

Teaching Literacy to Native American Students

by

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Abstract

The average reading scores for 4th grade Native American students consistently fall below the reading scores of their peers from other races and ethnicities. This deficit reflects a potential weakness in the ability of the education system in the United States to provide culturally responsive literacy education to Native American students and remains a critical issue that must be addressed. This begins by adequately preparing teachers to educate Native American students in a culturally and linguistically responsive manner. The goal of this study was to interview teachers regarding their preservice cultural training. And also investigate their ability to implement appropriate strategies in the classroom in order to provide culturally responsive literacy education to their Native American students. Teachers were questioned using an online survey of multiple choice and open-ended questions regarding how knowledgeable they consider themselves regarding Native American culture, the extent that they implement and incorporate Native American culture and language into the classroom and instruction, and how important they consider culturally-linguistically relevant literacy intervention. Results of this study indicated that teachers do not believe that their pre-service training provided adequate preparation to teach Native American students. However, teachers reported strategies they have developed in order to effectively teach their Native American students. This information was useful in exploring the level of preparation that teachers receive before administering literacy instruction to Native American students, their current understanding of Native American cultures and languages, and specific culturally-linguistically responsive methods of teaching these teachers have implemented in the classroom.

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Chapter 1

Introduction

Literacy has been defined as, “Using printed and written information to function in society, to achieve one’s goals, and to develop one’s knowledge and potential” (White & McCloskey, 2009). The literacy abilities of students in the classroom are in direct relation to their academic achievement. It has been found that a child’s reading scores in third grade can predict their academic achievement later in school (Lesnick et al., 2010). A study by Cappella and Weinstein (2001) sampled high school students in public schools across the United States and found that 85% of students who entered high school with low reading proficiency remained at the low or basic reading level throughout high school. For Native American students specifically, low rates of high-school graduation and high rates of reading below grade level reveal a continuing deficit in the effectiveness of the current mainstream American educational system in reaching these culturally and linguistically diverse students (National Center of Education Statistics [NCES], 2018; NCES, 2019).

The average reading scale score of 202 (scale ranges from 0-500) for 4th grade Native American students remains below the national average reading score of 222. This also falls below the average scores for other races/ethnicities including, White, Black/African American, Asian, Hispanic, and Pacific Islander (NCES, 2018). The NCES reports that the high school graduation rate of Native American students has slowly risen to 72% for the school year 2016-2017 but still trails behind the national graduation rate of 85% (NCES, 2019). This is also behind the high school graduation rates of other races/ethnicities including, White, Black/African American, Hispanic, and Asian/Pacific Islander (NCES, 2019). Additionally, the college enrollment rates for Native American students have not measurably increased between 2000 and

2017 (NCES, 2018). The college enrollment rate of 20% for Native American students ages 18-24 remains below the national average of 40%. This is also below the college enrollment rates of other races/ethnicities including, White, Black/African American, Hispanic, and Asian/Pacific Islander. The data seems to indicate a correlation between the low early literacy rate of Native American students and their lower rate of academic success, high school graduation, and college attendance among Native American students.

The United States has an historical, legislative, cultural, and social responsibility to provide culturally relevant education to Native American students. This continuing deficit in reading achievement levels is a critical issue that should be addressed. The weight of this education is the responsibility of mainstream teachers to educate Native American students using culturally relevant education that considers the traumatic history of Native America and the mainstream education system, tribal cultures, and the revitalization of Native American heritage languages (Coady et al., 2016; de Jong & Harper, 2005).

Culturally Responsive Education

There has been a shift in student demographics that has significant implications for how educators teach students in the classroom. Although the percentage of minority teachers has slightly increased over the past decade, White teachers still account for eighty-one percent of mainstream public-school educators, while, in contrast, the majority of students in mainstream American public schools are Black, Hispanic, and Asian/Pacific Islander (NCES, 2018). No longer do teachers share similar linguistic, socioeconomic, and cultural backgrounds as the majority of their students. This changing construct of mainstream education creates a crucial opportunity and imperative responsibility for teachers and educators to provide culturally and linguistically responsive education in their classrooms (Fox & Gay, 1995; Paris, 2015; Van

Hook, 2000). According to the National Center for Education Statistics (2019), Native American students account for 1% of public elementary and secondary students. Of these Native American students, 37% attend schools with at least 75% minority student enrollment. Additionally, the percentage of Native American teachers in mainstream public schools remains below 1%, leaving Native America underrepresented among public school educators (NCES, 2019).

Liams et al., (2004) conducted surveys and interviews of mainstream teachers regarding their attitudes toward English language learning (ELL) students and found that 70% of teachers were not interested in having ELL students in their classrooms and 14% objected to having them in their classroom. Additionally, 25% of teachers felt that it was the responsibility of students to adapt to mainstream culture, and 20% directly objected to adapting their instruction for ELL students (Liams et al., 2004). These statistics point to the crucial need to change the attitude of teachers and educators and prepare them to provide culturally responsive teaching in mainstream classrooms. It is the responsibility of mainstream educators to provide culturally responsible education that not only allows Native American students to achieve their full academic potential, but also honors and validates their heritage language and culture. Gay (2002) observed that culturally responsive education uses the characteristics of students' cultures to create effective channels of education. When teachers are able to utilize this method of teaching, they are able to effectively reach their students while validating and honoring the diverse cultures in the classroom (Gay, 2002). In 2015, the Every Student Succeeds Act (ESSA) reaffirmed legislation that requires teachers to provide culturally responsive education to students across the United States. It also requires teachers to teach and educate in a way that specifically honors their Native American students' culture, language, and traditions (U.S. Department of Education, 2015, p.

246). This legislative requirement, in turn requires teachers to be adequately prepared to implement this education and honor the culture and language of their Native American students.

Cultural Knowledge Base for Native Americans

Providing culturally responsive education is not something that occurs without adequate training and preparation. Effective, quality teaching not only depends on the teacher's mastery of the material, but on their knowledge of the specific heritage cultures and languages of their students (de Jong & Harper, 2005; Fox & Gay, 1995). As classrooms become more and more culturally diverse, it is assumed that educators will adapt current curricula, apply "just good teaching" practices, and help close the achievement gap (de Jong & Harper, 2005). However, the education and preparation for teachers to provide this culturally responsive teaching goes beyond helping educators affirm and respect the cultures of their students. In order to provide the quality education these students need to adequately succeed academically, teachers must be equipped with a detailed knowledge base of cultural and ethnic information that is specific to their students (Fox & Gay, 1995; Gay, 2000; Van Hook, 2000). This knowledge base is not limited by subject and extends to all cultural details. Some teachers may be tempted to think that specific subjects (math or science) are not impacted by culture. Instead, the knowledge of different ethnicities or cultures that have contributed to each field can help teachers convey the topic in an interesting and stimulating manner (Gay, 2000). Teachers must have a detailed, comprehensive knowledge base that includes knowledge of the traumatic history between Native Americans and the mainstream education system, Native American values, tribal specific cultures, and the preservation of Native American languages (Crawford, 1995; Limb et al., 2008; McInnes, 2017; Voss et al., 2005).

Historical Trauma in Mainstream Education.

It is critical for the educational and cultural aspect of teacher training to ensure that educators gain knowledge of Native history, language and culture (ESSA, 2015). This responsibility is not merely a legislation of good intent but has historical and cultural implications for Native students. Historically, mainstream education has been used against Native America. During the late 1800's and early 1900's, the federal government enacted an education system that would force assimilation of Native American children into American culture and traditions. Native American children were forcibly removed from their homes and placed in off-reservation boarding schools (Adams, 1995; Voss et al., 2005). In the name of education, Native children were forbidden from speaking their native language or engaging in Native customs and traditions. Additionally, these children's names were changed, their hair was cut, and they were required to dress in European clothing (Adams, 1995). The end goal of forced cultural assimilation was to exterminate Native American languages and cultures in favor of the dominant American mainstream culture and require the Native children to become integrated into the perception of a civilized world (Adams, 1995). Although cultural and linguistic extermination of Native America did not occur, it did leave long-lasting cultural damage and traumatic effects (Voss et al., 2005). Today there are few Native people who have not been impacted by boarding schools, which continue to be associated with loss of culture, language, and identity (Voss et al., 2005). Focus group interviews of Native American elders, conducted by Whitbeck et al., (2004) as part of a study seeking to conceptualize and measure historical trauma, were used to develop a survey tool regarding historical trauma. This survey, given to 143 Native American adults, found that over 27% think of loss of language on a daily basis; over 25% think daily of the loss of Native culture; and over 28% consider loss of respect for elders from children and grandchildren on a daily basis. These results suggest that the trauma and loss is historical in

origin, but the effects still impact the lives of Native Americans on a daily basis and is carried with them into the mainstream classroom of modern America (Whitbeck, et al., 2004).

Contrasted Values of Native Americans and Mainstream Classrooms.

Another vital aspect of teacher training is to equip each educator with an adequate knowledge of the specific cultures represented in their classrooms. Bennett (1995) observed, the majority of mainstream schools remain monocultural, despite the diverse cultural society of America. Research demonstrates a disparity between the values and perceptions of Native American students compared to the education system. Guillory & Wolverton (2008) conducted case study interviews of Native American college students and members of the state board of education (states include Washington, Idaho, and Montana) and asked each participant to describe three to four factors that increased Native American's persistence through college and three to four factors that were considered barriers to degree completion by Native American students. The institutions identified two perceived barriers (inadequate finances and lack of academic preparation), while the Native American college students reported the barriers of single parenthood and a sense of isolation. The students also listed family and tribal community as both a barrier and persistence factor – because of the desire to honor their tribal identity while also feeling the weight of dependence family members place on them (Guillory & Wolverton, 2008) These findings reveal the discrepancy of perspectives between mainstream education institutions and Native American students.

Individuals in the United States may pursue and prioritize values differently based on certain demographic criteria (e.g., geographical location, socioeconomic status, education level, etc.). An example of this is a study by Rogers and Wood, which found that participants generally agreed on regional stereotypes and that these generalizations were rooted in some truth (2010).

However, while certain general observations can be allowed across the country, it must be remembered that these are typically based on general mainstream American culture. These all-American values and customs descend from western, European society, and are predominantly driven by achievement and accomplishment at the individual level (Raeff, 1997). This individualism concept is secondary to the fundamental value of harmony in Native American culture where the family is seen as the cornerstone of the community (Limb, et al., 2008). Tribal and family identity takes precedence over other events and affiliations, including school (Garrett, 1995). An article by Limb, Hodge, & Panos (2008) published to provide child welfare workers with a better understanding of Native American values, describes how Native American values prioritize cooperation, listening to learn, and only providing indirect criticism. Competing for the sake of beating others or asking questions rather than observing may be frowned upon in Native American communities (Garrett, 1995) Mainstream American culture emphasizes competition, speaking to be heard, and giving direct criticism (Limb et al., 2008). This disparity in values may influence how Native American students learn and participate in daily classroom activities. For instance, in Native American culture the definition of “family” can be extended to include the entire tribe, which can impact the communication between students and their teachers or peers who may not share the same understanding of the word “family” (Limb et al., 2008). Without an understanding of these differences in definitions and priorities, teachers cannot effectively implement culturally relevant education. When mainstream values are incorporated into the design of classroom curriculum and assessments for mainstream public classrooms, even with the best of intentions, they can have a negative impact on Native students and their ability to succeed in the classroom (Garrett, 1995). Mainstream education depends on verbal interaction between students and teachers. Classroom curriculum and assessments prioritize the competitive,

individualistic nature of the dominant mainstream culture, which may be difficult for the collectivistic, reflective Native American students. The Native American concept of time is where things begin when everyone is ready and stop when everything is complete, rather than living by the clock. This can lead to Native American children performing poorly on the standardized, timed testing that is fundamental to the modern educational system (Garrett, 1995). Teacher training regarding educating Native Americans students in the mainstream classroom is made further complex when each of the specific tribal cultures recognized throughout the United States are correctly acknowledged and considered.

Tribal Specific Cultural Competency Training

There are currently 574 “ethnically, culturally, and linguistically diverse” federally recognized tribal nations throughout the continental United States and Alaska, in addition to state recognized tribes (National Congress of American Indians [NCAI], 2019). A study by McInnes (2017) surveyed preservice teachers before and after participating in University of Minnesota Duluth’s (UMD) Department of Education’s foundations course, “Teaching the American Indian Student in the Elementary Classroom.” Student responses affirmed that the course was helpful in preparing them to teach Native American students and noted that the course had changed several of their preconceived ideas about Indigenous people. Most respondents also responded that the course should be longer, and noted that it should be emphasized that all Native American students cannot be generalized into one group or taught in the same way (McInnes, 2017). As culture is incorporated into the classroom, the language specific to each tribe must also be considered, and this plays a significant role in the literacy development of Native American children.

Native American Languages

Heritage languages are typically defined as non-national languages that were acquired first, but not completely because of the switch to the dominant, national language (Polinsky & Kagan, 2007). However, there are two crucial differences between indigenous heritage languages and immigrant native languages in the United States: legal status and endangerment. Speakers of immigrant heritage languages still remain in the country of origin (preserving the grammar and vocabulary of that language), while indigenous languages are dependent on maintaining speakers within the United States (Haynes, 2010). Historically, Native American languages are associated with the past and broadly referenced in history books while Mainstream English is the progressive voice of the future and technology (McHenry, 2002). The impact that the Navajo language had on United States history with its role as the unbreakable code of World War II is the extent of many American's knowledge of Native American languages (Spolsky, 2002).

However, Native American languages are experiencing a rapid decline in speakers, as Native children are growing up speaking only English (Crawford, 1995). The loss of language users for Native American languages is leaving these languages critically endangered. One hundred thirty-five of the 155 indigenous heritage languages may be extinct by 2050 if the rate of speakers continues to decline (Crawford, 1995). The United States has passed legislation in order to help ensure that the preservation of these indigenous languages.

Importance of Native American Language Preservation

Unfortunately, there is a crucial need for this preservation because of the cultural and linguistic damage done to Native American tribes by the national boarding schools. Additionally, tribal education agencies are moving to educate the younger generations in the languages of Native American heritage and culture. The Native American Language Program, under the Office of Indian Education, was begun with the purpose of support schools who use Native

American languages as their primary language of instruction, improve education and student outcomes within Native America, and advocate for the rights of Native Americans to use and revitalize their languages (U. S. Department of Education, n.d.). Replacing a language with a more dominant language is not simply switching to another channel of communication.

Language is intrinsically related to culture, history, and worldview of a people group (Biddle & Swee, 2012). In order to prevent the loss of Native American tradition and culture, tribal agencies and the federal government have passed legislation and begun implementing language educational opportunities for Native children. McHenry observed, that one problem with past and modern methods of researching and exploring a language is that someone outside of the community typically performs this job (2002). A non-Native speaker is tasked with the job of exploring a language and documenting its syntax, grammar, and other important details. However, this places the responsibility of determining what is or is not vital to a culture on a non-member (McHenry, 2002).

Classroom administrators and educators must consider the impact of these positive movements towards preserving Native American languages on students' literacy and reading skills. It is crucial for educators to understand the intertwined relationship of language and culture in order to effectively understand the impact that language has on literacy and the importance of teaching literacy in a culturally relevant manner.

While teacher training equips educators to teach pre-literacy skills and reading to students, it is focused on the skills needed to read mainstream English. There are significant differences in the linguistic structure of mainstream English compared to Native American languages. One study by Lonigan et al., (2008) found that there is strong evidence that alphabet knowledge, phonological awareness, rapid automatic naming, writing/writing name, and

phonological short-term memory are important factors for predicting later reading and writing abilities (Lonigan et al., 2008) This is not an exhaustive list of predictive literacy skills but represent skills that can be assessed and monitored as children develop reading and writing abilities in mainstream American English (Good et al., 2009). In contrast to this, the Navajo language contains 10 consonants and 20 vowel sounds that are not found in standard American English (Young & Morgan, 1980). This is just a singular example of how American English differs from only one of the one hundred fifty languages Native American languages spoken in the United States (U.S. Department of the Census, 2015). The significant differences in the languages and their associated dialects must be accounted for during literacy instruction in mainstream American English.

Culturally Responsive Literacy Instruction for Native American Students

Literacy goes beyond decoding skills to include comprehension, which is also significantly impacted by a student's cultural background. The linguistic organization pattern associated with spoken language is included in the text organization of each language. Second language readers who are unfamiliar with the structure of their second language may be confused by the structural differences between languages (Westby, 2005). There is a reciprocal relationship between spoken and written language, allowing each to build on the other as they develop and build competence (American Speech-Language Hearing Association [ASHA], 2001).

ESSA (2015) reaffirmed the responsibility of America's educational system to ensure that every child is given the chance to succeed in the classroom and that educators must be prepared to help students develop the needed skills to achieve this academic success (U.S. Department of Education, 2015, p. 13). Despite this educational commitment by the United

States to “every child,” Native American students continue to fall below their peers on the “accountability measures” determined by ESSA for monitoring academic success. These measures include math and reading scores, English-language proficiency test scores, and high school graduation rates (U.S. Department of Education, 2015, pp. 24-29). Ensuring that the commitment of educational legislation to “every child” appropriately includes Native American students begins with preparing the teachers of these students. Educators must be trained and equipped to meet the diverse social and linguistic needs of their Native American students, to allow them to reach their full potential.

Justification

Prior literature has explored and examined the impact of low literacy, the responsibility of teachers to provide culturally relevant literacy instruction, and the importance of closing achievement gaps for literacy. Despite this research and the requirements of current legislation, the literacy achievement gap for Native American students continues to indicate that mainstream American teachers lack the preparation necessary to provide culturally responsive literacy education to Native American students.

Little research has been done on the perception of teachers regarding their preparation and their ability to implement appropriate strategies in the classroom to provide culturally responsive literacy education to their Native American students.

This study’s goal was to interview teachers who provide literacy education to Native American students in order to investigate their impression of the effectiveness of their pre-service preparation. Teachers were questioned regarding how knowledgeable they consider themselves regarding Native American culture, the extent that they implement and incorporate Native American culture and language into the classroom and instruction, and how important

they consider culturally relevant literacy intervention. This information will be useful in describing and exploring the level of preparation that teachers receive before administering literacy instruction to Native American students. Specifically, the current study hoped to explore the following aims:

- I. How are mainstream classroom educators trained regarding the administration of culturally relevant literacy education that is specific to Native American students?
 - Hypothesis – Preservice education will contain instruction on culturally and linguistically relevant teaching methods, but they will not be specifically relevant to Native American students or contain the detail necessary to adequately teach literacy to Native American students.
- II. Examine how mainstream classroom educators believe their cultural education has prepared and equipped them to teach literacy to their Native American students.
- III. Examine how culturally relevant literacy education specific to Native Americans is being incorporated into mainstream classrooms.
- IV. Explore how mainstream classroom educators consider the importance of teaching literacy in a culturally relevant manner to their Native American students.
- V. Illustrate how mainstream classroom educators understand and consider Native American cultures, languages, and their history within mainstream classrooms.

Chapter 2

Manuscript

Teaching Literacy to Native American Students

Introduction

Literacy has been defined as, “Using printed and written information to function in society, to achieve one’s goals, and to develop one’s knowledge and potential” (White & McCloskey, 2009). The literacy abilities of students in the classroom are in direct relation to their academic achievement. It has been found that a child’s reading scores in third grade can predict their academic achievement later in school (Lesnick et al., 2010). A study by Cappella and Weinstein (2001) sampled high school students in public schools across the United States and found that 85% of students who entered high school with low reading proficiency remained at the low or basic reading level throughout high school. For Native American students specifically, low rates of high-school graduation and high rates of reading below grade level reveal a continuing deficit in the effectiveness of the current mainstream American educational system in reaching these culturally and linguistically diverse students (National Center of Education Statistics [NCES], 2018; NCES, 2019).

The average reading scale score of 202 (scale ranges from 0-500) for 4th grade Native American students remains below the national average reading score of 222. This also falls below the average scores for other races/ethnicities including, White, Black/African American, Asian, Hispanic, and Pacific Islander (NCES, 2018). The NCES reports that the high school graduation rate of Native American students has slowly risen to 72% for the school year 2016-2017 but still trails behind the national graduation rate of 85% (NCES, 2019). This is also behind the high school graduation rates of other races/ethnicities including, White, Black/African

American, Hispanic, and Asian/Pacific Islander (NCES, 2019). Additionally, the college enrollment rates for Native American students have not measurably increased between 2000 and 2017 (NCES, 2018). The college enrollment rate of 20% for Native American students ages 18-24 remains below the national average of 40%. This is also below the college enrollment rates of other races/ethnicities including, White, Black/African American, Hispanic, and Asian/Pacific Islander. The data seems to indicate a correlation between the low early literacy rate of Native American students and their lower rate of academic success, high school graduation, and college attendance among Native American students.

The United States has an historical, legislative, cultural, and social responsibility to provide culturally relevant education to Native American students. This continuing deficit in reading achievement levels is a critical issue that should be addressed. The weight of this education is the responsibility of mainstream teachers to educate Native American students using culturally relevant education that considers the traumatic history of Native America and the mainstream education system, tribal cultures, and the revitalization of Native American heritage languages (Coady et al., 2016; de Jong & Harper, 2005).

Culturally Responsive Education

There has been a shift in student demographics that has significant implications for how educators teach students in the classroom. Although the percentage of minority teachers has slightly increased over the past decade, White teachers still account for eighty-one percent of mainstream public-school educators, while, in contrast, the majority of students in mainstream American public schools are Black, Hispanic, and Asian/Pacific Islander (NCES, 2018). No longer do teachers share similar linguistic, socioeconomic, and cultural backgrounds as the majority of their students. This changing construct of mainstream education creates a crucial

opportunity and imperative responsibility for teachers and educators to provide culturally and linguistically responsive education in their classrooms (Fox & Gay, 1995; Paris, 2015; Van Hook, 2000). According to the National Center for Education Statistics (2019), Native American students account for 1% of public elementary and secondary students. Of these Native American students, 37% attend schools with at least 75% minority student enrollment. Additionally, the percentage of Native American teachers in mainstream public schools remains below 1%, leaving Native America underrepresented among public school educators (NCES, 2019).

Liams et al., (2004) conducted surveys and interviews of mainstream teachers regarding their attitudes toward English language learning (ELL) students and found that 70% of teachers were not interested in having ELL students in their classrooms and 14% objected to having them in their classroom. Additionally, 25% of teachers felt that it was the responsibility of students to adapt to mainstream culture, and 20% directly objected to adapting their instruction for ELL students (Liams et al., 2004). These statistics point to the crucial need to change the attitude of teachers and educators and prepare them to provide culturally responsive teaching in mainstream classrooms. It is the responsibility of mainstream educators to provide culturally responsible education that not only allows Native American students to achieve their full academic potential, but also honors and validates their heritage language and culture. Gay (2002) observed that culturally responsive education uses the characteristics of students' cultures to create effective channels of education. When teachers are able to utilize this method of teaching, they are able to effectively reach their students while validating and honoring the diverse cultures in the classroom (Gay, 2002). In 2015, the Every Student Succeeds Act (ESSA) reaffirmed legislation that requires teachers to provide culturally responsive education to students across the United States. It also requires teachers to teach and educate in a way that specifically honors their Native

American students' culture, language, and traditions (U.S. Department of Education, 2015, p. 246). This legislative requirement, in turn requires teachers to be adequately prepared to implement this education and honor the culture and language of their Native American students.

Cultural Knowledge Base for Native Americans

Providing culturally responsive education is not something that occurs without adequate training and preparation. Effective, quality teaching not only depends on the teacher's mastery of the material, but on their knowledge of the specific heritage cultures and languages of their students (de Jong & Harper, 2005; Fox & Gay, 1995). As classrooms become more and more culturally diverse, it is assumed that educators will adapt current curricula, apply "just good teaching" practices, and help close the achievement gap (de Jong & Harper, 2005). However, the education and preparation for teachers to provide this culturally responsive teaching goes beyond helping educators affirm and respect the cultures of their students. In order to provide the quality education these students need to adequately succeed academically, teachers must be equipped with a detailed knowledge base of cultural and ethnic information that is specific to their students (Fox & Gay, 1995; Gay, 2000; Van Hook, 2000). This knowledge base is not limited by subject and extends to all cultural details. Some teachers may be tempted to think that specific subjects (math or science) are not impacted by culture. Instead, the knowledge of different ethnicities or cultures that have contributed to each field can help teachers convey the topic in an interesting and stimulating manner (Gay, 2000). Teachers must have a detailed, comprehensive knowledge base that includes knowledge of the traumatic history between Native Americans and the mainstream education system, Native American values, tribal specific cultures, and the preservation of Native American languages (Crawford, 1995; Limb et al., 2008; McInnes, 2017; Voss et al., 2005).

Historical Trauma in Mainstream Education.

It is critical for the educational and cultural aspect of teacher training to ensure that educators gain knowledge of Native history, language and culture (ESSA, 2015). This responsibility is not merely a legislation of good intent but has historical and cultural implications for Native students. Historically, mainstream education has been used against Native America. During the late 1800's and early 1900's, the federal government enacted an education system that would force assimilation of Native American children into American culture and traditions. Native American children were forcibly removed from their homes and placed in off-reservation boarding schools (Adams, 1995; Voss et al., 2005). In the name of education, Native children were forbidden from speaking their native language or engaging in Native customs and traditions. Additionally, these children's names were changed, their hair was cut, and they were required to dress in European clothing (Adams, 1995). The end goal of forced cultural assimilation was to exterminate Native American languages and cultures in favor of the dominant American mainstream culture and require the Native children to become integrated into the perception of a civilized world (Adams, 1995). Although cultural and linguistic extermination of Native America did not occur, it did leave long-lasting cultural damage and traumatic effects (Voss et al., 2005). Today there are few Native people who have not been impacted by boarding schools, which continue to be associated with loss of culture, language, and identity (Voss et al., 2005). Focus group interviews of Native American elders, conducted by Whitbeck et al., (2004) as part of a study seeking to conceptualize and measure historical trauma, were used to develop a survey tool regarding historical trauma. This survey, given to 143 Native American adults, found that over 27% think of loss of language on a daily basis; over 25% think daily of the loss of Native culture; and over 28% consider loss of respect for elders from children

and grandchildren on a daily basis. These results suggest that the trauma and loss is historical in origin, but the effects still impact the lives of Native Americans on a daily basis and is carried with them into the mainstream classroom of modern America (Whitbeck, et al., 2004).

Contrasted Values of Native Americans and Mainstream Classrooms.

Another vital aspect of teacher training is to equip each educator with an adequate knowledge of the specific cultures represented in their classrooms. Bennett (1995) observed, the majority of mainstream schools remain monocultural, despite the diverse cultural society of America. Research demonstrates a disparity between the values and perceptions of Native American students compared to the education system. Guillory & Wolverson (2008) conducted case study interviews of Native American college students and members of the state board of education (states include Washington, Idaho, and Montana) and asked each participant to describe three to four factors that increased Native American's persistence through college and three to four factors that were considered barriers to degree completion by Native American students. The institutions identified two perceived barriers (inadequate finances and lack of academic preparation), while the Native American college students reported the barriers of single parenthood and a sense of isolation. The students also listed family and tribal community as both a barrier and persistence factor – because of the desire to honor their tribal identity while also feeling the weight of dependence family members place on them (Guillory & Wolverson, 2008) These findings reveal the discrepancy of perspectives between mainstream education institutions and Native American students.

Individuals in the United States may pursue and prioritize values differently based on certain demographic criteria (e.g., geographical location, socioeconomic status, education level, etc.). An example of this is a study by Rogers and Wood, which found that participants generally

agreed on regional stereotypes and that these generalizations were rooted in some truth (2010). However, while certain general observations can be allowed across the country, it must be remembered that these are typically based on general mainstream American culture. These all-American values and customs descend from western, European society, and are predominantly driven by achievement and accomplishment at the individual level (Raeff, 1997). This individualism concept is secondary to the fundamental value of harmony in Native American culture where the family is seen as the cornerstone of the community (Limb, et al., 2008). Tribal and family identity takes precedence over other events and affiliations, including school (Garrett, 1995). An article by Limb, Hodge, & Panos (2008) published to provide child welfare workers with a better understanding of Native American values, describes how Native American values prioritize cooperation, listening to learn, and only providing indirect criticism. Competing for the sake of beating others or asking questions rather than observing may be frowned upon in Native American communities (Garrett, 1995) Mainstream American culture emphasizes competition, speaking to be heard, and giving direct criticism (Limb et al., 2008). This disparity in values may influence how Native American students learn and participate in daily classroom activities. For instance, in Native American culture the definition of “family” can be extended to include the entire tribe, which can impact the communication between students and their teachers or peers who may not share the same understanding of the word “family” (Limb et al., 2008). Without an understanding of these differences in definitions and priorities, teachers cannot effectively implement culturally relevant education. When mainstream values are incorporated into the design of classroom curriculum and assessments for mainstream public classrooms, even with the best of intentions, they can have a negative impact on Native students and their ability to succeed in the classroom (Garrett, 1995). Mainstream education depends on verbal interaction

between students and teachers. Classroom curriculum and assessments prioritize the competitive, individualistic nature of the dominant mainstream culture, which may be difficult for the collectivistic, reflective Native American students. The Native American concept of time is where things begin when everyone is ready and stop when everything is complete, rather than living by the clock. This can lead to Native American children performing poorly on the standardized, timed testing that is fundamental to the modern educational system (Garrett, 1995). Teacher training regarding educating Native Americans students in the mainstream classroom is made further complex when each of the specific tribal cultures recognized throughout the United States are correctly acknowledged and considered.

Tribal Specific Cultural Competency Training

There are currently 574 “ethnically, culturally, and linguistically diverse” federally recognized tribal nations throughout the continental United States and Alaska, in addition to state recognized tribes (National Congress of American Indians [NCAI], 2019). A study by McInnes (2017) surveyed preservice teachers before and after participating in University of Minnesota Duluth’s (UMD) Department of Education’s foundations course, “Teaching the American Indian Student in the Elementary Classroom.” Student responses affirmed that the course was helpful in preparing them to teach Native American students and noted that the course had changed several of their preconceived ideas about Indigenous people. Most respondents also responded that the course should be longer, and noted that it should be emphasized that all Native American students cannot be generalized into one group or taught in the same way (McInnes, 2017). As culture is incorporated into the classroom, the language specific to each tribe must also be considered, and this plays a significant role in the literacy development of Native American children.

Native American Languages

Heritage languages are typically defined as non-national languages that were acquired first, but not completely because of the switch to the dominant, national language (Polinsky & Kagan, 2007). However, there are two crucial differences between indigenous heritage languages and immigrant native languages in the United States: legal status and endangerment. Speakers of immigrant heritage languages still remain in the country of origin (preserving the grammar and vocabulary of that language), while indigenous languages are dependent on maintaining speakers within the United States (Haynes, 2010). Historically, Native American languages are associated with the past and broadly referenced in history books while Mainstream English is the progressive voice of the future and technology (McHenry, 2002). The impact that the Navajo language had on United States history with its role as the unbreakable code of World War II is the extent of many American's knowledge of Native American languages (Spolsky, 2002).

However, Native American languages are experiencing a rapid decline in speakers, as Native children are growing up speaking only English (Crawford, 1995). The loss of language users for Native American languages is leaving these languages critically endangered. One hundred thirty-five of the 155 indigenous heritage languages may be extinct by 2050 if the rate of speakers continues to decline (Crawford, 1995). The United States has passed legislation in order to help ensure that the preservation of these indigenous languages.

Importance of Native American Language Preservation

Unfortunately, there is a crucial need for this preservation because of the cultural and linguistic damage done to Native American tribes by the national boarding schools. Additionally, tribal education agencies are moving to educate the younger generations in the languages of Native American heritage and culture. The Native American Language Program, under the

Office of Indian Education, was begun with the purpose of support schools who use Native American languages as their primary language of instruction, improve education and student outcomes within Native America, and advocate for the rights of Native Americans to use and revitalize their languages (U. S. Department of Education, n.d.). Replacing a language with a more dominant language is not simply switching to another channel of communication.

Language is intrinsically related to culture, history, and worldview of a people group (Biddle & Swee, 2012). In order to prevent the loss of Native American tradition and culture, tribal agencies and the federal government have passed legislation and begun implementing language educational opportunities for Native children. McHenry observed, that one problem with past and modern methods of researching and exploring a language is that someone outside of the community typically performs this job (2002). A non-Native speaker is tasked with the job of exploring a language and documenting its syntax, grammar, and other important details. However, this places the responsibility of determining what is or is not vital to a culture on a non-member (McHenry, 2002).

Classroom administrators and educators must consider the impact of these positive movements towards preserving Native American languages on students' literacy and reading skills. It is crucial for educators to understand the intertwined relationship of language and culture in order to effectively understand the impact that language has on literacy and the importance of teaching literacy in a culturally relevant manner.

While teacher training equips educators to teach pre-literacy skills and reading to students, it is focused on the skills needed to read mainstream English. There are significant differences in the linguistic structure of mainstream English compared to Native American languages. One study by Lonigan et al., (2008) found that there is strong evidence that alphabet

knowledge, phonological awareness, rapid automatic naming, writing/writing name, and phonological short-term memory are important factors for predicting later reading and writing abilities (Lonigan et al., 2008) This is not an exhaustive list of predictive literacy skills but represent skills that can be assessed and monitored as children develop reading and writing abilities in mainstream American English (Good et al., 2009). In contrast to this, the Navajo language contains 10 consonants and 20 vowel sounds that are not found in standard American English (Young & Morgan, 1980). This is just a singular example of how American English differs from only one of the one hundred fifty languages Native American languages spoken in the United States (U.S. Department of the Census, 2015). The significant differences in the languages and their associated dialects must be accounted for during literacy instruction in mainstream American English.

Culturally Responsive Literacy Instruction for Native American Students

Literacy goes beyond decoding skills to include comprehension, which is also significantly impacted by a student's cultural background. The linguistic organization pattern associated with spoken language is included in the text organization of each language. Second language readers who are unfamiliar with the structure of their second language may be confused by the structural differences between languages (Westby, 2005). There is a reciprocal relationship between spoken and written language, allowing each to build on the other as they develop and build competence (American Speech-Language Hearing Association [ASHA], 2001).

ESSA (2015) reaffirmed the responsibility of America's educational system to ensure that every child is given the chance to succeed in the classroom and that educators must be prepared to help students develop the needed skills to achieve this academic success (U.S.

Department of Education, 2015, p. 13). Despite this educational commitment by the United States to “every child,” Native American students continue to fall below their peers on the “accountability measures” determined by ESSA for monitoring academic success. These measures include math and reading scores, English-language proficiency test scores, and high school graduation rates (U.S. Department of Education, 2015, pp. 24-29). Ensuring that the commitment of educational legislation to “every child” appropriately includes Native American students begins with preparing the teachers of these students. Educators must be trained and equipped to meet the diverse social and linguistic needs of their Native American students, to allow them to reach their full potential.

Justification

Prior literature has explored and examined the impact of low literacy, the responsibility of teachers to provide culturally relevant literacy instruction, and the importance of closing achievement gaps for literacy. Despite this research and the requirements of current legislation, the literacy achievement gap for Native American students continues to indicate that mainstream American teachers lack the preparation necessary to provide culturally responsive literacy education to Native American students.

Little research has been done on the perception of teachers regarding their preparation and their ability to implement appropriate strategies in the classroom to provide culturally responsive literacy education to their Native American students.

This study’s goal was to interview teachers who provide literacy education to Native American students in order to investigate their impression of the effectiveness of their pre-service preparation. Teachers were questioned regarding how knowledgeable they consider themselves regarding Native American culture, the extent that they implement and incorporate

Native American culture and language into the classroom and instruction, and how important they consider culturally relevant literacy intervention. This information will be useful in describing and exploring the level of preparation that teachers receive before administering literacy instruction to Native American students. Specifically, the current study hoped to explore the following aims:

- I. How are mainstream classroom educators trained regarding the administration of culturally relevant literacy education that is specific to Native American students?
 - Hypothesis – Preservice education will contain instruction on culturally and linguistically relevant teaching methods, but they will not be specifically relevant to Native American students or contain the detail necessary to adequately teach literacy to Native American students. Examine how mainstream classroom educators believe their cultural education has prepared and equipped them to teach literacy to their Native American students.
- II. Examine how culturally relevant literacy education specific to Native Americans is being incorporated into mainstream classrooms.
- III. Explore how mainstream classroom educators consider the importance of teaching literacy in a culturally relevant manner to their Native American students.
- IV. Illustrate how mainstream classroom educators understand and consider Native American cultures, languages, and their history within mainstream classrooms.

Methodology

Participants

Thirteen classroom educators in public schools met the inclusion criteria and completed the survey throughout the United States. The following inclusive criteria was applied to participants: (a) experience teaching Mainstream American English literacy skills to Native American students for a minimum of one year, (b) experience teaching Native American students and non-Native students in one classroom, and (c) teacher in a K-3rd grade general education classroom. The following exclusionary criterion was applied: lack of experience teaching literacy and lack of experience teaching Native American students. In order not to prime their responses, teachers were asked at the beginning of the survey to identify all races and ethnicities they had experience teaching, but only their experience with Native American students was considered. Individuals who did not meet inclusion criteria or met exclusion criteria were taken to the end of the survey and thanked for their time.

Materials

To answer the research questions of the investigation, the researchers created a web-based 24-item survey via Qualtrics software (see Appendix 1). Questions were drawn from a variety of previous studies that had investigated the beliefs and attitudes of teachers towards culturally responsive education (Frye, et al., 2010; Hsiao, 2015; Siwatu, 2007). The questions were designed by speech-language pathologists, but written to use terminology and language familiar to teachers. Before large-scale dissemination of the survey, the instrument was piloted with members of the committee and peers of the author. This allowed feedback to be provided in

order to improve the content, structure, and validity of the survey. The survey was completely anonymous, contained twenty-four questions, and included three parts.

- Part 1 asked the participant to identify demographic information and background educational experience. Data collected included: their level of education, race, age, state they completed their pre-service education, grade levels they have experience teaching, and years of experience teaching literacy skills. The purpose of these general information questions was to help establish whether there were statistical trends throughout responses.
- Part 2 consisted of five open-ended interview style questions related to the implementation of culturally responsive practices and the degree of confidence that the teacher found in their level of cultural preparation. Prior to beginning Part 2, participants were asked to watch a video introducing the researcher and providing instructions for answering the open-ended questions (see Appendix D). Information gathered included: how teachers define “literacy” and “culture,” how teachers consider language when teaching literacy, strategies implemented to teach literacy to Native American students, and if teachers felt that their teacher training prepared them to teach literacy to their Native American students. The purpose of these questions was to address Research Aims 2-5.
- Part 3 asked the participant to identify information related to culturally responsive teaching. Information gathered included: (a) any cultural preparation classes they had participated in, (b) the culture(s) addressed in each class, (c) the area(s) of teaching that were addressed in each class, and (d) the level of education where these classes were provided (undergraduate, graduate, continuing education, etc.). The purpose of these questions was to address Research Aim 2.

Procedure

Following approval by the Auburn University Institutional Review Board recruitment was conducted via two methods. Initially schools were located within four determined regions of the United States (South, West, Midwest, and Northeast). Schools with a student body that contained at least 1% Native American representation were identified (Profiles of USA Public Schools, 2021). An introductory, individualized email containing the link to the survey was distributed to teachers, using public information available on the school information database. A total of 143 teachers were contacted via email. Participants chose to participate in the study by clicking the link, reading the attached consent letter, and choosing to begin the survey. The survey link was kept live for 4 – 6 weeks. A second personalized email was resent after two weeks as a reminder to those who had not yet responded to the initial invitation. Additionally, participants were recruited using snowball sampling. Promotional material was posted to the social media accounts of the authors and made publically opened for reposting. Additionally, promotional material was added to the Teaching English to Speakers of Other Languages (TESOL) forum.

Data Analysis

Multiple-choice Analysis

After the survey was closed, respondent answers were filtered for survey completion, which resulted in thirteen responses. These responses were transferred to the spreadsheet for descriptive analysis. The responses for all participants were summarized and averaged in order to establish frequency counts and means for each item. Areas of analysis were: participants' demographics, education information, and consideration of Native American culture in the classroom. In cases where some participants selected not to respond to a question, the averages

were calculated using the number of respondents who answered that item, as opposed to the number who completed the survey.

Written Interview Analysis

Written interview data was downloaded and saved for analysis. Transcripts received from the three open-ended questions from Part 3 and compiled with the transcripts received from the written interview questions from Part 2. This allowed the author to have a broader and deeper understanding of the experiences of each participant. Initially, all transcripts were analyzed and separated into general codes using open coding procedures. Codes were then organized and sorted into preliminary themes. Codes could be applied to more than one theme and codes that did not apply to specific themes were organized under “miscellaneous.” Preliminary themes were then reviewed, modified, and defined in order to establish coherent and distinct themes that were applicable to the purpose of the study. As themes were finalized, they were placed in a working word document shared between the researchers.

Establishing Trustworthiness

Authors collaborated on data collection and analysis. The second author was experienced in qualitative research, analysis, and semi-structured interviews. Initially investigators familiarized themselves with the data, conducted preliminary theme searches, and assigned primary coding individually, then collaborated to compare and discuss. Collaboration was conducted in order to reach a consensus. This process was repeated with analytical coding to determine that all transcripts were interpreted correctly. Both authors reviewed all answers and took notes if further clarification was deemed necessary. Through an iterative process, codes were organized into applicable categories and then analyzed to look for comprehensive themes within the data. During the process of collecting data and coding, the researchers kept memos of

observed behavior, perceived relationships, and other information that might pertain to the study. Memos served as collected forms of documentation and the reflective interpretation of the researchers. The primary author met with another speech-language pathology graduate student, who had previous experience in peer debriefing, to discuss the analysis process. This helped remove redundancy and probe for comprehension for an unfamiliar reader.

Results

Participant Demographics

A total of 13 participants met inclusionary criteria and completed the survey. Participants were then asked to answer several questions regarding demographic information (e.g., age range, race, years of experience). The assigned pseudonyms, along with individual demographic information of each participant, are detailed in Table 1.

Table 1: *Participant Pseudonyms and Personal Information*

	Age	Race	Years of Experience Teaching	Years of Teaching Literacy	Achieved Education
TJ	38-47	White	16-20	16-20	B.S. or B.A. Other, M.S. or M.A. Other
CC	58 or above	White	21 or more	21 or more	B.S. or B.A. Other, M.S. or M.A. Other, Other
KC	58 or above	White	21 or more	21 or more	B.S. or B.A. Other, Other
JT	48-57	White	21 or more	16-20	B.S. or B.A. Other, M.S. or M.A. Other
KD	28-37	White	11-15	6-10	B.S. or B.A. Early Childhood Education, M.S. or M.A. Other
JC	18-27	White	6-10	6-10	Other
GK	48-57	White	21 or more	21 or more	M.S. or M.A. Other
AJ	48-57	White	21 or more	16-20	M.Ed or M.S. Elementary Education
JJ	28-37	White	6-10	6-10	B.S. or B.A. Early Childhood Education, B.S. or B.A. Elementary Education
PT	38-47	White	6-10	1-5	B.S. or B.A. Other, M.S. or M.A. Other
DH	38-47	White	16-20	16-20	B.S. or B.A. Elementary Education, Other
BD	38-47	White	16-20	16-20	M.Ed or M.S. Elementary Education, Other
KK	38-47	American Indian or Alaska Native	21 or more	21 or more	M.S. or M.A. Other

Participants represented all age ranges listed from 18-27 to 58 and above. The majority of participants were ages 38-47 (39%, n=5). For the other participants, 23% were between the ages of 48-57 (n=3), 15% were between the ages of 28-37 (n=2), 15% were between the ages of 58 and above (n=2), and the remaining participant was between the ages of 18-27 (8%, n=1). Of the thirteen participants who completed the survey, the majority of respondents indicated their race to be White (92%, n=12). The remaining participant indicated their race to be Native American or Alaska Native (8%, n=1). None of the participants identified as being of Hispanic, Latino, or Spanish origin. Participant responses are detailed in Table 2.

Table 2. *Participant Demographics*

	Response Count (N=13)	Percentage %
Age		
18-27	1	8
28-37	2	15
38-47	5	39
48-57	3	23
58 and above	2	15
Race		
Native American or Alaska Native	1	8
White	12	92
Experience Teaching		
6-10 years	3	23
11-15 years	1	8
16-20 years	3	23
21 or more years	6	46
Experience Teaching Literacy		

1-5 years	1	8
6-10 years	3	23
16-20 years	5	38
21 or more years	4	31

Demographic data revealed that all participants had at least 5 years of experience teaching. Results indicated that the majority of participants answered that they had 21 or more years of experience teaching (46%, n=6), while the others responded they had 16-20 years of experience (23%, n=3), 11-15 years of experience (8%, n=1), and 6-10 years of experience (23%, n=3). Participants were also asked about the number of years they have experience teaching literacy. The majority (38%, n=5) answered that they had 16-20 years of experience, while the others responded they had 21 or more years of experience (21%, n=4), 6-10 years of experience (23%, n=3), and 1-5 years of experience (8%, n=1).

Analysis of the data revealed three of the four regions (7 of the 50 States) of the United States were represented (South, Northeast, and West). There were no participants from the Midwest region who completed the survey. The majority of participants were located in the Northeast (62%, n=8), with 7 located in New York (88%) and 1 in Maryland (12%). There were 3 participants in the South (23%), with 1 located in Alabama (33.33%), 1 located in Louisiana (33.33), and 1 located in Texas (33.33%). There were 2 participants located in the West region of the United States (15%), with 1 located in Alaska (50%) and 1 located in Arizona (50%).

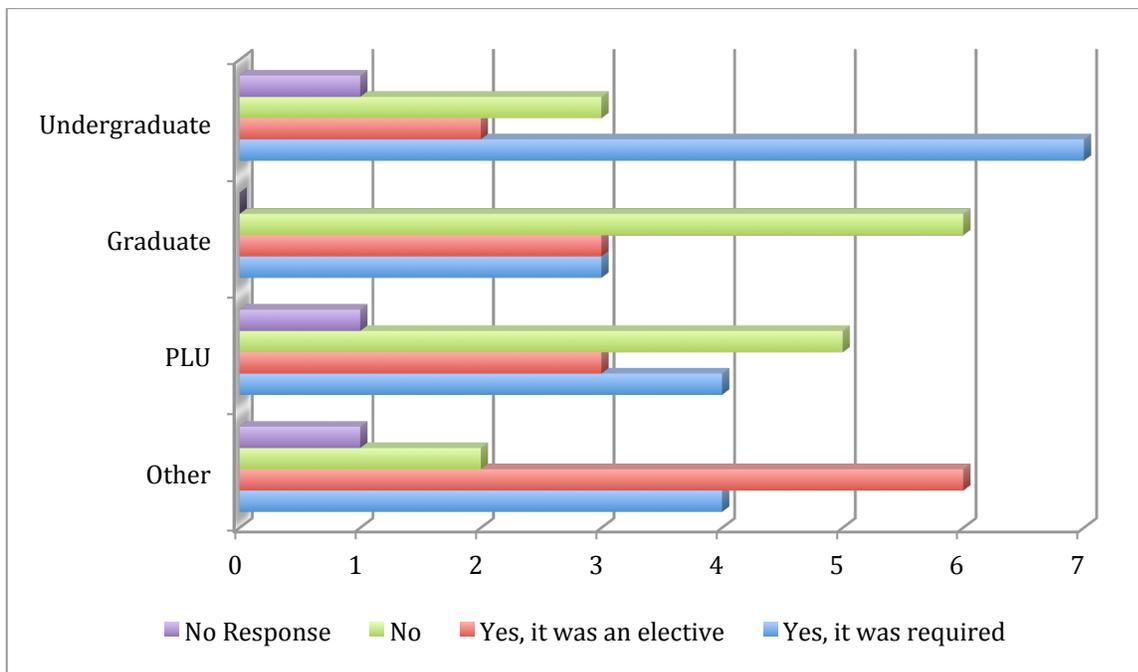
Participants were asked to identify the region where they have spent the majority of their life (using an eight-region model of the United States). The majority selected the Midwest (54%, n=7), while 23% selected the Southeast (n=3), 15% selected the Southwest (n=2), and 8% selected the Great Lakes (n=1). They were also asked to identify the region where they

completed their preservice training (using the same eight region model of the United States). Again, the majority selected the Mideast (54%, n=7). The other participants answered the Southeast (23%, n=3), the Great Lakes (15%, n=2), and the Plains (8%, n=1).

Education Regarding Culture

Participants were asked if they had taken a class regarding culture. This same question was asked regarding four different levels of education (undergraduate, graduate, professional learning unit, and other). The results of this question detailing at what level participant classes taken culture were taken are detailed in Figure 1.

Figure 1. *Participant Classes Taken Regarding Culture*



If the participant selected “No,” or chose not to answer, the survey logic moved on to the next question. If “Yes, it was required” or “Yes, it was an elective” was selected, participants were asked if the class highlighted the impact of culture with regard to specific subjects. Participants could select all that applied therefore the n’s and percentages exceeded 100

Results of these questions are detailed in Table 3.

Table 3. *Relationship of Culture and Specific Subjects*

	Undergraduate (n=9)	Graduate (n=6)	PLU (n=7)	Other (n=10)
Culture in the Classroom	67%, n=6	67%, n=4	86%, n=6	80%, n=8
Culture and Language Arts	22%, n=2	17%, n=1	29%, n=2	20%, n=2
Culture and Math/Sciences	11%, n=1	17%, n=1	14%, n=1	10%, n=1
Culture and Literacy	33%, n=3	50%, n=3	29%, n=2	40%, n=4
Culture and Social Sciences	11%, n=1	17%, n=1	29%, n=2	20%, n=2
Implications of Culture on Grammar, Language Usage, Dialect, and Semantics	22%, n=2	33%, n=2	57%, n=4	40%, n=4
No Response	33%, n=3	-	-	10%, n=1

Participants were then asked if the class on culture addressed any specific student cultural and ethnic backgrounds. Participants could select all that applied. Results of these questions are detailed in Table 4.

Table 4. *Specific Student Cultural and Ethnic Backgrounds Addressed*

	Undergraduate (n=9)	Graduate (n=6)	PLU (n=7)	Other (n=10)
American Indian/ Alaskan Native	22%, n=2	50%, n=3	71%, n=5	60%, n=6
Asian	-	17%, n=1	14%, n=1	10%, n=1
Black or African American	22%, n=2	50%, n=3	57%, n=4	40%, n=4
Culturally Diverse Students	44%, n=4	50%, n=3	57%, n=4	20%, n=2
English Language Learners	44%, n=4	83%, n=5	57%, n=4	40%, n=4
Native Hawaiian	-	-	14%, n=1	-
Spanish Descent	11%, n=1	67%, n=4	57%, n=4	40%, n=4
ESL	33%, n=3	33%, n=3	43%, n=3	40%, n=4
Other	22%, n=2	-	-	40%, n=4
Not Applicable	11%, n=1	-	-	10%, n=1

Teachers' Perception of Their Knowledge

Teachers were asked to rank how knowledgeable they consider themselves regarding the history of Native Americans and the American mainstream education system and how to teach literacy to Native American students. Teachers were given five options: Extremely Knowledgeable, Very Knowledgeable, Moderately Knowledgeable, Slightly Knowledgeable, and Not Knowledgeable. One participant did not respond to either question. Only the answers of those that did respond are considered in the data below (n=12).

When asked to rate how knowledgeable they consider themselves regarding teaching literacy to Native American students, 42% of teachers selected Moderately Knowledgeable

(n=5), 33% selected Very Knowledgeable (n=4), 17% selected Slightly Knowledgeable (n=2), and 8% selected Not Knowledgeable (n=1).

When asked to rate how knowledgeable they consider themselves regarding the history of Native Americans and the American mainstream education system, 58% of teachers selected Moderately Knowledgeable (n=7), 17% selected Very Knowledgeable (n=2), 17% selected Slightly Knowledgeable (n=2), and 8% selected Extremely Knowledgeable (n=1).

Teachers' Consideration and Incorporation of Native American Culture

Teachers were asked a series of questions regarding how often they consider Native American history and culture when teaching literacy. Teachers were given five options: Always, Most of the Time, About Half of the Time, Sometimes, and Never. One participant did not respond to any of the questions. Only the answers of those that did respond are considered in the data below (n=12).

When asked to identify how often they consider the history of Native Americans and the American mainstream education system when teaching literacy to Native American students, 42% of teachers selected Most of the Time (n=5), 25% selected About Half of the Time (n=3), and 33% selected Sometimes (n=4).

When asked to identify how often they incorporate Native American language into the classroom, 50% of teachers selected Sometimes (n=6) and 50% selected Never (n=6).

When asked to identify how often they consider the specific tribal culture and language of Native American students in the classroom, 58% of teachers selected Sometimes (n=7), 25% selected About Half of the Time (n=3), 8% selected Always (n=1), and 8% selected Never (n=8).

Importance of Considering Language and Culture

Teachers were asked to rank how important it is to consider the impact of a student's culture and language when teaching literacy to Native American students. Teachers were given five options: Extremely Important, Very Important, Moderately Important, Slightly Important, and Not Important. One participant did not respond. Only the answers of those that did respond are considered in the data below (n=12).

When asked to select how important it is to consider the impact of a student's culture and language when teaching literacy to Native American students, 42% of teachers selected Extremely Important (n=5), 42% selected Very Important (n=5), and 16% selected Moderately Important (n=2).

Qualitative Analysis

The open-ended questions in Part 2 were addressed using open coding procedures, in order to establish coherent and distinct categories that were applicable to the purpose of the study. Focused coding led to four different themes, which will be elaborated on in the following text.

“Language is the medium, and literacy is the art form:” How Teachers Define the Relationship Between Culture, Language, and Literacy

When asked to define language, teachers demonstrated a common emphasis on the various mediums that could be used for language. Teachers noted the auditory and visual components of language – where communication is not limited to written and spoken words, but also includes signs, gestures, sounds, and pictures. For instance, one teacher gave this definition, “Language is how people communicate with one another. This could be nonverbal language, verbal language, pictorial language, or written language.” The definitions given by teachers also focused on how language is used for communication between people. Several teachers

commented on how language unifies groups of people. One teacher said, “Language helps to reinforce the bond between the individuals. It is inclusive and exclusive at the same time.” A common theme among answers was the importance of language. For instance, one teacher responded, “Language is essential both heard, read, and written!”

Many teachers highlighted the heritage aspect of language. KD, a participant with experience teaching on the Navajo Reservation responded, “Language is a way to pass down culture.” AJ, a teacher with experience in New York, answered, “Even when there was no alphabet, people utilized pictures to create a story or an idea that they felt strongly enough to carve into stone for generations to read.” Teachers also emphasized the role language plays in the perceptions of those they meet. For instance, JC, another teacher from New York answered, “Language can tell a lot about your education level and is often part of the first impression of you as a person.” Another example was given by TJ, a teacher in Maryland, “it [the way someone speaks] sends messages to others, who then may communicate - or choose not to - in different ways that might impact our being able to acquire a larger variety of literacy skills.”

The definitions of culture that teachers provided were similar. They commented on how culture is the shared way of life among a group of people. Examples given included the common themes of culture encompassing the beliefs, customs, traditions, and identify shared by a group. Teachers also commented on the relationship between culture and language. BD, a teacher from Louisiana responded that, “culture shapes how our language is formed.” A teacher from New York, JD, gave the example that language is how “a group of people in the same community communicate with each other and build relationships (family, friends, etc.).” KD also commented that language is “present in celebrations, art, music, literature, traditions, ceremonies, and customs, so a culture cannot exist without a language to express that culture.”

When teachers defined literacy there were a variety of answers given. However, some common unifying themes emerged. Literacy was identified as an ability or skill that needs to be taught. Additionally, many answers included comprehension of the communication as an important part of literacy. For instance, CC, a teacher from Texas, answered, “the ability to understand language spoken and written.” DH, another teacher from New York, answered, “If you are not understood then your communication means nothing.”

When participants were asked to define the purpose of literacy, a common theme was the ability to belong. For instance, KC, another teacher from New York, answered, “Literacy skills are important so that children can think for themselves, form valid opinions about topics, and thus become functioning members of society.” Other answers said literacy allows children to “become independent, productive adults” and helps them to gain “a better understanding of deeper concepts that make us human.” Participants also gave examples for how literacy is a skill that facilitates communication and comprehension, allowing for successful communication. JC responded that literacy is “the key to unlocking your personal ability to conquer and learn the world. It is the most important thing to learn.”

Teachers highlighted the differences between languages. KD, who has experience teaching ESL students answered, “There may be preconceptions about written language that students have that are different in the English written language. I have also had experience with students whose native language is primarily oral, and not written, so the concept of reading and writing a language seems like much more of an obstacle to those students and families. We need to take all of these factors into consideration when planning literacy instruction to students.”

Referring to Native American languages, CC responded, “There are other phonemes that don't

exist for them in English. In fact, I know the word "snow" does not exist in some Native American cultures.”

When asked about the relationship between language and literacy, many teachers emphasized the importance of exposure to language at home in order to promote literacy development. JC answered that in their experience there is less interaction between Native American adults and children than in other cultures, and that “children are often left to experience things on their own so they are not exposed to the same language other students are.” JC also commented that the Native cultures represented in their classroom struggle with poverty and high rates of illiteracy, which impacts the language exposure of Native American children. AJ commented on the impact that personal culture has on literacy, “Sometimes the family unit does not promote, practice or hold literacy as important and a child can arrive at school with very little background related to any kind of literacy.”

Another emphasis was on the relationship between oral language and literacy. For example, GK answered:

“The way we speak directly impacts our literacy skills. Students need to hear patterns of language from birth to be able to mimic language. They need to be read to and spoken to so that they can pick up on these patterns when they begin to read and see them in print.”

AJ gave another example, “If a child is not spoken to within their family, they can demonstrate immense difficulties with expressing and understanding language all together.” JT, a teacher in New York, responded, “Language plays a very important role in literacy. It is the foundation of literacy.”

“I was not prepared to teach Native American students:” Teachers’ Perceptions of their Teacher Training

Of the teachers that responded to this question, the majority reported that their teacher training did not adequately prepare them to teach Native American students. Six teachers directly answered that their teacher training did not prepare them at all. The majority also mentioned that their teacher training focused on other languages and cultures. TJ specifically mentioned the curriculum focused on “student speakers of other languages or AAVE [African American Vernacular English].” Other teachers just broadly referenced speakers of other languages.

The feeling of inadequate preparation, when compared to the demographics they actually end up working with, was a common theme among responses. KD reported that, in their experience, teacher training was “very theoretical and assumed typical childhood development.” KD also commented that, “no demographics of students I have worked with met those typical scenarios of development.” JC also suggested that undergraduate teacher education should “have more focus on intercity and poverty teaching.” JC reported that teaching in these settings is very different than teaching in a suburban neighborhood and “Maslow's Hierarchy of Needs is a focus before you even begin teaching academics.”

KD commented that teacher training in the theory of language development is not beneficial. KD also noted, “It was not easily applied to students who grew up in mainly oral-language environments and were not introduced to texts before coming to my Kindergarten classes.”

Participants emphasized the importance of teachers understanding the cultures of their students. For instance, DH answered, “I think Native American students can learn using the same programs, but if you teach to a different culture you definitely need to know background knowledge of that culture.” KK, a Native American teacher in Alabama answered, “I think teaching to any minority can be a challenge. Considering their culture and the way they are

raised/taught by their families' needs to always be a factor when trying to teach any subject to minority students.”

PT, a teacher from Alaska reported that teacher training did not adequately prepare them, but professional learning units that are focused on Native American culture have been beneficial in helping them feel more prepared.

“Native Americans don't enunciate clearly; they also tend to pass down stories and tell them verbally in their native language. This presents a problem:” **Impact of Students' Cultural Backgrounds in the Classroom**

A common theme among participant's answers was the impact that students' cultures have on the classroom. For instance, JJ answered, “Culture and language are important to a school and classroom makeup. Your classroom can be shaped depending on your student's culture and the language they speak.” JJ also commented, “Based on Language you may have to adapt or change aspects of the culture in your room to make sure all can understand.” DH answered, “You need to know what vocabulary you will need to become familiar with when working with different cultures.”

KC commented on personal observations of the impact that culture has on the language development of Native American students, “Native Americans don't enunciate clearly, they also tend to pass down stories and tell them verbally in their native language. This presents a problem. They don't seem to value the time to read books to their child, engage in conversation with them, etc.”

Several teachers drew attention to the fact that their Native American students come from homes where more than one racial identity is represented or where at least one person in the home spoke a language other than English. KD responded that because of this the majority of

Native American students in their classroom are classified as English Language Learners (ELLs), even though they are “not actually fluent in (and some not even familiar with) their native language.” JT, a teacher in New York, commented that for their Native American students, “their first language was English, and some were given instruction as a second language in their Native American language.”

As previously mentioned, teachers expounded on the differences between languages (particularly highlighting the difference between English and Native American languages). For instance, CC wrote, “Their [Native American students] language may be more pictorial than alphabetic.” CC also commented, “My students needed to make many of the cultural connections before they could understand written word.”

When questioned about the inclusion of Native American artifacts and traditions into the classroom, the majority of participants responded that they do not currently incorporate any Native American traditions. JC responded, “We do not specifically incorporate and Native American tradition. The Seneca tribe is very private about their ceremonies and events.” The majority of participants responded that they do have at least one Native American artifact in their classroom. A variety of artifacts were given, including art prints (of various Native American culture), jewelry, baskets, dolls, and dream-catchers. GK specifically mentioned an Iroquois flag and Hiawatha belt and KD answered “when I moved to Phoenix, in my classroom I had artifacts given to me by my Navajo students and families.”

KD also responded “I often share about the culture and traditions I learned while teaching on the Navajo Reservation. When we come across topics in ELA or Social Studies that include Native American culture and history, I invite my students and parents to share their perspectives.” CC mentioned the incorporation of storytelling into the classroom.

AJ answered, “We have made strawberry juice, we ordered fry bread and ate it, we have made paper dreamcatchers, and we have watched a video on Indigenous Day!” JC responded that their Native students can wear traditional Native dress and DH answered that their entire district observes Native American heritage throughout the year, including reading special books during Native American month. Additionally, DH mentioned that the school has a “Seneca Culture teacher who teaches our students about the Seneca culture once every six day cycle.” This Seneca Culture teacher also posts cultural information on the school’s website.

Several teachers also commented that they include Native American words around the school. This included Native American students using their given Native name. Teachers also listed the inclusion of Native American books. For instance, AJ answered “We have one real dream catcher that hangs in the room and we read a story from our Wonders Reading Series that tells a whole story from the native perspective regarding the dream catcher and its true meaning!”

KD and AJ both mentioned the specific incorporation of Native American culture by teachers. For instance, AJ answered that the general education teacher in their classroom is Native American (from a different tribe than the students) and engages with the students about “her heritage and how they participate in making native soups and playing native games from long ago at her family functions.” AJ went on to say, “I wear dream catcher earrings and often engage in language about what the students wear; earrings, clothes, and when they attend long house and other cultural celebrations.”

Teachers were asked to identify how many different tribes are represented in their classroom. DH responded they have no information about specific tribes in the classroom and TJ answered that rarely is a specific tribe mentioned regarding their students. The majority of

teachers answered with specific tribes represented by their students. Tribes that were mentioned in their responses included Hopi, Navajo, Pima, Apache, Seneca, Native Alaskan, and Poarch Creek. Several of the teachers simply responded with a number of tribes represented by their students, not specific tribal names (e.g., one or two). AJ elaborated on the tribal representation in their classroom, “We have 4 Seneca students out of 12 students in the classroom. We have 3 girls and 1 boy. They belong to three different clans!”

“Everything that I learned about Native American literacy was at school and on the job:”

Knowledge Gained from Practical Experience

The majority of teachers reported that their knowledge of Native American culture and language has been gained from direct experience working Native American students. AJ told about how the Native American students in their school attended a Seneca Language class once a week. “They learned Seneca there, learned stories about their culture and elders as well as cooked things like fry bread and strawberry juice!” AJ accompanied the students with special needs and was able to learn from the class as well, and went on to report, “when the class was no longer offered, I would do those same things within the classroom to encompass the Native American Seneca culture.”

Several teachers highlighted their belief that students need to feel understood in order to effectively learn. For instance, CC responded, “I think that most students want to be understood first, in order to understand.” Additionally, teachers noted that when students are interested in the topic or engaged by the mode of instruction, they are more willing to participate. KD answered, “For comprehension lessons, oral read-alouds were important and were more engaging and accessible to my students.” Additionally, AJ responded, “We incorporate stories from their

culture about animals, the earth, and long house traditions to help them engage and stay interested in reading and writing.”

Answers varied when teachers were asked about the strategies they used to choose a literacy instruction program. While some teachers indicated they choose a program based on the needs of the students, many answered that they use the same program for all students. JC answered, “the majority of my district is low income and so we use the same program for all students.” These programs use intense, direct instruction of phonemic awareness, phonics, and the rules of the English language in a standardized, linear sequence. BD responded, “we teach phonemic awareness and immerse the children in a print rich environment at the school level while promoting this at home also.” BD also went on to explain how they use a variety of methods with all their students, while also “while promoting a wrap-around literacy program that promotes phonics, comprehension and writing.”

As previously mentioned, KD responded that most of their Native American students are designated as English Language Learners (ELLs), because at least one person in their household speaks a language other than English. Because of this, “I [KD] was encouraged to use ELD [English Language Development] Methodologies to teach grammar and reading. I found when I taught non-ELL classes, those same methodologies were beneficial to all students.” PT answered, “I use many of the same strategies I would use for other Emerging Multilinguals.”

Several participants answered that they use a multisensory method of literacy instruction because they have found this to be beneficial for their Native American students. AJ responded that this approach to teaching literacy “allows a student to see, hear, write, and read sounds in words, sentences, and stories.”

When asked about any particular strategies they use for their Native American students, several participants responded they incorporate the use of oral presentations and storytelling into instruction. For instance, KD answered, “Traditionally their cultural story-telling was oral, and I found their comprehension skills to be much stronger when they listened to stories than when they read them on their own, regardless of their reading level ability.” Additionally, AJ answered that they use Read Naturally, a program that “includes many animal stories to teach themes like; work together to reach a goal, practice to get better at a skill and so on.”

Another common strategy was the incorporation of visuals into both teacher instruction and student activities. For instance, KD answered, “We also used a lot of visuals in conjunction with vocabulary, and I made sure to incorporate stories with illustrations as much as possible. My students were encouraged to use art (drawing, painting) to summarize and reflect their comprehension of a text as well.”

The inclusion of visuals and other strategies to aid the comprehension of written text was also emphasized. As an example, KD answered “because they [Native American students] struggled more in comprehension of written text, we worked a lot with graphic organizers and note-taking strategies, especially as texts got longer for older students. They were encouraged to draw in addition to taking notes, in order to capture main ideas and details as they read texts.” KD went on to say that including oral summaries and Reader’s Theatre (the oral reading and dramatization of stories) helps bring “the content to life for my students and played to their strengths of relating more to oral storytelling.”

Discussion

The purpose of this study was to (a) explore the degree of confidence teachers have in the effectiveness of their preservice preparation to teach literacy to Native American students and (b) examine the degree to which Native American history and culture is considered in the classroom from the perspective of experienced teachers. Although prior research has revealed the negative long-term impact of low-literacy skills and the importance of closing literacy achievement gaps, previous literature has not investigated this concern from the perspective of mainstream teachers and their ability to implement appropriate strategies in the classroom to provide culturally responsive literacy education to their Native American students. By using open-ended interview style questions, that allowed the teachers to write and expound upon their answers, this study was able to gather a detailed understanding of teacher's personal thoughts, experiences, knowledge, and perspective.

Teachers, who provide literacy education to Native American students, were questioned regarding how knowledgeable they consider themselves regarding Native American culture, the extent that they implement and incorporate Native American culture and language into the classroom and instruction, and how important they consider culturally relevant literacy intervention. This information will be useful in describing and exploring the level of preparation that teachers receive before administering literacy instruction to Native American students. Specific findings were 1) teachers understand the relationship between oral language and literacy, 2) teachers do not believe that their preservice training provided adequate preparation to teach Native American students, 3) teachers have developed strategies in order to effectively teach their Native American students, and 4) teachers present varied degrees of incorporating Native American culture into the classroom and literacy instruction. Each of these will be

discussed below, followed by comparison to previous literature, limitations, and implications for further research.

Previous research demonstrates that there is a reciprocal relationship between spoken and written language, allowing each to build on the other as they develop (American Speech-Language Hearing Association [ASHA], 2001), and the results of this study indicate that teachers understand this relationship and the importance of it. Additionally, a common observation was that teachers see the direct influence that a child's home environment can have on their pre-literacy abilities. It was identified in one answer that the Native American children in their school come from poverty and high rates of illiteracy, which impacts the language exposure children are receiving at home.

According to previous literature, language is intrinsically related to culture, history, and worldview of a people group (Biddle & Swee, 2012), and the results of this study indicate that, when asked to define the relationship between language and culture, teachers affirmed this intrinsic relationship between the two. The wording that some participants used to report their perceptions of Native American cultures and languages must be emphasized. As previously mentioned, one teacher responded, "Native Americans don't enunciate clearly, they also tend to pass down stories and tell them verbally in their native language. This presents a problem. They don't seem to value the time to read books to their child, engage in conversation with them, etc." As McHenry observed, one problem with past and modern methods of researching and exploring a language is that someone outside of the community typically performs this job, placing the responsibility of determining what is or is not vital to a culture on a non-member (McHenry, 2002). This echoes a tendency that can extend beyond researching a language and encompass (however unintentionally) the mainstream classroom. The inherent tendency and formal teaching

methodology that encourages placing cultures and languages in a hierarchy creates an atmosphere where aspects of some cultures may be viewed as problems. If culture and language are intrinsically related than this hierarchal structure, based primarily on observation, not direct conversations, leads to damaging and dangerous misinterpretations about individuals from different cultural and linguistic backgrounds.

Previous literature has highlighted the importance of literacy abilities and reading scores (Lesnick et al., 2010). A study by Cappella and Weinstein (2001) found that 85% of students who entered high school with low reading proficiency remained at the low or basic reading level throughout high school. Results of this studies found that when defining culture, language, literacy, and the relationship between them, one of the most distinctive commonalities was that most teachers identified the importance of being literate, Teachers emphasized that an individual's language and literacy abilities impact how others perceive them, and this can impact their ability to be included in groups or get a job.

An important observation was how often the teachers identified and emphasized the differences that can occur between languages. Teachers gave personal experiences of working with students who came from a primarily oral native language and were unfamiliar with the concept of reading and writing a language. Teachers also identified words and phonemes represented in English that are not present in Native American languages. These results indicate that teachers are aware of these language differences and understand the importance of emphasizing that these differences must be considered when teaching Native American students. Previous research by McInnes (2017) surveyed preservice teachers before and after participating in University of Minnesota Duluth's (UMD) Department of Education's foundations course, "Teaching the American Indian Student in the Elementary Classroom," and found that most

respondents affirmed it should be emphasized that all Native American students cannot be generalized into one group or taught in the same way (McInnes, 2017). An important observation from the current study's results is to note that the majority of teachers indicated their school uses the same literacy program for all students, regardless of their cultural or linguistic background. In one instance, this was attributed to the school's district being in a low-income area. Additionally, the majority of teachers selected that they only consider this "Sometimes," when asked to identify how often they consider the specific tribal culture and language of Native American students in the classroom.

Previous research that conducted surveys and interviews of mainstream teachers regarding their attitudes toward English language learning (ELL) students and found that 70% of teachers were not interested and 14% objected to having ELL students in their classroom (Liams et al., 2004). However, results of the current study did not indicate any negative or apathetic attitudes towards English language learners among participants. Some teachers indicated they approach teaching literacy to Native American students by using English Language Development methodologies. One teacher indicated this is required by the district because Native American students are designated as English Language Learners (ELLs) when at least one person in their household speaks a language other than English. This generalization can lead to confusion regarding the cultural and linguistic background of these students. It was not clarified whether the teachers receive information about what language(s) is spoken in the home.

It was hypothesized that, while preservice education for teachers does contain instruction on providing culturally and linguistically relevant teaching, it is not specifically relevant nor does it contain enough detail to adequately teach Native American students. Current legislation establishes that the United States has a responsibility to provide culturally relevant education to

Native American students. It goes so far as to require teachers to specifically honor the cultures, languages, and traditions of their Native American students (U.S. Department of Education, 2015, p. 246). However, the results of this study indicate that teachers graduate from preservice training feeling unprepared and inadequately trained to teach literacy to Native American students. When asked to rate how knowledgeable they consider themselves regarding teaching literacy to Native American students, the majority of teachers responded that they only consider themselves “Moderately Knowledgeable.” Teachers clearly stated that the knowledge they have regarding teaching literacy to their Native American students was learned through direct experience, once they were out of school and teaching.

A common theme among participants’ answers was the implication that their preservice training was based on typical childhood development of students in average suburban neighborhoods. Teachers commented on what they believe preservice training should focus on instead (e.g., teaching in poverty or low-income settings). One answer in particular referenced the difficulty applying the theory of language development (commonly taught in preservice training) to students who grew up in oral-language environments and were first introduced to text in kindergarten. The answers that teachers provided in this study indicate that teachers do have minimal to moderate knowledge of the cultural and linguistic backgrounds of the students in their classroom, but this knowledge is primarily (if not exclusively) attained based on direct experience.

Previous studies have demonstrated that in order to provide quality, effective teaching, educators must not simply demonstrate mastery of the material, but also incorporate their knowledge of the languages and culture represented in their classroom (de Jong & Harper, 2005; Fox & Gay, 1995). Gay (2002) observed that culturally responsive education uses the

characteristics of students' cultures to create effective channels of education. When teachers are able to utilize this method of teaching, they are able to effectively reach their students while validating and honoring the diverse cultures in the classroom (Gay, 2002). The results of the current study indicate that a common theme highlighted by teachers was that they believe students need to feel understood in order to learn effectively. Teachers' answers encompassed more than knowing the student as an individual, but also included understanding the cultural background that their students represented.

Previous research has demonstrated that when mainstream values are incorporated into the design of classroom curriculum and assessments for mainstream public classrooms, they can have a negative impact on Native students and their ability to succeed in the classroom (Garrett, 1995). The current study found that a common answer among teachers was about the impact that the home environment and values of students can have on their participation in the classroom. For example, teachers emphasized the impact that oral-based storytelling in Native Culture has on student participation into mainstream American classrooms. Teachers commented on the effectiveness of using the strategy of oral presentations and teaching, alongside or in place of written information. One teacher explicitly stated that, regardless of the reading ability of the students, the strategy of oral presentation improves the comprehension of the Native American students. Teachers gave additional practical examples (e.g., oral read-aloud and presentation opportunities, multisensory instruction, incorporating stories from Native American culture, and providing visuals during instruction) of how they attempt to meet these needs of their Native American students. Again, it is important to note that these methods are techniques that these teachers have found to be effective based on direct experience teaching Native American students. These were not based on instruction these teachers received during preservice training.

Teachers reported varied degrees of participation when asked how often and to what degree of incorporation they include Native American culture in the classroom. The majority of teachers identified at least one Native American artifact (e.g. art prints (of various Native American culture), jewelry, baskets, dolls, and dream-catchers) in their classroom. It is interesting to note that teachers' responses indicated a more successful incorporation of Native American culture and traditions into the classroom when the teachers had the support of the school.

In summary, the results of this study indicate that, regardless of whether Native American students are speaking a Native American language in their home, they are coming from a different cultural background and that has a significant impact on their participation in the classroom. This was most clearly demonstrated with the impact that a home culture of oral language has on Native American student's ability to transition to dependence on a written language in the classroom.

Implications

With regard to the implication of this study's results, it becomes apparent that there is a need for direct instruction during preservice training with a focus on teaching Native American students. Mainstream classroom teachers play a crucial frontline role in providing culturally-linguistically responsible education for every student. And it is the responsibility of educational institutions to prepare and equip teachers to effectively reach each cultural and linguistic background represented. However, research suggests that preservice education programs are consistently underperforming on this responsibility. Specifically, in regard to teaching literacy to Native American students, teachers report feeling inadequately prepared. With Native American reading scores consistently falling below the national average, this is a deficit that must be

addressed. It must be acknowledged and considered that consistently low literacy rates among Native American students emphasize the importance that preservice training must help teachers develop the most effective teaching methods possible. Current standards of cultural and linguistic preparation must be evaluated and adjusted to meet the changing atmosphere of the mainstream American classroom.

The suggestions and comments that the participants made regarding teaching in low-income or poverty settings (including but not limited to classrooms where Native American students are present) should also be taken into consideration. If teachers are consistently graduating with inaccurate perceptions of classroom types, backgrounds, and settings then they enter the workforce grossly unprepared for the career ahead of them. The assumption that teachers will continue to learn from their students and adjust curriculum and teaching styles without training is not a sustainable model. More assertive, experienced teachers may be able to compensate for deficits in preparation, but less experienced teachers may not feel that they have the skill level or ability to create these changes. It is unfair and short sided for legislation to continue to require cultural and linguistically responsive teaching practices without providing adequate training during preservice education.

The comment that some districts and schools are reliant on one literacy program for all students due to low funding, despite literature that highlights the importance of diversifying curriculum based on needs, highlights the need for school resources to be devoted towards meeting the needs of culturally and linguistically diverse students and aid teachers in effectively educating them. A crucial piece of preparation should be equipping teachers to identifying the needs of their culturally and linguistically diverse students and modifying the literacy curriculum as needed.

Previous research and the current study highlight the importance that the cultural and linguistic differences among Native American tribes must be addressed during preservice training. Teachers cannot enter the workforce with a naïve version of Native Americans, unprepared to effectively teach these students. It may be unrealistic for preservice education to attempt to cover realistically all cultures, ethnicities, and languages that may be represented in each classroom. However, this does not allow for generalizing Native American cultures and languages into one, broad “culture” that presents an unrealistic representation. Instead, preservice curriculum must highlight the unique Native American tribal cultures and languages represented across the United States.

Strengths and Limitations

The strengths and limitations of this study should be remembered when considering the results. This study is believed to be the first qualitative study to interview teachers about their perceptions of preservice training regarding teaching literacy to Native American students. Thus, information and knowledge gained from this study can be considered a novel addition to research literature. The semi-structured written interview methods allowed the authors to gather the personal opinions and experiences of teachers. An additional strength is the use of theory and expert opinion from the fields of both education and speech-language pathology to guide the design and implementation of data collection.

One limitation to the current study is that data collection took place during the COVID-19 pandemic. It is believed that this impacted the ability and willingness of teachers to participate in the survey and increased the difficulty finding participants. An additional limitation is that data regarding the gender of the participants was not collected. It is not believed that this demographic information would alter the purposes or interpretation of this study or results.

Future Directions

We underestimated the impact that the COVID-19 pandemic would have on recruitment. Further studies with a larger rate of participation encompassing more regions of the United States would be a beneficial addition to the literature. Additionally, although one participant was a Native American teacher, all other participants were White. Further studies with more diversified participants, representing additional races and ethnicities, particularly Native American mainstream teachers, would provide a unique and novel addition to the literature. Another opportunity for further research would consider the impact of gender on participant answers, experiences, and beliefs. The methodology and information are also applicable to races and ethnicities other than Native American students. Future research that gathers information from teachers regarding their confidence level, teaching students with additional cultural and linguistic backgrounds, will be a beneficial addition to the literature.

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Appendix A. Survey

Do you have experience teaching literacy in the classroom?

- Yes
- No

Please select all races/ethnicities you have experience teaching:

- American Indian, Native American, or Alaskan Native
- Asian
- Black or African American (non-Hispanic)
- Hispanic/Latino
- Native Hawaiian or Pacific Islander
- White (not of Hispanic origin)
- Other

Please select your age group:

- 18-27
- 28-37
- 38-47
- 48-57
- 58 or above

Please select the race that best describes you (select all that apply):

- American Indian or Alaska Native
- Asian
- Black or African American
- Native Hawaiian or Pacific Islander
- White
- Other

Are you of Hispanic, Latino, or Spanish origin (select all that apply):

- No, not of Hispanic, Latino, or Spanish origin
- Yes, Mexican, Mexican American, or Chicano
- Yes, Puerto Rican
- Yes, Cuban
- Yes, other Hispanic, Latino, or Spanish origin

Select the region of the United States where you have lived the majority of your life:

- Far West (AK, CA, HI, NV, OR, and WA)
- Great Lakes (IL, IN, MI, OH, and WA)
- Mideast (DE, DC, MD, NJ, NY, and PA)
- New England (CT, ME, MA, NH, RI, and VT)
- Plains (IA, KS, MN, MO, NE, ND, and SD)
- Rocky Mountain (CO, ID, MT, UT, and WY)
- Southeast (AL, AR, FL, GA, KY, LA, MS, NC, SC, TN, VA, and WV)
- Southwest (AZ, NM, OK, and TX)
- Other

Select the region of the United States where you received your preservice education:

- Far West (AK, CA, HI, NV, OR, and WA)

- Great Lakes (IL, IN, MI, OH, and WA)
- Mideast (DE, DC, MD, NJ, NY, and PA)
- New England (CT, ME, MA, NH, RI, and VT)
- Plains (IA, KS, MN, MO, NE, ND, and SD)
- Rocky Mountain (CO, ID, MT, UT, and WY)
- Southeast (AL, AR, FL, GA, KY, LA, MS, NC, SC, TN, VA, and WV)
- Southwest (AZ, NM, OK, and TX)
- Other

Please select all achieved education:

- B.S. or B.A. Early Childhood Education
- B.S. or B.A. Elementary Education
- B.S. or B.A. Other
- M.Ed or M.S. Early Childhood Education
- M.Ed or M.S. Elementary Education
- M.S. or M.A. Other
- Other

Please enter the number of years you have experience teaching:

- Less than a year
- 1-5 years
- 6-10 years
- 11-15 years
- 16-20 years
- 21 or more years

Please enter the number of years you have experience teaching literacy:

- Less than a year
- 1-5 years
- 6-10 years
- 11-15 years
- 16-20 years
- 21 or more years

How would you define the following concepts?

- Literacy
- The purpose of literacy
- Culture
- Language

What role do you think language plays in culture?

What role do you think language plays in literacy? How does the way we speak impact our literacy skills?

Talk about the way you teach your Native American students how to read and write.

- Are there any particular strategies/programs that you use?
- Do you use the same strategies/programs to teach reading/writing for all of your students?

How do you think your teacher training prepared you for teaching literacy to Native American students?

Have you taken an **undergraduate class** regarding culture?

- Yes, it was required
- Yes, it was an elective
- No

In the undergraduate class identified above... (check all that apply):

- I learned about culture in the classroom
- I learned about generally incorporating culture and language arts curriculum
- I learned about generally incorporating culture and math/sciences curriculum
- I learned about generally incorporating culture and literacy curriculum
- I learned about generally incorporating culture and social sciences curriculum
- I learned about the implications of culture on grammar, language usage, dialect, and semantics

Please identify any student cultural or ethnic backgrounds that were addressed in the class identified above:

- American Indian or Alaska Native
- Asian
- Black or African American
- Culturally diverse students
- "English Language Learners"
- Native Hawaiian or Pacific Islander
- Spanish, Hispanic, or Latino descent
- English as a Second Language (ESL)
- Other
- Not applicable

Have you taken a **graduate class** regarding culture?

- Yes, it was required
- Yes, as an elective
- No

In the graduate class identified above... (check all that apply):

- I learned about culture in the classroom
- I learned about generally incorporating culture and language arts curriculum
- I learned about generally incorporating culture and math/sciences curriculum
- I learned about generally incorporating culture and literacy curriculum
- I learned about generally incorporating culture and social sciences curriculum
- I learned about the implications of culture on grammar, language usage, dialect, and semantics

Please identify any student cultural or ethnic backgrounds that were addressed in the class identified above:

- American Indian or Alaska Native
- Asian
- Black or African American

- Culturally diverse students
- "English Language Learners"
- Native Hawaiian or Pacific Islander
- Spanish, Hispanic, or Latino descent
- English as a Second Language (ESL)
- Other
- Not applicable

Have you taken a **Professional Learning Unit (PLU)** regarding culture?

- Yes, it was required
- Yes, as an elective
- No

In the PLU identified above... (check all that apply):

- I learned about culture in the classroom
- I learned about generally incorporating culture and language arts curriculum
- I learned about generally incorporating culture and math/sciences curriculum
- I learned about generally incorporating culture and literacy curriculum
- I learned about generally incorporating culture and social sciences curriculum
- I learned about the implications of culture on grammar, language usage, dialect, and semantics

Please identify any student cultural or ethnic backgrounds that were addressed in the PLU identified above:

- American Indian or Alaska Native
- Asian
- Black or African American
- Culturally diverse students
- "English Language Learners"
- Native Hawaiian or Pacific Islander
- Spanish, Hispanic, or Latino descent
- English as a Second Language (ESL)
- Other
- Not applicable

Have you taken any other training regarding culture?

*This includes guest lectures, seminar, webinars, or any other training that lasted less than a semester.

- Yes, it was required
- Yes, as an elective
- No

In the training identified above... (check all that apply):

- I learned about culture in the classroom
- I learned about generally incorporating culture and language arts curriculum
- I learned about generally incorporating culture and math/sciences curriculum
- I learned about generally incorporating culture and literacy curriculum
- I learned about generally incorporating culture and social sciences curriculum

- I learned about the implications of culture on grammar, language usage, dialect, and semantics

Please identify any student cultural or ethnic backgrounds that were addressed in the PLU identified above:

- American Indian or Alaska Native
- Asian
- Black or African American
- Culturally diverse students
- "English Language Learners"
- Native Hawaiian or Pacific Islander
- Spanish, Hispanic, or Latino descent
- English as a Second Language (ESL)
- Other
- Not applicable

Identify how knowledgeable you consider yourself regarding teaching literacy to Native American students

- Extremely knowledgeable
- Very knowledgeable
- Moderately knowledgeable
- Slightly knowledgeable
- Not knowledgeable at all

Identify how knowledgeable you consider yourself regarding the history of Native Americans and the American mainstream education system

- Extremely knowledgeable
- Very knowledgeable
- Moderately knowledgeable
- Slightly knowledgeable
- Not knowledgeable at all

How often do you consider the historical knowledge in your teaching?

- Always
- Most of the time
- About half the time
- Sometimes
- Never

How often do you incorporate Native American language into the classroom?

- Always
- Most of the time
- About half the time
- Sometimes
- Never

How often do you consider the specific tribal culture and language of your Native American students in the classroom?

- Always
- Most of the time

- About half the time
- Sometimes
- Never

Select how important you consider the impact of a student's culture and language when teaching literacy to Native American students.

- Extremely important
- Very important
- Moderately important
- Slightly important
- Not at all important

How many different tribes are represented in your classroom?

What artifacts, if any, in the classroom represent Native American culture?

What Native American traditions, if any, do you incorporate in your classroom?

Appendix B. Letter to Association

My name is Jessica Pritchett, and I am a 2nd year speech-language pathology graduate student at Auburn University in the Speech, Language, and Hearing Sciences department. For my thesis project, “*Providing Culturally and Linguistically Responsible Literacy Education,*” I am surveying teachers about the effectiveness of their teacher training in preparing them to teach literacy to Native American students.

I would like permission to contact the members of your association and invite them to participate in my research survey. I understand that because of social distancing guidelines, schools are closed and in-person interviews would not be possible. All correspondence and required participation would be performed online. I have attached a copy of the letter of consent that will be provided to your members. As noted in the letter, your members are under no risk, will receive no compensation, and are free to refuse participation. All survey answers will be completely anonymous.

Please let me know if you have any questions or if I can clarify any particular details for you. I have CC’ed my thesis advisor, Dr. Megan-Brette Hamilton, on this email and included her contact information.

Sincerely

Appendix C. Information Letter

You have been invited to participate in a research study to explore the preparation of American teachers to provide literacy education. This study is being conducted by Jessica Pritchett, Master's student at Auburn University, and Dr. Megan-Brette Hamilton, assistant professor at Auburn University's department of Speech, Language, and Hearing Sciences. You were selected as a participant because of your position as a teacher at (Name of School).

What will be involved if you participate? If you decide to participate in this research study, you will be asked to complete an online survey.

Are there any risks or discomforts? There is always a risk of breach of confidentiality with surveys, but this possibility is being addressed by keeping all responses completely anonymous and using all reasonable and customary security measures. The data will be stored behind a secure firewall, and all security updates are applied in a timely fashion.

Are there any benefits to yourself or others? There is no direct benefit to you for participating in this study, but it is hoped that the results of this study will help to provide needed information on the amount and effectiveness of cultural preparation that educators receive.

Will you receive compensation for participating? There is no compensation for completing this survey; however, your participation would be greatly appreciated.

Are there any costs? There are no costs associated with this survey, except for the time you give to complete the survey. There are three parts to this survey. Estimated time of completion for Parts 1 and 3 are approximately 2 minutes each. Part 2 includes open-ended, written response questions, which will require the most time commitment as we ask you to give thoughtful, detailed answers about your professional experience.

If you change your mind about participating, you can withdraw at any time by closing your browser window. Once you have submitted anonymous data, it cannot be withdrawn due to it being unidentifiable. Your decision about whether or not to participate or to stop participating will not jeopardize your employment at NAME OF SCHOOL or your future relations with Auburn University.

Any data obtained in connection with this study will remain anonymous. We will protect your privacy and the data you provide by not asking for any identifiable information. Information collected through your participation may be presented at state or national conferences and may be published in a professional journal.

If you have questions about this study, please contact Dr. Megan-Brette Hamilton at mzh0102@auburn.edu. If you have any questions about your rights as a research participant, you may contact the Auburn University Office of Research Compliance or the Institutional Review Board by phone (334) 844-5966 or email at IRBadmin@auburn.edu or IRBChair@auburn.edu.

Appendix D. Rapport Building Protocol

Hello! My name is Jessica Pritchett. I am a graduate student at Auburn University, earning my Masters in Speech-Language Pathology. I would certainly love to meet you and be able to ask these questions in person. Unfortunately, because of COVID-19 and social distancing guidelines, we are unable to conduct in-person interviews. But we are trying to mimic the interview process as much as possible. During this next portion of the survey, you will have the opportunity to answer five open-ended questions and I would like to hear about your thoughts, feelings, and experiences regarding teaching literacy to Native American students in your classroom.

Before you get started here are some things I want you to remember: First of all, there are no wrong answers. Do not feel like there is only one way to answer each question. Remember that everything is anonymous and be honest with your thoughts and opinions, even if they are different from what you have heard or read from other people. Also, feel free to give me as much information as possible. You are not being graded on form or structure and this is not an essay assignment. I would rather you spend your effort on giving me all your thoughts, rather than worrying about making sure it reads correctly. This survey is available for 72 hours. Take your time to think through each answer and give me your most honest answers. You are able to exit the survey and then return to it within that time period. However, please keep in mind that all information on that page will be lost. Information is only saved when you advance to the next question and you cannot go back. So complete each answer and advance to the next page before you exit the survey.

Please remember that the survey is available for 72 hours and that began when you started the survey. Take your time to answer thoughtfully, but use your time wisely so you have time to answer all five-interview questions.

When you finish the interview questions, you will be asked to ask some brief multiple choice questions about your education history. Then you will be finished! Again, I want to thank you for participating in this study! Your thoughts and opinions are so valuable, and I look forward to hearing from you.

Appendix E. Letter to Participant

My name is Jessica Pritchett, and I am a 2nd year speech-language pathology graduate student at Auburn University in the Speech, Language, and Hearing Sciences department. Because of your experience as a teacher in a K-3rd grade public school classroom, I would like to invite you to participate in my survey. I understand that because of social distancing guidelines, schools are closed and in-person interviews would not be possible. All correspondence and required participation will be performed online.

You are under no risk, will receive no compensation, and are free to refuse participation. All survey answers will be completely anonymous. However, your participation will be beneficial for my study and greatly appreciated.

Additionally, if you know any other teachers who you think can provide relevant, thoughtful answers please forward this survey link to them!

Please let me know if you have any questions or if I can clarify any particular details for you. I have also CC'ed my thesis advisor, Dr. Megan-Brette Hamilton, if you would like to contact her for further information.

Sincerely,

Appendix F. Social Media Posting

Hello! My name is Jessica Pritchett, and I am a 2nd year speech-language pathology graduate student at Auburn University. If you have experience as a teacher in a K-3rd grade public school classroom, I would like to invite you to participate in my survey. All correspondence and required participation will be performed online.

You are under no risk, will receive no compensation, and are free to refuse participation. All survey answers will be completely anonymous. However, I would greatly appreciate your participation. Additionally, please share this survey information and link to any other teachers who you think can provide relevant, informational feedback!

Please let me know if you have any questions or if I can clarify any particular details for you!