THE MOLLY HOOTCH SCHOOLS AFTER 40 YEARS: SUCCESSES, FAILURES, AND OPPORTUNITIES

Jody Lynne Drew
THE MOLLY HOOTCH SCHOOLS AFTER 40 YEARS: SUCCESSES, FAILURES, AND OPPORTUNITIES

By

JODY LYNNE DREW

Master of Arts, University of Washington, Seattle, WA, 1990
Bachelor of Arts, Whitworth College, Spokane, WA, 1981

Dissertation

presented in partial fulfillment of the requirements for the degree of

Doctorate in Educational Leadership

The University of Montana
Missoula, MT

May 2022

Approved by:
Dr. Ashby Kinch,
Interim Graduate School Dean

Dr. John Matt, Chair
Educational Leadership

Dr. Francee O’Reilly
Educational Leadership

Dr. Roberta Evans
Educational Leadership

Dr. Beverly Chin
English

Dr. Anna East
Outside committee member
This quantitative study was designed to understand the relationship between the variables of student attendance, educator experience and turnover, and student achievement at the Molly Hootch schools in rural Alaska in an effort to understand the current state of achievement according to data from 2002–2019 collected from the Alaska Department of Education and Early Development (AKDEED) database. Data revealed that Molly Hootch school attendance was at 90% and that proficiency among student dropped from 40% to 15% during the years under review. The researcher was not granted access to review further data that could provide more concrete answers to the research questions. There certainly is enough evidence to warrant further investigation, both qualitative and quantitative, into the experiences of these students and communities, as well as the teachers and other educational staff, to uncover possible supports that can be provided or barriers that can be removed to increase equity in education and increase academic achievement for Alaskan Native communities.
Dedication

Many thanks to Helen Hancken, who first invited me to Bethel, to Bill Eisenbart and Mary Whitaker, who invited me back again and again and showed me the country, to Katie and Robert Charles and their family, who helped me orient in Akiachak, to Sally Russell, who hired me to teach at UAF Kuskokwim, and to Oscar Alexie, who was my Yugstun teacher there.

To Molly and Mickey Nicolai of Kalskag, who adopted me; to Jeff Saunders, who mentored me in carpentry, fishing, and being gussak in a Yup’ik world; to John Demientieff from Holy Cross for many unexpected adventures and the moose nose; to Pete Kaiser of Bethel, who sold me his boat and let me work with his dogs; and to Mike Williams Sr. of Akiak for his tireless work for sobriety and Yupiit sovereignty. Also, a big thanks to my parents, Pat and Marv Drew, for everything, but especially for their unflagging interest in and encouragement throughout this project.
Acknowledgments

Although this study could not be completed as envisioned, it yielded important and heretofore unreported information about the Molly Hootch schools in remote, rural Alaska. Bruce Twomey provided the complete Tobeluk v. Lind settlement decree. Christian Colton and Mary-Heather Kakhlen at AKDEED provided school- and state-level data from the AKDEED database. Audrey Schell at The Analysis Factor helped with the original project design.

My dissertation committee members Dr. Anna East, Dr. Beverly Chin, Dr. Francee O’Reilley, Dr. Roberta Evans, and Committee Chair Dr. John Matt provided me with encouragement, enthusiastic support, and much needed, sometimes pointed, guidance. Thank you each and all.
Table of Contents

List of Tables ........................................................................................................................................ iii
List of Figures ......................................................................................................................................... iv
Chapter 1: Introduction to the Study .................................................................................................... 1
  Background of the Study ...................................................................................................................... 2
  Problem Statement .............................................................................................................................. 5
  Purpose of the Study ........................................................................................................................... 5
  Significance of the Study ..................................................................................................................... 6
  Research Questions and Hypotheses ................................................................................................. 7
  Definition of Terms ............................................................................................................................. 8
  Limitations ......................................................................................................................................... 9
  Organization of the Remainder of the Study .....................................................................................10
Chapter 2: Literature Review ................................................................................................................11
  Theoretical Foundations ....................................................................................................................12
  History of the Problem ......................................................................................................................15
  Attendance .......................................................................................................................................28
  Educator Turnover ...........................................................................................................................30
  Teacher Experience ...........................................................................................................................32
  Principal Experience ..........................................................................................................................35
  Education in Rural Alaska ..................................................................................................................37
  Educator Expectations in Cross-Sociodemographic Situations .........................................................40
  Summary ...........................................................................................................................................41
Chapter 3: Methodology .......................................................................................................................43
  Research Questions and Hypotheses .................................................................................................44
Professional School Culture ..............................................................................................67
Teacher Experience........................................................................................................68
Teacher Turnover............................................................................................................69
Standardized Tests as Measures of Academic Achievement and/or Cultural Alignment ..................................................................................................................70
Attendance ..................................................................................................................71
Summary ....................................................................................................................71
References ...................................................................................................................74
Appendix A: Tobeluk v. Lind Settlement Decree .............................................................88
<table>
<thead>
<tr>
<th>Table Number</th>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Descriptive Statistics for Attendance Rate for the Years 2010–2019</td>
<td>54</td>
</tr>
<tr>
<td>2</td>
<td>Descriptive Statistics for the Proficient Percent 2010–2019</td>
<td>55</td>
</tr>
<tr>
<td>3</td>
<td>Descriptive Statistics for Total Students Taking the Tests 2010–2019</td>
<td>56</td>
</tr>
<tr>
<td>4</td>
<td>Descriptive Statistics for Average Years of Experience 2010–2019</td>
<td>58</td>
</tr>
<tr>
<td>5</td>
<td>Descriptive Statistics for Teacher Turnover 2010–2019</td>
<td>60</td>
</tr>
</tbody>
</table>
List of Figures

Figure 1: Student Attendance Rates from 2010 to 2019 ....................................................54
Figure 2: Academic Achievement From 2010 to 2019 ......................................................56
Figure 3: Proficiency for School Size by Year ..................................................................57
Figure 4: Teacher Years of Experience from 2010 to 2019 ...............................................59
Figure 6: Teacher Turnover from 2010 to 2019 .................................................................61
Figure 7: Average Teacher Experience, Turnover, and Student Attendance,
  Proficiency in Math, and Reading/Writing from 2010 to 2019 .....................................62
Chapter 1: Introduction to the Study

In Alaska, students have consistently performed poorly on national educational rankings compared to students in other states (Trimble, 2018). Furthermore, the Alaska Native population is disproportionately represented at the lowest levels of student achievement within the state rankings (DeFeo et al., 2017). In the 1970s, the governor of Alaska signed a consent decree to establish high schools in rural, predominantly Alaska Native communities (Alaskool, n.d.) where there were none. Although 105 such schools were eventually built, researchers have not determined whether these schools have adequately educated the students who attend them.

The Alaska Department of Education and Early Development (AKDEED) uses school-level standardized test results as a measure of quality control for schools, citing three purposes:

First, we want to be able to inform parents, educators, policy makers, the community, and businesses how our schools and districts are performing. Second, after we have determined how our schools are performing, we want to identify schools in the most need of school improvement efforts. Third, we want to ensure there is equity in education. Our mission is to provide an excellent education to every student every day. (AKDEED, 2018, para. 4)

Among rural Alaska Native populations, student academic achievement, as measured by state-mandated standardized tests, remains lower than the average at both the state and national levels (Patterson Silver Wolf & Butler-Barnes, 2017) in mathematics and English Language Arts (ELA). It was unclear whether this result is consistent for the “Molly Hootch” schools. More specifically, it is not clear whether student attendance, high turnover of educators, or the years of educator experience
contribute to student achievement in the schools built in rural Alaskan villages after the Molly Hootch lawsuit settlement. In the lawsuit, over 4,000 Alaska Native plaintiffs claimed they faced racial discrimination by the State of Alaska because they lacked high schools in their rural villages (Alaskool, n.d.). The government of Alaska admitted no wrongdoing but still built these “Molly Hootch” high schools in rural villages. The purpose of the present quantitative study was to describe the academic performance of the Molly Hootch schools and to investigate the relationships between student attendance, educator experience, and school efficacy as measured by achievement on standardized tests in the Molly Hootch schools in rural Alaska.

**Background of the Study**

On September 3, 1976, Alaska Governor Jay Hammond signed a consent decree ending the class-action lawsuit known as the Molly Hootch case, which was officially tried as *Tobeluk v. Lind* (Alaskool, n.d.; see Appendix A). In the suit, the plaintiffs numbered more than 4,000, resided in 126 rural villages, and claimed racial discrimination by the State of Alaska. As a result, leaders from the State provided high schools in small, predominantly White villages—but did not do so in the plaintiffs’ small, predominantly Alaska Native villages.

In the settlement decree, all while denying any wrongdoing, leaders of the State of Alaska agreed to construct high schools in any of the 126 villages named in the consent decree that wanted a high school (See Schedule C in Appendix A). Eventually, 105 schools were built (See schedule D in Appendix A). This act enabled rural Alaska Native students to stay in their home villages for high school, rather than forfeiting high school or traveling great distances to attend residential schools. Although the construction of schools in the rural villages of Alaska seemed socially and culturally beneficial to
families and communities, the educational benefits anticipated by and for the Molly Hootch communities have not been realized (Alaskool, n.d.). Moreover, the Molly Hootch schools have not demonstrated proficient levels of academic attainment.

In 2011, Alaska Governor Sean Parnell asked Margie Brown, President and Chief Executive Officer of Cook Inlet Region Inc. (CIRI), for suggestions for education reform (Brown, 2011). CIRI is one of 12 land-based Alaska Native regional corporations created by the Alaska Native Claims Settlement Act of 1971. Brown (2011) said, “Alaska students are near the bottom among the states, with Alaska Native students ranking among the worst-performing groups in the state. [We] are barely in the game … fewer than half of Alaska Native students graduate from high school” (para. 2). The Lower Kuskokwim School District is comprised of schools in Bethel, Alaska that predate the Tobeluk Consent Decree and about 25% of the Molly Hootch schools.

On March 28, 2017, Lower Kuskokwim School District (LKSD) Staff (2017) reported that LKSD had a pre-Kindergarten to 12th grade average attendance rate of 90% but had only achieved a 53% graduation rate. Further, less than 41% of students in math and 33% of students in reading were meeting growth goals, and less than 19% had proficiency in Yugtun/Cugtun in dual language schools (LKSD Staff, 2017). Several factors may be contributing to the poor educational record of Alaska in general and rural Alaska specifically. For example, educator turnover rates in rural Alaska are among the highest in the nation (Hill & Hirschberg, 2013). Alaskan PK–12 education ranked 46th in a nationwide study (Trimble, 2018). Alaska Native students were disproportionately represented at the lowest levels of achievement and graduation rates. High school graduation rates for Alaska Native students hover around 30%. Those who do graduate
demonstrate the reading and writing levels of fifth graders, as measured by state standards-based assessments (AKDEED, 2016; Wolf et al., 2017). Fifty-two percent of all Alaskan high school graduates who enroll at the University of Alaska require significant remediation in preparation for college work (Gutierrez, 2013).

Up to 70% of educators working in the Molly Hootch villages are beginning teachers who are neither Alaska Native nor native to Alaska (Carter, 2006; Patterson Silver Wolf & Butler-Barnes, 2017). Novice teachers develop competencies more quickly when they work in high-functioning professional cultures and when they have the support and guidance of an experienced principal. Many principals in rural Alaska—sometimes called “the bush”—may also be outsiders in the initial years of their work as administrators (DeFeo et al., 2017; Trumbull et al., 2015). The reality shock and culture fatigue beginning teachers and principals experience contributes to educator failure and high turnover rates in rural Alaska (Patterson Silver Wolf & Butler-Barnes, 2017; Torres, 2017; Trumbull et al., 2015). Turnover rates have historically been—and remain—much higher than national rates, even among high-poverty, high-needs schools (DeFeo et al., 2017; Patterson Silver Wolf & Butler-Barnes, 2017). Furthermore, researchers have associated high turnover rates and inexperienced teachers with poor achievement among students (Adams & Woods, 2015; DeFeo et al., 2017; Murnane, 1975). Thus, rural Alaska Native students need more experienced educators, but encounter teachers with less experience (DeFeo et al., 2017).

Achievement results from the LKSD’s 2015–2016 school year (SY) indicate that solutions to the student achievement problem lie in factors under the schools’ control. One of those factors is educator turnover. Previous scholars have found that a shortage of
qualified teachers and higher turnover rates have disproportionately influenced high poverty and minority school districts, and these factors have strong negative correlations to student achievement (Chain et al., 2017; Hanushek, 2016). For example, Ronfeldt et al. (2013) established a direct causal link between teacher turnover and student achievement. Another factor under the schools’ control is the experience level of the educators they hire. Research has shown that educator years of experience contributes to the academic achievement of students (Murnane, 1975; Patterson Silver Wolf & Butler-Barnes, 2017).

Problem Statement

Alaska Native students have repeatedly placed in the bottom rankings on national surveys of academic achievement and graduation (DeFeo et al., 2017; Trimble, 2018). To better serve the Alaska Native population, Molly Hootch schools were constructed in rural regions of Alaska (Alaskool, n.d.). To date, however, no research had been conducted on whether those schools are adequately educating the student population. The limited educational research that exists on rural areas of Alaska continues to show that student achievement among rural Alaska Native populations remains lower than the average at both the state and national levels (Vincent et al., 2017). Student attendance, rates of educator turnover, and years of educator experience contribute to student achievement in the schools built in rural Alaskan villages after the Molly Hootch lawsuit settlement.

Purpose of the Study

The purpose of this quantitative study was to investigate the relationships between student attendance, educator experience, and student achievement in the Molly Hootch schools in rural Alaska. The findings from this study contribute knowledge about the educational efficacy of the Molly Hootch schools and reveal whether leaders are
adequately serving the community they are hired to assist. Researchers have indicated that student populations of rural Alaska do not perform to the standards of the national average (Trumbull et al., 2015) in mathematics and ELA. Scholars have also shown that Alaska Native students are disproportionately represented in the bottom levels of student achievement (Patterson Silver Wolf & Butler-Barnes, 2017). Researchers have found that educator years of experience contributes to the academic achievement of students (Murnane, 1975; Patterson Silver Wolf & Butler-Barnes, 2017). In the present study, the researcher reviewed the existing literature on this topic and identified a gap in the knowledge about the Molly Hootch schools. Therefore, this research contributed to filling the gaps in research on education in rural Alaska.

**Significance of the Study**

Student achievement is essential for the well-being of the students themselves and for society (Patterson Silver Wolf & Butler-Barnes, 2017). Researchers have correlated higher student achievement with better employment opportunities for the students, and thus more economic gain for society (DeFeo et al., 2017). The current study has important implications for students in rural Alaska and their communities. Previous researchers have found that Alaska Native students are academically outperformed by their non-Alaska Native counterparts (Brayboy & Lomawaima, 2018), as measured by standards-based achievement tests. By investigating factors that influence student achievement in rural Alaskan schools, the current researcher sought to offer explanations for the low academic achievement of rural Alaska Native students in the Molly Hootch schools.

The current study is important to tribal leaders, educational leaders, University of Alaska leaders, Illisagvik College leaders and Denali College leaders, policymakers, and
legislators as they continue to seek efficiencies while improving educational outcomes. Identifying relationships between educator turnover, educator experience, and student achievement outcomes is relevant for educational training and recruitment of educators at all levels. Finally, this study added to the limited knowledge base about the factors contributing to student achievement in the Molly Hootch schools in remote, rural Alaska.

**Research Questions and Hypotheses**

For the purposes of this project, the study asked the following overarching research question: What are the relationships between school attendance, student achievement educator turnover, and the experience of teachers and principals? The COVID-19 pandemic and resulting loss of employment in the University of Alaska system disqualified this researcher from accessing the deidentified, individual level data required for the study that they had envisioned and proposed. Therefore, using school-level data that was available to the public, the researcher conducted a quantitative case study to examine the following research questions:

- **RQ1**: What levels of academic achievement did students attending the Molly Hootch schools from 2010–2019 attain?
- **RQ2**: What were the rates of attendance for the Molly Hootch schools from 2010–2019?
- **RQ3**: What were the rates of educator turnover at the Molly Hootch schools from 2010–2019?
- **RQ4**: What were the years of educator experience for the Molly Hootch schools from 2010–2019?
Definition of Terms

The following terms appear frequently throughout this dissertation:

*Achievement.* Achievement refers to test results students obtain on standardized tests administered by the State of Alaska (AKDEED, 2004a; Wolf et al., 2017).

*Attendance.* Attendance means the student’s physical presence in the school for at least the half-day on a school day (AKDEED, 2004a; Wolf et al., 2017).

*Beginning principal.* Beginning principal refers to principals within the first 5 years of their principalship (Walters-Brazile, 2012).

*Beginning teacher.* Beginning teacher refers to teachers within the first 5 years of teaching (Murnane, 1975).

*Cheechako.* Cheechako refers to a newcomer to Alaska who is ignorant of the state’s terrain, weather, animals, and/or culture (Carter, 2006). This term is used primarily on the Yukon and in the Interior. On the coast and in the Kuskokwim Delta, the term *outsider* is more common (Brooks & Bartley, 2016).

*Culture fatigue.* This term describes the relentless experience for Cheechako educators of living and working in an unfamiliar environment, within an unfamiliar and low-context culture, where people may not speak their language, do not recognize their references, eat unfamiliar foods, and more (Grubis, 2008).


*Principal.* According to the Alaska Administrative Code (2017), a principal/administrator must hold a Type B certificate to be the primary authority.

Principals have the responsibility of any or all of the following administrative functions
in an Alaska public school: selection, appointment, oversight, review, and control of employees of the district. Their employees are required to hold teaching, administrative, or special service providers certificates. Principals also have oversight of planning and development of one or more educational programs of the district (Alaska Administrative Code, 2017).

Principal turnover. Principal turnover refers to the departure of principals from their principal jobs (Mascall & Leithwood, 2010).

Standards-based assessments. Standards-based assessments refer to proficiency-based criterion-referenced tests explicitly developed for Alaska (AKDEED, 2004b; Wolf et al., 2017).

Teacher. According to the Alaska Administrative Code (2017), a teacher in a public school must be at least 18 years old and must hold a valid teacher certificate issued under this chapter, unless the teacher is participating in an exchange program under AAC 30.010.

Teacher turnover. Teacher turnover refers to the departure of teachers from their teaching jobs (Ingersoll, 2001).

Limitations

Circumstances resulting from the COVID-19 pandemic prevented the researcher’s access to the individual level, de-identified data required to complete this study as envisioned. The available data was limited to information schools and districts provided to the Alaska Department of Education and Early Child Development. The scope of this study was also limited to the Molly Hootch schools in Alaska; therefore, the results cannot be generalized to other populations or school districts.
Organization of the Remainder of the Study

The present study examined the relationships between student attendance, educator experience, and student achievement. Chapter 1 introduces the problem under study, including a background to the problem, the problem statement, the purpose and significance of the study, the research questions, and a brief overview of the research methodology and research design.

In Chapter 2, the researcher reviews the relevant literature on the study topic. The review begins with a discussion of the theoretical framework that guided the study, followed by a history of the problem, including a history of the establishment of the Molly Hootch high schools. The literature review then focuses on factors affecting student achievement, as well as the variables examined in the current study.

Chapter 3 includes a thorough discussion of the methodology and is organized into the following sections: research questions and hypotheses, research design, population, data collection, data analysis, instruments, ethical considerations, and a summary. Chapter 4 is a detailed analysis of the data and the results of that analysis. Chapter 5 then provides a discussion and interpretation of the results, recommendations for educators and community leaders, and recommendations for further research, before it concludes the study.
Chapter 2: Literature Review

Chapter 2 reviews the literature on the topic of the current study. Students in Alaska have consistently performed poorly compared to students in other states on national educational rankings (Trimble, 2018). Furthermore, the Alaska Native population is disproportionately represented in the lowest level of student achievement within state rankings in Alaska (DeFeo et al., 2017). In the 1970s, the governor of Alaska signed a consent decree meant to establish schools in rural, predominantly Alaska Native communities of Alaska (Alaskool, n.d.). Although slow to implement, 105 schools were eventually built. To date, however, no research has been conducted on whether those schools are adequately educating the student population.

Student achievement among rural Alaska Native student populations remains lower than that recorded at both the state and national levels (Patterson Silver Wolf & Butler-Barnes, 2017). It is unclear whether student attendance, high turnover of educators, or years of educator experience contributed to student achievement in the schools built in rural Alaska Native villages after the Molly Hootch lawsuit settlement. The purpose of this quantitative case study was to investigate the relationship between student attendance, educator turnover, educator experience and student achievement in the Molly Hootch schools in remote, rural Alaska.

The findings of this study have significance for students in rural Alaska and for their communities. Previous researchers have found that Alaska Native students are academically outperformed by their non-Alaska Native counterparts (Adams & Woods, 2015; DeFeo et al., 2016; Kaden et al., 2016). Through this study, the researcher sought to investigate and explain the factors that influence student academic achievement in the Molly Hootch schools.
They employed the following databases in the literature search for this review: JSTOR, EBSCOHost, Springer, Google Scholar, and PsychInfo. They used the following search terms, both singularly and in Boolean operator (and, or, etc.) combinations: Alaska education, Alaska Native, cultural implications for education, learning theories, Molly Hootch schools, principal experience, principal turnover, student achievement, student attendance, student performance, teacher experience, and teacher turnover.

This chapter begins with a discussion of the theoretical framework. To address the educational outcomes specific to Alaska Native students, Vygotsky’s (1978) social constructivism theory served as the guiding framework for this study. After detailing the framework, the literature review turns to a history of the problem. To understand the factors affecting student achievement in all schools, one must understand the history of education for Alaska Native people. Because historical and cultural factors affect these communities, one cannot understand student academic achievement among this population without first understanding the background to the current problem. The history moves into the establishment of the Molly Hootch high schools, which are the subject of this study. Student achievement in these schools remains low and lacks adequate research (LKSD Staff, 2017). After a discussion of the history, the literature review then addresses the factors affecting student achievement, as well as the research variables for this study. Both historical records and current research frequently note educator turnover, experience, and student attendance as contributing to low student achievement (McCarty et al., 2015; Nelson-Barber & Trumbull, 2015), and this thus a topic that requires a thorough examination.

**Theoretical Foundations**

The researcher chose the theory of social constructivism as the framework for the
current study. A theoretical framework acts as a lens through which to view and understand the research problem and the results of the study. Therefore, the researcher needed to choose the theory carefully. Vygotsky’s (1978) social constructivism theory provides a way of understanding how individuals develop and learn, and researchers have applied it to education. Vygotsky (1978) believed that knowledge is acquired and influenced by both an individual and by the relationship between an individual and others. Thus, learning is a collaborative enterprise. Vygotsky (1978) asserted that cognitive functioning is due to social interactions and exchanges and, thus, is a process only possible through the integration of the individual with a knowledge community. Vygotsky (1978) further rejected the theory that learning is simply the learner’s assimilation and accommodation of new knowledge.

Vygotsky (1978) placed special emphasis on the role of language and culture in cognitive development and learning processes. Not only does language and culture influence the development of the individual but also their perception of the world (Vygotsky, 1978). Vygotsky (1978) found that individuals do not simply see the world as objects of shape and color but also as imbued with meaning and interpretation. Thus, culture and language are the framework for learning and making sense of the world that each individual experiences (Vygotsky, 1978). Furthermore, Vygotsky (1978) described motivation for learning as both intrinsic and extrinsic; thus, learning is a social phenomenon but one that depends heavily on a learner’s motivation to engage in the learning process.

Vygotsky’s (1978) theory of social constructivism has informed many educational studies and was an appropriate fit for the current study. The researcher sought to
understand the relationship between external and social factors (i.e., educator experience and educator turnover with student achievement), so a social constructivist approach made sense. Furthermore, researchers of education in rural Alaska have noted the disconnect between the culture of the professionals hired to educate the students and the culture of the students themselves (Adams & Woods, 2015; DeFeo et al., 2016; Kaden et al., 2016). Thus, the emphasis that Vygotsky (1978) placed on culture and language was particularly relevant for the current study. Vygotsky (1978) described cognitive development as a process wherein a learner is guided in performing a task beyond the ability of the child’s independent effort by a more knowledgeable person, such as a parent, teacher, or an older child. In performing the task, gaining understanding, and making meaning, the child engages in conversation with the more knowledgeable person and learns via both social/linguistic interaction and performance of the task itself. Each event is embedded in and reinforces the culture of the learner in which the learning takes place.

Seen this way, students are culture bringers and culture bearers. When they come to school, they embody their culture. Educators are also culture bringers and bearers. They have socially constructed, language-based experiences and expectations that they enact in their work in classrooms and schools. For beginning teachers, the principal can—if they are a more knowledgeable person—provide significant scaffolding for learning and growth. If the principal is not a more knowledgeable person, the beginning teacher may not develop the requisite skills and attributes for teaching success quickly or completely, especially in cross-demographic situations. In understanding the potential relationships between student achievement and educator experience, it is critical to
remember that, like Russian dolls, students are individuals that are also nested within their families, villages, languages, cultures, and histories. Teachers, too, are nested within their families, languages, cultures, and histories, and their classrooms are nested within schools and professional cultures, where principals and exert significant influence through their expertise.

**History of the Problem**

For at least 10,000 and as many as 30,000 years, Alaska Native civilizations taught and learned complex subjects by incorporating education in their social lives (Adams & Woods, 2015; Kaden et al., 2016). Barnhardt (1973) articulated the differences between traditional teaching and learning and the systems of colonial education: “[Pre-colonial] education was viewed primarily as an informal and life-long process, since [colonization] it has become synonymous with those activities that occur within the large, illuminated building on the hill, and is restricted to six hours a day, five days a week” (p. 15). There was a cultural disconnect between these styles of learning, which Vygotsky (1978) would view as particularly problematic for the learner. Researchers have shown that this disconnect has continued to affect Native American students (Adams & Woods, 2015; DeFeo et al., 2016; Kaden et al., 2016).

Dauenhauer (2000) described starkly different colonial approaches to educating Alaska Natives, particularly between the U.S. and Russian modalities. Each approach was deeply rooted in religious belief. The Russian position respected and advanced Alaska Native languages and cultures, while the U.S. goal was to “kill the Indian” in the individual and to save the man (Pratt, 1892). Each system of education treated Alaska Native people as “children” who required protection and training (Schneider, 2018). The U.S. system, with its explicit goal of annihilating Alaska Native culture, prevailed.
Sheldon Jackson was instrumental in shaping the Territorial Government and school systems for the new Territory of Alaska (Schneider, 2018). In the Organic Act of 1884, Jackson combined his proposals for civil government, Alaskan education, policies of English-only curriculum, and the attendant suppression of Alaska Native language and culture into a single act (Schneider, 2018). The schools were openly unconstitutional due to a violation of the separation of church and state (Dauenhauer, 2000; Schneider, 2018).

In 1905, the Nelson Act permitted local communities to assume control of public schools (Schneider, 2018). This applied to Whites only or mixed-blood children who opted to lead what was deemed a “civilized” life. Native children continued to attend Bureau of Indian Affairs (BIA) schools (McCarty et al., 2015). A second Organic Act in 1912 provided for the territorial government, and all educational activities were handed over to it, except for Native education. In 1917, the U.S. Bureau of Education was relieved of its educational responsibilities in Alaska for all but Native people (Schneider, 2018). In 1924, Native Americans were made United States citizens, but federal courts still held that Alaska Natives were not “civilized” (Schneider, 2018). The Territory of Alaska aligned with the U.S. position, providing schools for White and “civilized” Alaska Native students. Most Alaska Native students attended the BIA schools, which continued the policies of cultural assimilation.

In 1926, the Institute for Government Research appointed Lewis Meriam as the technical director of a survey to compile information and report on the conditions of American Indians across the country (Mckinley et al., 2015; Schneider, 2018). He submitted *The Problem of Indian Administration* to the Secretary of the Interior in 1928. The 847-page report contained four sections: General Information, Health, Economy,
and Education. Meriam (1928) identified a lack of education as the crux of the failure of the government to protect the Indians. He wrote that the “Indian” problem was an educational one, in that these individuals needed to be trained for U.S. citizenry (Meriam, 1928).

From the 1930s to the mid-1950s, Alaska had three racially segregated school systems: local city schools, BIA schools, and territorial schools (McCarty et al., 2015). In 1950, 93 federal BIA day schools and three boarding schools remained in Alaska, but many communities and thousands of Alaska Native children were without any educational facilities at all (McCarty et al., 2015). The only high schools available to Alaska Native students were distant BIA boarding high schools and a small number of church-affiliated boarding high schools.

Kleinfeld and Bloom (1973) described the failures of the boarding school program and the paucity of opportunity for Alaska Native students at home. In 1947, the BIA in Sitka established a single consolidated boarding school. Ever since, this school, Mt. Edgecumbe, has remained a fixture in the boarding program. From 1947 to 1965, Mt. Edgecumbe was the only tax-supported high school available to Native children from rural villages. In the 1960s, as more Native children sought to attend high school, enrollment at Mt. Edgecumbe soared. The federal government, ignoring the lesson that it had learned barely a generation earlier, sent hundreds of Native children out of Alaska to boarding schools in Chemawa, Oregon and Chilocco, Oklahoma. By 1968, hundreds of Alaska Native children were attending these two BIA high schools (Kleinfeld & Bloom, 1973). As Charles Wohlforth (2016) pointed out in a series of columns published in the *Alaska Dispatch News*, the State of Alaska has never acknowledged conditions in the
boarding schools, the abuses children suffered in them, or the resulting generational trauma. Wohlforth (2016) wrote that, “Alaska must come to grips with what was done to these children before 1976, [sic] when a court case forced the state to open schools in every village. Their stories must be collected and officially documented while elders are still alive to tell what was done to them” (para. 7).

The wholesale exportation of Native children for a high school education proved no less disastrous in the 1960s than it had been in the 1920s (McCarty et al., 2015; Nelson-Barber & Trumbull, 2015). Therefore, the State of Alaska embarked on a new policy. Adopted in 1966, it involved two programs. One program was the Boarding Home Program, under which the state compensated private families monthly for providing food and housing for one or more village children who moved in for nine months to attend high school (Schneider, 2018). Boarding home programs were set up in Anchorage, Bethel, Fairbanks, Juneau, Kodiak, and several other communities across the state. Originally conceived as an emergency measure, the Boarding Home Program ballooned and became a permanent fixture. By 1976, when the Tobeluk case sounded its death knell, the state had 32 communities with boarding homes accommodating 851 students (Schneider, 2018).

The second new program initiated in 1966 was the establishment of regional high schools (Cotton, 1984). As leaders of the state embarked on the process of setting up its first two regional high schools, they also commissioned a study by a team of consultants from the Training Corporation of America (TCA) of Falls Church, Virginia, to recommend further locations and develop an overall plan for this initiative. The TCA recommended establishing six boarding schools with dormitory complexes, each
enrolling 650 or more students. This recommendation was based, in part, on the TCA’s conclusions that the ideal high school should contain at least 500 students and needed to reflect an urban technological society. The TCA recommendation, however, was based on an explicit goal of destroying the villages. The TCA concluded that moving Alaska Native students to larger centers of population would help speed their adjustment and acculturation. The TCA further articulated that a regional high school would attract village-based students by giving them increased opportunities, thereby accelerating the breakdown of old village patterns. Ultimately, this breakdown of culture associated with the villages was intended to turn the Alaska Native population into a more profitable workforce. However, the regional schools failed, most students dropped out in their first year, and the dormitories were rife with alcohol abuse and violence. Eventually, the state abandoned the TCA plan (Cotton, 1984).

In 1975, the Alaska State-Operated School System (comprised of former territorial schools and some of the BIA schools) was dissolved, then reconstituted as the Alaska Unorganized Borough School District for a 1-year interim, and then dissolved again on July 1, 1976 in conjunction with the creation of 21 Regional Educational Administrative Areas (Schneider, 2018). The establishment of regional school districts did not address the need for high schools in rural areas (McCarty et al., 2015; Nelson-Barber & Trumbull, 2015). There was no comprehensive effort to remedy this problem by the state or federal governments until the Molly Hootch lawsuit was filed against the State of Alaska in 1974 (McCarty et al., 2015; Nelson-Barber & Trumbull, 2015; Schneider, 2018).

Alaska Legal Services filed the class-action suit on behalf of rural secondary-aged
students, charging discriminatory practice on the part of the state for not providing local high school facilities for predominantly Alaska Native communities when it did provide high schools for the same-sized, predominantly non-Native communities (Alaskool, n.d.). The case was argued on the grounds of racial discrimination; in 1976, Governor Jay Hammond signed a consent decree as an out-of-court settlement of what had become the Tobeluk v. Lind case because Molly Hootch was no longer in school (Alaska State Archives, 1976). In the settlement, the State of Alaska agreed that it would establish a high school program in every community in Alaska where there was an elementary school (which required a minimum enrollment of eight students) and one or more secondary students unless the community specifically declined such a program (Barnhardt, 2001). One hundred and five villages accepted. Eighty-one new high schools were built, and additions were made to another 24 existing rural schools. These are known as “Molly Hootch projects.” This study examined these Molly Hootch schools, student attendance, the experience of their teachers and principals, and the students’ academic achievement as measured by standardized tests.

The U.S. Congress passed the Indian Education Act in 1972, which was directed at meeting the needs of American Indians and Alaska Native students in public schools (McCarty et al., 2015). The Indian Education Act provided grants to Native tribes, institutions, and organizations or to state and local agencies. This funding was intended to develop and implement projects to improve educational opportunities for Native American children (McCarty et al., 2015). Although one of the most frequently touted components of the Act was that it included the requirement for parental input, it did little but shift the focus of Indian involvement from non-participation to nominal involvement
In his address to the Yukon-Kuskokwim Delta Regional Summit on Native Education, Paul Ongtooguk (2002) made explicit the failure of the Regional Educational Attendance Areas (REAA) to authentically include local and parental input in rural Alaska:

Alaska Native school board members were being sent to workshops, and they were overwhelmed. They were being trained to think that a school board member spends 95% of the time agreeing to things that no one can understand, voting to approve documents that people couldn’t read to save their lives, and having administrators tell them “Well, if you don’t vote to approve this, we won’t get the funding for such and such.” And so, the board members, trying to do the right thing (because you’ve got to have money for your kids and for their schools), end up voting for policies that nobody’s following. And what I [Paul Ongtooguk] kept thinking, when the Regional Educational Attendance Areas (REAA) started in 1976, was that we Alaska Natives had finally gotten our hands on the wheel—and that we were soon going to move to a point where Native school board members were going to say “Wait a minute, we did not take over rural Alaska schools to run them as though they’re in Texas—or with a made-for-California curriculum.” We are not getting what we need and expect, and that has to change. But so far, that hasn’t happened. (para. 2)

U.S. colonial policies focused on the abolition of Alaska Native languages and cultures (McCarty et al., 2015; Schneider, 2018). This posture persisted officially into the 1970s, and remained a usually-unspoken position of some policymakers and educators
(Dauenhauer, 2000). Although the REAAs and the Molly Hootch schools provided nominal local control and self-determination, the educational attainment for students attending those schools has been low (LKSD Staff, 2017). Elders’ and other village leaders’ efforts to influence the schools have been frustrating and ineffective (LKSD Staff, 2017). Nevertheless, the Molly Hootch schools enroll hundreds of Alaska Native children in high schools in their home communities (Alaskool, n.d.). Since 1984, when construction was completed, no research has specifically looked at the efficacy and quality of the Molly Hootch schools; thus, it is unclear whether these schools are aiding in the education of Alaska Native students in rural Alaska. This study sought to fill this gap in the literature.

Prior to discussing the multiple factors that influence student academic achievement, it is important to acknowledge and understand the instrument of measure, namely standardized testing and its benefits and limitations. The remainder of the literature review focuses on factors that contribute to student achievement.

**Measuring Student Achievement Using Standards-Based Assessments**

Researchers have long identified factors that influence student performance on standardized measures of academic achievement. Among these are: factors within the domain of schools, factors inherent to the tests and measures themselves, and factors beyond the immediate reach of the schools and tests. School factors include the content of the curriculum offered, the quality of teachers and other educational leaders, and—to some extent—the schools’ attendance rates. Test factors include the relevance of the measure to the content delivered and implicit or explicit biases inherent in the test. Extra-institutional factors include student demographics, historical and contemporary...
relationships between student/family/community culture and majority/hegemonic culture, and to some extent, attendance.

Popham (1999) acknowledged that while “standardized achievement-test scores are what citizens and school board members rely on when they evaluate a school’s effectiveness” (p. 10), they should not do so. He asserted that standardized achievement test scores are, “assessment tools that permit … a valid inference about the knowledge and/or skills that a given student possesses in a particular content area” (p. 9) In addition, he posited “that inference is … norm-referenced so that a student’s relative knowledge and/or skills can be compared with those possessed by a national sample of students of the same age or grade level” (p. 1). Although useful for evaluating student achievement against national achievement, Popham (1999) argued that because of “confounded causation,” it is wrong to use student scores on standardized achievement tests to evaluate school effectiveness: “The problem of confounded causation involves three factors that contribute to students’ scores on standardized achievement tests: (a) what’s taught in school, (b) a student’s native intellectual ability, and (c) a student’s out-of-school learning” (p. 6)

Popham’s (1999) three factors can be aligned with Murnane’s (1975) analysis of the factors, within the school’s domain, that influence student achievement. To Popham’s (1999) first factor, “what’s taught in school” Murnane’s (1975) analysis provided significantly more insight, namely, that the “who” (who is teaching) and the “how” (what is taught) are the critical elements influencing student achievement. Murnane (1975) found that beginning teachers were less effective than their experienced colleagues. Because it is outside of schools’ domain of influence, Murnane’s (1975) study did not
address students’ native intellectual ability.

Popham’s (1999) third factor of students’ out-of-school learning requires a closer look. According to this author,

The most troubling items on standardized achievement tests assess what students have learned outside of school. If children come from advantaged families and stimulus-rich environments, then they are more apt to succeed on items in standardized achievement test items than will other children whose environments don’t mesh as well with what the tests measure. (p. 12)

While Popham’s (1999) mistaken and classist assertion that “advantagedness” (i.e., economic status) somehow determines the stimulus “richness” of children’s environments, he was correct that children’s environments and experiences align with the paradigm implicit in standardized tests to a greater or lesser degree. According to Hambleton and Rodgers (1995), bias in testing materials can exist with reference to ethnicity, sex, culture, religion, class, or processes; such bias has the potential to benefit some test-takers and disadvantage others.

Popham’s critique of children’s out-of-school learning environments also hints at the nefarious origins of standardized testing in the United States: the eugenics movement of the early 20th century (Stoskopf, 2002). According to Stoskopf (2002), Sir Edward Galton, an English mathematician, invented eugenics (from the Greek for well or good birth) through misunderstanding and misapplying Gregor Mendel’s work on the heredity of dominant and recessive traits of sweet peas. Galton asserted that eugenics would improve or impair the physical or mental racial qualities of future generations. Henry Goddard, Director of the Vineland Training Center for Feebleminded Boys and Girls (in
New Jersey) became an ardent proponent of eugenics and infused it into educational theory and practice. Goddard adopted Alfred Binet’s achievement test, and expanded its use to test wide swaths of Americans, including 1.7 million in the U.S. Army. Binet believed that intelligence was a malleable and changeable aspect of the human mind, while Goddard believed he could and was accurately testing the fixed and unchangeable fact of the human intelligence quotient.

Along with Goddard, Lewis Terman at Stanford University and Edward Thorndike at Columbia’s Teachers College laid eugenic ideology and the assertion that “the tests tell the truth” as the foundation of educational reform, training thousands of teachers and school leaders in the use of the test. Terman normed his test “based on a small sample of 982 native-born children from European-American, middle-class, Protestant homes in the Palo Alto area” (p. 129), and “[t]heir questions (used in the Army I.Q. tests) revealed blatant class, cultural, and ethnic bias” (Stoskopf, 2002, p. 128). The tests and their results we used as scientific proof of the superiority of the White race and the degenerate qualities of all others. Goddard, Terman, Thorndike, and others designed and implemented the first Gifted and Talented Programs and initiated strict academic tracking across U.S. schools. White children were predominantly placed in college preparatory and/or “gifted and talented” tracks, while all others were shunted into vocational tracks, special education, or even separate schools. Although Terman lamented, in 1916, “[t]here is no possibility at present of convincing society that … the children of Indians, Mexicans and negroes should not be allowed to reproduce,” (Stoskopf, 2002, p. 129) by the 1930s, the compulsory sterilization laws in 30 of the United States were doing just that.
The work of Goddard, Terman, and Thorndike was also instrumental support in passage of the Immigration Restriction Act of 1924, which barred all immigrants from Asia and strictly limited immigration from all other places except the British Isles and Western Europe, also strengthening the anti-miscegenation laws of the time (Allen, 2004). Miller (2021) clearly and convincingly described the admiration Adolf Hitler had for the work of U.S. eugenicists and how U.S. racial hygiene laws and policies of Indian extermination informed and shaped the racial hygiene laws and genocidal policies of the Third Reich and motivated the Holocaust. Conservatively, the number of sterilizations performed in the United States between 1907 and 1932 was 12,145, while the Nazis forcibly sterilized 350,000 people and murdered 12,000,000 or more (Miller, 2021).

Standardized test results are used in two main ways: evaluation and placement. The State of Alaska uses the results of compulsory standardized tests to evaluate the efficacy of its schools, and also as part of individual student’s evaluation for inclusion in special education programs. Other standardized tests, like the Scholastic Achievement Test and the Graduate Record Exam, have been optional, but submission of one’s scores has been, until recently, part of virtually all college or graduate school application requirements. The University of California settled a lawsuit, brought by students, agreeing that standardized tests discriminate against Black and Brown students and students with disabilities, stipulating that standardized test scores will no longer be any part, even optionally, of admissions or scholarship decisions (del Rio, 2021). It is not yet known if this settlement is an indication that the use of standardized tests for placement is beginning to wane.

However, and despite their deeply flawed origins and genocidal early
applications, standardized tests are still ubiquitous for evaluation school performance at all levels of education in the United States. Somewhat surprisingly, the Education Alliance at Brown University (n.d.), a reform support organization committed to advancing equitable educational opportunities to prepare all student populations to succeed in the 21st century, asserted,

There are times when it is appropriate for a test item to assess a student’s mastery of cultural content. It is thus important at the outset to decide if the aim of the test item is to assess the student’s knowledge of culture, or whether the test item simply assumes the student already understands the cultural content of the question. (para. 10)

In other words, it is important to acknowledge that standardized tests represent and may legitimately inculcate cultural and other biases. Due to a lack of scholarly consensus, it is unclear whether these biases are implicit (i.e., occurring due to test-maker ignorance) or explicit (i.e., intended to measure awareness of and alignment with so-called mainstream U.S. culture and values). For indigenous students, the distinction between implicit and explicit bias in assessment is critical. If the former, the bias represents a body of knowledge that can be defined, understood, and mastered (Payne, 1996). If the latter, then measures of academic achievement are actual tools of colonialism and cultural and identity annihilation (Pratt, 1892).

AKDEED licenses items from the Data Recognition Corporation’s (DRC) College- and Career-Ready (CCR) item bank for use on the ELA and mathematics assessment. An independent, third-party, alignment study conducted in August 2017 showed a very strong alignment between the items used on the assessment and the Alaska
ELA and mathematics standards (AKDEED, 2016). On its public website, the AKDEED explains the purposes and uses of its standardized testing system as “tool[s] for measuring what students know and what they can do … according to Alaska’s educational standards” (AKDEED, 2016, n. p.). Test results provide the preponderance of evidence the State of Alaska uses in its System for School Success: 90% for schools serving grades PK–6 and 80% for schools serving Grades 7–12. While it is likely that cultural and other demographically-based biases are present in the standardized measures used in Alaska, it was beyond the scope of this study to determine to what extent, if any, the State of Alaska is aware of and/or supports the implicit or explicit biases that may be present in the assessments it purchases from the Data Recognition Corporation.

Attendance

One may question whether school attendance influences student academic achievement. The question seems rhetorical, and the answer axiomatic. Gottfried (2010) found a difference between the effects of attendance on achievement for students from different socioeconomic classes. He found that absences and tardies had a more significant negative effect on achievement for students living in poverty.

Other studies mirrored Gottfried’s (2010) findings. For example, Summers and Wolfe (1977) used unexcused absences and lateness as proxies for student motivation and found that motivation had a significant bearing on learning. Students with more unexcused absences and more tardies grew less academically than did students with fewer unexcused absences and/or tardies. Caldas (1993) found that attendance was positively and significantly related to student performance in Louisiana’s public elementary and secondary schools. Using data from Baltimore public elementary schools, Lamdin (1996) found that student attendance was positively and significantly related to
standardized achievement test performance. Gottfried (2010) examined student-level attendance and achievement, reporting that students with higher school attendance attained higher educational outcomes in terms of both GPA and standardized testing. Furthermore, Gottfried (2010) found that, “[a]ttendance is a robust predictor of student achievement. A concurrent and potentially causal relationship exists between attendance and achievement across multiple grades in urban schools” (p. 432). The positive relationship between attendance and achievement, however, can only exist in schools where a good education is available.

More recent research has found similar and alarming results. Chronic absenteeism in early childhood education is associated with lower academic performance in the future (García & Weiss, 2018; Gee, 2018; Kılıç et al., 2016). Even when students begin the year academically prepared to learn, their test scores decrease with chronic absenteeism (Gottfried & Kirksey, 2017; Mutekwe, 2017) Students who are frequently absent score well below students who are good attenders on third grade reading and math tests (Robinson et al., 2018).

Researchers have shown reduced elementary school attendance to negatively influence student outcomes, such as academic achievement (Gee, 2018; Gershenson et al., 2016). This finding is true for all students, regardless of income, ethnicity, and gender (García & Weiss, 2018); however, chronic absenteeism has a more negative impact on at-risk students. These students include English-language learners and those from low-income households.

Some research has focused on reducing chronic absenteeism in Kindergarten and elementary school students. For example, Robinson et al. (2018) examined the impact of
an intervention with leaders who attempted to improve student attendance in Grades K to 5 by targeting commonly held parental beliefs. Researchers have shown that parents often undervalue the importance of regular K–5 attendance and underestimate the number of school days their child has missed (García & Weiss, 2018; Gee, 2018; Kılıç et al., 2016; Robinson et al., 2018). Robinson et al. (2018) employed the intervention by sending personalized and automated communications to parents using easily attained district administrative data. The communications explained the value of daily attendance in the early grades and reported to parents the number of days their child had missed school. They employed the intervention in 10 school districts, including urban, suburban, and rural settings on the West Coast. Robinson et al. (2018) found that intervention was successful and that students attended more days of school over the course of the year. Chronic absenteeism was reduced by 15%. Furthermore, the intervention seemed most effective for at-risk students.

**Educator Turnover**

A pattern of concern in the history of education in Alaska is that it is difficult to staff schools for Alaska Natives in rural settings (McCarty et al., 2015; Nelson-Barber & Trumbull, 2015). Educator experience has been low, while turnover rates have historically been very high (McCarty et al., 2015). Dauenhauer (2000) stated that Sheldon Jackson “hired missionaries with federal funds, in violation of the establishment clause of the first amendment” (p. 13) to teach in Alaska schools because no other teachers could be recruited. Meriam (1928) noted the difficulty of filling teaching positions in “Indian” schools, citing an example of over 300% turnover in one school from September to March as commonplace. DeJong (1993) reported that only a handful of government schools offered instruction above the eighth-grade level, and the teacher turnover rate
was significantly higher than in other schools.

More recently, Barnhardt (2002) found that the average teacher turnover rate in Alaska’s 53 public school districts differed sharply across school districts, from a low of 3% to a high of 50%. Furthermore, the smaller, more remote districts with high Alaska Native populations had the worst turnover rate, some as high as 100% in some years. The state’s urban districts—Anchorage, Fairbanks, Juneau, and Mat-Su—have historic annual turnover rates between 6% and 14%, comparable to the national average (Barnhardt, 2002). All the districts with annual turnover rates of 30% or higher were rural districts with higher Alaska Native populations and economically poorer. Barnhardt (2002) found that rural districts with the highest turnover rates also employed more first-year teachers than urban and low turnover districts. More recent research has found equivalent results. Hill and Hirschberg (2013) found that annual teacher turnover rates in rural settings varied widely from 7% to over 52%, while urban districts had lower and more consistent turnover rates from about 8% to just over 10%.

High turnover rates are concerning because researchers have associated these with poorer student achievement (Adams & Woods, 2015; Adnot et al., 2016). A shortage of qualified teachers and higher turnover rates disproportionately influences high poverty and minority school districts (Torres & Oluwole, 2015). Researchers have shown that these factors have a strong negative correlation to student achievement (Adams & Woods, 2015; Adnot et al., 2016; Torres & Oluwole, 2015). For example, Ronfeldt et al. (2013) established a direct causal link between teacher turnover and student achievement:

Turnover may have a substantial impact on the financial and human resources in districts and schools. Such dynamics may harm schools with historically
underserved student populations the most, as these schools tend to have more persistent turnover and, in some cases, have fewer overall resources to work with. In addition, new hires in underserved schools are often less experienced and so require more supports to improve. Contrary to compositional explanations [of the effects of turnover] that assume stayers to be unaffected by turnover, disruptive explanations indicate that stayers indeed may be affected. … Persistent turnover may then have a debilitating impact on staying teachers and in turn, their students. (p. 8)

McDiarmid and Larson (2002) reported teacher turnovers rates of between 25% and 60% in the districts with Molly Hootch high schools. According to AKDEED (2016), 100% of villages with Molly Hootch high schools are high poverty schools, with at least 94% Alaska Native students and more than 30% of teachers who do not meet highly qualified standards. Therefore, more research on the Molly Hootch schools is needed to determine whether the high turnover rates and inadequate experience of educators influence student achievement in those schools specifically.

Teacher Experience

Although meeting certification requirements indicates that teachers are sufficiently prepared academically to teach, it is no indication of their actual capacity with the job or their efficacy (Gershenson et al., 2016). In response to growing social concerns and multiple lawsuits bringing equal access claims based on the unequal distribution of school resources, Murnane (1975) sought to identify which resources, that schools could purchase, influenced academic achievement. Murnane (1975) concluded that teacher experience was a significant resource affecting student academic achievement. They posited that per-pupil expenditure could only be important if there
were school resources that influenced student learning and could be purchased. Specifically, Murnane (1975) investigated the relationship between school resources, especially teachers, and the cognitive achievement of children by focusing on individual children in individual classrooms. Murnane (1975) first established that there were important quality differences in the learning environments of different classrooms. Next, they explored those quality differences in terms of teachers, peer groups, class sizes, and numbers of transient students. Of those, differences in teacher performance had the most significant effect on student academic achievement. Specifically, teachers’ years of experience was the most significant element of teacher performance (Murnane, 1975). Murnane (1975) concluded that educator experience was analogous to educator quality.

Murnane (1975) discovered a consistently significant relationship between principals’ evaluations and teacher performances, namely that principals’ evaluations did reflect teacher performance in improving the cognitive skills of their students. Teachers have a critical impact on student achievement (Torres, 2017). The effectiveness of teachers increases dramatically in the first few years of teaching (Faircloth et al., 2015; Redding & Henry, 2018). Teachers with several years of experience are markedly more effective than first-year teachers (Patterson et al., 2013). Many teachers improve between the first and third year, and some continue to improve through the sixth year (Kraft et al., 2016; Murnane, 1975).

Murnane (1975) concluded that classroom experience might be the most important form of teacher training. Beginning teachers must learn hard lessons about organizing materials, planning classes, and handling children’s problems; this knowledge is an important determinant of a teacher’s effectiveness. Although training can help to
prepare a teacher in some of these dimensions, they can only gain the ability to perceive
the needs of individual children, and the judgment to handle problem situations
effectively, through experience. Murnane (1975) also found that school leaders must be
aware of which students were assigned a first-year teacher within a school year to ensure
that children were not assigned to first-year teachers several years in a row.

Inexperienced teachers may be less productive because they are still learning their
professions (Grissom & Bartanen, 2018; Kaden et al., 2016). Veenman (1984) provided
insight into the phenomenon of reality shock, a concept “used to indicate the dramatic
and traumatic collapse of the missionary ideals formed during teacher training by the
harsh and rude reality of everyday classroom life” (p. 143). Reality shock is an
assimilation of a complex reality, which forces itself incessantly on the beginning teacher
daily. The unfamiliar reality must be mastered continually, especially in the first period
of actual teaching. Veenman (1984) identified the causes of reality shock by grouping
them into personal (e.g., choice for the teaching profession, improper attitudes, and
unsuitable personality characteristics) and situational causes (e.g., inadequate
professional training or problematic school situations, such as difficult classes or having
to teach subjects in which they are not trained). Veenman (1984) continued: “Besides
being an initiation into the profession, the first year of teaching is also an initiation into
the adult world with its responsibilities” (p. 148), which include living away from home,
looking for new accommodations, making new friends, and raising a family. From the
freedom of student life, the beginning teacher is moved to the restrictions and
responsibilities of professional life, making the first year a period of immense learning
for new teachers—but often not for their students (Adnot et al., 2016; DeFeo et al., 2016).
In addition to personal experiences of reality shock, beginning teachers join new-to-them professional communities (Grissom & Bartanen, 2018). New teachers encounter situational circumstances when making the shocking transition from theory to practice (Grissom & Bartanen, 2018). Researchers have suggested that the novice teacher does not only succeed or fail by his or her own skills and knowledge, but also by the quality of the interactions they have with their colleagues. Kardos et al. (2001) studied novice teachers’ interactions with their building-based colleagues and how principal leadership influenced those interactions. They conceptualized three types of professional cultures: (a) veteran-oriented professional cultures, referring to the concerns and habits of experienced teachers being determined based on professional interactions; (b) novice-oriented professional cultures, referring to schools staffed with very high proportions of new teachers where inexperience, youth, and idealism prevail and where professional interaction is ongoing, although generally uninformed; and (c) integrated professional cultures, which provide new teachers with sustained support and ongoing exchange about the needs of students and improvement in practice.

In veteran-oriented and novice-oriented cultures, principals do not try to establish a place for new teachers within the professional culture of the school. In contrast, the principals of schools with integrated professional cultures actively build those cultures. If a principal is less skilled, new teachers may be left adrift, largely because they lack sustained access to the expertise of accomplished teachers and to the attentive leadership of principals. Kardos et al. (2001) highlighted the need not only for experienced teachers, but for experienced principals too.

**Principal Experience**

More recent studies have widely confirmed the principal’s leading role in
establishing, reinforcing, and realigning a school culture, as well as in promoting collegiality, professional community, and a collective sense of purpose and responsibility among the faculty (Grissom & Bartanen, 2018; Jackson & Marriott, 2012). The collaborative aspect between teachers and principals reveals the continual relevance of the theory of social constructivism in the learning process for adults (Grissom & Bartanen, 2018; Jackson & Marriott, 2012; Mutekwe, 2017). Except for being remote and rural, rather than urban, all of the Molly Hootch schools meet Hughes’ (2012) definition of hard-to-staff schools: “Hard to staff school are schools that have a higher percentage of students who are performing below grade level, have higher level of special education/behavioral needs and are in low income, urban areas” (p. 4). Particularly in hard-to-staff schools, “[t]he effect that principal’s support has on teachers is substantial” (Hughes, 2012, p. 40). But, because they are experiencing their own version of reality shock, beginning principals are unlikely to provide the leadership necessary to support novice teachers (Grissom & Bartanen, 2018; Jackson & Marriott, 2012).

According to Crow (2006), the organizational socialization of beginning principals is individual, informal, and random. They must make sense of their roles by themselves (Grissom & Bartanen, 2018; Jackson & Marriott, 2012). They are immediately responsible for the full gamut of principal duties. They encounter challenging organizational settings and factors of mobility, at-risk conditions, poverty, and language, thereby creating a different clientele of students and parents than they may have experienced previously (Grissom & Bartanen, 2018; Jackson & Marriott, 2012). Cray and Weiler (2011) asked Colorado superintendents to identify observed deficits in new principals. These deficits include: (a) experience with and understanding of the
range of demands faced by building principals, (b) understanding of practice in differentiated instructional strategies and best practices, and (c) functional use of personnel management strategies. Researchers have found that, although the behaviors of principals may be the single most important determinant of school effectiveness, important features of their daily work life (e.g., mobility, fragmentation, collaboration, and urgency) have served to prevent or inhibit the ability of an individual to “make a difference” in their schools (Grissom & Bartanen, 2018; Jackson & Marriott, 2012; Spillane & Lee, 2014). The findings of Daresh (1986) were corroborated by Cray and Weiler (2011), who concluded that beginning principals had: (a) problems with role clarification, (b) limitations on technical expertise (mechanical and interpersonal), and (c) socialization to the profession and the system. Beginning principals feel vulnerable to the effects of a social and political system that they do not fully comprehend (Grissom & Bartanen, 2018; Jackson & Marriott, 2012).

Spillane and Lee (2014) found that new principals reported being shocked by the responsibility that came with entering the principal occupation: a sense of being ultimately responsible for their school. Novices reported sleep loss, physical exhaustion, frustration, nervousness, and worry. Their sense of more and ultimate responsibility stemmed from three problems of practice: elevated levels of task volume, diversity, and unpredictability. When novices begin work in schools that they know relatively little about, these problems of practice tend to be exacerbated (Spillane & Lee, 2014).

**Education in Rural Alaska**

High turnover and lack of educator experience influence the quality of educators everywhere; however, several special factors influence the quality of education in rural Alaska specifically (McCarty et al., 2015; Nelson-Barber & Trumbull, 2015). For
example, Carter (2006) identified an additional factor that might contribute to low student achievement in the Molly Hootch schools: most educators new to rural Alaska know little or nothing about the culture they are immersing themselves in, except for a cursory Google search or perhaps an attempt at reading James Michener’s Alaska (Carter, 2006). New educators are usually referred to as “Cheechako” teachers, meaning “tenderfoot” or “new ones.” According to Dickerson's (2002) survey, 70% of teachers in rural Alaska came from the lower 48 states. Barnhardt (2002) put this number as high as 90%.

Although more recent studies did not provide percentages, they did report that many educators in rural Alaska were not from Alaska themselves (DeFeo et al., 2016; Kaden et al., 2016). This finding indicates that cultural discontinuity between educators and the communities they serve remains a problem for the quality of education in the Molly Hootch schools.

Most teachers have little to no knowledge of the remote villages and Alaska Native cultures they are entering, the issues surrounding cross-cultural education, or the difficulties and rewards of living in such a unique environment (Adams & Woods, 2015; DeFeo et al., 2016; Kaden et al., 2016). Although researchers have pointed out that teachers in their first year of teaching will face challenges regardless of location, they have also emphasized the significant difficulties that non-Alaska Native educators face when entering remote, rural, Alaska Native communities for the first time (McCarty et al., 2015; Nelson-Barber & Trumbull, 2015). Barnhardt (2001) omitted mention of cross-cultural cultural challenges, but did report the problem of “green” teachers, with more clarity: “Rural schools in communities with high poverty—suffer severe shortages. These schools have little choice but to turn to unlicensed and under-prepared people who, facing
the greatest instructional challenges, are often overwhelmed and consequently abandon the classroom in short order” (p. 3).

Newly hired teachers in rural Alaska encounter many adjustment difficulties. A further challenge for the Molly Hootch schools is that 67% of new teacher hires are employed in village settings with populations of fewer than 500 people (Barnhardt, 2001) located hundreds of miles from any larger town, while the teachers often come from urban and suburban settings. New teachers to a bush REAA quickly adapt and succeed, or they suffer and leave (Adams & Woods, 2015). Few teachers appear to fall into a middle category, and it is not difficult to understand why. The typical new REAA teachers are young, inexperienced teachers from out of state (Adams & Woods, 2015). They are unprepared for what they encounter; no one advises them about their new communities (McCarty et al., 2015; Nelson-Barber & Trumbull, 2015), nor do they receive a meaningful orientation to their districts, its people, students, and procedures (Kaden et al., 2016). Thus, they start school in a state of shock, which many of them never overcome.

Researchers have frequently used the term “culture shock” to describe the debilitating experience that newly hired bush teachers undergo (Adams & Woods, 2015; DeFeo et al., 2016; Kaden et al., 2016). Culture shock removes and distorts the familiar cues that one encounters within their own culture and replaces these with other strange and unfamiliar cues, influencing the new Alaskan teacher’s experience (Adams & Woods, 2015; Kaden et al., 2016). Guthrie’s (1966) label of “culture fatigue” may be a more accurate description of this phenomenon. The term culture fatigue signals a much more subtle and ongoing process than culture shock, which appears to be a brief state to
which one can quickly adapt (Guthrie, 1966).

**Educator Expectations in Cross-Sociodemographic Situations**

Gershenson et al. (2016) found that educators played a key role in shaping students’ beliefs about their academic prospects, particularly among relatively disadvantaged students who rarely interact with college-educated adults outside of school settings. The student-teacher demographic mismatch influences teachers’ expectations for students’ educational attainment (Gershenson et al., 2016). The negative effect is pronounced when the racial background of students is different from that of their teachers (Kaden et al., 2016). Teacher expectations influence their subjective judgments of their students’ academic abilities and grades (Adams & Woods, 2015; DeFeo et al., 2016).

Brophy and Good (1970) identified 17 ways that teachers respond differently to students for whom they have low expectations. Teachers set low-level learning tasks when they have low expectations (Rubie-Davies, 2015). The amount that students learn depends on the learning opportunities their teachers provide (Torres, 2017). Students can identify teachers who have high and low expectations for them based on observations of their teachers’ behavior (McCarty et al., 2015).

The effect of teacher expectations on student learning is well documented. Rosenthal and Jacobson (1968) manipulated teachers’ beliefs of student ability by providing false information regarding students’ performances on a nonexistent test. They found significantly greater school-year gains among students who were falsely identified to teachers as “growth spurters.” This finding was also confirmed by Babad and Taylor (1992), who studied very young students who were shown 10-second audio and video clips of teachers talking to a student in a language that they did not understand. These teachers determined that students could reliably detect whether the teacher was talking to
a high- or a low-expectation student. More recently, researchers have found that teachers have significantly lower expectations for the educational attainment of socioeconomically disadvantaged and racial minority students (Adams & Woods, 2015; DeFeo et al., 2016; Kaden et al., 2016). Virtually every new educator coming into a Molly Hootch school village will encounter students of different socioeconomic and racial demographics than themselves.

**Summary**

The history of education among Alaska Natives is long, complicated, and primarily dismal (Faircloth et al., 2015; Redding & Henry, 2018). Formal education in rural Alaska sought to assimilate Alaska Native people and had explicit goals of destroying Alaska Native cultures (Schneider, 2018). In the 1970s, the formation of REAAs and the construction of high schools in the Molly Hootch villages offered the possibility that Alaska Native children could gain a school education in their home villages, and one that supported their cultural values (McCarty et al., 2015). However, research has shown that village schools are staffed with a majority of inexperienced educators and experience a high level of turnover among educators (McCarty et al., 2015). Furthermore, high rates of turnover and lack of experience among educators contribute to low student achievement (Torres & Oluwole, 2015).

Village schools tend to be staffed by educators of different demographic backgrounds than their students, which can also lead to negative educational outcomes for students (Kaden et al., 2016; McCarty et al., 2015). Alaska Native students frequently score near the bottom of national surveys and tests on educational outcomes (Kaden et al., 2016). Limited research has been conducted on the effectiveness and quality of the Molly Hootch schools in the last 40 years. Therefore, there is a need to fill this gap in the
literature. The purpose of this quantitative case study was to investigate the relationship between student attendance, high turnover of educators, years of educator experience, and student achievement in the Molly Hootch schools in rural Alaska. The next chapter presents the methodology and research design of the current study, including data collection, data analysis, population, instrument validity, and ethical considerations.
Chapter 3: Methodology

The Alaska Native student population is disproportionately represented in the lowest level of student mathematics and ELA achievement within state rankings in Alaska (DeFeo et al., 2017). In the 1970s, the State of Alaska agreed with the plaintiffs in *Tobeluk v. Lind*, who argued that schools were needed in rural Alaska to help increase the access and quality of education for Alaska Native students (Schneider, 2018). After much deliberation, 105 schools and additions to 24 elementary schools (i.e., the Molly Hootch schools) were built in response to this call (Kaden et al., 2016). To date, however, no research has been conducted on whether the leaders of those schools are adequately educating the rural student population.

Student achievement, as measured by standardized tests, among rural Alaska Native populations remains lower than the averages at both the state and national levels (Patterson Silver Wolf & Butler-Barnes, 2017). It is unclear whether student attendance, high turnover of educators, or years of educator experience contribute to student achievement in the schools built in rural Alaskan villages after the Molly Hootch lawsuit settlement. The purpose of this quantitative causal-comparative study was to investigate the relationships between student attendance, educator turnover, educator experience, and student achievement in the Molly Hootch schools in remote, rural Alaska.

In the causal-comparative quantitative study proposed, the researcher would have employed a linear mixed-model to analyze the relationships between educator experience, educator turnover, student attendance, and student achievement. In the quantitative case study they conducted, the researcher analyzed the census of school level attendance rates and academic achievement, the reported rates of educator turnover, and the years of experience of the educators working in the Molly Hootch schools from 2002
to 2019. Chapter 3 presents the methodology and is organized into the following sections: research questions, research design, data collection, data analysis, instruments, ethical considerations, and a final summary.

**Research Questions and Hypotheses**

To achieve the purpose of the current study, the researcher developed the following overarching research question: What are the relationships between school attendance, student achievement educator turnover, and the experience of teachers and principals?

**RQ1:** What levels of academic achievement did students attending the Molly Hootch schools from 2010–2019 attain?

**RQ2:** What were the rates of attendance for the Molly Hootch schools from 2010–2019?

**RQ3:** What were the rates of educator turnover at the Molly Hootch schools from 2010–2019?

**RQ4:** What were the years of educator experience for the Molly Hootch schools from 2010–2019?

**Research Methodology and Design**

To answer the research questions, the researcher selected the quantitative methodology. Researchers use quantitative methods to quantify already understood, known variables (Marshall & Rossman, 2016). Specifically, quantitative methods are most appropriate when a researcher aims to determine the relationship between variables (Creswell, 2014; Marshall & Rossman, 2016). The present study sought to determine the relationship between student attendance, the experience of educators, and student achievement outcomes; therefore, the researcher selected a quantitative approach.
The selection of a quantitative methodology and the collection of numerical data was due to the researcher’s focus on the relationship between variables. Through this focus on numbers, the researcher could determine the presence, strength, and direction of any possible relationships. Quantitative methodology guides the collection, interpretation, and analysis of data (Marshall & Rossman, 2016). Quantitative researchers use quantitative measurement and statistical analysis to obtain and explain numerical data in a meaningful way (Mustafa et al., 2011). The researcher collected numerical data on the study variables for this study using documents and records retrieved from the AKDEED database, which were available to the public. The use of quantitative research methods can increase the chances of a study’s findings being generalizable to a larger population (e.g., Adriaensen et al., 2014).

Quantitative research generally falls into the following designs: descriptive, correlational, quasi-experimental, and experimental (Creswell, 2014). Descriptive methods are generally used to describe a particular variable or phenomenon (Creswell, 2014). Correlational methods enable researchers to investigate the relationship between variables, but not to determine causality (Creswell, 2014); only quasi-experimental or experimental designs can be used to determine causality (Creswell, 2014). This researcher sought to use a causal-comparative design to understand the relationships between student achievement, student attendance, and educator experience and turnover. While the data collected precluded use of that design, it did provide clear and important information to describe achievement in the Molly Hootch schools.

**Population and Sample Selection**

The population of this study included students, teachers, and principals who attended or who were employed by Molly Hootch schools from 2010 to 2019. The
researcher did not take a random sample, but they used a census of the entire population. They chose the years 2010 to 2019 because 2010 is the first year of publicly available information and 2019 was the most recent data available at the time of the study.

**Data Collection Procedures**

The researcher collected data using records from the Alaska Department of Educations and Early Development (AKDEED). They only collected school-level data, but no individual-level data. The educators included only teachers. No information on principals was available. The researcher collected only school-level data on the educators, but no individual-level information.

The researcher also collected only school-level data on student achievement and attendance, as well as on educator experience and turnover. These data were available in the AKDEED database. AKDEED granted the researcher permission to access this database, and the researcher collected no personally identifying information.

**Data Analysis**

The researcher proposed a linear mixed model to analyze the relationship between educator experience, educator turnover, student attendance, and student achievement over time. Linear mixed models (also called multi-level or hierarchical models) are a type of regression model (Hox et al., 2017). Researchers can use linear mixed models to consider whether variation is explainable by both fixed effects and random effects. Independent variables explain fixed effects, but they do not explain random effects (Hox et al., 2017). This case study yielded information that describes important aspects of education in the Molly Hootch schools. The first aspect was the levels of academic achievement as measured by the state-mandated, annual standards-based assessment. The researcher used three different instruments for the assessment of student achievement over the timeframe.
of the study. Each of the assessment instruments was norm-referenced, standards-based, and criterion-referenced. In an inferential study, these results would be considered the dependent variable.

The second important aspect of education is the Molly Hootch schools was student attendance. The researcher gleaned information on attendance from data provided to AKDEED. Schools and districts compute the number of days that individual students are present in school on days when instruction is offered, divided by the total number of days instruction was offered each year. The result of the computation is reported as a school-wide percentage. In an inferential study, attendance would be included in the model as a control variable.

In an inferential study, educator experience would be included as an independent variable and measured by counting years of teaching or administrative experience on an interval scale. In this case study, the researcher included the years of teacher experience as the schools and districts reported to AKDEED.

**Validity**

The validity and reliability of a research study are critical. Validity indicates how logically and factually sound the measurement is in measuring the intended variable (Pearl, 2015). Researchers must establish the validity of measuring variables when attempting to answer proposed research questions and hypotheses (Pearl, 2015). Validity is the accuracy with which the instrument should be measuring, and reliability is the accuracy with which the instrument should be measured on a continuous basis (Pearl, 2015). The current researcher did not use specific instruments; therefore, the validity of the study is high. The following sub-sections outline several considerations for both external and internal validity.
**External Validity**

External validity is any factor within a study that reduces the generalizability of the results (Pearl, 2015). A higher sample number means that it will be more representative of and generalizable to the larger population (Pearl, 2015). The current study employed a census of the entire population; thus, the study has high external validity. Because this study included the entire population, the results of the study speak for the entire population, indicating the high external validity of this study.

**Internal Validity**

Generally, threats to the internal validity of the study include the respondents’ honesty in answering questions in surveys, which may result in inaccurate or untruthful data (Simon & Goes, 2013). For the current study, there were no survey questions; however, other threats of internal validity may exist. For example, unintentional data disorganization or missing data in the collection process can also threaten validity. The researcher took care to ensure that the collected data were not accidentally deleted or altered in the dataset during data handling. They also checked the collected data prior to the data analysis.

**Reliability**

Reliability refers to the trustworthiness of the measurement or instruments used in the data collection process (Ingham-Broomfield, 2014). In this study, the measurements involved counting years of experience, days of attendance, and number of turnovers, as well as reviewing test scores. Therefore, the researcher ensured the study’s reliability by double-checking the accuracy of the data multiple times.

**Ethical Considerations**

The three most important principles in conducting ethical research include respect
for persons, beneficence, and justice (Creswell, 2014). Respect requires treating the participants as independents, and thus protecting those participants with diminished autonomy (Creswell, 2014). Beneficence means that the participants are treated in an ethical manner and that justice is associated with fairness in the distribution of potential benefits of the study (Creswell, 2014). Working with human subjects constitutes the most important ethical issue in research (Creswell, 2014). Although the researcher did not actually engage with the human participants of this study, they considered the protection of the participants’ rights before and while executing the study.

The main concern for the current study was protecting the anonymity of the individuals whose records the researcher accessed. All data reviewed is available to the public, and the researcher collected no individual or identifying information.

**Assumptions and Delimitations**

**Assumptions**

Researchers must make basic assumptions that they believe to be true but that they cannot verify (Creswell, 2014). This researcher investigated the relationship between student attendance, educator experience, educator turnover, and student achievement. One assumption was that a relationship, whether negatively or positively correlated, existed between the variables. Another assumption was that the data from the AKDEED records would be accurate. Although this assumption cannot be avoided, it is important to remember that it does affect the study, and the researcher had no control over the way AKDEED collected data and maintained its records.

**Delimitations**

The scope of this study was delimited to the years 2010 to 2019. The population for this study included all students and teachers attending or employed by the Molly
Hootch village schools. McDiarmid and Larson (2002) determined that if a beginning teacher had been born in and/or trained in Alaska, this fact somewhat reduced their chances of leaving the village schools. This researcher did not seek to identify educators’ places of birth or training. Although a topic of interest, this researcher also did not seek to determine the reasons that teachers and principals left their positions. Children’s poverty, their statuses as English-language learners, the mothers’ levels of educational attainment, and many other factors can be predictive of students’ levels of educational achievement. Because these are status quo factors in rural Alaska, this researcher did not seek to analyze them beyond identifying them as demographic features of individual villages and schools.

**Summary**

To address the gap in the research about the quality of education in the Molly Hootch schools in rural Alaska, the current researcher sought to examine the relationships between the variables of educator experience, educator turnover, student attendance, and student achievement. As they could not use a quasi-experimental model, the researcher sought to describe educator experience, educator turnover, student attendance, and student achievement. Chapter 3 provided a thorough discussion of the selected methodology and design, including the research questions, census population, data collection and analysis procedures, instruments, and ethical considerations. Next, Chapter 4 presents the results of the study, before Chapter 5 includes the researcher’s final conclusions and recommendations for educators and educational leaders, as well as recommendations for future investigations on this topic.
Chapter 4: Results

The purpose of this quantitative case study was to describe student attendance, educator experience, and student achievement in the Molly Hootch schools in rural Alaska. The following research questions guided this study:

**RQ1:** What levels of academic achievement did students attending the Molly Hootch schools from 2010–2019 attain?

**RQ2:** What were the rates of attendance for the Molly Hootch schools from 2010–2019?

**RQ3:** What were the rates of educator turnover at the Molly Hootch schools from 2010–2019?

**RQ4:** What were the years of educator experience for the Molly Hootch schools from 2010–2019?

The Alaska Department of Education and Early Development (AKDEED) provided school-level data from the Molly Hootch schools for the years 2010–2019. The data provided the opportunity for the researcher to describe important aspects of education in the Molly Hootch schools for the years 2010–2019.

The researcher obtained data from AKDEED as separate Excel files for the years 2010–2019. No data was available for the year 2016 because Alaska officials … canceled the state’s computer-based standardized testing for the year. They cited repeated technical problems that were interrupting students’ exams, throwing schools into chaos and threatening the validity of results, including a construction worker accidentally cutting a fiber optic cable thousands of miles away at the University of Kansas, while testing was underway. The cable was an essential connection between the university’s Achievement and
Assessment Institute—which provides Alaska’s state test, the Alaska Measures of Progress—and Alaska schools. (Brown, 2016, para.7.)

Variables available included district, school, village, type of test, subject, proficient count, percent proficient, not proficient count, percent not proficient, total tested, and school attendance rate for each available year at the school level (all grades K–12 combined). In addition, information was available at the school level for the total number of teachers, new hires, teacher turnover, and average years of experience. No data were available for principal turnover or principal experience. The researcher excluded schools with four or fewer students from the dataset.

For the years 2010–2014, the test administered was the Standards Based Assessment (SBA), with separate tests for math, reading, and writing. In 2015, the Alaska Measure of Progress was administered with separate tests for math and ELA (reading and writing combined). In the remaining years, the Performance Evaluation of Alaska’s Schools (PEAKS) was administered, with separate math and ELA (reading and writing combined) tests. For the years 2010–2014, where separate tests were administered for reading and writing, the researcher used the combined average of these subtests in all analysis. Data were sometimes recorded using proficient count and sometimes by proficient event; however, there was always enough information (e.g., total tested) that all data could be computed.

The researcher constructed models separately for math and reading/writing. Rather than using percent as the outcome, which can be problematic if values fall outside the boundaries, the researcher modeled the outcome as the number of students who were proficient (i.e., the events) divided by the total tested (i.e., the trials). In statistical
packages, this method is the event/trial option. To aid in interpretation, the researcher categorized school size into small, average, medium, and large based on the total number of students tested.

**Results**

This section provides a description of the school-level data for student attendance, academic achievement, achievement by school size, teacher experience, and educator turnover. The researcher used tables and figures to describe the data for the period from 2010 to 2019, with the exception of the year 2016, as no assessments were administered in that year. The researcher performed no inferential analyses to examine the research hypotheses based on the school-level data obtained from AKDEED.

**Attendance**

The Molly Hootch schools’ mean attendance rate exceeded 90% for the years under study. Each school calculated these rates and reported them to the state as average daily attendance in October of each year. There were no significant differences in attendance rates between small, medium, and large schools, or across years; the attendance mean stayed between 89% and 92%. Table 1 provides descriptive statistics for the mean of attendance, while Figure 1 depicts the changes in the mean of attendance from 2010 to 2019.
Table 1

Descriptive Statistics for Attendance Rate for the Years 2010–2019

<table>
<thead>
<tr>
<th>Year</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Median</th>
<th>Mode</th>
<th>Minimum</th>
<th>Maximum</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010</td>
<td>89.47</td>
<td>5.54</td>
<td>89.77</td>
<td>91.29</td>
<td>65.76</td>
<td>100.0</td>
</tr>
<tr>
<td>2011</td>
<td>89.26</td>
<td>5.72</td>
<td>90.07</td>
<td>85.06</td>
<td>71.18</td>
<td>99.99</td>
</tr>
<tr>
<td>2012</td>
<td>89.69</td>
<td>5.07</td>
<td>90.38</td>
<td>84.83</td>
<td>72.43</td>
<td>100.0</td>
</tr>
<tr>
<td>2013</td>
<td>90.62</td>
<td>4.08</td>
<td>90.73</td>
<td>94.64</td>
<td>75.84</td>
<td>100.0</td>
</tr>
<tr>
<td>2014</td>
<td>92.56</td>
<td>3.52</td>
<td>92.78</td>
<td>0</td>
<td>79.71</td>
<td>99.86</td>
</tr>
<tr>
<td>2015</td>
<td>89.67</td>
<td>5.47</td>
<td>90.62</td>
<td>82.10</td>
<td>72.60</td>
<td>98.80</td>
</tr>
<tr>
<td>2017</td>
<td>89.33</td>
<td>5.34</td>
<td>90.35</td>
<td>89.84</td>
<td>74.80</td>
<td>98.63</td>
</tr>
<tr>
<td>2018</td>
<td>89.71</td>
<td>5.21</td>
<td>90.76</td>
<td>86.54</td>
<td>66.05</td>
<td>98.33</td>
</tr>
<tr>
<td>2019</td>
<td>89.07</td>
<td>5.23</td>
<td>90</td>
<td>89.28</td>
<td>72.58</td>
<td>98.45</td>
</tr>
</tbody>
</table>

Figure 1

Student Attendance Rates 2010–2019
**Academic Achievement**

The years 2010–2014 showed the highest level of academic achievement for the Molly Hootch schools, with proficiency as measured by the SBA at 49% in 2010 and falling off to 40% in 2014. In 2015, the state changed the assessments, and the results obtained from the Alaska Measure of Progress showed that students/schools reaching proficiency dropped to about 15%. The 2016 assessment was canceled due to technical difficulties. From 2017 to 2019, Alaska administered the Performance Evaluation of Alaska’s Schools (PEAKS). Although the PEAKS results showed a very slight increase, proficiency remained close to or below 15%. Table 2 reports the results for proficient students over the period from 2010 to 2019. Figure 2 displays the changes in the math and ELA scores over this period, and Table 3 reports descriptive statistics for total students who took the tests over this period.

**Table 2**

*Descriptive Statistics for the Proficient Percent 2010–2019*

<table>
<thead>
<tr>
<th>Year</th>
<th>Mean</th>
<th>Median</th>
<th>Mode</th>
<th>Minimum</th>
<th>Maximum</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010</td>
<td>25.61</td>
<td>50.00</td>
<td>60.00</td>
<td>10.71</td>
<td>80.49</td>
</tr>
<tr>
<td>2011</td>
<td>41.71</td>
<td>40.79</td>
<td>20.00</td>
<td>9.23</td>
<td>89.83</td>
</tr>
<tr>
<td>2012</td>
<td>39.03</td>
<td>36.00</td>
<td>20.00</td>
<td>6.35</td>
<td>80.00</td>
</tr>
<tr>
<td>2013</td>
<td>40.12</td>
<td>40.00</td>
<td>40.00</td>
<td>6.98</td>
<td>80.00</td>
</tr>
<tr>
<td>2014</td>
<td>39.40</td>
<td>39.79</td>
<td>60.00</td>
<td>5.00</td>
<td>80.00</td>
</tr>
<tr>
<td>2015</td>
<td>15.08</td>
<td>10.00</td>
<td>5.00</td>
<td>1.15</td>
<td>60.00</td>
</tr>
<tr>
<td>2017</td>
<td>14.59</td>
<td>10.00</td>
<td>5.00</td>
<td>1.97</td>
<td>50.00</td>
</tr>
<tr>
<td>2018</td>
<td>15.47</td>
<td>10.96</td>
<td>5.00</td>
<td>1.61</td>
<td>57.14</td>
</tr>
<tr>
<td>2019</td>
<td>15.31</td>
<td>10.00</td>
<td>20.00</td>
<td>1.24</td>
<td>60.00</td>
</tr>
</tbody>
</table>
Figure 2

*Academic Achievement 2010–2019*

![Proficiency Math Reading/Writing for State and Molly Hatch](image)

Table 3

*Descriptive Statistics for Total Students Taking the Tests 2010–2019*

<table>
<thead>
<tr>
<th>Year</th>
<th>Mean</th>
<th>Median</th>
<th>Mode</th>
<th>Minimum</th>
<th>Maximum</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010</td>
<td>46.16</td>
<td>29.00</td>
<td>9.00</td>
<td>5.00</td>
<td>225.0</td>
</tr>
<tr>
<td>2011</td>
<td>46.52</td>
<td>32.00</td>
<td>7.00</td>
<td>5.00</td>
<td>196.0</td>
</tr>
<tr>
<td>2012</td>
<td>48.08</td>
<td>34.00</td>
<td>9.00</td>
<td>5.00</td>
<td>218.0</td>
</tr>
<tr>
<td>2013</td>
<td>48.87</td>
<td>30.00</td>
<td>5.00</td>
<td>5.00</td>
<td>220.0</td>
</tr>
<tr>
<td>2014</td>
<td>50.16</td>
<td>33.50</td>
<td>5.00</td>
<td>5.00</td>
<td>261.0</td>
</tr>
<tr>
<td>2015</td>
<td>52.03</td>
<td>36.00</td>
<td>5.00</td>
<td>5.00</td>
<td>261.0</td>
</tr>
<tr>
<td>2017</td>
<td>52.14</td>
<td>35.00</td>
<td>9.00</td>
<td>5.00</td>
<td>267.0</td>
</tr>
<tr>
<td>2018</td>
<td>47.80</td>
<td>34.00</td>
<td>9.00</td>
<td>5.00</td>
<td>248.0</td>
</tr>
<tr>
<td>2019</td>
<td>48.75</td>
<td>35.00</td>
<td>12.00</td>
<td>5.00</td>
<td>242.0</td>
</tr>
</tbody>
</table>
Achievement by School Size

Schools with greater than four students and less than or equal to 11 students were categorized as *small*, those with more than 11 and less than or equal to 30 as *average*, those with greater than 30 and less than or equal to 76 as *medium*, and those with more than 76 as *large*. Although the small schools achieved slightly higher rates of proficiency, and although it appears that proficiency decreased with increased school size, the differences do not indicate size as a significant factor in student/school academic achievement (see Figure 3).

**Figure 3**

*Proficiency for School Size by Year*

![Proficiency for School Size by Year](image)

Teacher Experience

The mean of years of experience for teachers in the Molly Hootch schools stayed between 7.5 and 8.5 years, as individual schools and/or districts reported to the state, which then averaged them (see Table 4 and Figure 4). Because it is an average, it cannot be used to evaluate the relationships—if any—between educator experience and student
achievement; unless the school in question has only one teacher, the significance of years of experience, reported as an average, is nil. Further, the years of experience category in the annual report was supposed to report the actual years of experience teaching in the position for which hired, but AKDEED acknowledged that it may not be so. In some cases, the reported years of experience may only reflect salary schedule placements. As many teachers working in the Molly Hootch schools come from out of state, and Alaska only allows them to “bring in” 5 years for salary purposes, the years of experience may be unreliable. Nevertheless, the teaching cadre in the Molly Hootch schools appears to have only half as much experience as their colleagues “outside”: the National Clearinghouse for Educational Statistic reported that 63% of teachers working nationwide and also in the State of Alaska in 1999–2000 and 2017–2018 had 14 or more years of experience.

Table 4

Descriptive Statistics for Average Years of Experience 2010–2019

<table>
<thead>
<tr>
<th>Year</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Median</th>
<th>Mode</th>
<th>Minimum</th>
<th>Maximum</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010</td>
<td>8.51</td>
<td>4.11</td>
<td>8.00</td>
<td>2.67</td>
<td>0</td>
<td>24.00</td>
</tr>
<tr>
<td>2011</td>
<td>7.91</td>
<td>3.86</td>
<td>7.75</td>
<td>10</td>
<td>0</td>
<td>22.0</td>
</tr>
<tr>
<td>2012</td>
<td>7.97</td>
<td>4.08</td>
<td>7.15</td>
<td>6.00</td>
<td>1</td>
<td>24.00</td>
</tr>
<tr>
<td>2013</td>
<td>7.89</td>
<td>3.88</td>
<td>7.25</td>
<td>3.00</td>
<td>0</td>
<td>25.00</td>
</tr>
<tr>
<td>2014</td>
<td>7.74</td>
<td>3.28</td>
<td>7.33</td>
<td>4.00</td>
<td>2.00</td>
<td>22.00</td>
</tr>
<tr>
<td>2015</td>
<td>8.02</td>
<td>3.82</td>
<td>7.33</td>
<td>7.00</td>
<td>1</td>
<td>22.33</td>
</tr>
<tr>
<td>2017</td>
<td>7.39</td>
<td>4.15</td>
<td>6.50</td>
<td>6.00</td>
<td>0</td>
<td>22.00</td>
</tr>
<tr>
<td>2018</td>
<td>8.24</td>
<td>4.72</td>
<td>7.00</td>
<td>7.00</td>
<td>2</td>
<td>30.50</td>
</tr>
<tr>
<td>2019</td>
<td>8.43</td>
<td>5.07</td>
<td>7.33</td>
<td>7.50</td>
<td>1.25</td>
<td>31.50</td>
</tr>
</tbody>
</table>
Figure 4

Teacher Years of Experience 2010–2019

Figure 5 depicts proficiency attained, by years of teacher experience and school size

Figure 5 Proficiency for Average Years of Teacher Experience by School Size
**Educator Turnover**

The Molly Hootch schools reported turnover rates between 22% and 32%, which are double the national average, between 2010 and 2019 (see Table 5 and Figure 6). These data are collected annually, in October, along with the average daily attendance. The data do not reflect the instances where students in a particular grade or classroom may have had more than one teacher, a substitute teacher, or no teacher at all.

**Table 5**

*Descriptive Statistics for Teacher Turnover 2010–2019*

<table>
<thead>
<tr>
<th>Year</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Median</th>
<th>Mode</th>
<th>Minimum</th>
<th>Maximum</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010</td>
<td>23.24</td>
<td>21.09</td>
<td>20</td>
<td>0</td>
<td>0</td>
<td>100.0</td>
</tr>
<tr>
<td>2011</td>
<td>22.93</td>
<td>21.23</td>
<td>22.22</td>
<td>0</td>
<td>0</td>
<td>100.0</td>
</tr>
<tr>
<td>2012</td>
<td>27.26</td>
<td>21.94</td>
<td>25.00</td>
<td>0</td>
<td>0</td>
<td>100.0</td>
</tr>
<tr>
<td>2013</td>
<td>27.33</td>
<td>24.27</td>
<td>25.00</td>
<td>0</td>
<td>0</td>
<td>100.0</td>
</tr>
<tr>
<td>2014</td>
<td>24.42</td>
<td>20.64</td>
<td>25.00</td>
<td>0</td>
<td>0</td>
<td>100.0</td>
</tr>
<tr>
<td>2015</td>
<td>30.83</td>
<td>27.83</td>
<td>26.67</td>
<td>0</td>
<td>0</td>
<td>100.0</td>
</tr>
<tr>
<td>2017</td>
<td>30.33</td>
<td>28.55</td>
<td>25.00</td>
<td>0</td>
<td>0</td>
<td>100.0</td>
</tr>
<tr>
<td>2018</td>
<td>24.63</td>
<td>22.90</td>
<td>25.00</td>
<td>0</td>
<td>0</td>
<td>100.0</td>
</tr>
<tr>
<td>2019</td>
<td>29.67</td>
<td>23.94</td>
<td>25.00</td>
<td>0</td>
<td>0</td>
<td>100.0</td>
</tr>
</tbody>
</table>
Figure 7 depicts the line chart of average teacher experience, turnover, student attendance, proficiency in math, and proficiency in English from 2010 to 2019. There were no data available for the year 2016. This plot reveals that student attendance and teacher experience did not change substantially during this period. There was a drastic decrease in students’ proficiency in math and English in 2015, the year in which the state changed its assessments. Moreover, teacher turnover rates remained between 22% and 32% over these years.
**Summary**

All collected data were reported at the pre-K–12 school level only. From 2010 to 2019, the average attendance in the Molly Hootch schools was 90%. School-level achievement of proficiency fell from less than 50% to less than 15%. The largest drop coincided with a change in the state-wide test administered. The researcher could not determine what demographic biases, if any, were present in the state-wide tests or whether those demographic biases, if any, were intentional or unintentional. The reported average years of teacher experience was 8 years. The mean for teacher turnover was 27%. The researcher could not measure the relationships between individual students’ achievement and their teachers’ years of experience, or between teachers’ efficacy (measured as experience) and the support they could access from their principals (principal years of experience). Because the data collection occurred at a single point in
time (one day in October, only), the researcher could not measure the impact of teacher turnover. Due to the aggregate, averaged nature of the teacher experience data, and uncertainty regarding the data’s accuracy, the researcher could not measure the educator culture of the schools (novice, veteran, and more).
Chapter 5: Discussion

Conclusions and Recommendations Tied to the Literature

Vygotsky’s (1978) theory of social constructivism defines learning as a collaborative experience that occurs between a less experience learner and a trusted, more experienced teacher. In this seemingly simple nexus lie the causes of the successes and failures of the Molly Hootch schools to date. In that confoundingly complex nexus lies also the prescription to realize the many opportunities to do things differently and better for the students and educators available to the Molly Hootch schools, and potentially all Alaska schools, now and in the future. The centerpiece of that nexus is trust.

Given the explicit genocidal violence and abuse at the boarding schools, construction of the Molly Hootch schools was an appropriate and corrective step. But, as Wohlforth (2016) pointed out, the State of Alaska has never acknowledged or apologized for its responsibility in the deaths, abuses, and generations of trauma of Alaska Natives in boarding schools. Unless and until the State admits the truth and engages in reconciliation, it is likely and appropriate that Alaska Native families and communities will continue to withhold their trust and participation from the public schools. Also, as Kendi (2020) of the Antiracist Research and Policy Center at Boston University noted, “[s]tandardized tests have become the most effective racist weapon ever devised to objectively degrade Black and Brown minds and legally exclude their bodies from prestigious schools” (Rosales & Walker, 2021, para. 5). What Kendi did not mention is that this is precisely what standardized tests were designed to do: sort, track, and degrade Black and Brown people. The goal was not only to exclude them from prestigious schools, but also to justify providing Black, indigenous, and other people of color with demeaning and ineffective schooling.
In September 2016, Commissioner Michael Johnson and the Alaska State Board of Education and Early Development, recognizing the need for educational reform in Alaska, made changes to the Department of Education and Early Development’s mission and vision statements. Recognizing the critical need to improve students’ educational outcomes and overall well-being, they established five strategic priorities designed to better ensure an excellent public education for all of Alaska’s students. Then, in April 2017, Commissioner Johnson and the State Board formally launched Alaska’s Education Challenge. Nearly 100 Alaskans from all corners of the state, representing diverse backgrounds, interests and experiences, convened to work collaboratively in developing up to three recommendations for each of the State Board’s five strategic priorities:

- amplify student learning
- ensure excellent educators
- modernize the education system
- inspire tribal and community ownership of educational excellence
- promote safety and well-being

The committee that focused on Strategic Priority No. 4 (Inspire Tribal and Community Ownership of Educational Excellence) ultimately agreed on the following recommendation that the State Board later adopted: “Self-Governance Compacting: Create the option for self-governance compacting for the delivery of education between the State of Alaska and Tribes or tribally-empowered Alaska Native organizations” (AKDEED, 2022, n.p.)

The opportunity for Tribes and Alaska Native Corporations to compact for education in their villages could provide the same profound change in the Molly Hootch
schools and other predominantly Alaska Native schools that the establishment of Tribal Colleges and Universities did for American Indian Higher Education. As Lynnette Chandler (2010) explained, “Peter Senge uses the term ‘profound change’ to describe organizational change that combines inner shifts in people’s values, aspirations, and behaviors with ‘outer’ shifts in processes, strategies, practices and systems” (Senge, 1999, p. 15). The building of whole new education systems and institutions that are unique to the needs of American Indian people are an example of profound change (Chandler, 2010, p. 24).

Tribal Colleges and Universities were started in rural American Indian Reservations and continue to serve the people of those places. Prior to their founding, American Indian students had found scant success in other institutions of higher education. In contrast to traditional/Western American colleges and universities, Tribal Colleges and Universities, which are fully accredited by the same standards and organizations as every other college or university, “are unique in the way they function as an extension of the values and norms of their communities for their students. Students and staff repeatedly describe their colleges as functioning like an extended family, with warmth, humor, and discipline provided in culturally appropriate ways” (Chandler, 2010, p. 22). Whether they decide to pursue tribal compacting for PK-12 schooling or to undertake some other educational reform, educational and community leaders in the Molly Hootch and other predominantly Alaska Native villages could make use of the Learn-Ed Nations Inventory developed by Education Northwest (Spracker, 2001). The Inventory provides a comprehensive framework for investigating schooling in the
present, recognizing opportunities to do things differently and better and planning for those changes.

**Principal Experience**

As so many other studies have confirmed, experienced principals who are educational leaders are central and critical to the nurture and growth of beginning teachers, to the development of integrated professional cultures in the schools, and to cultivating the vigorous, engaged involvement of school and community stakeholders in ensuring all aspects of student success. In the Molly Hootch schools, experienced principals, particularly those familiar with the cultures and villages where they serve, could provide guidance, support, and perspective to beginning and experienced teachers who are new to the bush and to the Molly Hootch schools. The Tribally-controlled Colleges in Alaska, Illisagvik and Denali, are in a unique position to develop and support educational leaders to serve in predominantly Alaska Native villages. Even more important than the initiative of the University of Alaska system to “home grow” teachers for Alaska. Home grown, tribally-educated principals and superintendents will be well-positioned to bring about the best possible outcomes for the students and communities of the Molly Hootch schools.

**Professional School Culture**

The professional culture of a school, if it is an integrated culture rather than novice-oriented or veteran-oriented, can provide sustenance and support to teachers new to the Molly Hootch schools. An integrated professional culture includes a mixture of novice and veteran teachers who work collaboratively with the principal to continuously improve all areas of student achievement. The rate of teacher turnover reported in this
study, though lower than reported in other studies, is still so high that the professional culture of the school must be remade from scratch nearly every school year. The average years of experience for teachers in the Molly Hootch schools, 7.5 years, at about half the national and state average years of experience, also suggest that rather than an integrated professional culture, the culture in these schools is likely novice-oriented.

**Teacher Experience**

Murnane (1975) identified teacher experience as the most important factor in student achievement over which schools have control. Murnane (1975) found tremendous teacher growth, as measured by increased student achievement scores, in the first 3 years, as well as continued growth up to 7 or 8 years. He attributed this teacher growth to “beginners learning their trade,” and possibly to people “not suited” to teaching leaving the profession. From 2010 to 2019, the mean of years of experience for teachers in the Molly Hootch schools stayed between 7.5 and 8.5 years. That number was derived by totaling the years of experience each teacher in each school had in the same job code, as reported to the State in the October 15 Online Alaska School Information System (OASIS). Murnane (1975) found that teachers were still learning their craft for the first 7-8 years of work. Murnane (1975) warned specifically against assigning students to beginning teachers year after year. In order to determine the effect of teacher experience on the students attending the Molly Hootch schools, further research is required.

Veenman’s (1984) work adds reality shock to the challenges beginning teachers experience—namely, the collapse of the ideals and aspirations they developed in college when faced with actual educational practice. Virtually all teachers in the Molly Hootch schools—whether experienced or beginning—are vulnerable to what Grubis (2008)
called culture fatigue, which describes the exhausted result of living and working in an entirely alien place, with unfamiliar people and constantly surprising behavior, protocols, and practices.

Whenever possible, schools do well to provide immersive orientations for new-to-them teachers. Whether these are culture camps with elders and kids, or entail being matched with age-approximate, local peer mentors, these relationships can serve as touchstones, guides, and handy living references to help the teacher bond with and become more comfortable in their new place and new colleagues.

**Teacher Turnover**

Teacher turnover rates in the Molly Hootch schools have been reported to be as high as 100% in some schools and in some years. From 2010–2019, the mean rate of teacher turnover fell between 23% and 30%. Turnover affects the students whose teacher leaves, the colleagues with whom the teacher worked, and the budget of the school and district the teacher left by requiring recruiting, hiring, and training a replacement teacher. As was true with student attendance and teacher experience, the researcher only collected the turnover numbers for this study on a single day in October. The number does not reflect cases where a class or subject may have had more than one teacher during a school year, but only whether the teachers in the school were the same and in the same positions from one October to the next. In a column in *Alaska Dispatch News*, Wohlfarth (2016) astutely observed that educator turnover may have a fatiguing effect on the hospitality of people who live in the villages: “Worse, she [a new teacher] often feels unwelcome in a community that seems uninterested in her work. The village can even seem hostile and dangerous. Why isn’t this new teacher welcomed more warmly? Villagers have seen
people like her cycle through endlessly. Students don’t bond with teachers they know are leaving” (para. 8). Further research is needed to determine the nature and extent of the effect of educator turnover beyond the school building.

**Standardized Tests as Measures of Academic Achievement and/or Cultural Alignment**

The State of Alaska uses the results of standardized tests to measure students’ academic achievement as a proxy for school efficacy. From 2010 to 2019, the Molly Hootch schools failed to achieve proficiency for between 50% and 85% of students. The state affirms a high level of consistency between state-wide assessments and state academic standards. From the data available, the researcher could not determine whether demographic biases are present in the assessments used by the State of Alaska. Further, if demographic biases are present, it is unclear whether they purposeful (that is, set to measure students’ familiarity with and fluency in majority culture) or whether they are unconscious remnants of the eugenically motivated origins of standardized testing. Standards pertaining to majority culture literacy are not explicitly evident in the Alaska state standards. If demographic bias is present in the state assessments, it may have contributed to the very low academic achievement measured in the Molly Hootch schools. Research is needed to determine the presence, if any, of demographic bias in the state’s standardized assessments.

Additionally, those villages that choose to pursue tribal compacting may wish to develop alternative instruments, perhaps like the AIMS Key Indicator System (AKIS), that was developed based on input from AIHEC [American Indian Higher Education Commission], Tribal Colleges and Universities, accrediting organizations, the American Indian College Fund, Bureau of Indian Affairs, and others. This instrument was
developed because of the distinctive needs of measurement and unique system of higher education in Tribal Colleges and Universities. Often, traditional measures of success, assessment, and measurements of student success do not reflect success at Tribal Colleges and Universities, so the AKIS was developed to measure success and impact in higher education (Chandler, 2010, p. 24).

**Attendance**

School attendance is a critical element in academic achievement. From 2010–2019, the Molly Hootch schools recorded a mean attendance rate of 90%. This excellent attendance rate indicates that the students who were test takers were present in school nearly all of the time. As such, they were available to receive the instruction provided by each school. This high rate of attendance also indicates that families, communities, and schools are succeeding in getting children to school. The low levels of academic achievement reported in the Molly Hootch schools cannot be linked to student absenteeism. Further research should be conducted to understand how the Molly Hootch schools have achieved such a high attendance rate. The findings of those studies could be of assistance to other schools and communities beyond the bush.

**Summary**

Studies had widely reported that Alaska Native students score well below their non-Native counterparts on state and national assessments of academic achievement. The Molly Hootch lawsuit settlement built high schools in 105 predominantly Alaska Native villages where students of high school age had been forced to travel long distances to attend boarding schools, or to forego high school. The Molly Hootch schools have allowed students to stay in their home communities and attend high school. The educational efficacy of the Molly Hootch schools, however, had not been evaluated.
Through this study, the researcher sought to identify school efficacy as measured by academic achievement on standards-based assessments, and to discover the relationships, if any, between student attendance, academic achievement and educator experience in the Molly Hootch schools.

The available data precluded analysis using the general linear model with the nested design that the researcher proposed initially. Instead, they used school-level data on attendance and achievement, and averages of teacher years of experience and rates of turnover, to create a general description of education in the Molly Hootch schools.

Student attendance was unexpectedly high for the years under study, hovering around 90%. Likewise, rates of teacher turnover were between 25% and 33%, well below the rates reported in other studies. The average years of teacher experience was found to be about 7.5 years, which is about half as much as state and national average. More than 50% and as many as 85% of students failed to demonstrate grade-level proficiency on the state-wide assessment for the years under study.

Officials at AKDEED must determine to what extent the standardized tests they require to be administered to all students in Alaska contain implicit or explicit demographic biases. This is crucial in discovering whether the tests are actually measuring academic achievement or if they are actually measuring acculturation. The State of Alaska invests financially in the System for School Success in order to support poor-performing schools. If the tests reflect acculturation, rather than academic achievement, the focus of the System for Success will require realignment.

Although construction of the Molly Hootch schools provided the opportunity for Alaska Native students in remote, rural Alaska to attend high school, the quality of
education available in those schools is poor. It would behoove educational and 
community leaders to examine the experience level of the educators being hired. If these 
hires are predominantly less experienced or inexperienced, leaders know that hiring more 
experienced educators is likely to have a beneficial effect on student academic 
achievement. Although hiring more experienced educators would not address higher rates 
of turnover, or the culture fatigue of living and working in a remote, rural village, or the 
predominance of educators from “outside,” it would remove the element of reality shock 
of beginning to learn one’s craft and first-time “adulting” from the challenges that 
educators in the Molly Hootch schools face.
References


Alaska State Archives (1976). *Tobeluk v. Lind, the settlement of the Molly Hootch lawsuit*. PDF provided by co-counsel Bruce Twomey, attached as Appendix A

Alaskool (n.d.). *Description of the original project plans and goals: The Alaska Native Curriculum and Teacher Development Project*. http://alaskool.org/


Chandler, L. K. (2010). *A qualitative study of tribal colleges and universities that have transitioned: From two-year Associate degree granting institutions to targeted four-year Bachelor degree granting institutions*. Graduate Student Theses, Dissertations, & Professional Papers. 1322. https://scholarworks.umt.edu/etd/1322


Miller, R. J. (2021) Nazi Germany’s race laws, the United States, and American Indians.


Mutekwe, E. (2017). Advancing the learning equity agenda through a social constructivist epistemology to teaching and learning in the curriculum.

*International Journal of Educational Sciences, 17*(1–3), 197–204.

https://doi.org/10.1080/09751122.2017.1305736


https://doi.org/10.1177/0022487113503871


Appendix A: Tobeluk v. Lind Settlement Decree

IN THE SUPERIOR COURT FOR THE STATE OF ALASKA
THIRD JUDICIAL DISTRICT

ANNA TOBELUK, et al.,
Plaintiffs,

vs.

MARTIN LIND, et al.,
Defendants.

No. 72-2450

AGREEMENT OF SETTLEMENT

WHEREAS, a civil action has been brought by Alaska Natives (Eskimo, Indian and Aleut) children of secondary school age to secure the provision of secondary schools in their communities of residence, in which plaintiffs allege (a) a pattern and practice of racial discrimination against Alaska Natives in the non-provision of local secondary schools, in violation of the constitution and laws of the United States and Alaska (U.S. Const. Amend. XIV; 42 U.S.C. §§1981, 1983, 2000d; Alaska Const. Art. I §1); and (b) a disparity between the manner in which secondary education is provided to the plaintiffs and the manner in which such education is offered to most other Alaska school children, which unduly burdens the exercise of plaintiffs' right to a public education, which is not justified by either a rational basis or a compelling state interest, and which is therefore violative of Article I §1 of the Alaska Constitution; and

WHEREAS, defendants allege that while they desire to provide secondary education facilities as set forth herein, and intend to do so within the limits of public funds, they have no constitutional obligation to provide the secondary facilities set out in this agreement; and