work with the many Outside teachers (non-Native teachers from the Lower 48 who exhibit no Alaska experience) being hired as regular teachers. Typically, Outside teachers stay up to four years before returning *home*, therefore, contributing to the district's high teacher turnover rate. (Lipka, 1994)
- The University of Alaska is expanding its special education department in order to serve students in rural sites who wish to pursue a Masters program in Special Education. The limitations of this program are twofold: (a) the teacher needs to have access to the internet, and (b) the teacher must be in a situation in the village

where a host teacher with special education credentials will act as a mentor. (LaBarge, 1999)

- Some school districts are actively involved in promoting local students who wish to pursue teaching degrees. Several rural districts offer programs that encourage and promote Alaska Local or Native teacher hires through scholarship programs. For example, Lower Kuskokwim School District placed six such students (12% of their total hires) and Southwest School District placed four students (13% of their total hires) directly into classrooms in 1998 (LaBarge, 1999). According to the Alaska Teacher Placement Department, such programs greatly enhance the state's need to fulfill demands for teacher diversity (LaBarge, 1999).

While the above programs provide some relief to the teacher turnover issue, the graduates of these programs are not able to fulfill Alaska's total demand for bush teachers. Current data indicates that 85% of all new Alaska hires come from outside the state, predominantly from the Lower 48 (LaBarge, 1998). Although most of these hires from the Lower 48 are well-intended (Barnhardt, 1998), Kleinfeld (1988), longtime professor and researcher of Alaska rural issues, states,

It is important for administrators, counselors, and teachers recognize that some otherwise excellent teachers may not be personally adapted to a cross-cultural teaching situation, and that there is no need to view this as evidence of personal failure. (p. 84)

However, Barnhardt (1997) offers hope and encouragement to non-Native teachers by saying,

Succeeding as a teacher in an Alaska bush village and school is difficult, yet not impossible for a non-Native teacher. . . It is not necessary (nor it is possible) for an Outsider to fully comprehend the subtleties and inner workings of another cultural system (even if it is still fully functional) to be able to perform a useful role in that cultural community. (p. 3)

Miller also points out,

We must not suggest that working and living in a rural community is, or cannot be, a positive experience. However, a match must be made between the teacher and the employment setting in order to best benefit the learning environment for the students. If teachers are not adequately prepared to deal with those factors that are unique to rural teaching in Alaska, they may never come to realize the many positive aspects of small, rural schools and communities. (p. 87)

Despite the varied programs to increase local candidates as prospective teachers, and Barnhardt's notion that an Outsider is able to serve a useful role in bush Alaska, successful teacher recruitment and retention is vital (Matthes & Carlson, 1987). In the next section, information is presented regarding effective teacher recruitment and retention.

Teacher Recruitment and Retention Within Alaska Bush Schools

According to Matthes and Carlson (1988), little is known about those factors that attract an individual to a particular school district. Furthermore, even less is known about the factors that might cause an individual to consider a position in another school district. It is implied that *the conditions for practice* (Sykes, 1983; Chapman & Hutcheson, 1982; McLaughlin, Pfeifer, Swanson-Owens, & Yee, 1986) are directly related to the recruitment and retention of qualified teachers.

Although there are numerous recommendations for successful recruitment and retention of teacher in the literature (Miller, 1982; Seifert & Kurtz, 1983; Swift, 1984), Matthes & Carlson (1985) contend that for many rural school

districts, retention is much harder than recruitment. They go on to state, "Encouraging the best available teachers to come to a school in sparsely populated areas and then making it attractive for them to remain there long enough to make a lasting, positive contribution is a long-standing problem."

Some recruitment suggestions for school districts, which may help to increase teacher retention, include (Matthes & Carlson, 1985; Barnhardt, 1999):

- Pay expenses of candidates to visit the school district before signing a contract (local community patrons and civic groups can help in the recruitment and screening of applicants);
- Emphasize the inherent advantages of small, rural schools while being honest about the limitations of bush living;
- Pre-service and ongoing orientation programs;
- Immediate community involvement in welcoming and including the new teacher in a variety of community programs;
- Pairing new teacher with a master teacher;
- Pairing new teacher with a community elder;
- Regular classroom and school-wide visits by district and building administrators;
- Professional days to participate in workshops and conferences;
- Reimbursement of tuition for one graduate course per academic year;
- Release time for working on curricula/instructional units, or for visiting classrooms in other school districts;
- Inservice workshops designed and arranged by classroom teachers with administrative support and involvement;
- Effective negotiations with area universities to offer, within the district, graduate-level courses tied in with local curricular and instructional projects;

- Paying stipends to teachers to attend summer institutes and to work on curriculum development projects;
- Conferences on outcome-based learning, sponsored by administrators and school board members; and
- Career ladders and staff development plans.

Barnhardt (1999) believes the responsibility for addressing the issue of Alaska teacher recruitment and retention also lies with a variety of agencies outside the school district. These agencies may include:

- Department of Education (DOE) through licensing regulations and teacher education standards;
- The universities through appropriate teacher preparation programs such as Cross-Cultural Education (X-CED)/Rural Education Preparation Partnership (REPP); and
- Rural communities through their commitment to locally controlled education; Barnhardt (1990) adds, "The most critical factor in the success of any educational effort is its initiation from the cultural community being served and the strong, sustained and unequivocal support provided by the representatives of that community. Without such commitment and persistence, the initiative softens and falls by the wayside in a few years, victims of the frequent turnover in school personnel and the inevitable redirection and reconstruction of programs that accompany such turnover." (p. 46)
- A program of study based on the Alaska Standards for Culturally Responsive Schools could be made available to guide teachers in the transition of their new insights into culturally-appropriate curriculum and teaching practices. (p. 46) (Appendix P)

Summary

The research related to teacher attrition was discussed in Chapter 2 along with teacher recruitment and retention in rural areas. Alaska's geographical and

social features were categorized according to Sher's terms: (a) *Conditions*, (b) *Characteristics*, and (c) *Compensation*. Similarities and differences between Alaska's schools and those of the Lower 48 were compared.

In Chapter 3, the researcher will outline the methodology of this study. The study's population description and sampling procedures, data collection instrument, survey design and development, and timeframe for data collection will be outlined.

CHAPTER 3

METHODOLOGY

The purpose of this study was to identify factors inherent in Alaska's bush schools (i.e., professional, personal/family, geographic, and socio-cultural) which are related most highly to teacher turnover, as perceived by Alaska bush administrators. Secondly, the researcher sought to determine whether school district geographic location within Alaska made a significant difference as to which factors identified most highly with teacher turnover. In this chapter, the study's methodology will be outlined. Topics of discussion will include: the study's population description and sampling procedures, data collection instrument, survey design and development, initial data analysis strategy, and the study's timeframe.

Population Description and Sampling Procedures

Of Alaska's 52 school districts, six districts were determined to be urban districts and were, therefore, not included in this study (i.e., Anchorage, Fairbanks, Juneau, Ketchikan, Matanuska-Susitna, and Valdez). The superintendent (or his/her designee) from the remaining 46 school districts served as the population, as well as the sample for this study (Appendix E). Throughout the study, the researcher refers to this group as the *population*. By definition, two of the study's 46 school districts consisted of both urban and bush

schools (i.e., Kenai Peninsula Borough Schools and Kodiak Island Borough School District). Respondents from these two school districts were reminded to complete the questionnaire based upon his/her "entire experiences as an Alaska bush educator" and not the experiences associated with the urban schools within these two districts.

Based upon its geographic location, each school district was assigned to one of five regions within Alaska. They were as follows (Figure 2):

Figure 2. Alaska's Five Regions

Alaska's Five Regions	
Region 1	Northwest Region
Region 2	Interior Region
Region 3	Southwest Region
Region 4	Southcentral Region
Region 5	Southeast Region
(See Appendices A and C for more information)	

Division of the regions was adopted from the Alaska Teacher Placement Department, University of Alaska Fairbanks (LaBarge, 1998). Each region exhibited distinct characteristics, as noted by expert, Laura Walters, Research and Data Analyst, State of Alaska (Appendices Q, R, S, T, and U) (L. Walters, personal communication, February 10, 1999).

Data Collection Instrument

Data for this study were collected through the use of a 32-item questionnaire (Appendix V). The written directions at the top of the first page

informed participants regarding the importance of the study and provided them with reassurance of confidentiality that all results would be presented in aggregate form, with no school district being identified with their individual responses.

The questionnaire consisted of four parts, as follows:

1. Questions #1 - #23: Each participant was asked to circle a number on a Likert type scale from 1 - 10 which indicated to what degree the item listed led to Alaska bush teachers leaving their current positions. Number 1 on the scale meant the factor *did not* contribute to teachers leaving. Number 10 meant the factor *strongly* contributed to teachers leaving. Although the questions, hereafter referred to as items, were categorized according to their respective sub-factor during the data analysis process, the items were listed in random order on the questionnaire (Appendix W). Following is an abbreviated listing:
 - Professional Sub-factor – lesson planning and teaching; peer relations; student discipline; professional growth;
 - Personal/family Sub-factor – contentment of spouse; safe, enriching environment for own children; quantity and quality of time with own family; hobbies and recreation;
 - Geographical Sub-factor – isolation from one's own culture; availability of goods and services; climate; housing;
 - Socio-cultural Sub-factor – cultural sensitivity through participation in school/community activities; able to effectively survive in community's political infrastructure; social issues;
2. Question #24: Each participant was asked an open-ended question in which he/she was encouraged to write any comments concerning the instrument's format or content, identify any additional factors which the participant believed related to teacher turnover, to provide clarification regarding a given answer, or to list other issues of interest related to teacher turnover.
3. Questions #25 - #30: Through the use of multiple-choice responses, each participant was asked demographic questions which provided

additional information concerning the participant's gender, age, experience in Alaska, and position within current school district.

Since one of the research questions of this study was to analyze the responses according to geographic region within Alaska, the respondent was asked to denote which region (i.e., Northwest, Interior, Southwest, Southcentral, or Southeast) was most representative of his/her responses, based upon his/her past experience.

4. Questions #31 - #32 (optional): The respondent was asked to respond to these questions only if he/she desired a summary of the study's findings upon their completion. These questions requested the respondent's name and address.

Survey Design and Development

The questionnaire (Appendix V) was developed by the researcher, based upon review of related literature and discussions with 37 Alaska bush teachers (past and present), authors, professors, community agency personnel, and researchers in the field of Alaska bush schools and communities. A three-phase process established construct and content validity of this instrument. Each step of the process is described below.

Validity and Reliability

Validity is "the degree to which a test measures what it is supposed to measure and, consequently, permits appropriate interpretation of scores" (Gay, 1996, p. 138). *Construct validity* is "the degree to which a test measures an intended hypothetical construct or an intended content area" (Gay, 1996, p. 140). According to Gay (1996) *content validity* is "the degree to which a test measures an intended content area" (p.139). The establishment of validity was

accomplished through expert judgment throughout the three phases of questionnaire construction.

Reliability is "the degree to which a test consistently measures whatever it measures" (Gay, 1996, p. 145). Reliability was established as part of the data analysis. However, in the three-phase questionnaire development process, experts facilitated the establishment of the questionnaire's reliability by examining it for possible problems associated with clarity of instructions, wording, and format.

The three-phase questionnaire development used to establish validity and reliability of the instrument was as follows:

1. Phase #1: Before the development of the instrument's first draft, the researcher completed a comprehensive review of literature and informally interviewed eight Alaska Bush teachers and four experts in the field of bush education. During these interviews, the researcher was referred to other professionals working in the field of Alaska bush education. The researcher informally interviewed three current Alaska bush teachers with a combined bush experience of 33 years spanning all five Alaska regions; one principal/teacher with eight years bush experience; one principal with six years bush experience; one special education director with eight years bush experience; one assistant superintendent of instructional services with 11 years bush experience; and one itinerant nurse who has served Alaska bush schools for the past six years. The questionnaire construction was initiated, based upon data collected from the informal, data-gathering interviews. The researcher determined that the main factors most highly related to teacher attrition in Alaska bush schools could be categorized into four sub-factors: professional, personal/family, geographic, and socio-cultural.
2. Phase #2: Upon completion of the draft questionnaire, the researcher solicited feedback from a multi-disciplinary group of experts and Alaska bush teaching professionals. These people were asked to comment on the questionnaire regarding the following issues that could

negatively impact the validity and reliability of the questionnaire (Greenland, 1985):

- Unclear directions
- Reading vocabulary and sentence structure difficulty
- Inappropriate level of difficulty of questionnaire
- Poorly constructed questions
- Ambiguity
- Survey items inappropriate for the outcomes being measured
- Survey item length
- Improper arrangement of items
- Identifiable patterns of answers

The draft questionnaire was distributed to experts and Alaska bush professionals for review. This process was completed via e-mail and through personal delivery.

Feedback was provided to the researcher by one nurse (six years bush experience), four teachers (combined 33 years bush experience spanning all five Alaska regions), one principal/ teacher (two years bush experience in Region 3), two school district consultants (29 years bush experience throughout all five Alaska regions), five principals (36 years bush experience spanning all five Alaska regions), two districtwide administrators (19 years experience including combined 47 years Alaska bush experience in all five Alaska regions), and two experts. The researcher via e-mail, telephone conversations, and fax messages received this feedback.

Based upon input from the reviewers listed above, the researcher revised the questionnaire to reflect identified problem questions.

3. Phase #3: Upon revision of the questionnaire, the researcher distributed the instrument via e-mail to another group of individuals for their review.

Feedback was obtained from three teachers (23 years combined experience, representing Regions 1, 2, and 3); one principal (11 years experience, primarily in Region 5); two university professors; and the Commissioner of Education for the State of Alaska.

These reviewers suggested only minor changes. The questionnaire was revised to reflect those suggestions and was then ready for distribution to participants of the study.

Data Collection and Return Rate

The researcher spoke with the school district superintendent in each of the 46 Alaska bush school districts that served identified as this study's population. In the telephone conversation, the researcher introduced herself and explained that she was also an Alaskan administrator, explained the purpose of the study, and requested school district participation.

Dillman, author of the book, Mail and Telephone Surveys: The Total Design Method (1978), stresses the importance of personal appeal which helps "respondents feel that they have [through the completion and return of the instrument] done something important to help solve a problem faced by them, their friends, or members of a group" (p. 163). The researcher's current position as a school administrator in an Alaska bush school district helped to create a collegial feeling of working together to solve the issue of high teacher turnover rates.

Receiving an affirmative response from each of the 46 superintendents, the researcher asked each superintendent how many years he/she had been an educator in the State of Alaska. Based upon his/her answer, the researcher asked if the superintendent felt comfortable completing the questionnaire, or if the Superintendent felt the task should be delegated to another administrator within the district. In all cases, the superintendent and the researcher felt the superintendent was qualified to complete the questionnaire.

The questionnaire was faxed to each superintendent immediately following the telephone conversation. Each faxed questionnaire contained a short, hand-written message thanking the respondent, in advance, for his/her participation in the study. Each participant was instructed to return the completed questionnaire via fax or mail. After ten days, the researcher called each superintendent who had not returned the questionnaire. Telephone follow-ups were continued until there was a 100% questionnaire return.

Initial Data Analysis Strategy

Data Analysis

Initial data analysis included calculating the mean scores and standard deviations for each of the 23 survey items. Next, the survey items were categorized into four groups called sub-factors (i.e., professional, personal/family, geographic, and socio-cultural). The mean response of each of the four sub-factors was calculated for each region and total.

A one-way analysis of variance was conducted to determine if a statistically significant relationship exists between the regions and perceptions of superintendents, concerning factors related to teacher turnover. Also, a total mean score denoting all five regions (i.e., a statewide mean score) was calculated. By determining the means of each sub-factor, the researcher was able to compare relative importance of the sub-factors across the regions to explain teacher turnover.

Through this analysis, the researcher was able to answer the research questions posed in Chapter 1: (a) What are the main factors inherent in Alaska bush schools that are most highly related to teacher attrition? and (b) Is there a significant relationship between the factors identified in question one and the geographic location of the school district within Alaska?

Timeframe for Data Collection

The review of related literature was completed and the development of the study's instrument began. Upon culmination of feedback and revisions concerning the survey, the questionnaire was distributed to the 46 Alaska bush school district superintendents. Data analysis followed the collection process. The researcher's timeframe is presented in Figure 3.

Figure 3. Timeframe for Data Collection

June – July 10, 1998	Phase #1: Development of initial questionnaire after literature search and interviews with experts and Alaska bush professionals.
July 24, 1998	Committee Meeting and Defense of Study's proposal
July 24 - October 30, 1998	Phase #2: Feedback from experts and Alaska bush school professionals regarding draft questionnaire. Revision of questionnaire by researcher.
November 1 – 30, 1998	Phase #3: Additional feedback from experts and professionals regarding questionnaire. Revision of questionnaire by researcher.
December 1, 1998 - January 4, 1999	Final critique of instrument by experts and professionals. Final version of questionnaire completed by researcher.
January 5 - February 26, 1999	Phone contact made with study's participants; Questionnaires faxed to participants; Return of completed questionnaires to researcher; Follow-up telephone calls completed by researcher, as needed.

Summary

In this chapter the study's methodology was outlined. Topics of discussion included: population description and sampling procedures, data collection instrument, survey design and development, initial data analysis strategy, and the study's timeframe. In the next chapter, a further discussion will take place regarding the data collection procedure, data analyses, as well as the study's summary of findings and interpretation.

CHAPTER 4

FINDINGS AND INTERPRETATION

Introduction

The purpose of this study was to identify factors inherent in Alaska bush schools that related most highly to teacher turnover. The superintendent, or designee, in each of the Alaska bush school districts completed a questionnaire, indicating on a Likert-type scale their perceptions of each level of relationship to teacher turnover. The items were categorized into four groups, hereafter referred to as sub-factors. They included professional, personal/family, geographic, and socio-cultural factors. The responses that defined the sub-factors were analyzed to determine if any one of the sub-factors, as perceived by the superintendents, was the primary reason for teachers leaving Alaska bush schools. Secondly, these sub-factors were analyzed to determine if the school district's geographic location within Alaska was related to the sub-factors that most highly related to teacher turnover, as perceived by bush school district superintendents.

Data Collection Procedure

Preceding data collection, the researcher telephoned each school district's superintendent, and asked for his/her school district's participation in the study. One hundred percent of the superintendents agreed to participate. Upon agreement to participate, the researcher faxed a questionnaire and a

personalized handwritten cover letter thanking the respondent for his/her participation. Each survey was completed and either faxed back to the researcher or returned via U.S. Postal Service mail. This process began on January 4, 1998, with the first telephone calls to superintendents and ended on January 8, 1999. In all but four instances, the researcher spoke directly with each superintendent. In four cases the superintendent was not available. However, the superintendent's secretary requested the researcher to fax the questionnaire to the school district without prior approval of the superintendent. In each instance, the secretary offered to ask the superintendent for his/her support of participation. The secretary also assured the researcher that she would ask the superintendent to return the call to the researcher if participation was not desired. The researcher received no dissenting replies from superintendents.

Over half of the surveys were returned by January 22, 1999. Follow-up telephone calls were initiated to all participants who had not returned a questionnaire by January 22, 1999.

By February 12, 1999, all but two questionnaires had been returned to the researcher. After several additional reminders to these two respondents, their surveys were returned by February 26, 1999, from their respective school districts. Both respondents indicated they favored their district's participation in the study, but stated that they had just "not gotten to it." Upon the acquisition of these two surveys, the researcher claimed a 100% return rate.

While all 46 of the superintendents had offered support of this survey, four of the superintendents chose to delegate the survey's completion to an experienced subordinate. Several respondents wrote comments on the cover letter, indicating support and need for this study, which, in turn, will benefit Alaska's educational system.

Respondents' Profile

Most of this study's respondents were males (Figure 4) between the ages of 46-55 years (Figure 5). Forty-two superintendents, two personnel directors, one principal, and one director of secondary education served as this study's participants by completing the questionnaire. In most cases, superintendents had experience working in schools that had over 10 teachers (Figure 6). The respondents averaged 14 years as an Alaskan educator and 10 years as an Alaskan administrator.

Each participant was asked to indicate in which *one* region he/she had the most familiarity/experience in Alaska bush education. Therefore, it was possible that an individual's responses were categorized within a different region than the one in which he/she was currently employed (Table 1).

Figure 4.

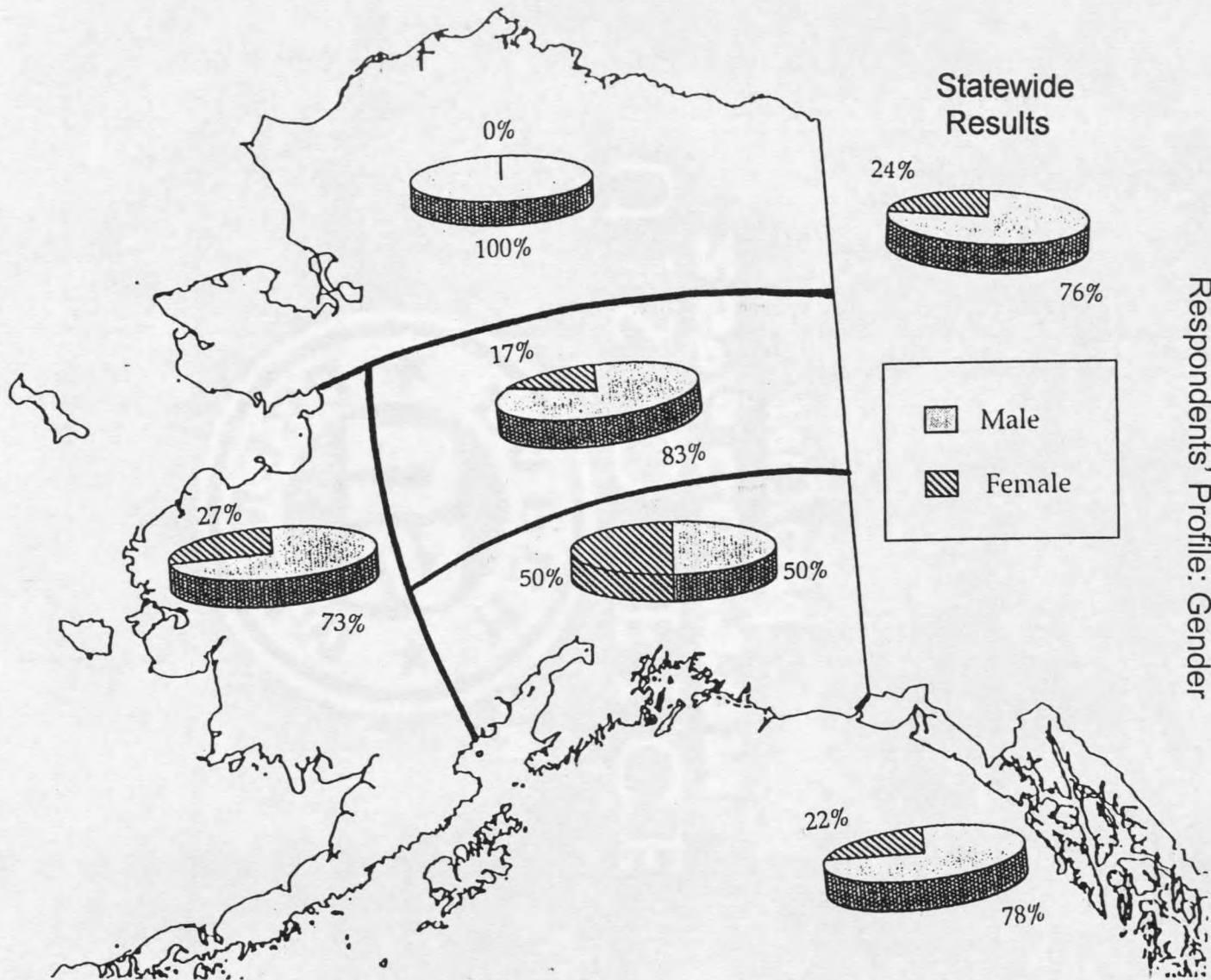


Figure 5.

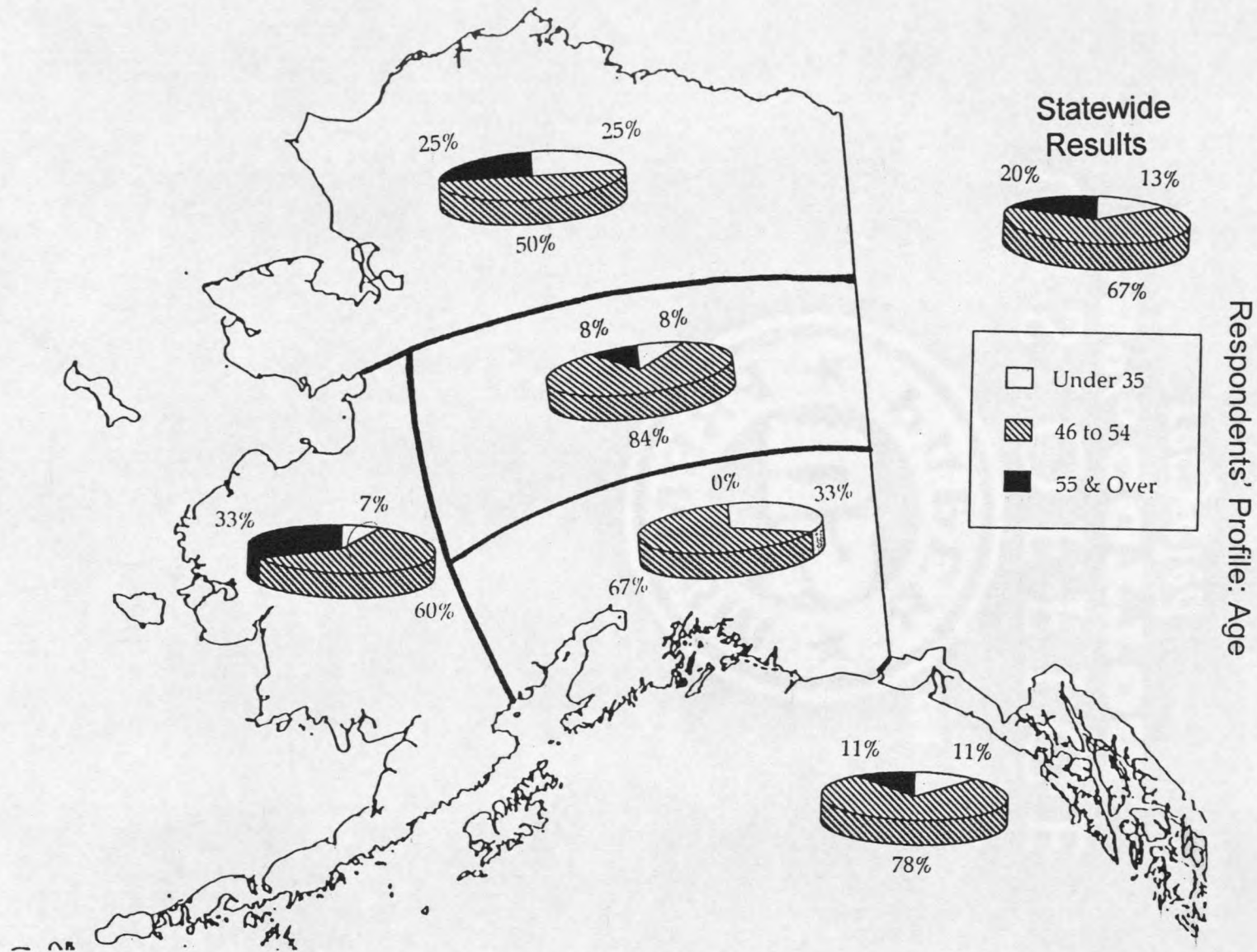


Figure 6.

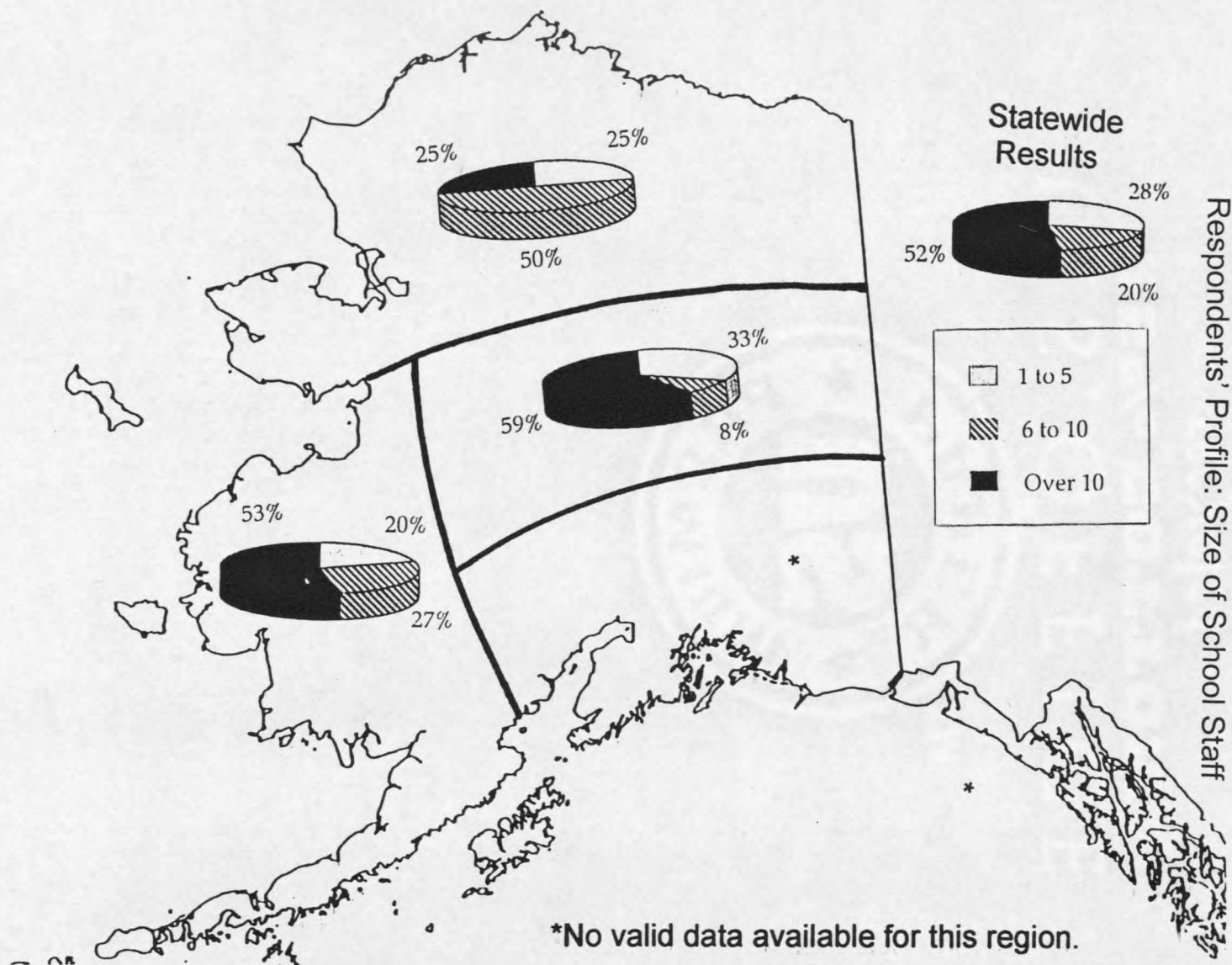


Table 1. Number of Respondents by Region

Region	Number of schools in region (bush)	Number of respondents claiming this region as their most familiar region
Region 1: Northwest Region	4	4
Region 2: Interior Region	10	12
Region 3: Southwest Region	14	15
Region 4: Southcentral Region	3	6
Region 5: Southeast Region	15	9

Data Analyses

Instrument Validity and Reliability

In the process of developing the 23-item survey that was sent to the superintendents of Alaska's 46 bush school districts, content and construct validity were established through expert opinion (see Chapter 3). In this process, the instrument was pre-tested on a small group of individuals who were representative of the group that was to be surveyed. This exercise resulted in critical feedback regarding the instrument's format and clarity of instructions that could have introduced unintentional error by the respondents completing the survey.

Initial analysis of the 23-item survey addressed the issues of validity and reliability. Reliability, or internal consistency, was calculated using the Reliability Procedure in SPSS 9.0 (George & Mallery, 1999). Specifically, Chronbach's alpha was calculated using the following formula:

$$\alpha = \frac{Kr}{1+(K-1)r} = \frac{23 (.3577)}{1+(23-1)(.3577)} = \frac{8.2271}{8.8694} = .93$$

K = # of items

r = mean inter-item correlation

This calculation resulted in an alpha score of .93, indicating a very high level of internal consistency between the 23 survey items. Conceptually, this reliability coefficient reflects the correlation of the survey items to all other items in the domain of items that measured what this survey measured (refer to Chapter 3, Construct and Content Validity) (Gall, Gall, & Borg, 1999). The Chronbach's alpha of .93 indicates that the survey consistently measured one or more constructs related to teacher attrition in Alaska (Appendix X).

Principal Components Analysis

Once it was established that the survey instrument was reliable, a Principal Components Analysis (SPSS) (Gall, Gall, & Borg, 1999) was applied to the responses of the 23 items on the survey. Examination of the unrotated factor structure revealed that a single factor was measured by the survey (Table 2).

As illustrated in this table, all items loaded positively on the first factor with a factor loading above .4, with the exception of Item #8. This factor was developed using a least squares technique, in the same way as in multiple regression without the dependent variable. The fact that all but one item loaded highly on this factor strongly indicates that a single construct was measured by the survey and provides evidence that all items (except Item #8) contribute to face validity (Gay, 1996) of the survey instrument. This evidence of a single construct being measured by the survey is further supported by a strong Chronbach's alpha discussed above (Gorsuch, 1974). Attempts to identify the sub-factors using an oblique rotation technique of the Principal Component Analysis (a promax procedure, SPSS) did not result in the creation of an

interpretable factor structure.

Table 2. Principal Components Analysis

Component Matrix^a

	Component			
	1	2	3	4
#1	.615	.217	.169	5.399E-02
#2	.497	-.340	.582	-8.452E-02
#3	.636	-.394	.240	.179
#4	.455	-.397	.542	-2.278E-03
#5	.666	.120	3.870E-02	-7.318E-02
#6	.603	-2.810E-02	-.196	.205
#7	.564	.463	.436	-.276
#8	.220	.524	-.210	.477
#9	.673	.176	-9.556E-02	.118
#10	.716	9.378E-02	-.427	8.788E-02
#11	.723	2.519E-02	-.377	-.205
#12	.718	-2.523E-03	-.232	-.326
#13	.528	-.145	.168	.633
#14	.556	.304	.316	.366
#15	.666	-.496	-.104	-9.619E-02
#16	.686	-.573	-5.467E-02	-5.417E-02
#17	.793	-9.647E-02	-.229	7.027E-02
#18	.598	-.482	-2.929E-02	.166
#19	.609	.335	-.413	.112
#20	.588	.424	.448	-.296
#21	.667	.476	.429	2.893E-02
#22	.822	-1.463E-02	-.29	-.130
#23	.653	9.644E-02	-.165	-.439
Extraction Method: Principal Components Analysis.				
^a = 4 components extracted.				

The results of these analyses indicate that the instrument used to survey opinions of experienced Alaska public school administrators about why Alaska bush teachers leave their positions consistently measured a single construct that

deals with teacher turnover. This also implies that the sub-factors identified by the experts in the creation of the survey instrument measured the same phenomena and should not be considered as independent factors in discussions regarding teacher turnover.

Analysis of Variance

Based on the above findings, a one-way analysis of variance (ANOVA) was conducted to determine if a relationship existed between the five Alaska regions and the reasons for teacher turnover in Alaska bush schools. Total mean scores on the 23 items for each region were used to test for differences between the five Alaskan regions (i.e., Northwest, Interior, Southwest, Southcentral, and Southeast). This analysis indicated no significant difference between the regions ($\alpha = .05$) (Table 3).

Null Hypothesis

There is no significant difference on the total mean scores between the five Alaska regions ($\alpha = .05$).

Table 3. One Way Analysis of Variance

ANOVA

	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	1.184	4	.296	.113	.977
Within Groups	106.987	41	2.609		
Total	108.172	45			

Indicated in the table above, the significance level between the groups equated to .97. Therefore, this test failed to indicate that the null hypothesis should be rejected. Thus, it was concluded that there is no significant difference between the five Alaska regions ($\alpha = .05$) as related to reasons why Alaska bush teachers leave their current teaching positions.

Ranking of the 23 Items by Region

In order to examine the relative importance of the 23 items across the five regions, the means for each of the 23 survey items were calculated by region (George & Mallery, 1999) (Figures 7-12) (Table 4). Each item's mean score in descending order ranked the 23 items. While each region's list was a unique ranking, the means for the respective sub-factors across the regions were very similar. With so many of the items scoring so close together, these scores did not reflect practical differences.

Although the rankings did not indicate practical differences, it is interesting to note the specific survey items that consistently ranked within most of the regions' *Top 10 List* as being highly related to teacher turnover. The respondents indicated the teacher's family was a major issue as to longevity of a teacher. For example, if a teacher's spouse was either not present or was not content with living in the village, a teacher tended to leave his/her teaching position in the village. Likewise, if a teacher felt his/her own children were not being raised in a safe, healthy, and enriching environment, the teacher was likely to leave the village. Also, the lack of perceived adequate housing facilities, coupled with living in an isolated area away from

his/her own culture, friends, and families, was shown as being highly associated with teacher turnover in Alaska's bush schools.

Analysis of the Sub-Factors

Next, the 23 test items were categorized according to their respective sub-factors (i.e., professional, personal, geographic, and socio-cultural) to identify trends by region and total scores (Appendix X) (Figures 13-23) (Table 5) . As Figures 13-23 indicate, the profile of the average score for each of the sub-factors is virtually constant across the five regions. The Northwest region tended to be slightly higher in the geographical category and slightly lower in the professional category. This indicates that, according to the respondents' perceptions, all of the study's sub-factors are virtually equal in importance regarding teacher turnover in Alaska bush schools.

Responses from Open-ended Question

The instrument included one open-ended question. This question encouraged respondents to write comments concerning Alaska bush teacher turnover. From the responses of this open-ended question, it was concluded that the role of a bush teacher is multi-dimensional. Teachers were expected to deal with the many social issues they encountered. At the same time, they were also expected to provide exciting extra-curricular activities to students. Community standards encouraged them to teach cultural traditions, as well as strive for academic excellence.

Table 4.

**Means and Standard Deviations of the 23 Items
By Region and Total**

REGION		#1	#2	#3	#4	#5	#6
Northwest	Mean	5.75	3.75	3.75	3.75	6.50	4.50
	N	4	4	4	4	4	4
	Std. Deviation	.95	2.98	3.59	3.09	2.64	2.38
Interior	Mean	5.83	6.91	5.75	7.58	6.41	4.83
	N	12	12	12	12	12	12
	Std. Deviation	2.36	2.67	2.89	1.92	2.77	2.94
Southwest	Mean	6.26	4.33	5.46	5.86	5.93	5.33
	N	15	15	15	15	15	15
	Std. Deviation	1.94	2.19	3.09	2.29	2.25	2.63
South-central	Mean	7.00	6.83	5.66	6.66	5.66	5.33
	N	6	6	6	6	6	6
	Std. Deviation	2.60	2.92	2.50	1.63	2.50	2.73
Southeast	Mean	6.77	5.44	3.77	4.88	7.55	3.55
	N	9	9	9	9	9	9
	Std. Deviation	3.23	2.24	2.16	2.31	1.23	1.58
TOTAL	Mean	6.30	5.50	5.08	6.04	6.39	4.78
	N	46	46	46	46	46	46
	Std. Deviation	2.32	2.68	2.85	2.42	2.30	2.52

REGION		#7	#8	#9	#10	#11	#12
Northwest	Mean	5.00	7.50	3.75	6.75	6.25	3.75
	N	4	4	4	4	4	4
	Std. Deviation	3.46	1.91	1.70	3.20	2.21	1.70
Interior	Mean	6.41	5.25	5.16	4.33	4.75	4.91
	N	12	12	12	12	12	12
	Std. Deviation	3.11	2.76	2.97	2.67	2.98	2.87
Southwest	Mean	6.46	6.66	4.60	5.06	5.80	5.93
	N	15	15	15	15	15	15
	Std. Deviation	2.92	2.35	2.26	2.12	2.30	1.98
South-central	Mean	7.00	6.66	5.50	3.83	4.33	6.00
	N	6	6	6	6	6	6
	Std. Deviation	2.75	1.75	1.64	2.31	1.75	1.67
Southeast	Mean	5.88	5.11	5.33	4.77	5.88	6.66
	N	9	9	9	9	9	9
	Std. Deviation	3.37	2.36	3.12	2.10	2.14	2.44
TOTAL	Mean	6.28	6.06	4.93	4.80	5.39	5.63
	N	46	46	46	46	46	46
	Std. Deviation	2.99	2.42	2.49	2.40	2.39	2.35

Means and Standard Deviations of the 23 Items By Region and Total

(Continued)

REGION		#13	#14	#15	#16	#17	#18
Northwest	Mean	6.25	6.75	6.25	6.00	5.25	5.75
	N	4	4	4	4	4	4
	Std. Deviation	2.98	2.63	2.75	2.94	2.87	2.63
Interior	Mean	7.41	7.00	6.41	6.25	5.83	6.16
	N	12	12	12	12	12	12
	Std. Deviation	2.93	2.73	2.90	2.80	3.15	2.94
Southwest	Mean	6.66	7.60	6.86	6.06	5.06	5.33
	N	15	15	15	15	15	15
	Std. Deviation	2.66	2.06	1.35	1.86	2.34	2.12
South-central	Mean	6.00	7.16	6.33	6.83	5.83	5.50
	N	6	6	6	6	6	6
	Std. Deviation	2.60	1.32	2.50	2.40	2.63	2.42
Southeast	Mean	5.88	6.66	6.44	5.88	4.88	5.77
	N	9	9	9	9	9	9
	Std. Deviation	3.21	2.50	2.35	2.47	2.42	2.72
TOTAL	Mean	6.58	7.13	6.54	6.17	5.34	5.69
	N	46	46	46	46	46	46
	Std. Deviation	2.80	2.24	2.20	2.32	2.58	2.46

REGION		#19	#20	#21	#22	#23
Northwest	Mean	6.00	4.25	6.25	4.75	6.00
	N	4	4	4	4	4
	Std. Deviation	2.44	2.63	3.09	1.50	2.94
Interior	Mean	4.66	5.58	6.41	4.75	5.08
	N	12	12	12	12	12
	Std. Deviation	2.49	3.17	2.87	2.89	3.62
Southwest	Mean	6.66	4.66	6.40	5.13	6.80
	N	15	15	15	15	15
	Std. Deviation	1.49	2.79	2.41	2.44	2.17
South-central	Mean	5.50	5.83	6.50	6.00	8.16
	N	6	6	6	6	6
	Std. Deviation	1.37	2.92	2.88	2.52	1.16
Southeast	Mean	5.55	5.77	6.66	5.44	7.77
	N	9	9	9	9	9
	Std. Deviation	1.94	2.63	2.69	2.24	2.68
TOTAL	Mean	5.71	5.23	6.45	5.17	6.65
	N	46	46	46	46	46
	Std. Deviation	2.02	2.80	2.58	2.41	2.82

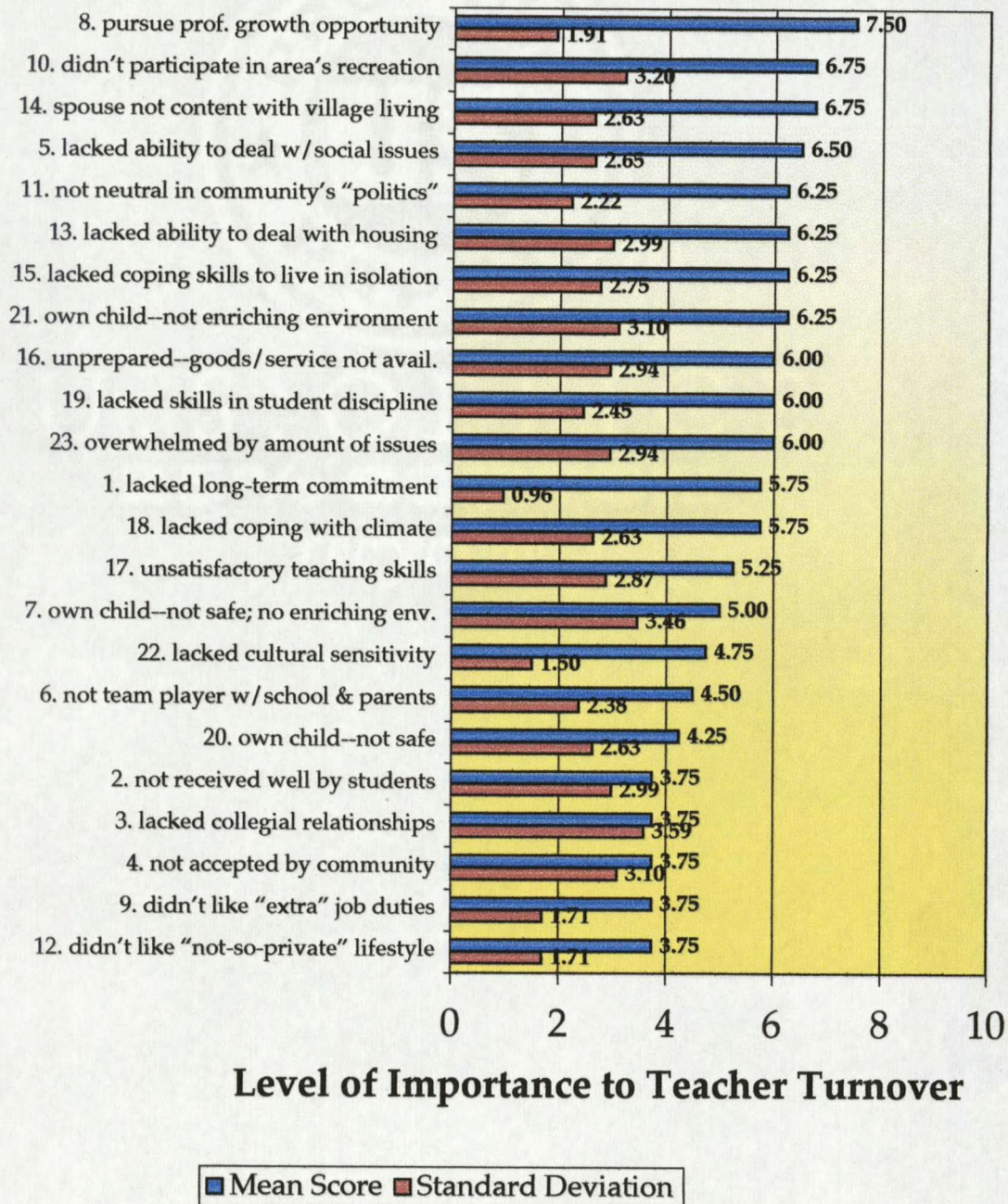
Table 5.

**Means and Standard Deviations of Sub-Factors
By Region and Total**

REGION		Personal	Socio-Cultural	Geographic	Professional	TOTAL
Northwest	Mean	5.38	5.58	5.41	6.50	5.07
	N	4	4	4	4	4
	Std. Deviation	2.49	2.38	2.09	2.01	1.89
Interior	Mean	6.29	5.83	5.81	5.50	5.66
	N	12	12	12	12	12
	Std. Deviation	2.11	2.06	1.80	2.05	1.90
Southwest	Mean	6.28	6.06	5.86	5.78	5.45
	N	15	15	15	15	15
	Std. Deviation	1.83	1.45	1.32	1.13	1.57
South-central	Mean	6.41	6.19	6.09	5.70	5.95
	N	6	6	6	6	6
	Std. Deviation	1.56	1.48	1.24	1.11	1.58
Southeast	Mean	6.25	6.33	5.75	5.38	5.58
	N	9	9	9	9	9
	Std. Deviation	2.21	1.91	1.79	2.01	1.75
TOTAL	Mean	6.22	6.03	5.82	5.68	5.56
	N	46	46	46	46	46
	Std. Deviation	1.94	1.74	1.55	1.62	1.66

Figure 7.

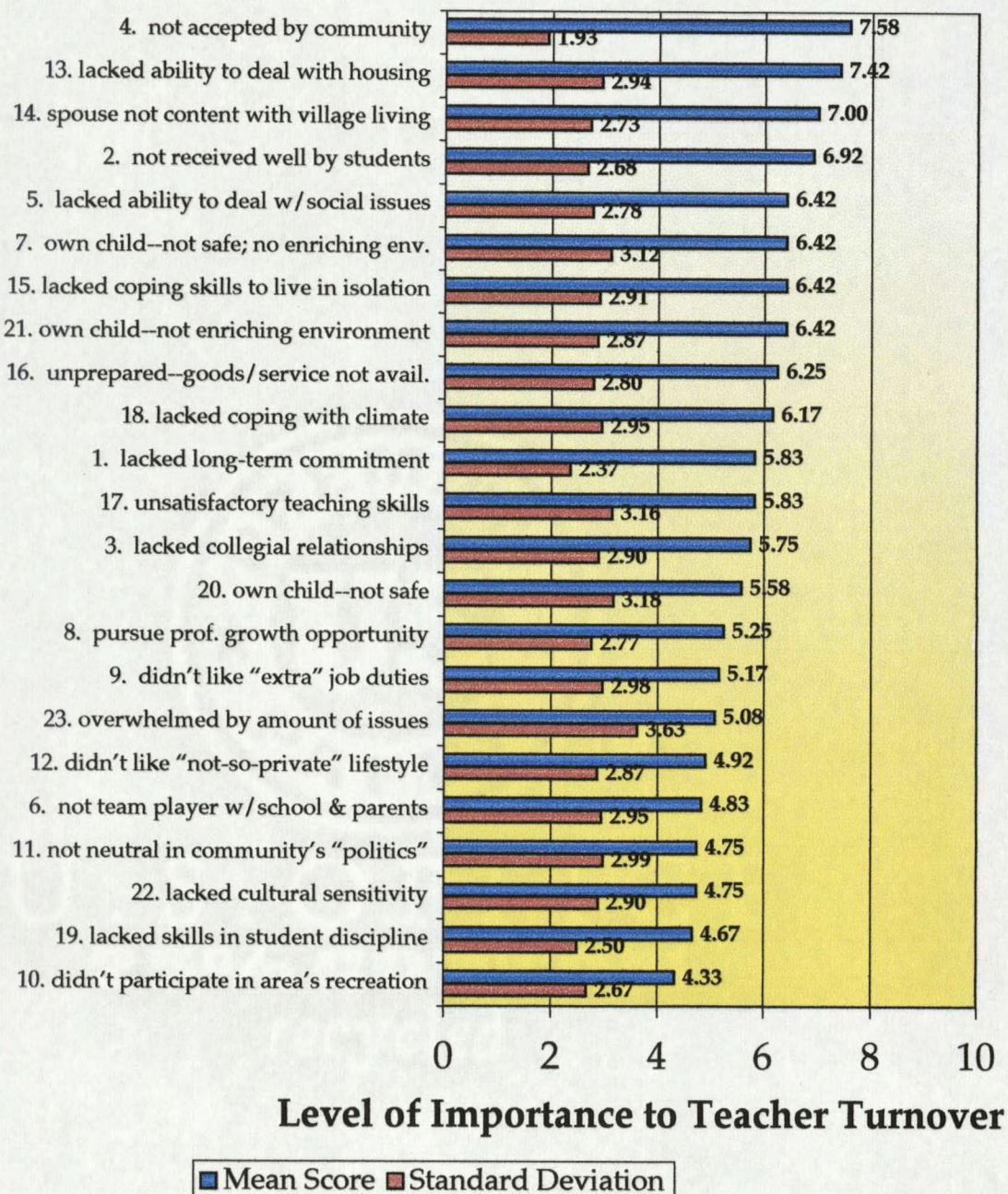
Northwest Region Mean Scores of Items* (N=4)



*Actual scores are rounded to the nearest hundredth.

Figure 8.

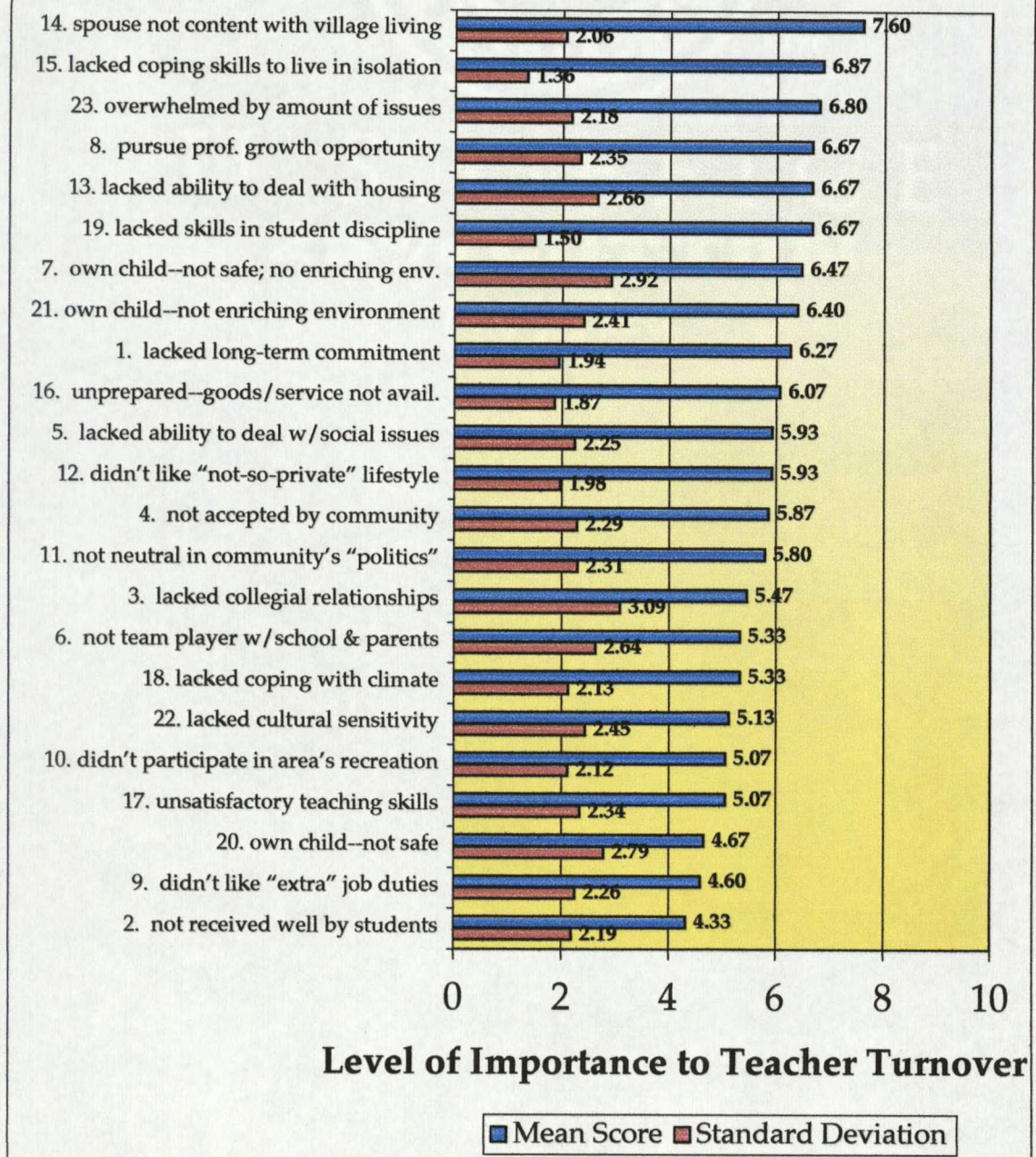
Interior Region Mean Scores of Items* (N=12)



*Actual scores are rounded to the nearest hundredth.

Figure 9.

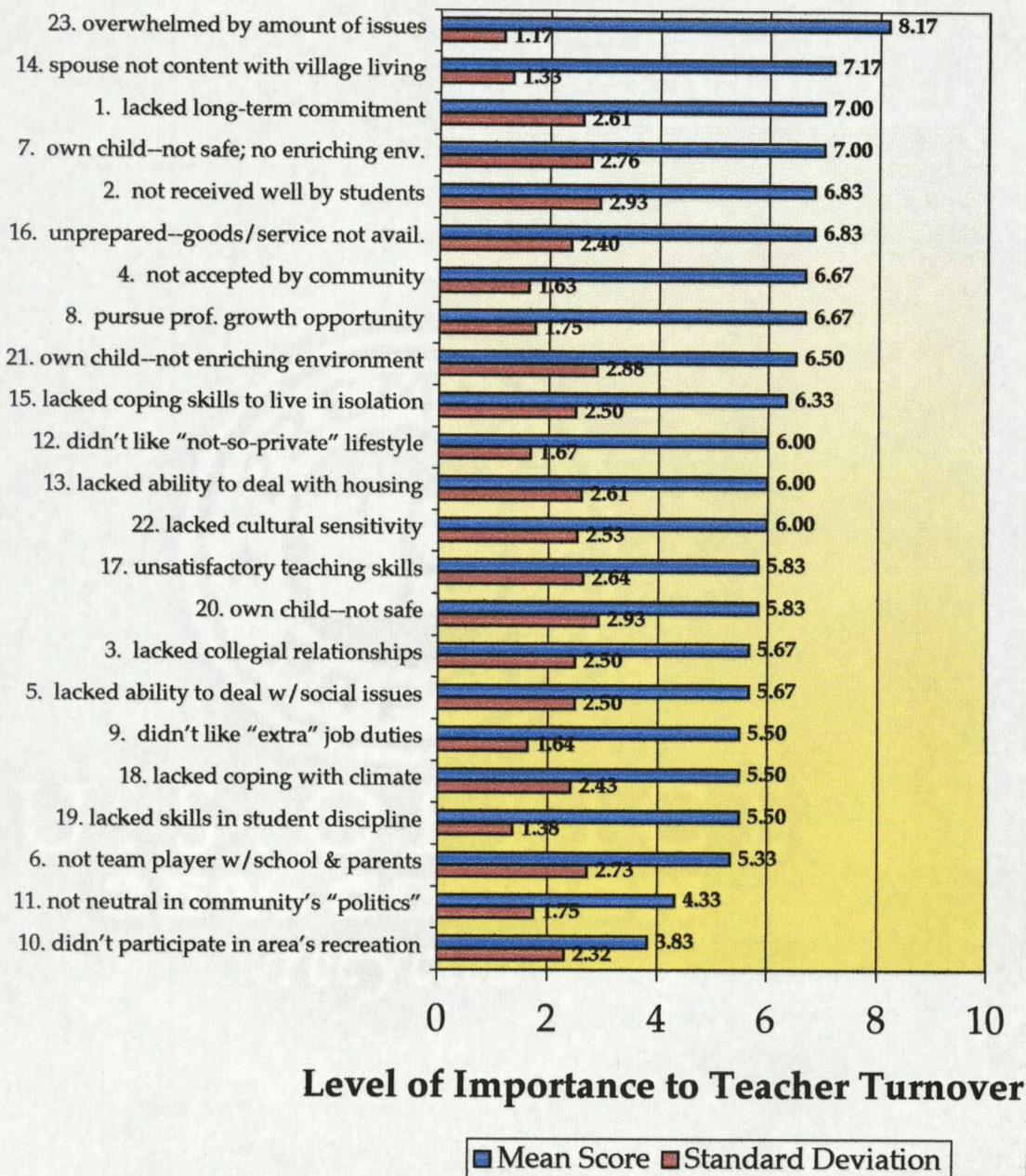
Southwest Region Mean Scores of Items* (N=15)



*Actual scores are rounded to the nearest hundredth.

Figure 10.

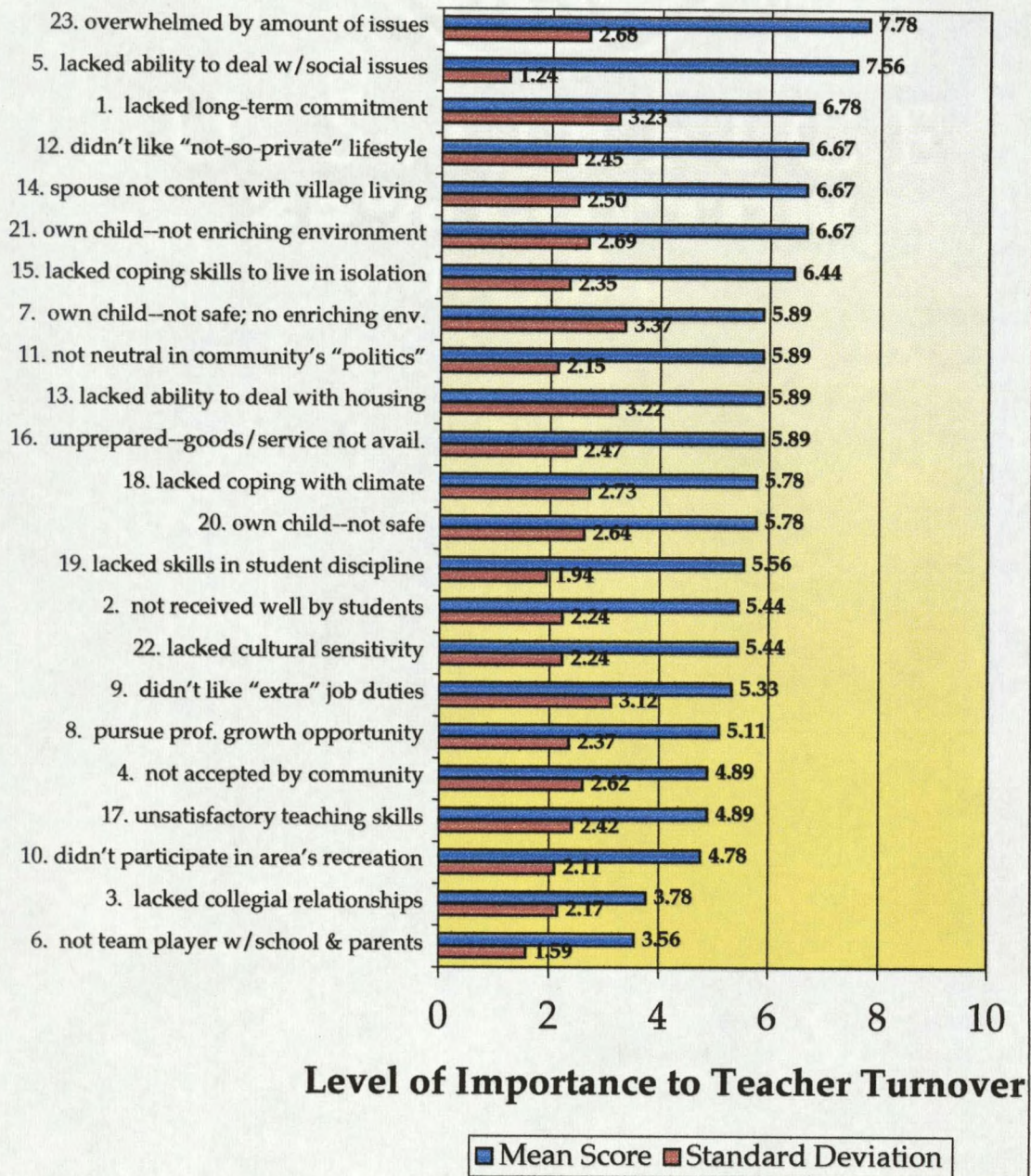
Southcentral Region Mean Scores of Items* (N=6)



*Actual scores are rounded to the nearest hundredth.

Figure 11.

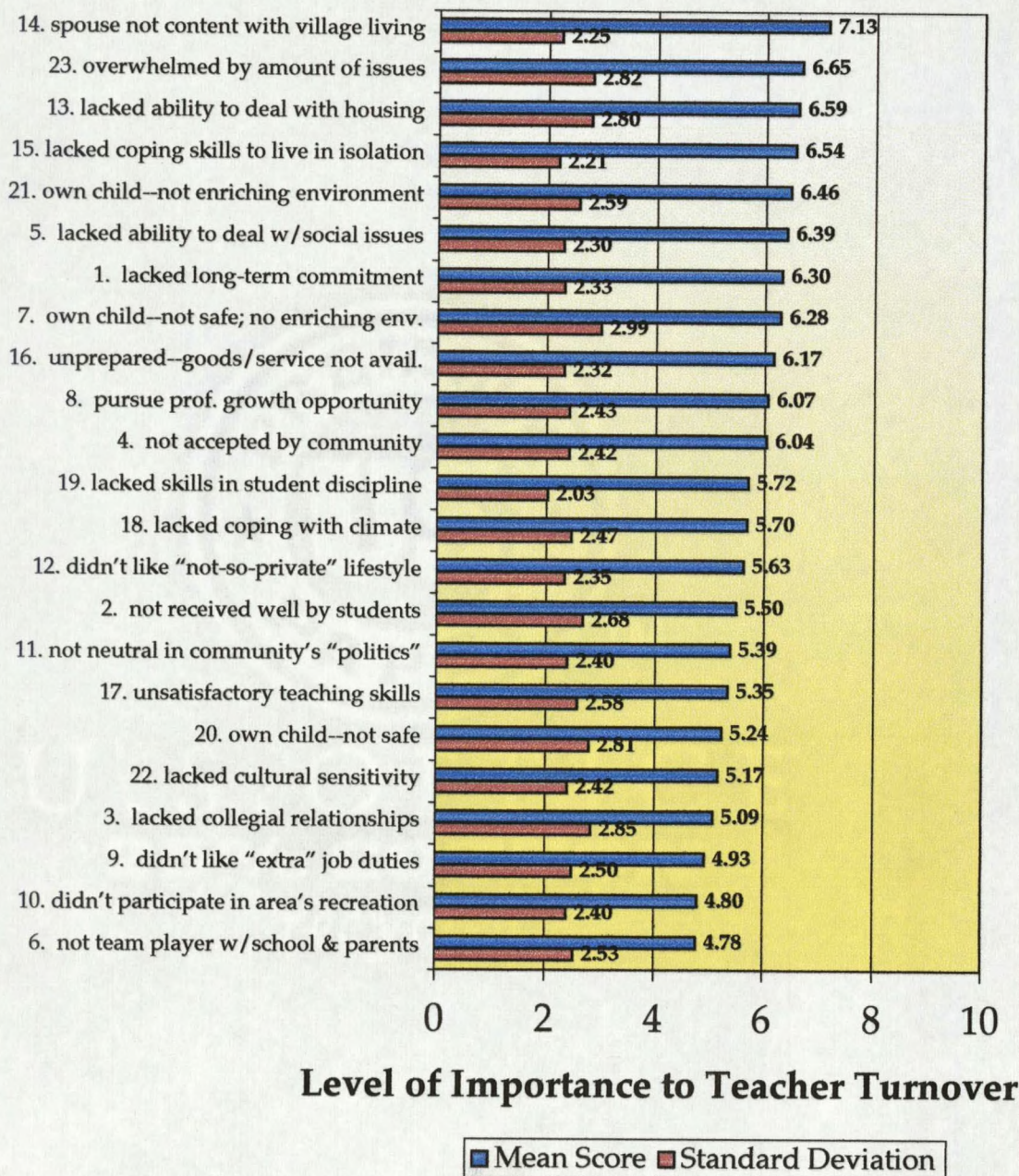
Southeast Region Mean Scores of Items* (N=9)



*Actual scores are rounded to the nearest hundredth.

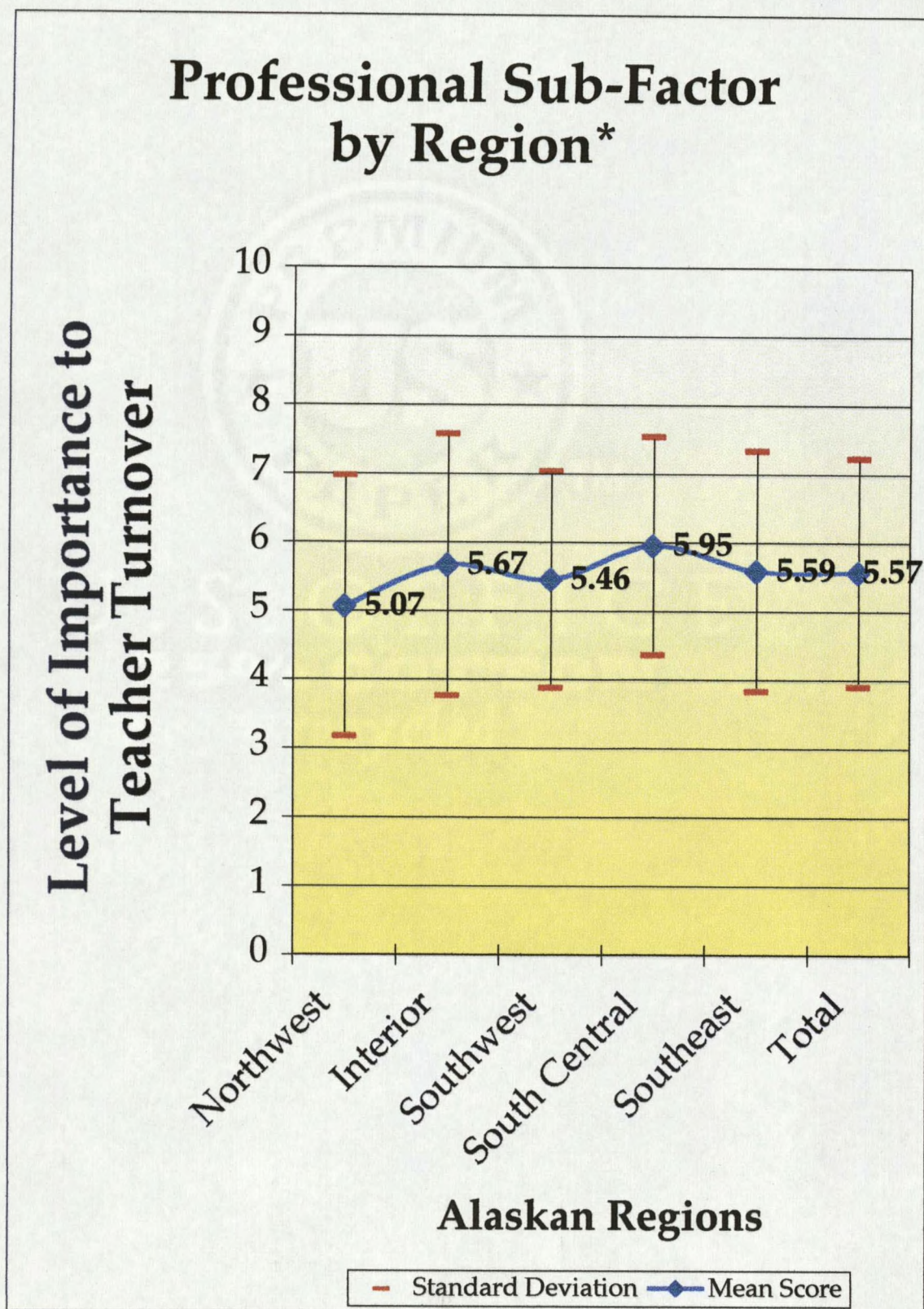
Figure 12.

All Regions Mean Scores of Items* (N=46)



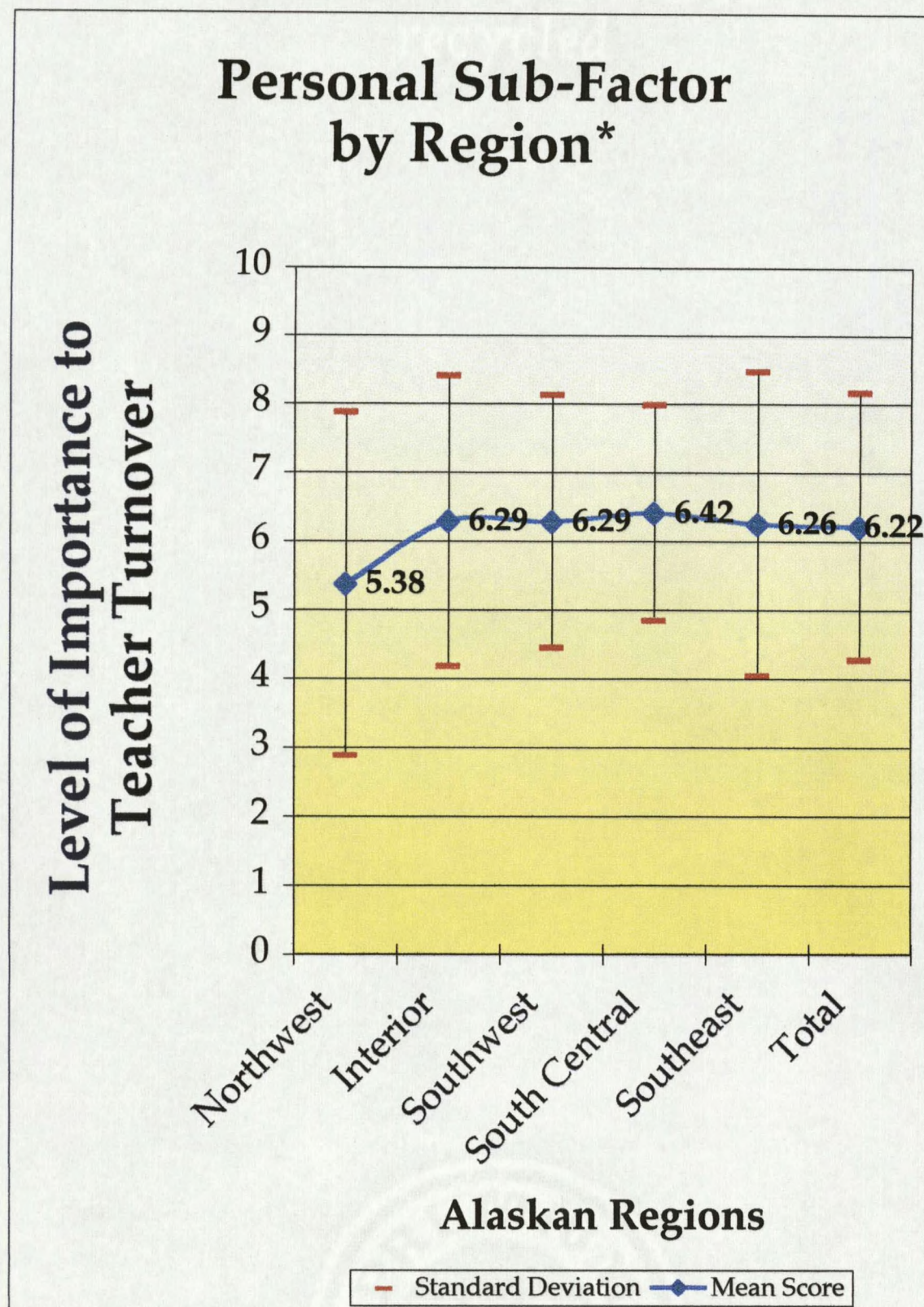
*Actual scores are rounded to the nearest hundredth.

Figure 13.



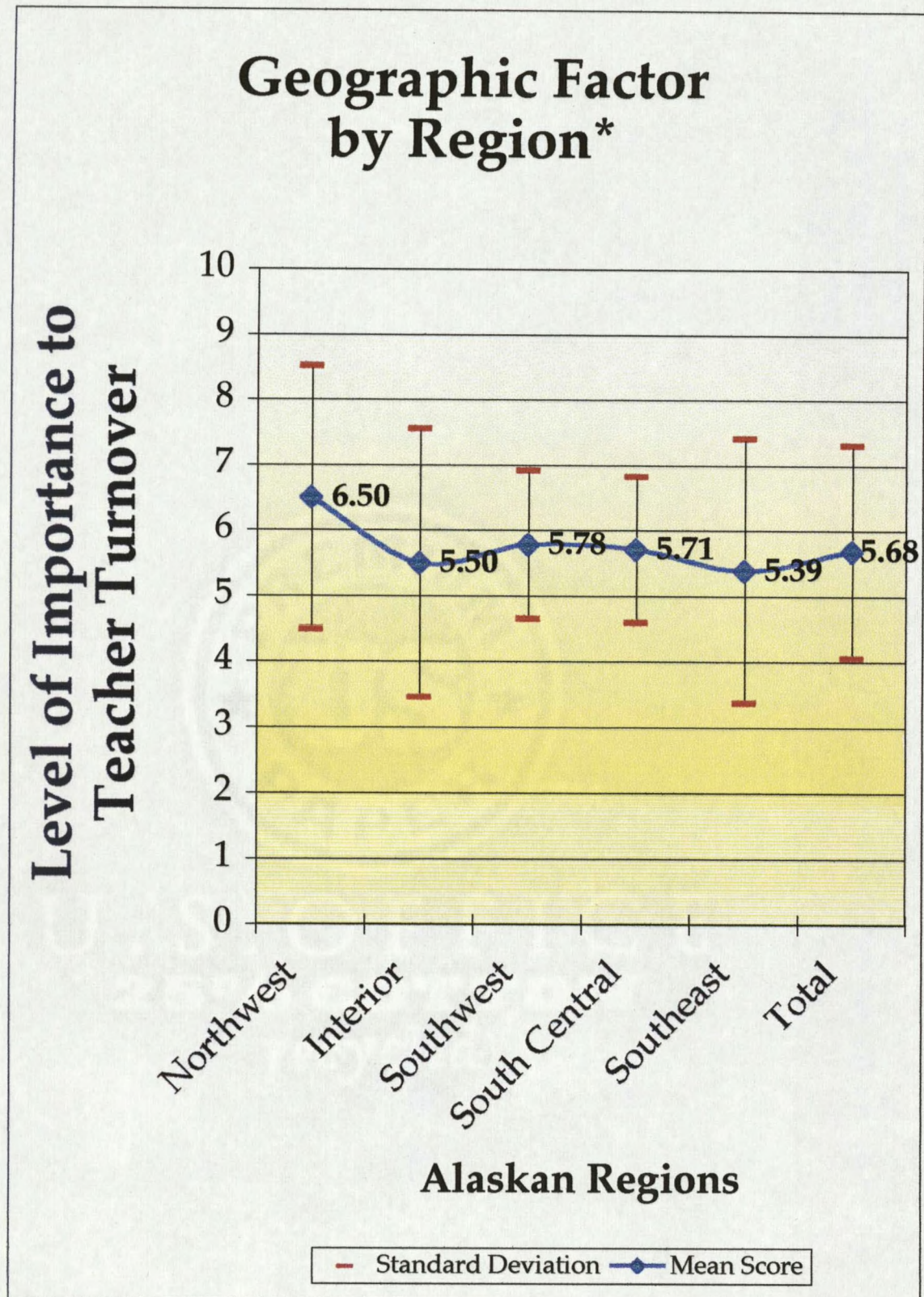
*Actual scores rounded to the nearest hundredth.

Figure 14.



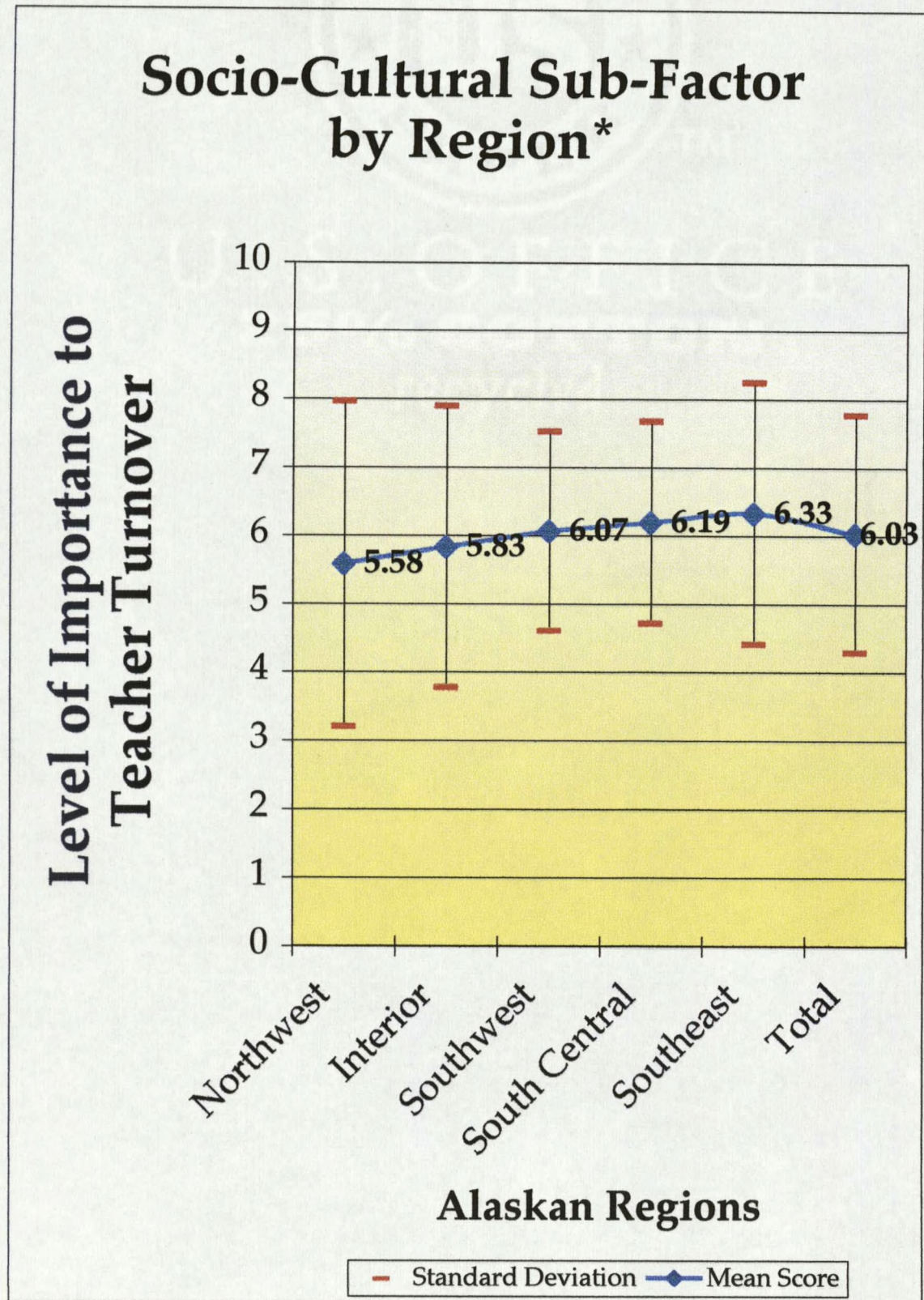
*Actual scores rounded to the nearest hundredth.

Figure 15.



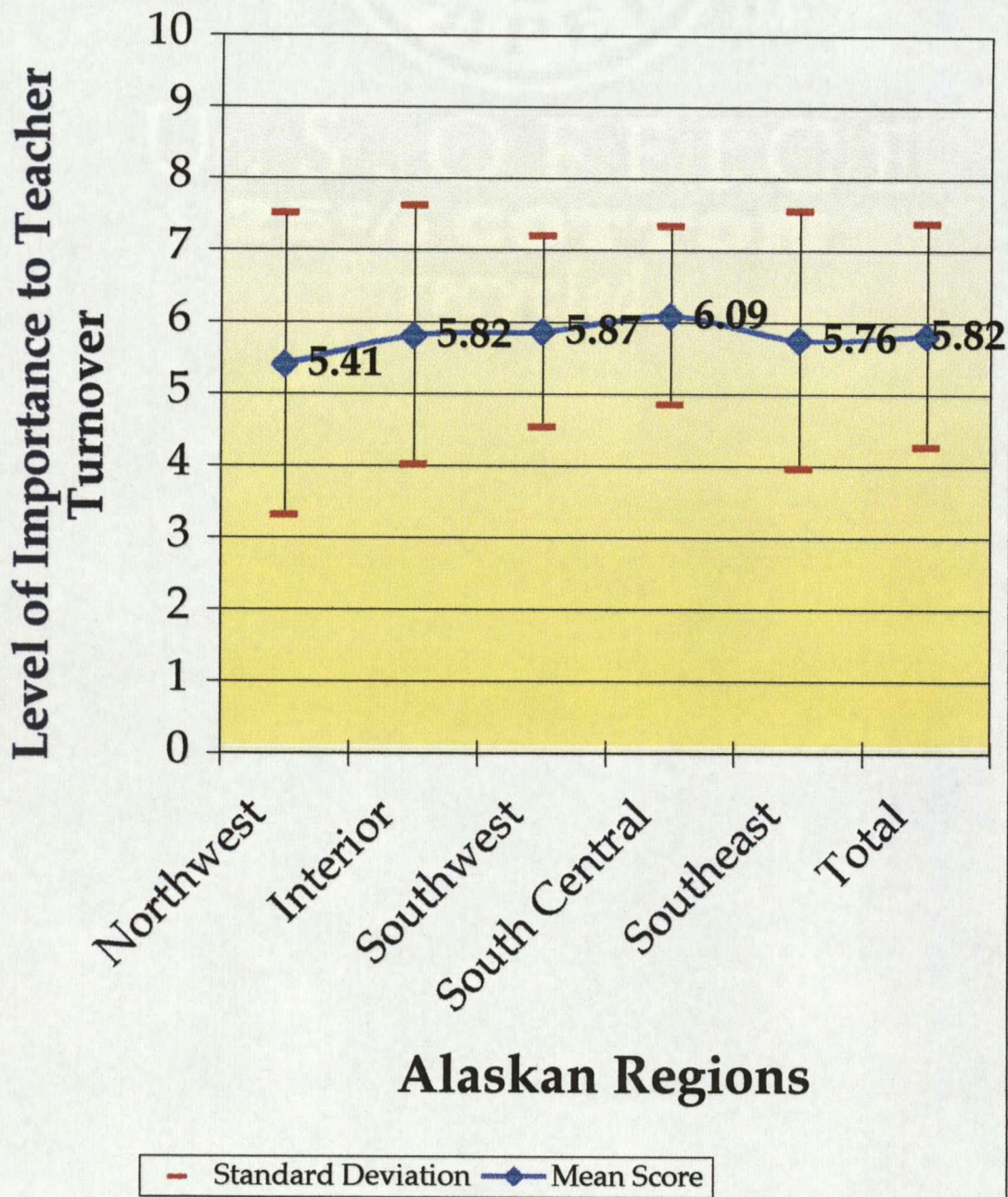
*Actual scores rounded to the nearest hundredth.

Figure 16.

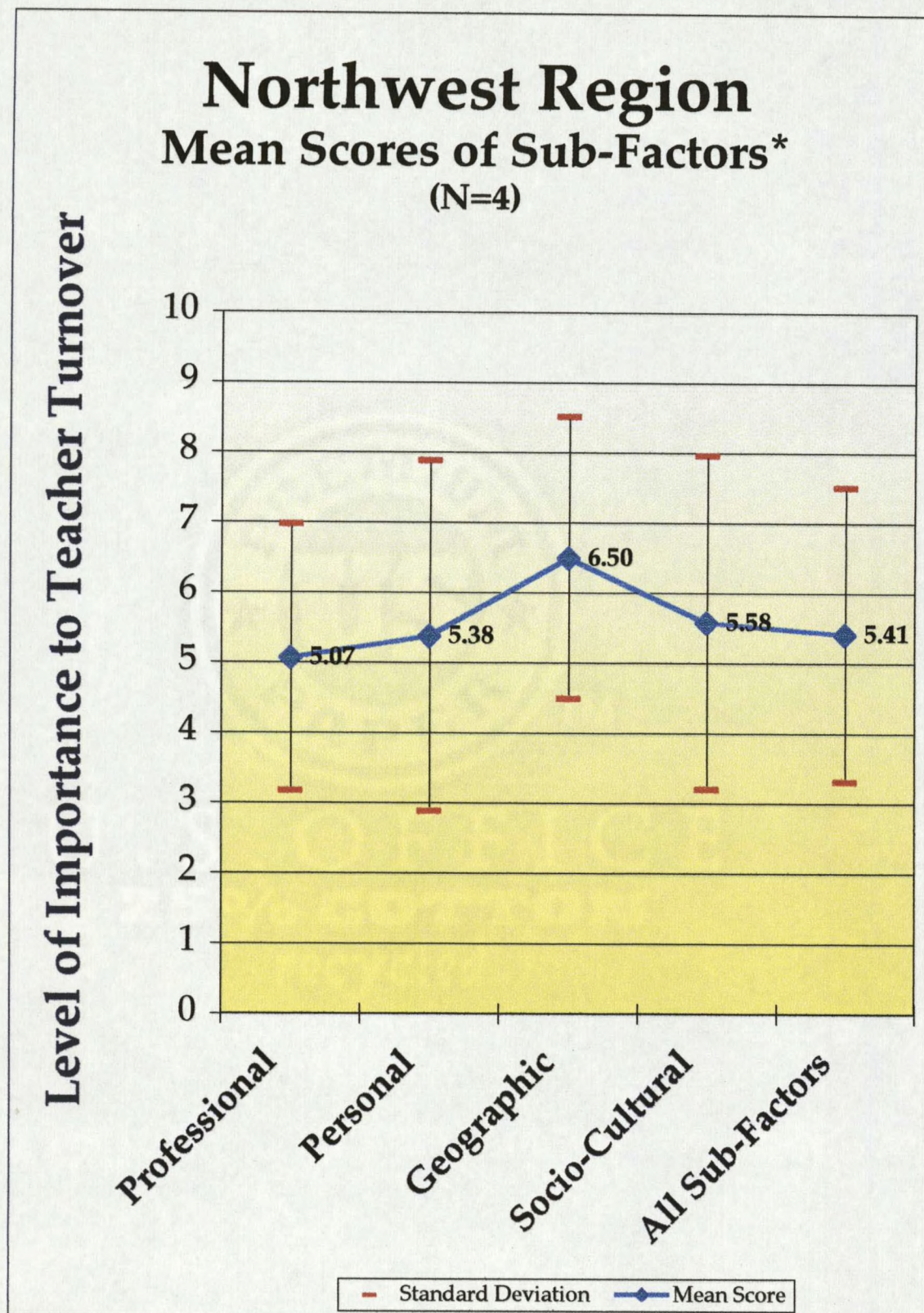


*Actual scores rounded to the nearest hundredth.

Mean Scores of All Sub-Factors*

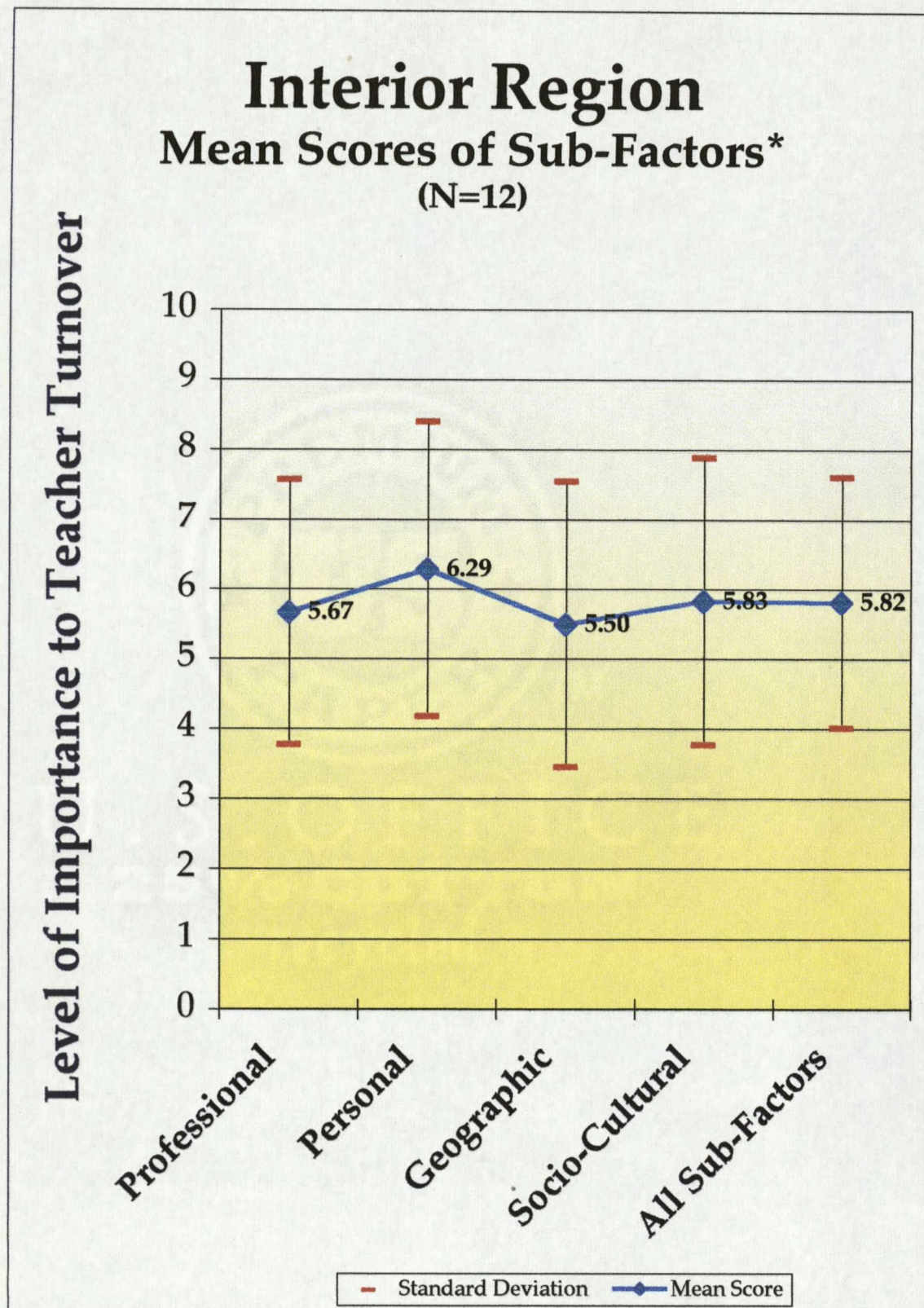


*Actual scores rounded to the nearest hundredth.

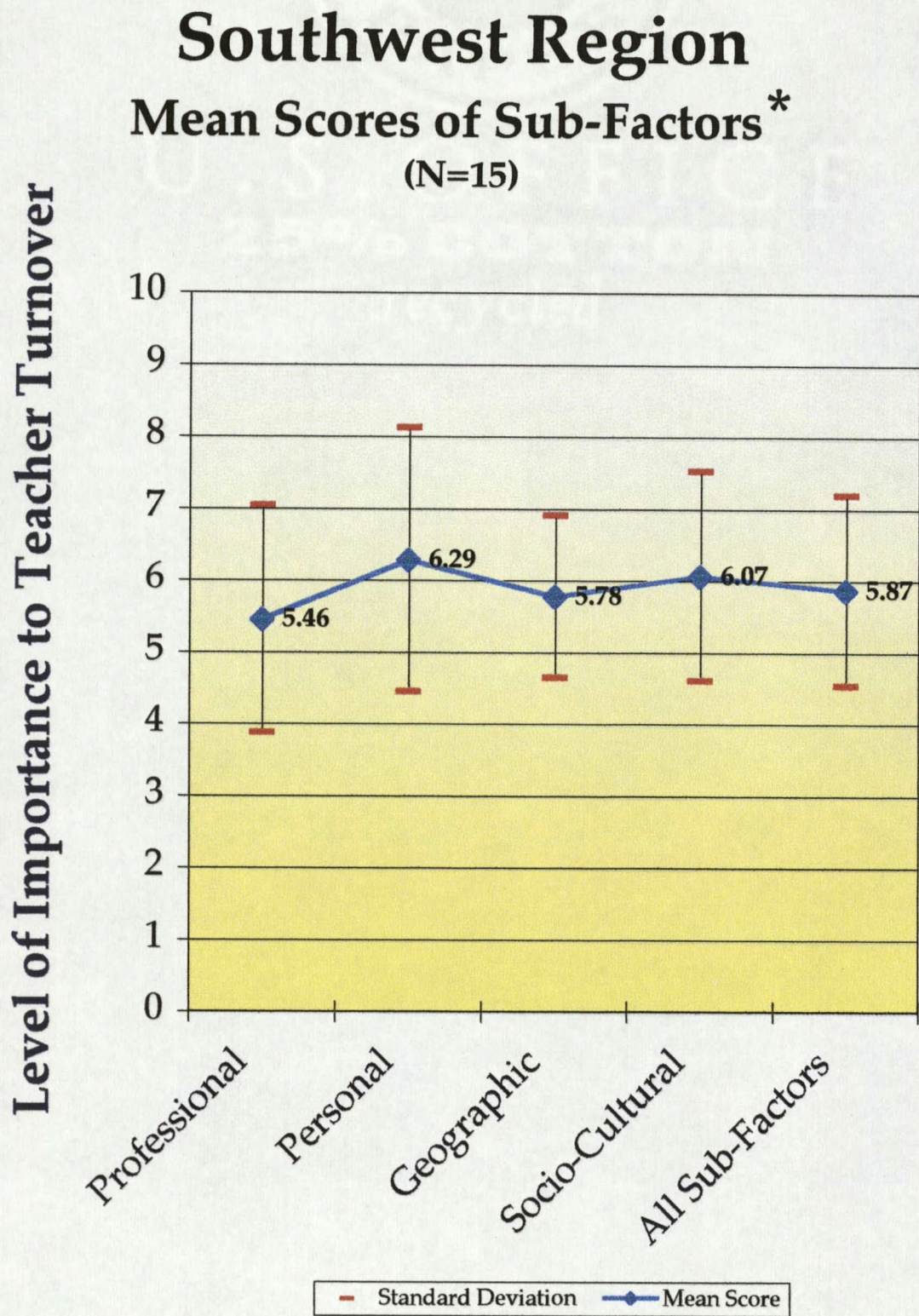


**Actual scores rounded to the nearest hundredth.*

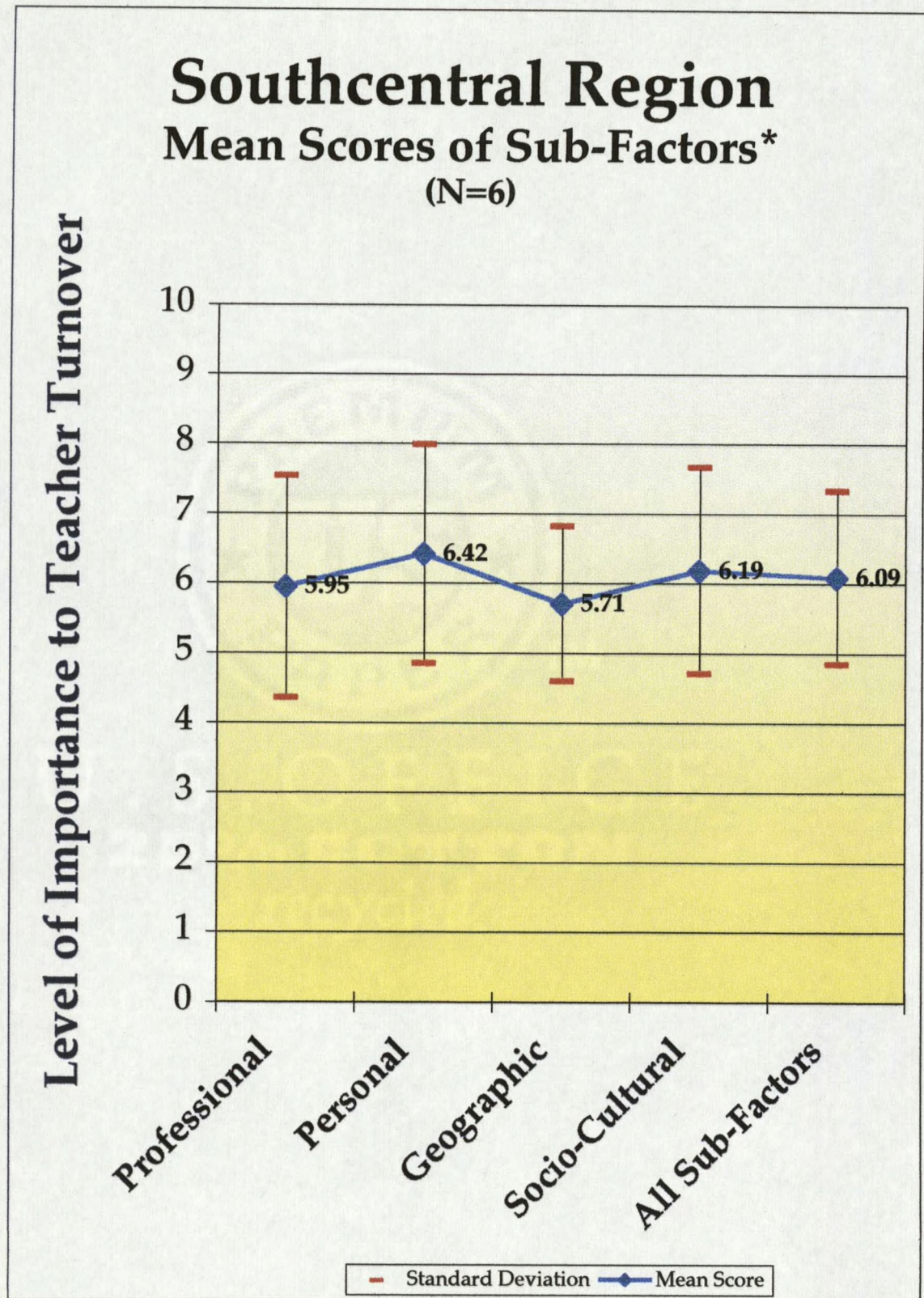
Figure 19.



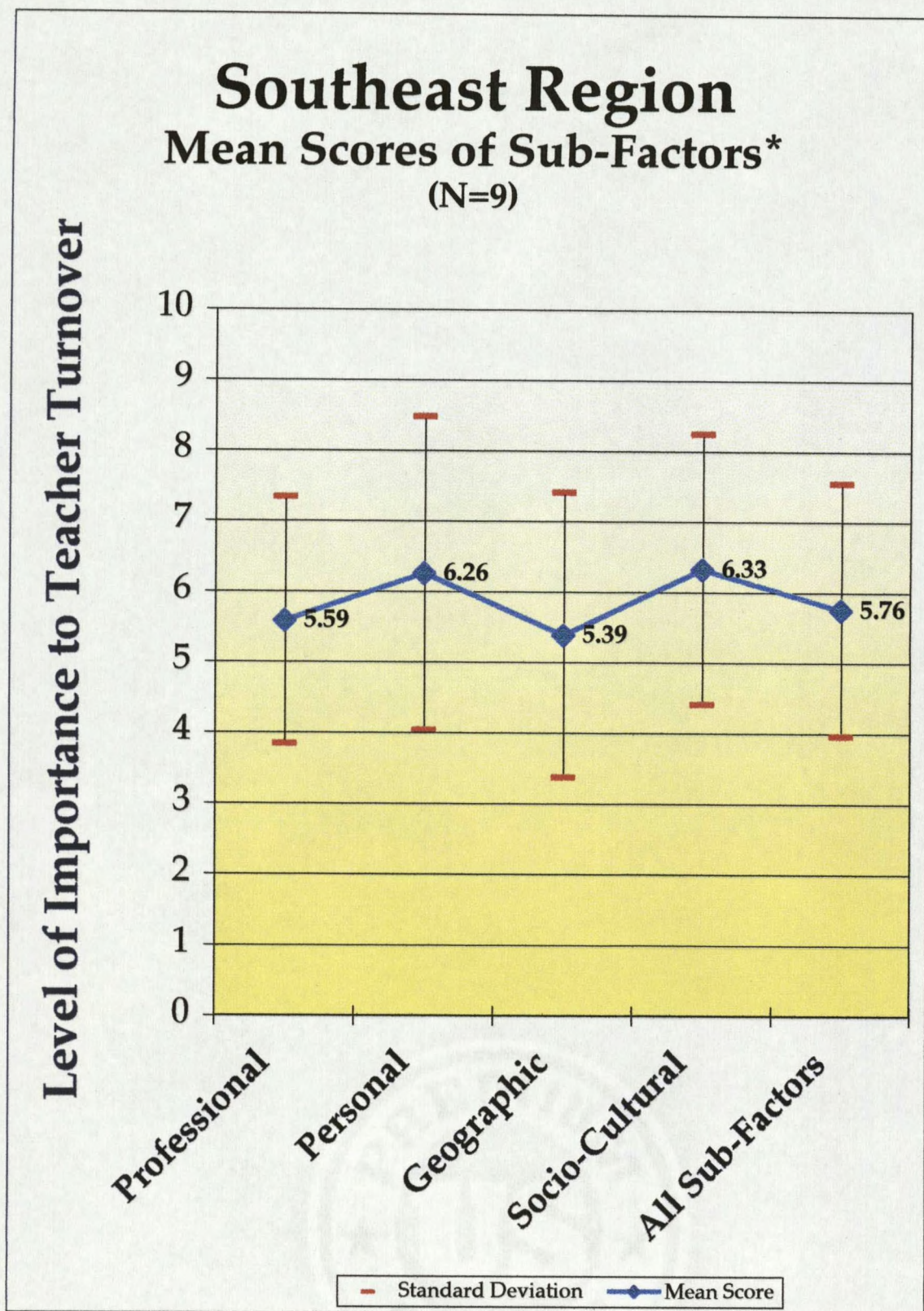
*Actual scores rounded to the nearest hundredth.



*Actual scores rounded to the nearest hundredth.

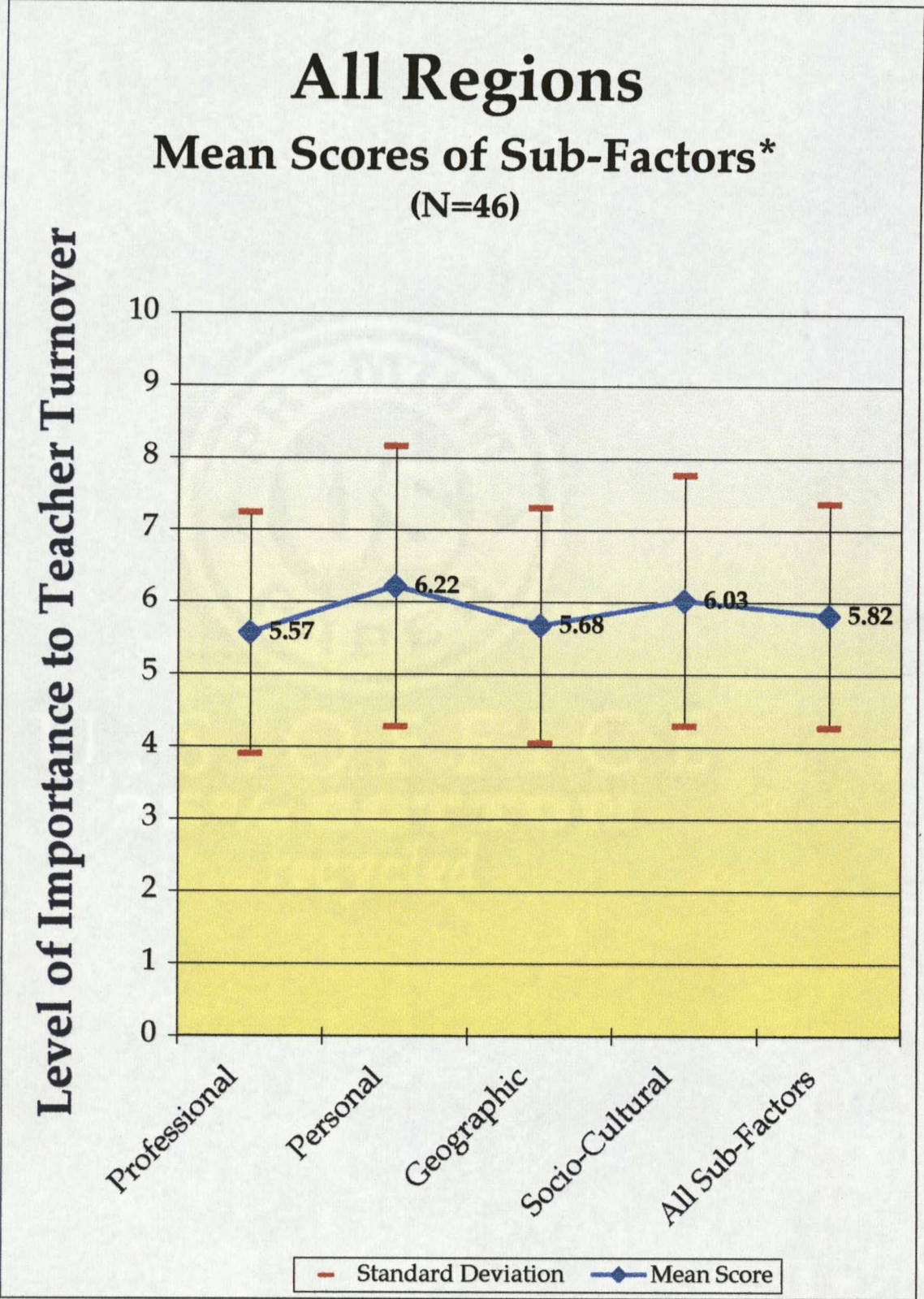


*Actual scores rounded to the nearest hundredth.



*Actual scores rounded to the nearest hundredth.

Figure 23.



*Actual scores rounded to the nearest hundredth.

According to several respondents, many times teachers find themselves overwhelmed by the significant amount of stressors found within these communities. One respondent wrote:

I found most village teachers to be open-minded and energetic, most willing to adapt and learn. Due to the constant demands and multi-faceted roles (e.g., coaching, sponsors, fundraising, multiple preps, and teaching out of endorsement areas), educators wore themselves down. When critical incidents arose, it distracted from academic programming—thus, compounding their inability to meet the unending needs of students.

The tension and conflict described above may have been brought about because teachers were simply ill-prepared to deal with the varied issues, disillusioned by the declining salaries, the high cost of living expenses, and their feelings of lack of positive educational results with students. One participant wrote, "Teachers fail to have the success needed to generate feelings that they are making a difference. This lack of successful teaching/learning experiences contribute greatly to teacher turnover in our village."

Another comment included, "The high cost of living in some villages [contribute to teacher turnover]. Teachers come [to the village] expecting to make a million [dollars] in a couple of years. They spend it all [their salaries] getting themselves and their families' food in and out [of the village]. Village housing [is also very expensive]."

Some of the study's respondents indicated that, in some cases, teachers came to bush Alaska simply to *get their feet in the door* to the more urban job market within the state. However, some of these teachers were not academically

prepared to meet the educational guidelines adopted by the state and national reform movements. Furthermore, one superintendent stated, "Too often, the bush [schools] get the leftovers after other districts have hired."

According to several respondents, teacher retention seemed to be a problem for the bush schools because many teachers' spouses choose not to live in the village where the teacher was employed. "With lack of information concerning village conditions beforehand, the teacher simply does not have the support system in place to deal with the conditions of village life," added another respondent.

Summary of Findings

As perceived by Alaska bush school administrators, issues related to teacher turnover in Alaska bush schools are very interrelated. Some administrators commented that it had taken them years of working in a variety of school settings and school districts in order to see objective trends in the comings and goings of bush teachers.

The respondents' survey comments agreed with long-time Alaskan administrator, John Antonnen's, viewpoint regarding traits found within teachers who remain in the same Alaskan bush school for many years (J. Antonnen, personal communication, June 29, 1998). Together, they indicated that teachers who stay in one particular bush school several years do so because they have assimilated themselves *with* the people of the village. In Antonnen's words, "These are the teachers who do not live in housing provided by the school

district. Rather, they live *with the people*. In some situations, these teachers have married a permanent resident of the village. They have made the particular community their *home*, not just their *place of employment*." These teachers are no longer viewed as *outsiders* by the community's residents.

This study identified factors related most highly to teacher turnover in Alaska's bush schools. Secondly, it analyzed whether a significant difference exists between the identified factors and the geographic location of the school district within Alaska. The findings of this study were based upon the perceptions of Alaska bush school administrators.

After a thorough literature search and interviews with teachers, administrators, and experts, it was concluded that factors relating to teacher turnover could be categorized into four sub-factors: professional, personal/family, geographic, and socio-cultural. The survey's Chronbach alpha score of .93 confirmed the high degree of internal reliability of this instrument. However, according to the perceptions of this study's respondents, a combination of all four of the sub-factors contribute, in varying degrees, to teacher turnover. The data analysis concluded that no single factor existed in isolation to teachers leaving their Alaska bush teaching positions.

In summary, as perceived by Alaska bush school administrators, the results indicated the factors most highly related to teacher turnover in Alaska bush schools were a combination of the four sub-factors: professional, personal/family, geographic, and socio-cultural. Therefore, it concludes that

there is no single construct that indicates the perceived reason for teachers leaving their current bush teaching position. Rather, it is several sub-factors working together to create a situation in which an employee ceases a working relationship with his/her current school district (Bluedorn, 1978).

CHAPTER 5

FINDINGS, CONCLUSIONS, AND RECOMMENDATIONS

Introduction

The problem addressed in this study was to identify factors inherent in Alaska bush schools that relate most highly to teacher turnover, as perceived by Alaska bush administrators. Secondly, the researcher sought to determine whether school district geographic location within Alaska made a significant difference as to which factors identified most highly with teacher turnover in each of the five regions within Alaska.

An administrator from each of the 46 Alaska bush school districts participated in this study. Each participant completed a survey asking him/her to indicate on a Likert-type scale his/her perception of reasons why Alaska bush teachers leave their current positions. Through the use of an open-ended question, respondents were encouraged to make additional comments relating to teacher turnover in Alaska bush schools.

Reliability for the instrument was established by calculating a Chronbach's alpha. A Principal Components Analysis was conducted on the responses to evaluate if the instrument was measuring a single dimension, as indicated by the high reliability coefficient. Based on the results of this analysis, a single mean score across all items was calculated for each respondent. A one-way analysis of variance was conducted to determine if a difference existed between the

regions on the one dimension. Combinations of items on the survey defined the sub-factors or general issues. A mean score was calculated for each of these sub-factors or issues. These mean scores were compared across the five regions within Alaska. Finally, the mean scores on individual items were ranked and examined by region and total.

Findings

Results of the data analyses indicated that there is no one single issue that contributes to teacher turnover in Alaska bush schools. But rather, the administrators felt that teacher turnover is the result of a combination of four general issues, referred to as sub-factors: (a) professional growth, (b) personal/family life, (c) geographic issues, and (d) socio-cultural reasons. The relative impact of each of these general issues varies within each Alaskan community. However, the analyses indicated that statistically, no relationship exists between the impact of specific individual issues and the school district's geographic region within Alaska (Tables 4 and 5) (Figures 7-23).

Conclusions

Specifically addressing the problem of high teacher turnover in Alaska bush schools, these findings answered the study's research questions that asked:

1. Which factors inherent in Alaska's bush schools are related most highly to teacher turnover?

2. Is there a difference in the rankings of importance in the identified factors across the five regions of Alaska (i.e., Interior, Northwest, Southcentral, Southwest, and Southeast regions)?

From the findings, it is concluded that:

1. There is no single reason that is individually associated with Alaska bush teachers leaving their current teaching positions.
2. The reasons why teachers leave their current Alaska bush teaching positions are due to a combination of sub-factors which include professional, personal/family, geographic, and socio-cultural issues.
3. The reasons why teachers leave their current Alaska bush teaching positions does not appear to be related to school district geographic location within Alaska.

Recommendations Related to Practice

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

1. Individual school districts should identify the combination of reasons within their specific communities that are related to teacher turnover. Decisions concerning appropriate programs to enhance teacher retention must be made based upon documented information.
2. Undergraduate and graduate teacher preparation programs within Alaska should be designed to prepare prospective bush teachers for the experiences they may encounter while teaching in Alaska's bush. Programs such as those implemented through the University of Alaska may help to prepare these prospective teachers by introducing a realistic picture of bush teaching and living conditions. (Barnhardt, 1999)
3. Recruitment efforts should be directed to those teachers who truly are interested in the Alaska bush way of life. To assume that people can be *made* to like the rural lifestyle is, for the most part, doomed to fail. (McIntosh, 1994)

4. A mentorship program should be developed whereby new teachers to the school are paired with experienced teachers. Through utilization of this approach, the concerns of new teachers can be dealt with on a personal level by discussing issues with professionals who are familiar with the specific school and community's characteristics and culture.

New teachers can also be paired with elders within the community. These elders can serve as liaisons between the school and the community by assisting the new teacher in becoming acclimated to the customs and traditions of the Native lifestyle.

5. It is vital for each school to have an administrator who is not only *trained*, but who is also *experienced* in Alaska bush education. This person should be someone who possesses the skills and time available to adequately supervise staff. This administrator should exhibit exemplary inter-personal skills that can be used to diffuse situations that may arise between the school and the community. He/she should also be able to serve as an instructional leader. According to comments made by this study's respondents, an administrator serves a vital role in establishing a smoothly operating school. Chamberlain & Goldsberry (1984) concur by stating,

Rural schools suffer under many burdens. Unable to employ full-time individuals [as administrators], due to financial constraints or given the limitations of rather low population density over wide areas, the prospect for improving instructional practices through direct supervision seems bleak. (p. 87)

6. Funding should be appropriated for research development within Alaska's bush schools (Barnhardt, 1999). By upgrading the existing information regarding teacher turnover, informed decisions could be made by Alaskan educators regarding programs that will enhance teacher retention in bush schools. Recognizing that some problems are unique to Alaska, the educators within the State should take an active role in finding solutions to the challenges of high teacher turnover. This recommendation is consistent with Barnhardt (1999) who urges the Alaska Department of Education to consider setting aside funds which would be made available on a grants and contracts basis for the purpose of soliciting and stimulating research and evaluation efforts related to Alaska bush education issues.
7. Although the rankings of the specific survey items were not practically significant, they *did* indicate that the teacher's spouse and children play

a leading role in whether a teacher remains or leaves an Alaskan bush school. The rankings showed that the longevity of a bush teacher is heavily dependent upon his/her spouse being content with living in the village and with the teacher's own children being safe and having opportunities for enrichment. Also, a teacher needs to have adequate housing facilities and some type of connection with his/her own culture, friends, and families.

Given this information, it is recommended that school district personnel take extra measures to involve the teacher's family in the recruitment process. District personnel should not only strive to present information concerning the school, but they should also furnish information of interest to the teacher's family regarding other aspects of the village (e.g., possible employment opportunities for the spouse, and recreational activities for children).

Since the results of this study indicated that isolation from one's own culture, friends, and extended families contributes to teacher turnover in bush schools, it is recommended that school districts take an active role in fostering a teacher's connection to their *outside world*. A school district could provide airfare once or twice a year so teachers have an opportunity to visit friends/extended family—or teachers could simply *take an excursion* with their family to a warm, sunny place. Also, school districts could distribute long-distance phone cards to teachers at strategic times throughout the school year, such as during the long winter months. Communication with friends and family can be facilitated via e-mail. Access to a computer where a teacher could send and receive e-mail messages could help to alleviate some of the *homesickness* experienced by many new bush teachers. Placing computers with internet and e-mail capabilities in each teacher's home is a recommendation for school districts. This would provide teachers and their families with a convenient, inexpensive way to communicate with friends and extended family, explore the internet for entertainment, and to simply *escape from village life*—all within the relaxed atmosphere of their own home.

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. Collecting data from bush teachers themselves should complete validation or invalidation of the findings of this study. This data must be comprehensive—studying those bush teachers who have left their positions voluntarily and involuntarily. Data must also be collected from experienced Alaska bush teachers to identify the ways they overcame the barriers that confronted them as new Alaska bush teachers.
2. Studies should be completed which compare the different types of Alaska bush school districts. Data should be collected from those districts, (a) whose one and only school is considered to be bush, (b) who have more than one bush school but have no schools considered to be urban, and (c) who have a combination of bush and urban schools within the same school district.
3. A qualitative study is recommended to examine the three school districts whose administrators indicated on the survey that their respective districts did *not* experience a high level of teacher turnover. All three of these districts fit the “bush school” criteria as defined in this study. The findings and conclusions from such a study may provide insights about retaining teachers in school districts that experience a high degree of teacher turnover.
4. With the state’s implementation of the Quality Schools Initiative, research should be completed to determine what affect the Initiative has on teacher turnover in Alaska’s bush schools. The Quality Schools Initiative calls for a high degree of school accountability for student learning. Through this legislation, school funding may be contingent upon exhibited student achievement (Holloway, 1998). Several of this study’s respondents indicated that they were concerned that this Initiative might negatively impact their ability to establish a stable core of teachers within their schools’ teaching ranks.

Summary

This study identified four general issues (i.e., professional, personal, geographic, and socio-cultural) which, in combination, are related to teacher turnover in Alaska bush schools. Combinations of these issues appear to exist

throughout each of the five regions in Alaska. They appear to impact the State's ability to retain teachers in the bush schools.

Based upon this study's findings, recommendations were developed for educational practice in Alaska, as well as for further research. It is anticipated that the results of this study will provide a foundation for future studies that will more clearly identify *causes of* and will develop *solutions to* the high teacher turnover rates in bush Alaska.

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APPENDICES

APPENDIX A

Alaska by Region

Alaska by Region

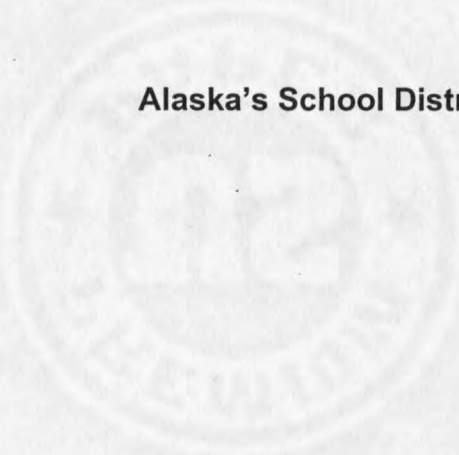
**5
Distinct
Regions!**



APPENDIX B

Alaska's School Districts

Alaska's School Districts



APPENDIX C

Alaska's 46 Bush School Districts Categorized by Region

Alaska's 46 Bush School Districts Categorized by Region

REGION	SCHOOL DISTRICTS	
Northwest Region	Bering Strait Schools Nome City Schools	North Slope Borough Schools Northwest Arctic Borough Schools
Interior Region	Alaska Gateway Schools Copper River Schools Delta/Greely Schools Denali Borough Schools Galena City Schools	Iditarod Area Schools Nenana City Schools Tanana Schools Yukon Flats Schools Yukon/Koyukuk Schools
Southwest Region	Aleutian Region & Unalaska City Schools Aleutians East Borough Schools Bristol Bay Borough Schools Dillingham City Schools Kashunamuit Schools Kodiak Island Borough School Kuspuk Schools	Lake & Peninsula Borough Schools Lower Kuskokwim Schools Lower Yukon Schools Pribilof Schools Southwest Region Schools Saint Mary's Schools Yupit Schools
Southcentral Region	Chugach Schools Cordova City Schools	Kenai Peninsula Borough Schools
Southeast Region	Annette Island Schools Chatham Schools Craig City Schools Haines Borough Schools Hoonah City Schools Hydaburg City Schools Kake City Schools Klawock City Schools	Pelican Schools Petersburg City Schools Sitka Borough Schools Skagway City Schools Southeast Island Schools Wrangell City Schools Yakutat City Schools

APPENDIX D

Summary of National Center for Education Statistics Survey

Summary of National Center for Education Statistics Survey

American Indian and Alaska Native students comprise approximately 1 percent of the total student population in the United States. Consequently, these students, and the schools and staff that serve them, are rarely represented in sufficient numbers in national education studies to permit reliable and valid generalizations about their characteristics. Additionally, because of tribal and linguistic diversity, geographic dispersion, and preponderance in remote rural areas, researchers have found it too costly to add supplemental samples of Indian schools and students to other data collection programs. However, during the 1990-91 and 1993-94 school years, the National Center for Education Statistics (NCES) of the U.S. Department of Education added an Indian education supplement to the Schools and Staffing Survey (SASS) data collection program that enabled education researchers and policymakers to describe the schools, principals, and teachers serving Indian students. The data collected by SASS are both national in scope and comparable to data gathered concurrently on U.S. schools in general.

This report summarizes the findings of the 1993-94 SASS with regard to schools that serve American Indian and Alaska Native students, and examines trends in Indian education since 1990-91, when the data for the first NCES report on Indian education were collected (Pavel, Curtin, Thorne, Christenson, & Rudes, 1995). The chapter highlights are presented below.

CHAPTER 2: SCHOOLS AND AMERICAN INDIAN AND ALASKA NATIVE STUDENTS

- ▣ In 1993-94, the Bureau of Indian Affairs (BIA) of the U.S. Department of Interior and federally recognized tribes with BIA funding operated 170 elementary and secondary schools in the United States (termed BIA/tribal schools in this report). Additionally, among the 80,893 public schools in the United States, 1,244 had an American Indian/Alaska Native student enrollment of at least 25 percent (called high Indian enrollment schools).
- ▣ BIA/tribal and high Indian enrollment schools were primarily located in rural areas and small towns and had enrollments of fewer than 500 students. The heaviest concentration of these schools was in the Southwest and Northern Plains regions of the U.S. Half of the high Indian enrollment public schools were located in the South Central region and Alaska.
- ▣ BIA/tribal schools were more likely than public schools with low Indian enrollment (less than 25 percent Indian student enrollment) to offer compensatory programs such as Chapter 1, remedial mathematics, and bilingual education. BIA/tribal schools were also more likely than these public schools to offer gifted and talented programs for their students.

- In order to graduate, high school students in BIA/tribal schools were required to complete more coursework in core subject areas (English and language arts, mathematics, social studies, and sciences) than students in low Indian enrollment schools. Additionally, BIA/tribal schools were more likely than high and low Indian enrollment public schools to require coursework in computer science and foreign language.
 - The student to teacher ratio in BIA/tribal schools (14:1) was lower than the ratio in public schools with low Indian enrollment (15:1). Additionally, the ratio of students to noninstructional staff was lower in BIA/tribal schools (43:1) than in either type of public school (50:1 and 72:1).
 - Public schools with high and low Indian student enrollment had higher graduation rates for high school seniors than BIA/tribal schools (91 percent for both types of public schools vs. 86 percent); public schools with low Indian enrollment also had larger percentages of students applying to college (58 percent vs. 47 percent for BIA/tribal schools).
 - Of the 491,936 American Indian and Alaska Native students enrolled in kindergarten through 12th grade (K-12) classes in publicly funded schools in the U.S. (i.e., BIA/tribal and public schools), 9 percent attended BIA/tribal schools and 38 percent attended public schools with high Indian enrollment. Fifty-three percent of the Indian student population attended public schools with relatively few Indian students.
 - Eighty-five percent of the students in BIA/tribal schools and 56 percent of the students in public schools with high Indian enrollment were eligible for free or reduced-priced lunches. Less than one-third of the students in low enrollment public schools were eligible.
 - Approximately one-third of the Indian students in BIA/tribal schools spoke a language other than English in their homes; 28 percent were identified by their schools as having limited English proficiency. Only a small fraction of Indian students in low Indian enrollment schools spoke a language other than English in their homes or had limited English proficiency.
 - BIA/tribal school students were just as likely as students in high and low Indian enrollment public schools to receive academic counseling, more likely to receive alcohol- and drug-abuse counseling, and less likely to receive career counseling.
 - Ten percent of the students enrolled in BIA/tribal schools had dropped out or withdrawn from school at some time in their student careers; less than 5 percent of the students in public schools with high and low Indian enrollment had dropped out or withdrawn.
 - American Indian and Alaska Native students were less likely than white, non-Hispanic students to enroll in higher-level mathematics courses typically required for college admission.
- ### CHAPTER 3: PRINCIPALS SERVING AMERICAN INDIAN AND ALASKA NATIVE STUDENTS
- During the 1993-94 school year, 74,842 principals administered publicly funded schools in the U.S. Forty-seven percent of the BIA/tribal school principals were Indian, and all of these were enrolled tribal members. Approximately 14 percent of the principals in public schools with high Indian enrollment were Indian, and 84

CHAPTER 3: PRINCIPALS SERVING AMERICAN INDIAN AND ALASKA NATIVE STUDENTS

- During the 1993-94 school year, 74,842 principals administered publicly funded schools in the U.S. Forty-seven percent of the BIA/tribal school principals were Indian, and all of these were enrolled tribal members. Approximately 14 percent of the principals in public schools with high Indian enrollment were Indian, and 84

percent were tribally enrolled. Less than 1 percent of the principals in low Indian enrollment public schools were Indian, and about half of them were tribal members.

- ▣ Compared to their white, non-Hispanic colleagues in BIA/tribal schools, Indian principals had fewer years of teaching experience and were less likely to hold advanced degrees beyond the master's degree. In public schools with high Indian enrollment, tribally enrolled principals had comparable teaching experience but were less likely than white principals to hold degrees beyond the master's.
- ▣ Most principals have received inservice training in evaluation and supervision. However, BIA/tribal school principals and principals in high enrollment public schools were more likely to have received specific training in Indian education administration.
- ▣ The average salaries for principals in BIA/tribal schools, especially those with master's degrees and more advanced degrees, were comparable to those of principals from public schools with high Indian enrollment but lower than principals in low Indian enrollment public schools.
- ▣ BIA/tribal school principals were less likely than principals in low Indian enrollment public schools to receive medical and dental insurance and to receive in-kind benefits.
- ▣ Principals in BIA/tribal schools were more likely than their colleagues in either type of public school to report that poverty, parental alcoholism and drug abuse, and lack of parental involvement were serious problems in their schools.

CHAPTER 4: TEACHERS SERVING AMERICAN INDIAN AND ALASKA NATIVE STUDENTS

- ▣ Less than 1 percent of the 2,564,000 teachers in BIA/tribal and public schools during the 1993-94 school year were American Indian or Alaska Native. In BIA/tribal schools, 38 percent of the teachers were Indian or Alaska Native. Sixteen percent of the teachers in public schools with high Indian enrollment and less than 1 percent of the teachers in low enrollment schools were Indian.
- ▣ Most of the Indian teachers in BIA/tribal schools (95 percent) and in public schools with high Indian enrollment (84 percent) were enrolled in a state or federally recognized tribe. Thirty-eight percent of the Indian teachers in public schools with low Indian enrollment were tribal members.
- ▣ Nationally, 6 percent of the publicly funded schools have American Indian or Alaska Native teachers on staff. Ninety-five percent of BIA/tribal schools, 70 percent of high Indian enrollment public schools, and 5 percent of low Indian enrollment public schools had Indian teachers.
- ▣ Nationally, few teachers reported college majors or minors in Indian education (less than 0.05 percent). Even in BIA/tribal schools, where teachers most often held these credentials, only 2 percent of the teachers held such a major or minor.
- ▣ On average, teachers in BIA/tribal schools had fewer years of teaching experience than their counterparts in public schools.

- American Indian and Alaska Native teachers were more likely than white, non-Hispanic teachers to begin teaching after first holding nonteaching positions in education (e.g., clerk or another type of noninstructional staff).
- Beginning teacher salaries were higher in BIA/tribal schools and high Indian enrollment districts than in public districts with low Indian enrollment. On the other hand, experienced teachers were better paid in low enrollment districts than in BIA/tribal and high Indian enrollment districts.
- At least half of the teachers in BIA/tribal schools reported that parental alcoholism and drug abuse, lack of parental involvement, and poverty were serious problems in their schools. At least one-third of the teachers in high Indian enrollment schools saw these issues as serious problems. Teachers in low Indian enrollment schools were less likely to report these problems.

CHAPTER 5: TEACHER SUPPLY AND DEMAND

- Overall, teachers in BIA/tribal schools were less likely than their colleagues in public schools to be certified in their teaching area. Notably, newly hired teachers in BIA/tribal schools were more likely than their public colleagues to be certified in their teaching area.
- Vacant teaching positions in BIA/tribal schools were more likely than teaching positions in high and low Indian enrollment schools to remain vacant or to be filled by substitute teachers because qualified candidates could not be found.
- BIA/tribal schools were more likely than public schools with low Indian enrollment to cancel classes, to hire less-qualified teachers, to use teachers from other subjects

or grade levels to fill the vacant classes, and to employ long- or short-term substitutes to fill vacant positions.

- BIA/tribal schools were more likely than high and low Indian enrollment schools to provide free retraining to staff members to prepare for careers in fields with current or anticipated teacher shortages.
- BIA/tribal schools were more likely than high and low Indian enrollment schools to use pay incentives to recruit teachers in fields with current or anticipated teacher shortages.

CHAPTER 6: AMERICAN INDIAN AND ALASKA NATIVE EDUCATION SINCE 1990-91

- BIA/tribal schools accounted for approximately 0.2 percent of the publicly funded schools in the United States during both the 1990-91 and 1993-94 school years.
- The majority of American Indian and Alaska Native students attended public schools with low Indian student enrollment in both 1990-91 and 1993-94, and this percentage was stable during the reporting period.
- The percentage of BIA/tribal schools offering Chapter 1 services decreased slightly (4 percent) between 1990-91 and 1993-94. However, this decrease was not accompanied by reductions in other programs for at-risk students (e.g., ESL, bilingual education, or remedial mathematics instruction). BIA/tribal schools offering gifted/talented programming increased 15 percent during the same period.
- Graduation rates for high school seniors remained steady in public schools with high Indian enrollment and BIA/tribal schools

between the 1990-91 and 1993-94 school years; the rate declined slightly in low Indian enrollment schools (from 94 to 91 percent).

- ▣ The percentage of students in BIA/tribal schools applying to college rose from 33 to 47 percent during the reporting period. No change was apparent in public schools with high Indian student enrollment.
- ▣ Graduation requirements for many high school students increased between the 1990-91 and 1993-94 school years. Course completion requirements for mathematics instruction increased to 3 years in BIA/tribal schools and to 2.5 years in public schools with low Indian student enrollment.
- ▣ Few changes in the qualifications and experiences of principals, their opinions about school problems and goals, or their career plans were apparent between the 1990-91 and 1993-94 school years. Notably, however, principals in public schools with low Indian student enrollment were more likely to have received specialized training in Indian education administration in 1993-94.
- ▣ Poverty was, and continues to be, the problem most frequently identified as serious by principals in BIA/tribal schools and public schools. Principals' concerns with the roles played by parents (e.g., alcoholism/drug abuse and lack of involvement) have decreased over the last 3 years.
- ▣ No change in the percentages of American Indian and Alaska Native teachers in the three Indian school types or in the percentages of Indian teachers enrolled in a state or federally recognized tribes was apparent.
- ▣ BIA/tribal schools were less likely to report teaching position vacancies during the 1993-94 school year than in 1990-91. Vacancies decreased in special education, English, mathematics, and foreign languages.
- ▣ BIA/tribal schools and public schools with low Indian student enrollment were more likely to provide free retraining to school staff preparing to teach in fields with current and anticipated shortages in 1993-94 than in 1990-91.

APPENDIX E
Alaska Bush School Districts

Alaska Bush School Districts

The superintendents of the following school districts were the subjects of this study (unless otherwise noted).

Alaska Gateway Schools
Aleutian Region &
Unalaska City Schools ***
Aleutians East Borough Schools
Annette Island Schools
Bering Strait Schools

Bristol Bay Borough Schools
Chatham Schools
Chugach Schools
Copper River Schools
Cordova City Schools

Craig City Schools
Delta/Greely Schools
Denali Borough School
Dillingham City Schools
Galena City Schools

Haines Borough Schools
Hoonah City Schools
Hydaburg City Schools
Iditarod Area Schools
Kake City Schools

Kashunamuit Schools
Kenai Peninsula Schools * / **
Klawock City Schools

Kodiak Island Borough Schools *
Kuspuk Schools

Lake & Peninsula Borough Schools
Lower Kuskokwim Schools **
Lower Yukon Schools
Nenana City Schools
Nome City Schools

North Slope Borough Schools
Northwest Arctic Borough Schools
Pelican City Schools
Petersburg City Schools
Pribilof Schools

Saint Mary's Schools
Sitka Borough Schools
Skagway City Schools
Southeast Island Schools
Southwest Region Schools *****

Tanana City Schools
Wrangell City Schools
Yakutat City Schools
Yukon Flats Schools
Yukon/Koyukuk Schools

Yupik Schools

- * This school district is comprised of urban as well as bush schools. Study participants were asked to complete the questionnaire based upon their experiences in the district's bush schools and in other bush schools in which they were previously employed.
- ** The Personnel Director in this school district served as the Superintendent's designee to complete the study's questionnaire.
- *** A Principal in this school district served as the Superintendent's designee to complete the study's questionnaire.
- **** A Director of Secondary Instruction served as the Superintendent's designee to complete the study's questionnaire.

APPENDIX F

Alaska School Districts Excluded From This Study

Alaska School Districts Excluded From This Study

Urban School Districts

Anchorage School District
Fairbanks North Star Schools
Juneau Borough Schools
Ketchikan Gateway Schools
Matanuska-Susitna Schools
Valdez City Schools

State Owned School Districts

Alaska State School for the Deaf
Alaska Vocational Technical Center
Alyeska Central School
Mt. Edgecumbe High School

APPENDIX G

Alaska's Area Compared with that of the Contiguous 48 States

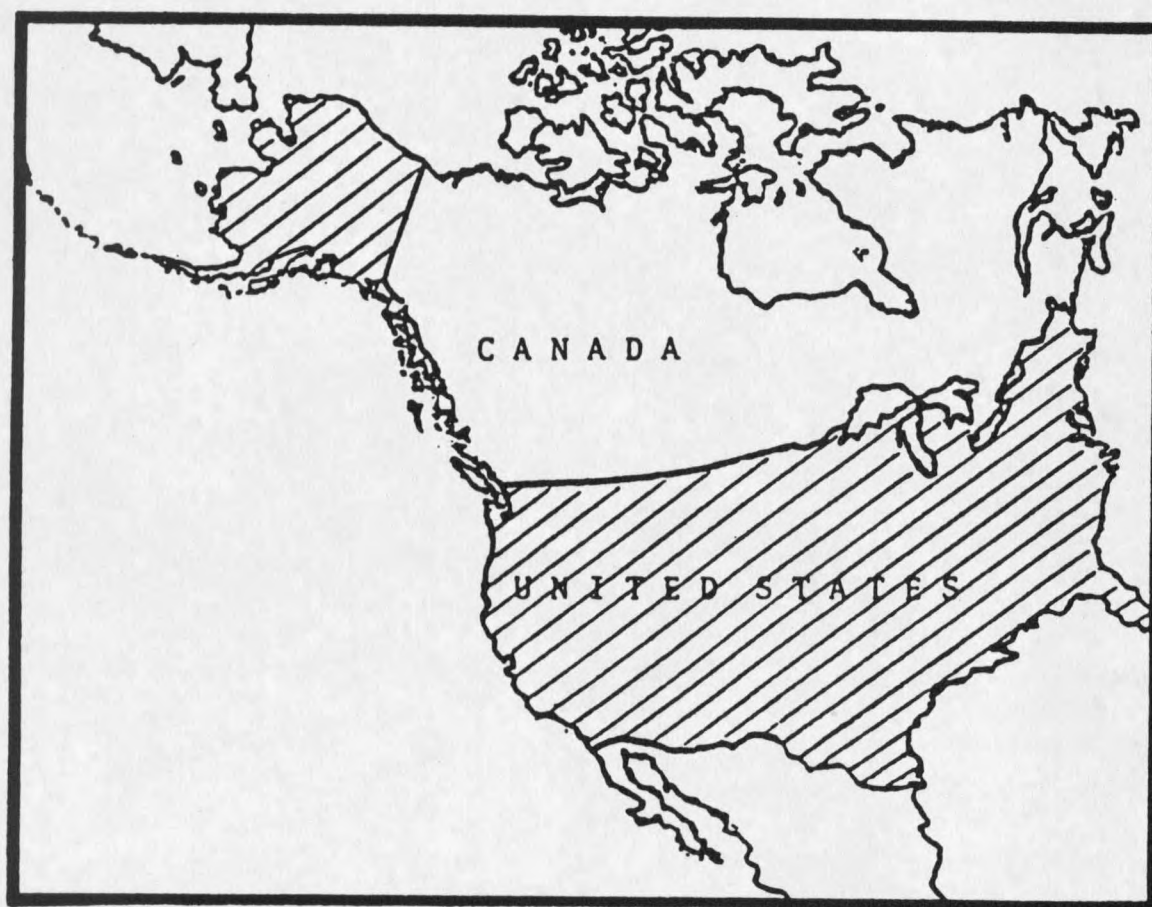
Alaska's Area Compared with that of the Contiguous Forty-Eight States



APPENDIX H

Alaska Shares No Common Boundaries with the Rest of the United States

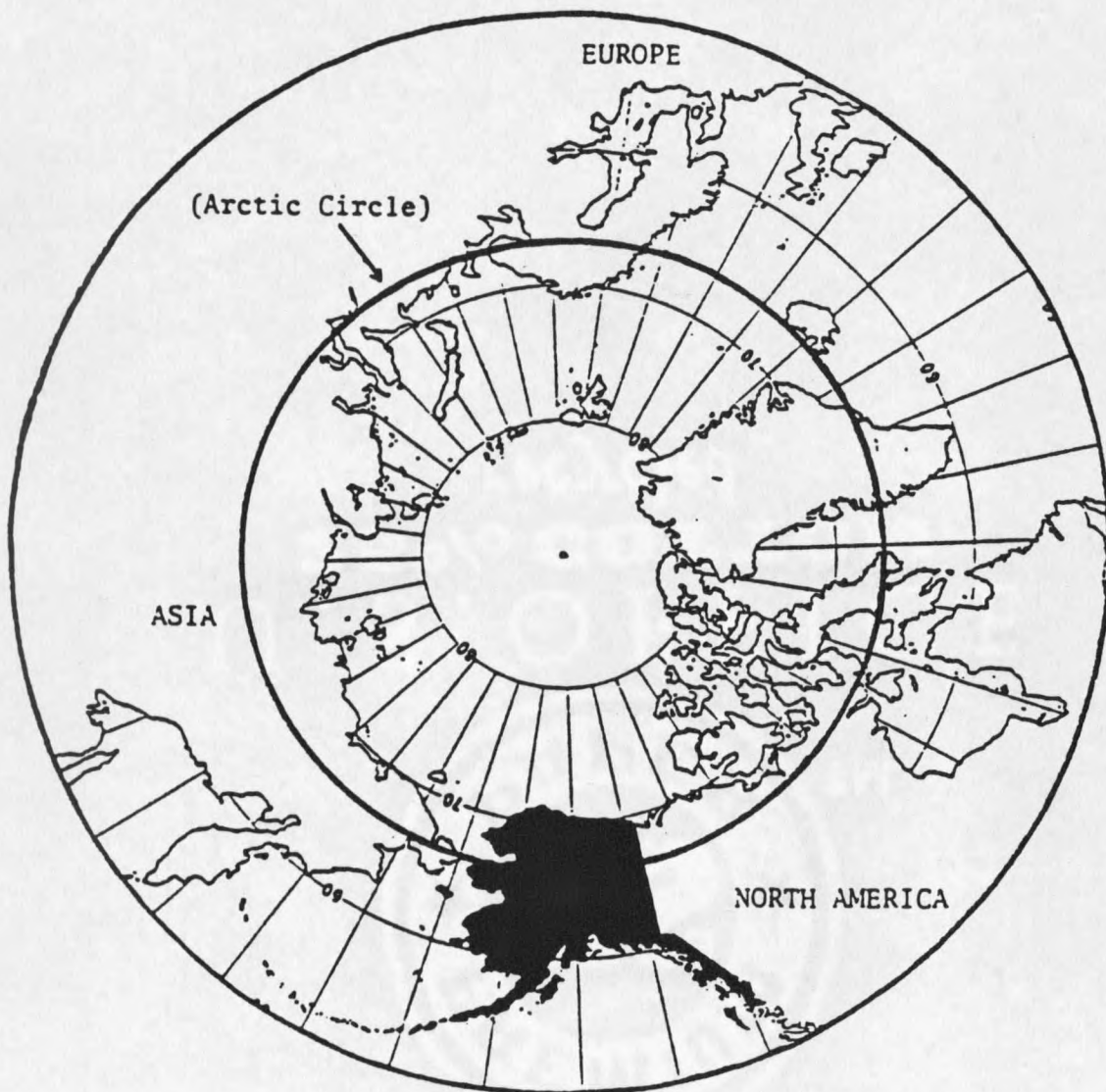
Alaska Shares No Common Boundaries with the Rest of the United States



APPENDIX I

Alaska as a Member of the Circumpolar Community

Alaska as a Member of the Circumpolar Community



APPENDIX J

Indigenous Worldviews Compared to Western Worldviews

Indigenous Worldviews Compared to Western Worldviews

Indigenous Worldviews

Spirituality is imbedded in all elements of the cosmos

Humans have responsibility for maintaining harmonious relationship with the natural world

Need for reciprocity between human and natural worlds – resources are viewed as gifts

Nature is honored routinely through daily spiritual practice

Wisdom and ethics are derived from direct experience with the natural world

Universe is made up of dynamic, ever-changing natural forces

Universe is viewed as a holistic, integrative system with a unifying life force

Time is circular with natural cycles that sustain all life

Nature will always possess unfathomable mysteries

Human thought, feelings and words are inextricably bound to all other aspects of the universe

Human role is to participate in the orderly designs of nature

Respect for elders is based on their compassion and reconciliation of outer-and inner-directed knowledge

Sense of empathy and kinship with other forms of life

View proper human relationship with nature as a continuous two-way, transactional dialogue

Western Worldviews

Spirituality is centered in a single Supreme Being

Humans exercise dominion over nature to use it for personal and economic gain

Natural resources are available for unilateral human exploitation

Spiritual practices are intermittent and set apart from daily life

Human reason transcends the natural world and can produce insights independently

Universe is made up of an array of static physical objects

Universe is compartmentalized in dualistic forms and reduced to progressively smaller conceptual parts

Time is a linear chronology of "human progress"

Nature is completely decipherable to the rational human mind

Human thought, feelings and words are formed apart from the surrounding world

Human role is to dissect, analyze and manipulate nature for own ends

Respect for others is based on material achievement and chronological old age

Sense of separateness from and superiority over other forms of life

View relationship of humans to nature as a one-way, hierarchical imperative

APPENDIX K

Educators Hired in Alaska by Fiscal Year

Educators Hired in Alaska by Fiscal Year



APPENDIX L
Salary Rankings by State

Salary Rankings by State

Average Salary Rank	State	1997 Beginning Salary	1997 Average Salary	% fo 1997 U.S. Average	Average Salary Adjusted to Cost of Living	Adjusted Rank
1	Connecticut	\$29,154	\$51,181	133%	\$43,067	4
2	New Jersey	\$28,039	\$49,786	130%	\$43,025	5
3	Alaska	\$35,502	\$49,140	128%	\$39,312	14
4	New York	\$28,749	\$48,000	125%	\$43,736	3
5	Michigan	\$26,404	\$47,769	124%	\$50,437	1
6	Pennsylvania	\$29,426	\$47,147	123%	\$47,136	2
7	Massachusetts	\$26,445	\$44,101	115%	\$38,788	16
8	Rhode Island	\$25,497	\$43,084	112%	\$40,002	12
9	California	\$26,684	\$42,992	112%	\$37,269	22
10	D.C.	\$25,937	\$42,424	110%	\$34,774	35
11	Illinois	\$27,210	\$42,339	110%	\$42,314	6
12	Delaware	\$24,349	\$41,436	108%	\$40,773	9
13	Maryland	\$26,548	\$41,257	107%	\$38,739	17
14	Oregon	\$25,373	\$41,093	107%	\$41,334	8
15	Nevada	\$28,538	\$40,817	106%	\$39,109	15
16	Ohio	\$22,146	\$38,944	101%	\$40,689	10
17	Indiana	\$24,172	\$38,722	101%	\$42,040	7
18	Minnesota	\$25,600	\$38,276	100%	\$39,598	13
19	Hawaii	\$25,965	\$38,105	99%	\$29,311	51
20	Wisconsin	\$24,830	\$37,878	99%	\$40,147	11
21	Washington	\$23,933	\$37,860	99%	\$36,558	25
22	Colorado	\$23,068	\$36,271	94%	\$35,485	32
23	Virginia	\$24,774	\$36,116	94%	\$37,172	23
24	Vermont	\$24,934	\$36,053	94%	\$36,816	24
25	New Hampshire	\$23,690	\$36,029	94%	\$34,056	40
26	Georgia	\$25,434	\$35,679	93%	\$38,441	18
27	Tennessee	\$21,705	\$34,267	89%	\$38,100	19
28	Florida	\$24,736	\$33,885	88%	\$36,156	28
29	Kentucky	\$23,018	\$33,802	88%	\$38,099	20
30	Maine	\$21,108	\$33,676	88%	\$34,615	36
31	Iowa	\$21,884	\$33,272	87%	\$36,266	27
32	West Virginia	\$22,278	\$33,258	87%	\$37,525	21
33	Arizona	\$24,286	\$33,208	86%	\$33,424	41
34	Kansas	\$21,909	\$33,150	86%	\$35,858	31
35	Missouri	\$23,205	\$33,143	86%	\$35,292	33
36	South Carolina	\$22,681	\$32,659	85%	\$35,954	30
37	Alabama	\$26,717	\$32,470	85%	\$36,320	26
38	Texas	\$24,079	\$32,426	84%	\$36,065	29
39	Idaho	\$19,715	\$31,818	83%	\$33,186	42
40	Nebraska	\$21,189	\$31,768	83%	\$34,494	37
41	Wyoming	\$22,010	\$31,716	83%	\$32,316	44
42	Utah	\$21,475	\$31,310	82%	\$32,483	43
43	North Carolina	\$21,136	\$31,019	81%	\$34,066	39
44	Arkansas	\$20,680	\$30,987	81%	\$35,284	34
45	Oklahoma	\$23,847	\$30,187	79%	\$34,289	38
46	Montana	\$20,592	\$29,958	78%	\$31,365	46
47	New Mexico	\$22,840	\$29,715	78%	\$30,818	48
48	Louisiana	\$21,087	\$28,347	74%	\$31,246	47
49	North Dakota	\$18,889	\$27,709	72%	\$30,125	50
50	Mississippi	\$20,264	\$27,662	72%	\$31,413	45
51	South Dakota	\$19,820	\$27,072	70%	\$29,617	49
	U.S. Average	\$24,507	\$37,643		\$37,643	

APPENDIX M

**Summary of Selected Items 1997-98
Regional and Statewide Averages**

**Summary of Selected Items 1997-98
Regional and Statewide Averages**

REGION	SALARY					
	SE	SC	SW	INT	NW	AK
AVERAGE TEACHER SALARY	\$48,802	\$47,806	\$49,562	\$48,805	\$48,093	\$48,275
AVERAGE BASE SALARY	\$31,385	\$30,274	\$34,364	\$32,162	\$34,937	\$31,530
AVERAGE MASTERS ONLY	\$35,411	\$33,613	\$38,910	\$37,575	\$38,835	\$35,468
AVERAGE TOP SALARY	\$58,733	\$60,179	\$62,864	\$60,708	\$64,003	\$60,694
BASKETBALL COACH	\$3,713	\$3,291	\$2,837	\$3,630	\$3,354	\$3,379
CERTIFIED SUBSTITUTE	\$93	\$86	\$115	\$95	\$134	\$102
NON-CERTIFIED SUBSTITUTE	\$73	\$69	\$84	\$71	\$116	\$78
REGION	BENEFITS (% OF DISTRICTS OFFERING)					
	SE	SC	SW	INT	NW	AK
DISTRICT HOUSING	29%	33%	87%	40%	75%	52%
LONGEVITY INCREMENT	24%	67%	40%	10%	25%	30%
TUITION REIMBURSEMENT	18%	33%	40%	50%	25%	33%
NON-BUSINESS TRAVEL	12%	0%	33%	30%	75%	25%
DISABILITY INSURANCE	6%	33%	33%	30%	50%	25%
PROFESSIONAL LIABILITY	35%	67%	20%	40%	50%	37%
TRAVEL INSURANCE	29%	50%	53%	40%	100%	46%
AVG. TOTAL INSURANCE (COST/TEACHER)	\$5,920	\$5,154	\$5,580	\$7,007	\$8,001	\$5,779
REGION	LEAVE BENEFITS					
	SE	SC	SW	INT	NW	AK
AVERAGE PERSONAL (DAYS PER YEAR)	3	4	3	3	3	3
AVERAGE PERSONAL (DAYS CUMULATIVE)	4	6	7	6	7	6
% DISTRICTS CASH IN (W/PERSONAL LEAVE)	41%	100%	66%	40%	100%	60%
REGION	ENROLLMENT/STAFFING/WORK YEAR					
	SE	SC	SW	INT	NW	AK
AVG STUDENTS/TEACHER	14.96	16.25	12.26	16.3	12.96	15.39
AVG TOTAL CONTRACT DAYS	185	187	191	190	192	188
AVG STUDENT CONTRACT DA	176	173	172	173	180	174

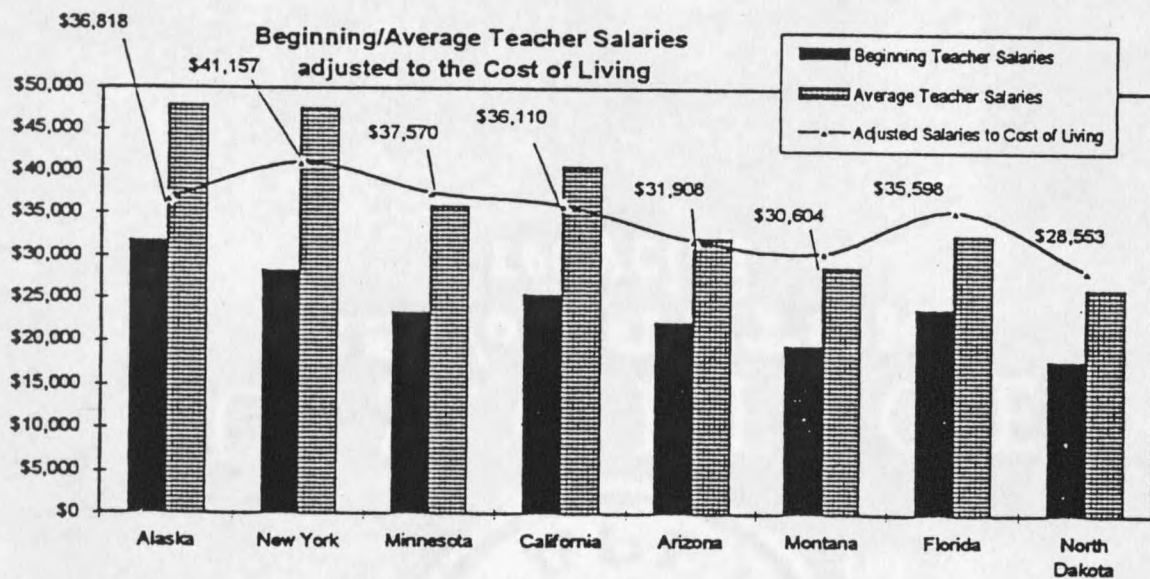
*PTR Figures do not include teacher aides also in the classroom.

ASSOCIATION OF ALASKA SCHOOL BOARDS 1997-98 ALASKA TEACHER SALARY AND BENEFITS REPORT

APPENDIX N

**Beginning/Average Teacher Salaries
Adjusted to the Cost of Living**

Beginning/Average Teacher Salaries Adjusted to the Cost of Living



Source: LaBerge, 1998, ATP Supply and Demand

APPENDIX O
ACCRA Cost of Living Index

ACCRA Cost of Living Index
Third Quarter 1997

City	All Items Index	Grocery Items	Housing	Utilities	Transportation	Health Care	Misc. Goods & Services
WEST							
Anchorage, AK	123.0	120.0	132.3	88.0	112.0	170.1	119.3
Fairbanks, AK	128.7	118.4	134.0	166.7	119.6	168.1	115.3
Juneau, AK	140.0	122.6	164.2	157.2	117.2	165.5	125.2
Kodiak, AK	145.1	144.2	151.6	175.7	116.8	158.5	137.9
Boise, ID	102.6	98.0	109.8	69.8	104.0	113.6	104.2
Las Vegas, NV	106.2	107.4	110.1	76.1	107.5	124.2	105.9
Portland, OR	106.8	103.4	118.9	77.0	109.9	121.8	101.7
San Diego, CA	119.9	112.1	147.5	101.3	120.4	122.2	104.3
Tacoma, WA	101.0	100.7	103.3	70.8	102.8	140.4	98.8
SOUTHWEST							
Dallas, TX	98.2	97.6	94.2	95.9	105.2	106.4	98.9
Denver, CO	106.4	101.4	119.6	82.9	112.7	122.4	98.6
Phoenix, AZ	103.5	105.7	102.0	106.4	112.0	112.6	99.1
Santa Fe, NM	114.0	104.3	134.4	102.3	115.3	106.9	105.2
MIDWEST							
Milwaukee, WI	103.9	101.9	124.0	81.6	101.7	102.2	94.0
Oklahoma City, OK	90.9	88.5	80.0	95.3	95.2	90.0	99.3
Omaha, NE	92.2	94.5	92.6	87.8	102.3	89.2	89.7
SOUTHEAST							
Atlanta, GA	100.5	100.8	98.9	97.8	99.2	106.9	101.7
Nashville, TN	95.6	99.2	94.9	91.2	97.4	94.5	95.3
Birmingham, AL	98.4	97.7	94.8	102.6	95.5	98.3	101.5
Miami, FL	106.4	101.0	108.1	108.8	117.6	111.9	103.0
Raleigh, NC	104.1	101.3	113.0	99.1	97.3	104.1	101.0
ATLANTIC/NEW ENGLAND							
Boston, MA	138.5	110.2	194.5	143.4	121.6	135.8	108.5
Baltimore, MD	98.4	98.7	95.4	108.7	100.5	97.9	97.7
Philadelphia, PA	122.5	109.0	140.0	169.8	119.2	102.8	107.1

ALASKA ECONOMIC TRENDS; June 1997

*Please note: This index gives only the baseline costs. ACCRA (American Chamber of Commerce Research Association), DOES NOT consider the area's tax costs. Transportation costs do not include air travel, which is expensive.

APPENDIX P

**Guidelines for Preparing Culturally Responsive Teachers
for Alaska's Schools**

Guidelines for Preparing Culturally Responsive Teachers for Alaska's Schools

Adopted by the
Assembly of Alaska Native Educators
Anchorage, Alaska
February 2, 1999

The following guidelines address issues that should be considered in the preparation of teachers who will be expected to teach students from diverse cultural backgrounds in a culturally responsive and healthy way. Special attention is given to the preparation of Native and non-Native teachers for small rural schools. The guidelines are presented as they relate to each of the Alaska Teacher Standards, taking into consideration the Alaska Standards for Culturally Responsive Schools and the Alaska Student Content Standards. It is assumed that all teacher candidates will be expected to demonstrate a high level of proficiency in all of these standards, and that teacher (and administrator) preparation programs will incorporate these guidelines in their planning and implementation.

Alaska Teacher Standard One: Philosophy

A teacher can describe the teacher's philosophy of education and demonstrate its relationship to the teacher's practice.

- a. Candidates will develop a philosophy of education that is able to accommodate multiple world views, values and belief systems, including the interconnectedness of the human, natural and spiritual worlds as reflected in Alaska Native societies.
- b. Candidates will incorporate locally appropriate cultural values, as reflected in the various regional value statements and posters, in all aspects of their teaching.
- c. Candidates will gain first-hand experience in alternative ways of knowing and learning under the guidance of personnel who are themselves grounded in ways of knowing that are different from those based on a literate tradition (i.e., schooling), including the experientially-based oral tradition of Alaska Native societies.
- d. Candidates will incorporate alternative ways of knowing in their teaching practice and understand the similarities and differences between them, particularly with regard to Alaska Native and Western traditions.
- e. Candidates will demonstrate their understanding of alternative world views in contexts where they can be judged by practitioners of those world views

Alaska Teacher Standard Two: Learning Theory and Practice

A teacher understands how students learn and develop and applies that knowledge in the teachers practice..

- a. Candidates will incorporate and build upon the prior knowledge and experiences of their students and utilize the parenting and child-rearing practices from the community in all aspects of their teaching.
- b. Candidates will have a thorough understanding of the role of naturalistic intelligence in indigenous societies and will demonstrate their ability to draw upon multiple forms of intelligence in their teaching practice.
- c. Candidates will have a full repertoire of skills for the appropriate use of experiential approaches to teaching and learning in their teaching practice.
- d. Candidates will demonstrate the ability to work with mixed-age/grade groupings in their classroom and to utilize the range of abilities and experiences in such a situation to instructional advantage.
- e. Candidates will approach the developmental potential of their students in a way that recognizes that all children develop at their own rate and in their own way.
- f. Candidates will have extended experiences that involve the development of observing and listening skills associated with the traditional learning ways of Native people.

Alaska Teacher Standard Three: Diversity

A teacher teaches students with respect for their individual and cultural characteristics.

- a. Candidates will acquire and apply the skills needed to learn about the local language(s) and culture(s) of the community in which they are situated.
- b. Candidates will draw upon the traditional teaching roles and practices in the community to enhance the educational experiences of their students.
- c. Candidates will participate in an Elders-in-Residence program and learn how to implement such a program in their own school and classroom.
- d. Candidates will understand the significance of the role of cultural identity in providing a strong foundation for all social, emotional, intellectual and spiritual development and will demonstrate the ability to build on that understanding in their teaching.
- e. Candidates will acquire a comprehensive understanding of all aspects of the local, regional and statewide context in which their students live and be able to pass on that understanding in their teaching, particularly as it relates to the well-being and survival of small societies.
- f. Candidates will help their students to understand and compare different notions of cultural diversity from within and beyond their own community and cultural region, including factors that come into play within culturally mixed and blended families.

- g. Candidates will serve as adult role models by being active contributors to the local lifeways as practiced in the community in which they teach.

Alaska Teacher Standard Four: Content

A teacher knows the teacher's content area and how to teach it..

- a. Candidates will be expected to pursue interdisciplinary studies across multiple subject areas that are applicable to the curriculum content they will be called upon to teach as it relates to the real-world context in which their students are situated.
- b. Candidates will have an extensive repertoire of skills for the application of the content knowledge they teach in guiding students toward the development of local solutions to everyday problems in the world around them
- c. Candidates will know how to acquire an in-depth understanding of the knowledge system indigenous to the place in which they are teaching and apply that understanding in their practice.
- d. Candidates will be familiar with the contributions of many and various cultural traditions to the knowledge base reflected in the Alaska Content Standards.
- e. Candidates will demonstrate the ability to align all subject matter with the Alaska Standards for Culturally Responsive Schools and to develop curriculum models that are based on the local cultural and environmental experiences of their students.
- f. Candidates will know how to translate cultural and intellectual property rights into their teaching practice and will consider such rights in all aspects of their selection and utilization of curriculum resources.

Alaska Teacher Standard Five: Instruction and Assessment

A teacher facilitates, monitors and assesses student learning.

- a. Candidates will utilize multiple instructional strategies and apply those strategies appropriately and flexibly in response to the cultural and instructional environment in which they are situated.
- b. Candidates will incorporate and build upon locally identified cultural values and beliefs in all aspects of their teaching and assessment practices.
- c. Candidates will construct and teach to alternative curriculum frameworks, including those grounded in Alaska Native world views and knowledge systems.
- d. Candidates will utilize alternative instructional strategies grounded in ways of teaching and learning traditional to the local community and engage community members in helping to assess their effectiveness in achieving student learning.
- e. Candidates will demonstrate the ability to utilize a broad assortment of assessment skills and tools in their teaching that maximize the opportunities for students to demonstrate their competence in a variety of ways applicable to local circumstances, including the involvement of local Elders to pass judgement on knowledge and skills associated with traditional cultural practices.

- f. Candidates will understand the strengths and weaknesses of standardized tests and be able to articulate when their use is appropriate and when it is not.
- g. Candidates will apply locally appropriate cultural principles in the assessment of the learning potential of students in their care and provide appropriate opportunities for their advancement.
- h. Candidates will acquire the skills to utilize technology as a tool to enhance educational opportunities and to facilitate the documentation and communication of local cultural knowledge.

Alaska Teacher Standard Six: Learning Environment

A teacher creates and maintains a learning environment in which all students are actively engaged and contributing members.

- a. Candidates will construct learning environments in the classroom context that are modeled on natural learning environments in the community.
- b. Candidates will effectively utilize the local community as an extension of the classroom learning environment.
- c. Candidates will successfully prepare for, organize and implement extended camps and other seasonal everyday-life experiences to ground student learning naturally in the surrounding environment.
- d. Candidates will utilize natural structures and models to construct learning environments that are compatible with the cultural and ecological context in which students are situated.

Alaska Teacher Standard Seven: Family and Community Involvement

A teacher works as a partner with parents, families and with the community.

- a. Candidates will effectively identify and utilize the resources and expertise in the surrounding community to enhance the learning opportunities of the students.
- b. Candidates will develop partnerships with parents, Elders, school board members and other community members as co-teachers in all aspects of their curricular and instructional planning and implementation, and arrange for appropriate compensation for such contributions.
- c. Candidates will understand the role and responsibility of the school as a significant factor in the social, economic and political make-up of the surrounding community and as a major contributor to the community's health and well-being.
- d. Candidates will assume culturally appropriate and constructive roles in the community in which they teach and respect the roles and contributions of other members of the community.

Alaska Teacher Standard Eight: Professional Growth

A teacher participates in and contributes to the teaching profession.

- a. Candidates will draw upon the regional Native Educator Associations along with state and district resources for their own educational improvement and professional growth.
- b. Candidates will engage in critical self-assessment and participatory research to ascertain the extent to which their teaching practices are grounded in the traditional ways of knowing and transmitting culture of the surrounding community.
- c. Candidates will prepare and maintain a comprehensive portfolio documenting the strengths and weaknesses they bring to their role as a teacher.
- d. Candidates will demonstrate their willingness and ability to contribute to a supportive collegial environment that promotes professional growth of all participants on behalf of the educational and cultural well-being of the students in their care.
- e. Candidates will participate in, contribute to and learn from local community events and activities in culturally appropriate ways.

General Recommendations

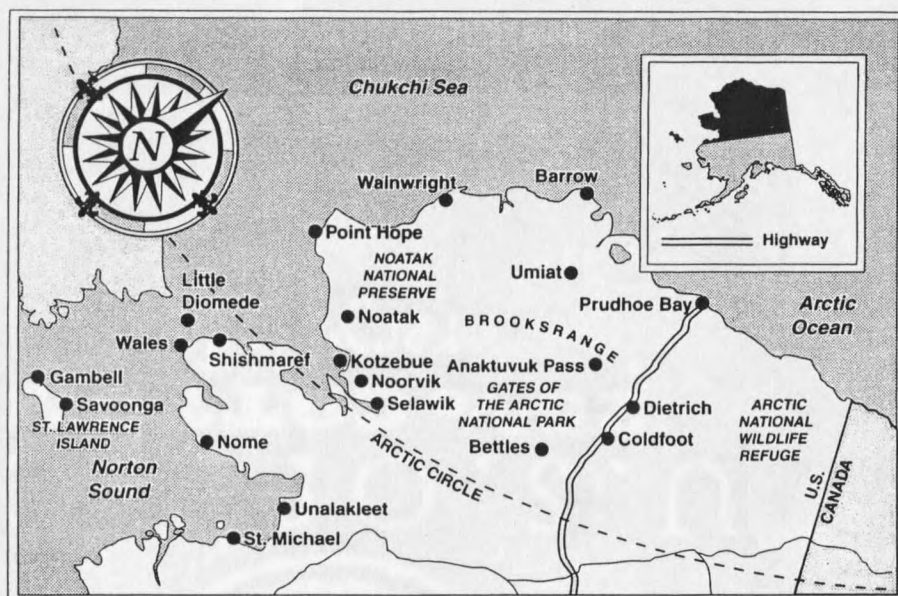
- 1. The Alaska Standards for Culturally Responsive Schools will be integrated into all aspects of teacher and administrator preparation programs.
- 2. All teacher preparation candidates will be provided in-depth experiences in working with students whose cultural backgrounds are different from their own.
- 3. All new teachers will be provided with a cross-cultural orientation as part of the district's regular inservice program, including where possible, a week-long cultural camp experience and the assignment of an experienced Native teacher/aide, Elder and student as mentors throughout the first year of teaching, all of which will be constructed to meet the state "multi-cultural education" requirement for licensure
- 4. Teacher preparation programs will provide candidates who wish to consider teaching in rural Alaska (or to address cross-cultural issues in urban schools) with extended opportunities to complete an internship in a rural school/community setting.
- 5. All school district will provide career ladder incentives for their employees to pursue professional development opportunities, as well as a "future teachers" club to attract more local people into careers in education.
- 6. A "cross-cultural specialist" endorsement based on the Alaska Standards for Culturally Responsive Schools will be made available through the Alaska DOE and UA for teachers and school district to utilize where such specialized expertise is needed.
- 7. To the extent that we teach the way we are taught, university faculty and others associated with the preparation of teachers will participate themselves in cultural immersion experiences to develop the insights and sensitivities they intend to impart to their teacher candidates.

8. Teacher education programs will be extended through the first year of teaching to assist new teachers in applying their newly-acquired knowledge and skills to a real-life teaching situation.
9. Mechanisms, incentives and resources will be made available for school districts to provide paid internships for preservice teacher candidates to assume responsibility for a regular classroom at 60% of a regular teacher's salary, with the stipulation that a licensed mentor teacher in the same building be assigned to guide and supervise the intern, utilizing the remaining 40% of the salary.
10. Native educator associations will initiate community forums and cultural orientation programs for parents, school board members and administrators to promote the development of a common agenda for addressing the educational needs of the children in their care based on the Alaska Standards for Culturally Responsive Schools, including the standards for culturally supportive communities.
11. All of the above guidelines and recommendations for strengthening the cultural responsiveness of teachers are equally applicable to the preparation and practice of school administrators and thus will serve as a basis for revitalizing all educational leadership programs, including the Native Administrators for Rural Alaska program.
12. All teachers, administrators and university faculty must demonstrate their survival skills by emerging intact from a "maquiq" with John Pingayak and successfully completing a course taught by Cecilia "Tacukaq" Martz in Cup'ik!

APPENDIX Q

Summary of Region 1: Northwest

Summary of Region 1: Northwest



Demographics: Population 23,649, with 77% Native. Area is 162,760 square miles.

Economy: Barrow, Kotzebue and Nome are the largest communities in the region. Oil exploration in the 1960s led to the development of the huge reserves in Prudhoe Bay, east of Barrow, and the subsequent construction of the Trans-Alaska Pipeline in the 1970s. Today, the North Slope Borough receives nearly \$40,000 per resident in oil tax revenues annually, and employs many of its Native residents in government service positions. The Red Dog Mine, 90 miles north of Kotzebue, provides 370 direct year-round jobs and over a quarter of the Northwest Arctic Borough's wage and salary payroll. Red Dog is the largest mine in Alaska and the largest zinc mine in the world. Kotzebue and Nome are "regional hub" cities, providing health care, transportation, construction, government and other services for the surrounding communities. Cash employment is limited to government services in the smaller communities, so families rely upon subsistence food-gathering and Native craft-making. Many villages in the region are widely known for their excellent ivory carvings.

Geography: The region includes the Arctic National Wildlife Refuge and the Gates of the Arctic National Park. In Barrow, the sun does not set during May, June and July, and does not rise between November 18 and January 24. The arctic tundra is home to the vast Porcupine Caribou Herd and migrating birds.

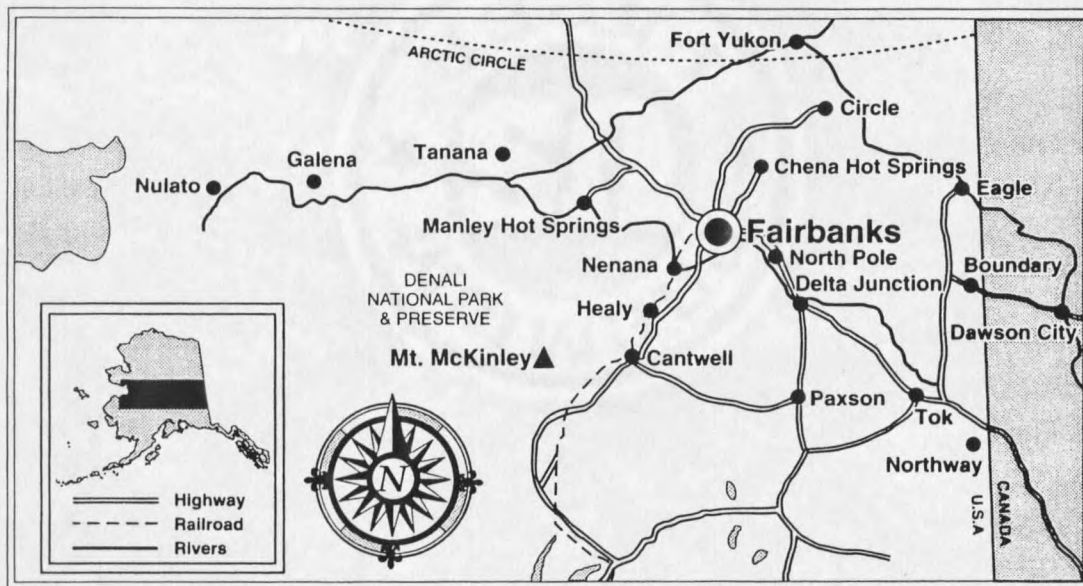
Native Cultures: Communities in this region are primarily Inupiat Eskimo. The Inupiaq and Siberian Yupik (St. Lawrence Island) languages are widely spoken. Whale, seal, walrus, fish and caribou are the most important subsistence foods.

Climate: Precipitation is light, averaging five to nine inches, with annual snowfall of 20 to 40 inches. Temperatures range from -56° to 78° , averaging 40° during the summer. The daily minimum temperature is below freezing 324 days of the year.

APPENDIX R

Summary of Region 2: Interior

Summary of Region 2: Interior



Demographics: Excluding the Fairbanks North Star Borough, Population in Study 17,803, with 35% Natives. Area in Study is 210,232 square miles.

Economy: Fairbanks is the heartbeat of the Interior region, and provides supplies, health care, transportation, government and other services. The Alaskan, Glenn and George Parks Highways are dotted with non-Native communities, such as Nenana, Delta Junction, Glennallen and Tok. Residents along these highways provide services to travelers, seasonal tourism-based businesses, or work in state road maintenance positions. In the remote Native villages, government services and the general store provide the only year-round jobs. Beadwork, trapping, summer construction work and fire fighting for the Bureau of Land Management provide income.

Geography: The Yukon, Koyukuk, and Nenana Rivers and their tributaries wind through the region. The Denali National Park and the Wrangell/St. Elias National Park are home to the largest mountains in the United States.

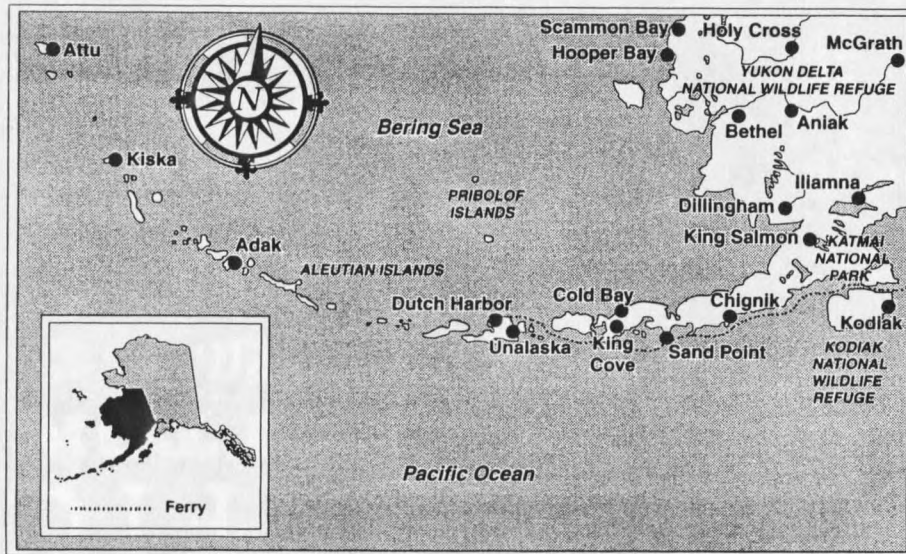
Native Cultures: The Athabascan villages, such as Galena, Fort Yukon and McGrath, lie along the Rivers. There were originally eleven Athabascan dialects, however, most of these are at risk of extinction. The Native villages are heavily dependent upon subsistence food items, such as salmon, pike, sheefish, whitefish, bear, moose, caribou, beaver and ducks.

Climate: Interior Alaska experiences seasonal temperature extremes. Winter temperatures average -12° ; summer temperatures average 61° . Temperatures have been recorded as low as -78° in mid-winter, and as high as 93° in summer. Average annual precipitation is 11.3 inches.

APPENDIX S

Summary of Region 3: Southwest

Summary of Region 3: Southwest



Demographics: Population 52,331, with 50% Native. Area is 157,146 square miles.

Economy: Kodiak, Dillingham, Unalaska and Bethel are the largest communities in the region. The residents of this region (with the exception of Bethel) are highly dependent upon commercial fishing, fish processing, and fleet support services such as supplies, fuel, repairs, and maintenance. Unalaska harbor ranks as the *number one port in the nation* for seafood volume and value; Kodiak ranks second. The Bristol Bay red salmon run is the largest in the world. Government, health care, transportation and other services help to stabilize seasonal employment in these "hub cities." Recreational sport fishing and bear-watching draws thousands of tourists to the Katmai National Park and Lake Iliamna each summer. However, the Kuskokwim and Yukon River salmon do not support a large commercial economy--the Native villages along these Rivers rank among the poorest in the state. Year-round employment is very limited. Basketry and trapping are popular sources of household income.

Geography: The region includes the Yukon and Kuskokwim River Deltas, Bristol Bay, Katmai National Park and the Aleutian and Pribilof Islands. The waters are teeming with abundant marine life; over 230 species of birds frequent the Aleutian Chain.

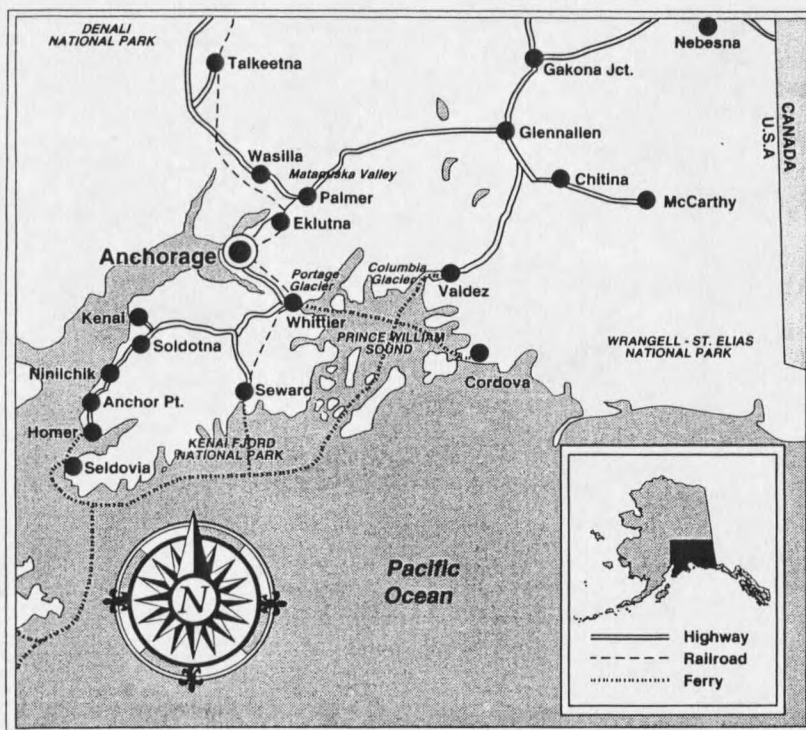
Native Cultures: The Central Yupik language is still widely spoken along the Yukon delta and the Kuskokwim Rivers--the Aleut and Alutiiq (Russian/Aleut) languages are rarely spoken. Residents in the Bethel and Saint Mary's areas and in the smaller communities depend heavily on subsistence foods: salmon, grayling, moose, bear and caribou are harvested. In the Pribilof Islands, seals and sea birds are highly prized.

Climate: Winds of up to 60-70 miles per hour occur between December and March. Average summer temperatures range from 37° to 66°; average winter temperatures range from 4° to 30°. Annual precipitation varies from 26 to 57 inches, with 50 to 65 inches of snow. Heavy fog is also common in the summer months.

APPENDIX T

Summary of Region 4: Southcentral

Summary of Region 4: Southcentral



Demographics: Excluding the Municipality of Anchorage, Matanuska-Susitna Borough and Valdez, Population in Study is 51,941, with 8% Natives. Area in Study is 39,905 square miles.

Economy: Anchorage and the Matanuska-Susitna Valley are home to 60% of all Alaskans. Kenai, Soldotna and Homer are the largest communities on the Kenai Peninsula; Valdez and Cordova are the largest along Prince William Sound. Commercial fishing, fish processing, sport fishing and tourism are prevalent in the region, but incomes are limited in the remote Native villages.

Geography: The Kenai Peninsula, Kenai Fjords National Monument and Prince William Sound are homes to glaciers, fjords, salmon streams and clamming beaches.

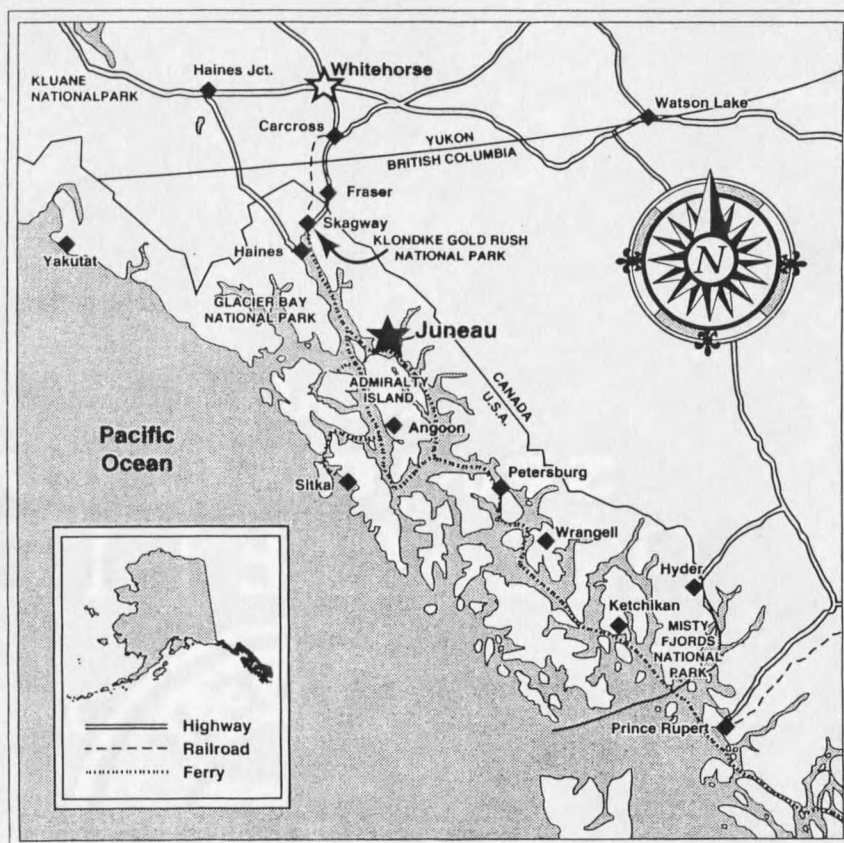
Native Cultures: The population is largely non-Native. The Native population includes the Eyaks in Cordova, Kenaitze Athabascans in Kenai, Sugpiaq Eskimos on the Southern end of the Kenai, and the Alutiiq in Prince William Sound. Native residents subsist on salmon, herring, halibut, seal, clams, crab, shrimp, deer and ducks. Most non-Native residents also participate in fishing and hunting activities to utilize these foods.

Climate: The average temperatures in January range from 6° to 20°; in summer, temperatures range from 50° to 70°. Annual precipitation ranges from 16.5 inches, with 69 inches of snowfall, in Anchorage, to an incredible 300 inches (25 feet) of snowfall annually in Valdez.

APPENDIX U

Summary of Region 5: Southeast

Summary of Region 5: Southeast



Demographics: Excluding the City & Borough of Juneau and the Ketchikan Gateway Borough, Population in Study 28,818, with 27% Natives. Area in Study is 46,644 square miles.

Economy: Juneau, Ketchikan and Sitka are the regional centers in Southeast. Commercial fishing, logging, government and tourism sustain these communities. Year-round employment is limited in the outlying communities.

Geography: Glaciers, the Tongass National Forest, mountains, deep fjords, and thousands of islands line the Inside Passage. Eagles, whales, sea lions, and porpoise abound.

Native Cultures: The population is largely non-Native. Southeast is home to Tlingits, Haidas and Tsimshians, best known for their totem poles and blankets. Salmon, halibut, herring, clams, crab, shrimp and deer are utilized by most households.

Climate: This region experiences the mildest climate in Alaska. Summer temperatures range from 44 to 65; winter temperatures average 25 to 35. Annual precipitation varies from 43 inches in Angoon to 162 inches (13.5 feet) in Ketchikan. Snowfall averages 101 inches in Juneau.

APPENDIX V
This Study's Questionnaire

This Study's Questionnaire

The purpose of this study is to identify the factors within an Alaskan bush village and school which correlate most highly with teacher attrition, as perceived by administrators of Alaskan bush schools and then to determine whether the locality of regions within Alaska has a significant correlation to the factors. For the purpose of this study, "teacher" is described as a person who teaches in a village, but is someone who has not been raised in that particular village.

The information requested in this questionnaire is essential to the outcome of this study. ALL information will remain confidential. Neither individual nor school will be identified in this study.

Directions: Based upon your entire experiences as an Alaskan bush educator, please circle a number 1 - 10 which indicates to what degree the factor below contributes to bush teachers leaving their jobs. Number "1" means the factor DOES NOT contribute to the teacher leaving and number "10" means the factor DOES contribute to a teacher leaving.

* * * * *

1. Teachers never intended to make the bush school a long term commitment. They accepted bush positions as a means of obtaining experience which would enable them to obtain employment in more populated areas.

DOES NOT contribute to teachers leaving	1	2	3	4	5	6	7	8	9	10	STRONGLY contributes to teachers leaving
---	---	---	---	---	---	---	---	---	---	----	--

2. Teachers were not received well by the students they taught.

DOES NOT contribute to teachers leaving	1	2	3	4	5	6	7	8	9	10	STRONGLY contributes to teachers leaving
---	---	---	---	---	---	---	---	---	---	----	--

3. Teachers were not able to develop a collegial relationship with other teachers/educators in the school setting.

DOES NOT contribute to teachers leaving	1	2	3	4	5	6	7	8	9	10	STRONGLY contributes to teachers leaving
---	---	---	---	---	---	---	---	---	---	----	--

4. Teachers were not accepted by members of the community (e.g., parents, political leaders, and religious leaders).

DOES NOT contribute to teachers leaving	1	2	3	4	5	6	7	8	9	10	STRONGLY contributes to teachers leaving
---	---	---	---	---	---	---	---	---	---	----	--

5. Teachers lacked the ability to deal empathetically with social issues inherent within the community (e.g., poverty, drug & alcohol consumption, child abuse, domestic abuse, death).

DOES NOT contribute to teachers leaving	1	2	3	4	5	6	7	8	9	10	STRONGLY contributes to teachers leaving
---	---	---	---	---	---	---	---	---	---	----	--

6. Teachers were not team players with colleagues, administration, and parents of students.

DOES NOT contribute to teachers leaving	1	2	3	4	5	6	7	8	9	10	STRONGLY contributes to teachers leaving
---	---	---	---	---	---	---	---	---	---	----	--

7. Teachers felt their own children were not being raised in a safe, healthy, and enriching environment.

DOES NOT contribute to teachers leaving	1	2	3	4	5	6	7	8	9	10	STRONGLY contributes to teachers leaving
---	---	---	---	---	---	---	---	---	---	----	--

8. Teachers wanted to pursue professional growth opportunities not available in the village setting.

DOES NOT contribute to teachers leaving	1	2	3	4	5	6	7	8	9	10	STRONGLY contributes to teachers leaving
---	---	---	---	---	---	---	---	---	---	----	--

9. Teachers did not like performing the "extra" duties of the job (e.g evening supervision of the facilities; serving as sponsor of school clubs, etc.).

DOES NOT contribute to teachers leaving	1	2	3	4	5	6	7	8	9	10	STRONGLY contributes to teachers leaving
---	---	---	---	---	---	---	---	---	---	----	--

10. Teachers did not participate in recreational activities which are inherent in a remote community (e.g., hunting, fishing, hiking, steaming).

DOES NOT contribute to teachers leaving	1	2	3	4	5	6	7	8	9	10	STRONGLY contributes to teachers leaving
---	---	---	---	---	---	---	---	---	---	----	--

11. Teachers lacked the ability to accept the community's residents and their way of life, yet still remain neutral in regards to community "politics".

DOES NOT contribute to teachers leaving	1	2	3	4	5	6	7	8	9	10	STRONGLY contributes to teachers leaving
---	---	---	---	---	---	---	---	---	---	----	--

12. Teachers did not adapt well to leading a "not-so-private" lifestyle in such a small community.

DOES NOT contribute to teachers leaving	1	2	3	4	5	6	7	8	9	10	STRONGLY contributes to teachers leaving
---	---	---	---	---	---	---	---	---	---	----	--

13. Teachers lacked perseverance in dealing with "less-than-satisfactory" housing situations (e.g., conditions, high rent, lack of adequate housing).

DOES NOT contribute to teachers leaving	1	2	3	4	5	6	7	8	9	10	STRONGLY contributes to teachers leaving
---	---	---	---	---	---	---	---	---	---	----	--

14. Teachers' spouses were not content living in the village setting.

DOES NOT contribute to teachers leaving	1	2	3	4	5	6	7	8	9	10	STRONGLY contributes to teachers leaving
---	---	---	---	---	---	---	---	---	---	----	--

15. Teachers lacked coping skills to function in an isolated area away from their own cultures, friends, and families.

DOES NOT contribute to teachers leaving	1	2	3	4	5	6	7	8	9	10	STRONGLY contributes to teachers leaving
---	---	---	---	---	---	---	---	---	---	----	--

16. Teachers were unprepared for living in an area where goods and services were not readily available (e.g., medical services, food, shopping, entertainment).

DOES NOT contribute to teachers leaving	1	2	3	4	5	6	7	8	9	10	STRONGLY contributes to teachers leaving
---	---	---	---	---	---	---	---	---	---	----	--

17. Teachers exhibited unsatisfactory teaching skills for the bush setting (e.g., lesson planning, organization, knowledge of content material, multi-age classes, knowledge of developmental skill levels of students).

DOES NOT contribute to teachers leaving	1	2	3	4	5	6	7	8	9	10	STRONGLY contributes to teachers leaving
---	---	---	---	---	---	---	---	---	---	----	--

18. Teachers lacked coping skills in dealing adequately with the climate (e.g., cold, rainy, harsh winters, darkness).

DOES NOT contribute to teachers leaving	1	2	3	4	5	6	7	8	9	10	STRONGLY contributes to teachers leaving
---	---	---	---	---	---	---	---	---	---	----	--

19. Teachers lacked skills in effectively dealing with student discipline and student behavior management issues.

DOES NOT contribute to teachers leaving	1	2	3	4	5	6	7	8	9	10	STRONGLY contributes to teachers leaving
---	---	---	---	---	---	---	---	---	---	----	--

20. Teachers felt their own children were not safe in the bush environment.

DOES NOT contribute to teachers leaving	1	2	3	4	5	6	7	8	9	10	STRONGLY contributes to teachers leaving
---	---	---	---	---	---	---	---	---	---	----	--

21. Teachers felt their own children were not being exposed to a healthy and enriching environment which provided extended learning opportunities.

DOES NOT
contribute to

teachers leaving

1 2 3 4 5 6 7 8 9 10

STRONGLY

contributes to

teachers leaving

22. Teachers lacked cultural sensitivity and appreciation for school and the community's culture by choosing to not participate in these activities.

DOES NOT
contribute to

teachers leaving

1 2 3 4 5 6 7 8 9 10

STRONGLY

contributes to

teachers leaving

23. Teachers possessed the necessary skills needed to deal with each of the issues listed above if these issues were encountered "one at a time". However, teachers lacked the emotional reserves required to deal with the sheer amount of issues confronting them at the same time, with very little hope for improved conditions.

DOES NOT
contribute to

teachers leaving

1 2 3 4 5 6 7 8 9 10

STRONGLY

contributes to

teachers leaving

24. Please feel free to write any comments below (e.g., factors not included in this questionnaire, general comments about teacher attrition in Alaskan bush villages, etc.). Your comments are valued!

25. GENERAL QUESTIONS ABOUT YOU:

Gender:

_____ Male

_____ Female

Your Age:

_____ Under 35

_____ 35 - 45

_____ 46 - 55

_____ 56 or above

26. The information you wrote on this questionnaire reflected your background of experience primarily from what region of Alaska, as listed below? (Please specify only ONE region).

- ☐ 1. Northwest Region
☐ 2. Interior Region
☐ 3. Southwest Region
☐ 4. Southcentral Region
☐ 5. Southeast Region

27. Identify the size of the school staff you primarily had in mind when you responded to the questions listed above. (Please specify only ONE choice).

- ☐ 1 - 5 teachers
☐ 6 - 10 teachers
☐ Over 10 teachers

28. Total number of years (including this year) that you have worked as an educator in Alaska: _____ yrs.

29. Total number of years (including this year) you have worked as an administrator in Alaska: _____ yrs.

30. Current position in the school district:

- ☐ Superintendent
☐ Personnel Director
 Other _____ (please specify)

31. Name (optional) _____

32. Would you like a summary of this study's findings? ☐ Yes ☐ No

If yes, please write your name and address on the lines below:

Thank you very much for your time and effort in completing this questionnaire. Please fax it back to me by January 15, 1999. Thanks again!

E-mail: Istroh@kpbsd.k12.ak.us

Fax: (907) 262-8739

APPENDIX W

Instrument's Questions Categorized by Sub-Factor

Instrument's Questions Categorized by Sub-Factor

PROFESSIONAL:

1. Teachers never intended to make the bush school a long-term commitment. They accepted bush positions as a means of obtaining experience which would enable them to obtain employment in more populated areas.
2. Teachers were not received well by the student they taught.
3. Teachers were not able to develop a collegial relationship with other teachers/educators in the school setting.
6. Teachers were not team players with colleagues, administration, and parents of students.
9. Teachers did not like performing the "extra" duties of the job (e.g., evening supervision of the facilities; serving as sponsor of school clubs, etc.).
17. Teachers exhibited unsatisfactory teaching skills for the bush setting (e.g., lesson planning, organization, knowledge of content material, multi-age classes, knowledge of developmental skill levels of students).
19. Teachers lacked skills in effectively dealing with student discipline and student behavior management issues.

PERSONAL / FAMILY:

7. Teachers felt their own children were not being raised in a safe, healthy, and enriching environment.
12. Teachers did not adapt well to leading a "not-so-private" lifestyle in such a small community.
13. Teachers lacked perseverance in dealing with a "less-than-satisfactory" housing situation (e.g., conditions, high rent, lack of adequate housing).
14. Teachers' spouses were not content living in the village setting.
20. Teachers felt their own children were not safe in the bush environment.
21. Teacher felt their own children were not being exposed to a health and enriching environment which provided extended learning opportunities.

GEOGRAPHIC:

8. Teachers wanted to pursue professional growth opportunities not available in the village setting.
10. Teachers did not participate in recreational activities, which are inherent in a remote community (e.g., hunting, fishing, hiking, steaming).
16. Teachers were unprepared for living in an area where goods and services were not readily available (e.g., medical services, food, shopping, entertainment).
18. Teachers lacked skills in dealing adequately with the climate (e.g., cold, rainy, harsh winters, darkness).

SOCIO-CULTURAL:

4. Teachers were not accepted by members of the community (e.g., parents, political leaders, religious leaders).
5. Teachers lacked the ability to deal empathetically with social issues inherent within the community (e.g., poverty, drug & alcohol consumption, child abuse, domestic abuse, death).
11. Teachers lacked the ability to accept the community's residents and their way of life, yet still remain neutral in regards to community "politics."
15. Teachers lacked coping skills to function in an isolated area away from their own cultures, friends, and families.
22. Teachers lacked cultural sensitivity and appreciation for school and the community's culture by choosing to not participate in these activities.
23. Teachers possessed the necessary skills needed to deal with each of the issues listed above if these issues were encountered "one at a time." However, teachers lacked the emotional reserves required to deal with the sheer amount of issues confronting them at the same time, with very little hope for improved conditions.

APPENDIX X

Reliability Analysis – Scale (Alpha)

Reliability Analysis – Scale (Alpha)

N of Cases = 46.0

Inter-item Correlations	Mean	Minimum	Maximum	Range	Max/Min	Variance
	.3577	-.2426	.8276	1.0702	-3.4117	.0290

Reliability Coefficients 23 items

Alpha = .9264

Standardized item alpha = .9276

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