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Culturally Responsive Pedagogy and Writing Achievement for Native High School Students

A dissertation submitted in partial fulfillment of the requirements for the degree of Doctor of Philosophy in Curriculum and Instruction

by

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> December 2020 University of Arkansas

This dissertation is approved for reco	mmendation to the Graduate Council.
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Abstract

This study focuses on the effects of culturally responsive pedagogy as it is implemented in a high school classroom with Native American students. This mixed methods case study collects, analyzes and synthesizes both quantitative and qualitative data within an overall formative and experimental design approach to measure the effects of culturally responsive pedagogy on students' writing and their attitudes about writing. The study identified specific approaches to literacy instruction that hold promise for engaging Native students. Furthermore, findings from the study reveal the use of visual art as a particularly powerful tool that extends students' meaning-making skills, leading to more robust, substantive writing. This study also identifies an integrative approach to place-based education and art as a catalyst for student engagement in classroom writing tasks. The study concludes with a list of suggested instructional practices for engaging high school Native students in writing and for extending student thinking through writing tasks that utilize a culturally responsive and intertextual approach.

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First, I want to acknowledge my family who has supported me through the last several years as I journeyed on this quest to stretch my brain and step outside my comfort zone. My husband cooked our dinners and kept a roof over our heads and traveled around the country with me as my best friend, emotional support, and sounding board as I immersed myself in the beautiful, resilient cultures of our Native American sisters and brothers. Since I started this journey, both of my children have graduated high school and have started their own paths in life. I thank them for their patience, text messages of support and hugs. I hope my late nights and stacks of books have not deterred them from academia but rather instilled in them the desire to keep learning and reaching for their dreams no matter the circumstance. Second, I want to thank my mentor, Dr. Vicki Collet, who encouraged me to apply to graduate school and has been by my side with encouragement as well as holding me to the highest standards throughout this process. I have been extremely fortunate to have her expertise throughout my coursework, especially in this dissertation process. Her class on Vygotsky changed my practice as a teacher and she continues to support me in my work as a literacy specialist. Last, but certainly not least, I want to thank both Dr. Freddie Bowles and Dr. Kathleen Collins for their expertise throughout my candidacy work and my dissertation. Dr. Bowles suggested scholars who have made significant contributions toward the education of Native American students and Dr. Collins' course on mixed methods was invaluable in my dissertation's methodology. Both have been encouraging and supportive on this academic journey. Every course I completed in this journey has been challenging and rewarding. I thank all of you!

Dedication

I dedicate this dissertation, my opus, to my mother who has been the guiding light in my life and a true friend. I watched her struggle as a little girl, swimming upstream to become an outstanding nurse and Air Force officer. She encountered many obstacles but always found a way to overcome them. I've been in awe of what she has accomplished in her own life since I was young adult, old enough to realize the sacrifices she made and the courage it took to blaze her own path. I spent many hours on the phone with her talking about the triumphs and the struggles I encountered as I completed this degree. Always she was there to listen, to laugh, and most of all to encourage me to continually move forward and never give up. Thank you, Mom. I love you.

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CHAPTER 1

Introduction

Culture is at the heart of education (Gay, 2018) and it drives the values, beliefs, and goals of a school. As Pai, Adler, and Shadiow (2006) point out, "education is a sociocultural process." (p. 6). For many children, the world of school and the world of home are widely separated by language, culture, and ways of knowing (Battiste, 2008; Castagno, McKinley, & Brayboy, 2008; Demmert & Towner, 2003; Gay, 2000, 2018, Hammond, 2015; Heath, 1982; Holly, 2018; Ladson-Billings, 1995; Reyhner, 2017; Rudy, 2019). Culturally responsive education seeks to build bridges between a student's home culture and that of the school. For many Native American children, school has not been a place of acceptance, empowerment, or success (Brayboy& Lomawaima, 2018; Castagno & Brayboy, 2008; McCardle & Berninger, 2015; Pewewardy & Hammer, 2003). Culturally responsive schooling provides a safe environment in which the student's home culture more closely matches the culture of the classroom. The goal of culturally responsive schools is to make the transition from home to school a congruent one (Castagno, McKinley, & Brayboy, 2008; Gay, 2018).

As the student population in classrooms across the country continues to reflect the everincreasing diversity of our nation's population, the current educational system must sever its ties
with status quo thinking and engage in innovative ways to ensure our classrooms are democratic
ones that give voice to ALL our students (Brandt, 2009). It is within this context that additional
studies that investigate the effectiveness of culturally responsive pedagogy (CRP) and literacy
instruction are encouraged. Furthermore, the need for both qualitative and quantitative data,
especially as it relates to literacy achievement for Native American students, is needed to affect
change within our nation's schools.

The diversity of our nation's public schools has increased over the past twenty years (Aydin et al., 2017; Hussar et al., 2020, Rampey et al., 2019); however, the need to make literacy instruction relevant and sustaining has not changed. Indeed, the goal to aid high school students in becoming engaged members of a democratic society can be found in the following quote from a 1998 article in a National Council of Teachers of English magazine:

If high school students are to become productive members of society, they must understand how their literacy enables them to be agents of change. It is not enough that they pass a test given in a prescribed format. Because of their restrictive nature, such exams will never truly indicate what students can do if they are allowed to write a meaningful composition intended to affect the world around them. As many assessment critics have indicated before, life is not a three-hour test. It is dynamic and constantly in flux. We must show young people how they can use what they know to make meaningful discourse as they interact with others in any given social context. (Heidorn & Rabine, 1998, p.52).

This statement points to the heart of culturally responsive writing instruction in that teachers need to acknowledge and validate students' unique "funds of knowledge" (Moll & González, 1994) and harness that knowledge to bring about positive change in the classroom, school, and community. Providing opportunities for students to share ideas, write about relevant topics and address authentic audiences stems from a community of practice grounded in a sociocultural approach to writing instruction (Kwok, Ganding III, Hull, & Moje, 2016). Through this "real learning" approach, positive shifts in writer identity occur (Lave & Wenger, 1991).

Overview of the Problem

For Native students as well as other underrepresented groups, the transition from home to school has been fraught with bigotry, physical violence, emotional trauma, and racist attitudes that have worked in combination to silence those who are not part of the mainstream culture (Au, Brown, & Calderón, 2016). One of the primary goals of public education at the start of the twentieth century was to prepare students for the world of work and to create loyal, contributing

citizens for American society, a society primarily founded on White, Western values; the history of public education for students of color served to limit opportunities and silence diverse voices. The history of public education for these students as well as first generation immigrants is well-documented (Adams, 2008; Au et al., 2016; Mondale et al., 200; Rury, 2016). A public education meant segregated schools, low expectations for work, and limited opportunities for additional education beyond high school. For European immigrants whose first language was not English, this meant learning English at the expense of speaking their native language and limited opportunities without assimilation to the mainstream, "American" culture (Au, Brown, & Calderón, 2016).

Schools operated from (and still do) an autonomous model of literacy that instills the idea that being able to read and write is an individual accomplishment that leads to greater opportunity, prosperity, and overall individual success (Street, 1984). The history of public education for Native American students is not unlike those of other students of color in this country. It is a history of segregation, low expectations, and limited opportunities. It is also a history of forced removal from parents and Native Nations to attend boarding schools where the speaking of native languages and the wearing of cultural accourtements were strictly forbidden. Assimilation into the dominant culture and the autonomous model of literacy prevalent in America's schools has continued to strip Native American students from their sense of identity (Bartolomé, 2008; Dunbar-Ortiz, 2014; Reyhner, 2017) perpetuating a form of colonialism (Aguilera-Black Bear & Tippeconnie III, 2015; Castagno & Brayboy, 2008; Freire, 1970/2000).

Public schools have been successful in educating America's youth in basic reading, writing and math skills. However, advancements in science and technology in the past thirty years have created a new reality where the basics simply are not enough. When President John F.

Kennedy called for a new generation to carry the torch for a brighter future and fulfill the dream of putting a man on the moon, the fundamental goals of public education changed. By the 1980s, the push to prepare every student for college became the clarion call to teachers across the country (Wissehr, Concannon, Barrow, 2011). New forms of evaluation for teachers and students were implemented including the No Child Left Behind legislation in 2002, the Common Core State Standards in 2010, and the Every Student Succeeds Act in 2015 that have pushed an entire generation of students into a new era of accountability and competition in education. Ironically, the goal of ensuring every child an opportunity to academically succeed led to an increased push for standardized testing, creating conditions that are counterproductive to America's evergrowing, diverse population (Au, 2009; Cajete, 2015; Hurtado, 2015; Madaus & Clarke, 2001).

High stakes testing has led to a culture of competitiveness that focuses on test scores far more than a student's overall well-being. In a concerted effort to leave no child behind and help every student succeed, educational policy has focused on accountability efforts, including test scores that do not represent the whole child (Aronson & Laughter, 2015; Cajete, 2015; Laughter & Adams, 2012). We must ask ourselves what our definition of success is. It is within this contentious environment that the Native American student comes to know the idea of school. For many Native students the cultural divide between home and school is far too wide. Some differences between the culture of Indigenous Nations and the mainstream culture include an emphasis on collaborative problem-solving rather than individual accomplishment and community well-being and cooperation rather than individual competition and individual success (Cajete, 2015; Four Arrows, 2016; Hart, 2010; Little Bear, 2000; Nerburn, 2016; Totton, 2012; Garrett, M.T.1970). Today, Native students make up 1.2% of the total population of K-12 students in public schools within the United States, approximately 644,000 thousand children.

Eight percent or approximately 51,500 of the Native student population attend Bureau of Indian Education (BIE) schools (Ninneman, et. al., 2017). Nation-wide the drop-out rate for our Native American students in public schools is 36%. (Education of Native Americans, 2018). Figure 1 contains the 2017-2018 national graduation rate, further delineating that average by race/ethnicity.

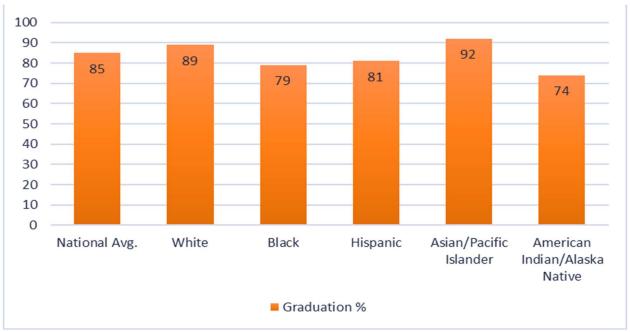


Figure 1 *National High School Graduation Rate 2017-2018*

Note. The ACGR (Adjusted Cohort Graduation Rate) is the percentage of public high school freshmen who graduate with a regular diploma within 4 years of starting ninth grade. The Bureau of Indian Education and Puerto Rico are not included in the U.S. average ACGR. Adapted from *Digest of Education Statistics 2019*. (https://nces.ed.gov/programs/digest/d19/tables/dt19_219.46.asp).

In the state of Oklahoma, the high school graduation rate is 81% for Native American students (United Heath Foundations, 2019), much higher than the national graduation rate for Native American students. Figure 2 shows not only Oklahoma's high school graduation rate but also delineates graduation rate by ethnicity/race.

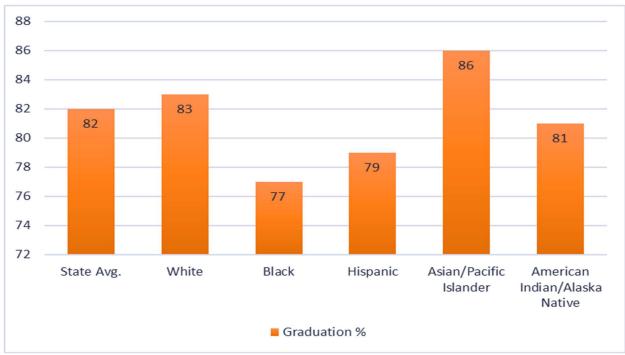


Figure 2
Oklahoma High School Graduation Rate 2017-2018
Note. The ACGR (Adjusted Cohort Graduation Rate) is the percentage of public high school freshmen who graduate with a regular diploma within 4 years of starting ninth grade. Adapted from U.S. Department of Education, Office of Elementary and Secondary Education, Consolidated State Performance Report, 2017–18. (https://nces.ed.gov/programs/digest/d19/tables/dt19/219.46.asp).

Academic Context

The history of our Native American students in public education has been a dismal one, riddled with racism, trauma, and oppression (Education of Native Americans, 2018; Reyhner, 2017; San Pedro, 2015; Sorknes & Kelting-Gibson, 2007). The introduction of standardized testing in public education has only exacerbated the problem, leaving our Native students further behind. (Brayboy & Lomawaima, 2018; Castagno & Brayboy, 2008; Madaus & Clarke, 2001). Scores in reading on the 2019 National Assessment of Educational Progress (NAEP) show a 26 point difference in the overall reading scores of White students in comparison to American Indian and Alaskan Native students. In addition, 8th grade White students on average scored 24

points higher than their American Indian and Alaskan Native peers. NAEP scores for 4th and 8th reading delineated by race/ethnicity is shown in Table 1.

Table 12019 NAEP Reading Scores by Race/Ethnicity

	White	Black	Hispanic	Asian	Native Hawaiian/Other Pacific Islander	American Indian/Alaska Native
4th Grade	230	204	209	239	212	204
8th Grade	272	244	252	284	252	248

Note. The NAEP reading score ranges from 0 to 500. The national average on the NAEP Reading in 2019 was 220 for 4th grade and 263 for 8th grade. Adapted from *The Nation's Report Card* administered by the National Center for Education Statistics. https://www.nationsreportcard.gov/highlights/reading/2019/

The overall reading scores in the 2015 NAEP for 12th grade students in Table 2 continues to show scores with wide point differences among racial/ethnic groups.

Table 22015 12th Grade NAEP Reading Scores by Race/Ethnicity

	White	Black	Hispanic	Asian/Pacific Islander	American Indian/Alaska Native
12th Grade	295	266	276	297	279

Note. 2015 NAEP data from National Center for Education Statistics. Adapted from *Digest of Education Statistics* 2019, tables 221.10 and 221.12. (https://nces.ed.gov/programs/coe/pdf/coe cnb.pdf)

This educational "gap" is seen in the NAEP scores of 4th and 8th grade Black, Hispanic and Native Hawaiian/Pacific Islander as well. Gloria Ladson-Billings' refers to this educational gap as an "educational debt," one that has been difficult to pay and one that all of society owes because previous generations have been denied equitable educational access (Fay, 2019; Ladson-Billings, 2006). Furthermore, the 2017 NAEP Reading scores indicated that only 20% of Native fourth-graders read on the proficient or advanced reading level as opposed to 47% of White students, and only 22% of Native eighth graders read on the proficient or advanced reading level

in comparison to their White peers at 45% (NAEP Reading, 2017). NAEP Reading scores are revealing, but the percentage of high school seniors taking the American College Test or ACT in 2018, a test designed to evaluate college readiness, reveals that not only is the percentage of Native students taking the test much lower than White students, but Native students' average score on the English subsection of the test is much lower than their White peers. Native students' overall ACT composite score average is a 17 compared to 21.9 for Whites. Only 8% of Native students taking the ACT in 2018 met ACT college readiness.

Table 3Percentage of 2018 High School Seniors Taking the ACT by Race/Ethnicity

	White	Black/African	Hispanic/	Asian	Native	Native
		American	Latino		American/Alaska	Hawaiian/Other
					Native	Pacific Islander
ACT	22.2	16.9	18.8	24.5	17.3	18.2
Composite						
% Taking	52.0	13.0	16.0	5.0	1.0	0.0
ACT						
ACT	21.9	15.8	17.8	24.1	15.9	17.2
English						
ACT						
College	34.0	6.0	15.0	49.0	8.0	14.0
Readiness						
ACT	6.8	5.8	6.4	7.5	5.5	6.1
Writing						

Note. ACT 2018 data for Native Hawaiian/ Other Pacific Islanders indicates 5,753 students took the test but made up 0% of the overall total. College readiness indicates the percent of students who met college readiness benchmark scores in all four areas: English (18), Mathematics (22), Reading (22) and Science (23). Writing scores are the average score for each race/ethnicity with the national average 6.5. Adapted from the graduating class 2018 from *The ACT Profile Report-National Graduating Class 2018* (https://www.act.org/content/dam/act/unsecured/documents/cccr2018/P_99_999999_N_S_N00_ACT-GCPR_National.pdf).

Native students make up 500,000 or 1% of the nation's public-school students. The percentage of Native seniors in 2018 taking the ACT was alarming, only 1% of Native American seniors in comparison to 52% of White seniors took the test. Although Native students make up only 1% of the total number of students enrolled in K-12 public schools, the statistics for Native students

should not be a reason to ignore, trivialize, or worse, give up, on the plight of hundreds of thousands of students regardless of their ethnicity (Ninneman, Deaton, & Francis-Begay, 2017).

The future of Native students (and their unique communities) depends on how well they learn to successfully navigate the world around them. It should not be a dichotomous decision for any student to either embrace one's culture or fail to succeed in American schools. Cajete (2015) and Cushman (2011), through their work with Native American children, acknowledge the courageous perseverance of Native children despite extreme poverty, limited resources, English as a second language, and cultural ways of knowing that are often counter to mainstream teaching (Cajete, 1994; Craig, 2015); however, Native American continue to struggle. It is within the context of this struggle that culturally responsive pedagogy can make a positive difference for students. Parents and caregivers of Native American children want their children to do well in school and to receive equal opportunities for a rigorous, academically challenging curriculum within a culturally responsive framework that will allow them to be successful in their communities and beyond (Baker, 2019; Craig, 2015; McCardle & Berninger, 2015). It is imperative that schools and teachers find effective ways to work with culturally diverse students, providing opportunities for students to access information and learn in a culturally responsive contexts (Aronson & Laughter, 2012; Deloria & Wildcat, 2001; Gay, 2018; Hammond, 2015; Hollie, 2018; Ruday, 2019).

Cherokee Nation

The Cherokee Nation has been at the forefront of educational opportunity for its citizens, operating 18 public schools by 1843, an exceptional feat given the trauma of forced Indian Removal only five years before. The capital of the Cherokee Nation located in Tahlequah, Oklahoma is the place of Northeastern State University. The university resides on the site of the

original Cherokee National Female Seminary founded in 1846. The Cherokee Nation has long been known for its dedication to advancing the educational opportunities of its tribal members. The Cherokee are unique in that a written language was invented by Sequoyah, a Cherokee citizen, in 1821. The Cherokee syllabary allowed for the maintaining of Cherokee Nation records and Native language and made possible the dissemination of news, creating a sense of community through the publication of the *Cherokee Phoenix and Indian's Advocate* newspaper in 1828 (Cushman, 2011; 2013). The newspaper, now known simply as the *Cherokee Phoenix*, is an example of the power of literacy in creating and maintaining community despite the hardships of physical separation and emotional trauma caused by forced migration from their original homelands. The importance of providing an equitable, sustaining education for its citizens is a priority and a core strength of the Cherokee Nation.

The preservation of Native languages plays a crucial role in strengthening communal bonds within Native Nations and preserving the culture of Native peoples (Cushman, 2011). As Susan Miller (2009) writes, "A language is a complex package encoding a unique worldview that no other language can really represent. When a language dies; therefore, a people's worldview dies with it" (p.29). It is this worldview that often conflicts with the dominant, Eurocentric worldview found in many mainstream classrooms. As Cushman (2011) points out, for the Cherokee, culture is not static; it evolves based on natural and man-made forces. This strongly suggests that had the Cherokee viewed culture as something unmalleable, it is unlikely they would have appropriated much of the ways of White settlers. The Cherokee view of life is a progressive one, with a deep respect for the past but an eye on the well-being of the next generation (Cushman, 2011). It is a perspective that has shaped over 500 years of settlement and resettlement, reflecting a spirit of survival. The Cherokee see the need for their culture to

persevere rather than to be preserved as though it once was but is not now (Cushman, 2011). This act of persevering is not the embracing of a totally new culture in order to fit in to one's new surroundings. It is understanding, respecting, and maintaining the core values, knowledge and beliefs that together help to define what it means to be Cherokee while acknowledging the need to be able to walk in both worlds - Indigenous and the American mainstream - to be successful both individually and as a citizen of both the Cherokee Nation and the United States.

Esther Burnett Horne, a Wind River Shoshone and beloved educator of teachers in the Bureau of Indian Affairs or BIA schools, once stated that "An individual without identity is like a plant devoid of nourishment. It withers and dies. Possessing identity, we feel a sense of freedom from within" (Horne, 2003, p.32). Our culture is a crucial part of who we are as individuals. To ignore or silence an individual's culture is to stifle the growth of that individual's sense of identity. More often than not, the Western, mainstream narrative in classrooms positions students who are not of the "master narrative" as "outside-looking-in" observers rather than engaged actors in the learning process (San Pedro, 2015, p. 133). This "relentlessness of the master narrative...hurts people who find themselves on the outside or the underside of the narrative" (Tuck & Yang, 2014, p. 235). One only needs to peruse the titles of texts used in public high schools to realize the master narrative of the White, male, Western perspective that dominates the teaching of literature. It is through stories that we come to know and become who we are (Brayboy, 2005). If the stories we hear do not mirror our lived realities, how do we establish trust with the storyteller? As San Pedro (2015) asserts, "Stories have impact and, when we allow them to enter into and, sometimes, disrupt our own construction of reality, they alter the way we see and understand" (p. 139). The challenge for educators is to be purposeful in the selection of

stories so that *all* students have opportunities to see themselves in the texts taught and made available to them (Beltrán, et al, 2015; Bishop, 1990; Reading Rockets, 2015; Tschida, et al, 2014)

Purpose of the Study

In a culturally relevant pedagogical approach, teachers "increase the classroom participation and academic achievement of students from different ethnic groups by modifying instruction so that it draws upon cultural strengths" (Banks, 2006, p. 197). The goal of this study is two-fold. First, the study hopes to explore the effects of culturally responsive instructional methods on the writing skills of Native American students and their attitudes about writing. Second, the study hopes to shed light on culturally responsive pedagogy that aids teachers in working with Native American high school students and empowering them as writers. To accomplish this goal, the focus will be on identifying CRP that results in the improvement of writing skills for Native American high school students and their overall self-confidence as writers. Furthermore, the study is designed to add to the growing body of research on CRP and its impacts on student learning. It is hoped that concurrent strands comprising qualitative and quantitative data collection and analysis leading to integrated interpretations will support inclusion of CRP in writing instruction.

Research Questions

1. How does a culturally relevant curriculum focused on reading culturally representative text and utilizing culturally responsive pedagogy affect high school Native American students' attitudes toward writing?

2. What specific changes- if any- are demonstrated within the students' writing after participating in a culturally responsive approach that exposes students to culturally responsive activities and texts?

Culturally Responsive Education

It is important to note that literature concerning the use of culture in education has evolved over time. Gloria Ladson-Billings (1995) proposed culturally relevant pedagogy as, "a theoretical model that not only addresses student achievement but also helps students to accept and affirm their cultural identity while developing critical perspectives that challenge inequities that schools (and other institutions) perpetuate" (p. 469). Culturally relevant pedagogy is often used synonymously with culturally responsive pedagogy (CRP) or culturally responsive teaching (CRT).

Geneva Gay defines culturally responsive education as "using the cultural characteristics, experiences, and perspectives of ethnically diverse students as conduits for teaching them more effectively" (2002, p. 106). This means intentionally situating new knowledge and skills within the context of students' lived experiences (Gay, 2000). Teachers are then creating culturally responsive filters or frames to introduce new concepts, knowledge, and skills. For teachers of Native American students, it is important to go beyond "mere awareness of, respect for, and general recognition" of various ethnic groups' values and beliefs (Gay, 2002, p. 107).

Study of the literature on culturally responsive education has led to many of the same components for creating successful, culturally responsive schools. Suggestions for creating culturally sustaining practices vary slightly but are generally consistent throughout the literature (Castagno & Brayboy, 2008; Demmert & Towner, 2003; Gay, 2002, 2018; Hammond, 2015;

Ladson-Billings, 1995; Muhammad, 2020). For Native American students these components include:

- * Students' culture at the forefront of curriculum planning
- * Literacy instruction that includes Indigenous authors and perspectives
- * Curriculum that is integrated and interdisciplinary
- * Engagement of students in the community and the community in the schools
- * A sense of belonging and an atmosphere of inclusiveness
- * Learning that is authentic, relevant, and experiential
- * Multimodal instruction and assessment to account for all learning styles
- * High expectations with rigor and respect
- * Acknowledgment, appreciation, and understanding of diverse values, cultures, and languages
- *Instructional spaces with small teacher to student ratio

Efforts to incorporate these components into sustained educational practice with Native students has found success both academically and culturally in charter and private schools (Aguilera-Black Bear & Tippeconnic III, 2015; Cajete, 2015; Deloria, Jr. & Wildcat, 2001; Gay, 2018; McCardle & Berninger, 2015).

Indigenous World View

Culture is created out of a sense of place and a group's connection to the environment. Consider that for the Cherokee and other Indigenous Peoples, the meanings within an Indigenous language are closely tied to the place in which one resides (Cajete, 2015; Cushman, 2011). With this understanding of culture, place-based education has gained recognition as an encouraging, even transformative form of culturally responsive pedagogy.

Place-based education centers teaching and learning within the context of the immediate surroundings, socially, culturally, and environmentally (Cajete, 2015; Deloria & Wildcat, 2001; Donovan, 2016; Smith, 2002; Surface, 2016). Through a place-based curriculum, bridges are formed that connect students to the local community. These bridges provide relevance for learning, create a sense of belonging for students and imbue a vested interest in the well-being of their community. This weaving of the community, local environment and student learning is natural to Indigenous ways of knowing. Indigenous Peoples view the world as interconnected both physically and spiritually (Cajete, 2015; Deloria & Wildcat, 2001). This sense of connection to one another and to all living things is at the core of Indigenous thought. Respect for life in all its forms is valued because each life affects and is affected by every other form of life. It is only natural for students to learn about their sense of humanity toward one another, their responsibility to the environment that sustains them, and their knowledge of history and tribal culture through the entirety of the place they live.

Many Indigenous scholars including Four Arrows, (2015), Cajete (2015), Deloria, (2003), Deloria & Wildcat, (2001), Garrett, (1998), Mooney, (2006), Totton, (2012), Zimmermon, (2011) have written about the perspective of an Indigenous, non-Western perspective that views the world and its inhabitants as interconnected with each living organism equal-distant to the center. With this perspective we can begin to understand the interconnectedness of all that is. With this view it is easy to see how instruction that is interdisciplinary and experiential provides familiarity as a way of knowing. Our life is dependent on the well-being of every other form of life from the smallest creature to the vastness of the sky and beyond. Within this sense of connection comes the power of community. This is the connection that an individual has with

every other individual within the group. Without this connection of culture, respect, and caring, the group self-destructs (Cajete, 2015; Four Arrows, 2015).

Within this frame of thought is the placing of Indigenous values, those beliefs and understandings that help guide the self and the community. Those values stem from the connections made among all living things and each other. Those values include respect for all life and for one another and knowing that what happens to one life affects all life; understanding that all individuals have a place within the community and all inhabitants of the community have a responsibility for its survival and growth; valuing the environmental space we inhabit, our place, and knowing that this place sustains us (Cajete, 2016). This circular pattern is fundamental to Indigenous ways of knowing. The Medicine Wheel and the Tree of Life, for example, contain metaphoric meaning about the nature of our world and as Cajete (2015) notes, "uses these deep metaphors to frame the goals and visions of Indigenous education, particularly a commitment to sustainability" (p. 141).

All elements and living organisms have equal share and stewardship of a place, and a place inhabited by a tribe is for all members not any one individual to own or to sell. The notion of private property and profit are not a part of Indigenous ideas. Crowfeet or Sahpo Muxika, chief of the Blackfeet explained in 1885:

Our land is more valuable than your money. It will last forever. It will not even perish by the flames of fire. As long as the sun shines and the waters flow, this land will be here to give life to men and animals. We cannot sell the lives of men and animals. We cannot sell this land. It was put here for us by the Great Spirit and we cannot sell it because it does not belong to us. You can count your money and burn it within the nod of a buffalo's head, but only the great Spirit can count the grains of sand and the blades of grass of these plains. As a present to you, we will give you anything we have that you can take with you, but the land, never. (BirdRattler, 2019).

Figure 1 is a visual of this concept. The symbol is from the Haudenosaunee Confederacy, better known to the English as the Iroquois Confederacy. It shows the relationship between all life and



Figure 3

Haudenosaunee Confederacy Logo

Note. This logo depicts the Haudenosaunee's Great Law of Peace on the Haudenosaunee

Nation's website at (https://www.haudenosauneeconfederacy.com/)

the chiefs of all clans within the nation. The tree in the center symbolizes the Great Tree of Peace with an eagle perched atop to serve as the watcher of danger (Haudenosaunee Confederacy, 2020). This relationship between all living things is symbolized within the Cherokee Nation and The United Cherokee Nations of Indians-Aniyvwiya emblem depicted in Figure 2. It too is circular in shape denoting the connection of all things. Within the emblem's design is the inclusion of the seven clans of the nation, the intertwining of all life and the webbing that holds all dreams and aspirations. At its core are the matters of the heart and the right way of living with each other and all of creation (United Cherokee Nation of Indians, 2020).



Figure 4

The United Cherokee Nation of Indians -Aniyvwiya Emblem

Note. This emblem is adopted by the United Cherokee Nation of Indians, an organization advocating for the complete sovereignty of the Cherokee people. It is not federally recognized and not synonymous with the Cherokee Nation tribe.

Native Nations' beliefs have appropriated many Eurocentric ways of thinking and being over the past two hundred years, but the idea that water, land, and trees are sacred and to be protected despite the potential for profit and employment illustrate the respect for the environment and its well-being as a fundamental value among Indigenous People.

A more illustrative view of the differences between mainstream, western ideology and Native American ideology is found in Table 4. Although the chart serves to summarize the differences within each ideology, it is important to note that within each Native Nation, Indigenous group, and individual, the degree of difference varies widely (Cajete, 2015; Demmert, 2002; Hammond, 2015). This supports the need for teachers not to group students based on race or Indigenous group affiliation. Furthermore, Sharroky Hollie (2018) explains that all of us are made up of at least seven identities including race, gender, nationality, religion,

Table 4 *Making Comparisons: Native American and Western Ideologies*

Native American	Western "Mainstream"
Strength through community	Strength through individual effort
Group problem solving	Individual intellectual prowess
Empowerment through voice	Empowerment through written word
Equality over degrees of importance	Competition necessary for winners and losers
Knowledge through experience and Nature	Knowledge through printed texts
Individual responsibility to the whole or group	Individual's responsibility to "one's own"
Sharing of knowledge	Individual ownership for ingenuity and invention
Interconnectedness	Individualism

ethnicity, class, and age. However, in isolation, our race is not linked to our "cultural determinations"; that is, who we are and why we enact certain behaviors is not related to race but a combination of several factors and lived experiences (p.35). Our goal in culturally responsive educational practices is to create bridges that work seamlessly to connect each student's unique culture with the school culture so that each student can experience success. Instruction that makes connections across disciplines, connects learning to the betterment of the community, respects knowledge gained through experience, provides opportunities to express information in multiple modalities and openly shares knowledge gained with others is at the forefront of CRP for Native students (Ackerman, 2013; Amour, et al., 2018; Cajete, 2015; Demmert, 2002).

Summary Chapter One

This chapter clarifies what is meant by culturally responsive education by offering a definition as well as a purpose for its implementation in the classroom. This chapter seeks to

spotlight the unique experiences of Native American students in public school settings by noting the significant differences in the ideologies of many Native American groups with what is referred to as the mainstream, Western perspective. Culturally sustaining practices, as cited in this chapter, can help to ease the tension produced when the student's ideology clashes with the dominant school culture.

CHAPTER 2

Review of the Literature

In completing a review of the literature, I used several sites including Google and Google Scholar, databases available through the University of Arkansas library system, Amazon book search, and the database for research with the National Indian in Education Association. Search terms included "Native Education," "Indian Students and writing," "writing and Native American students," "culturally responsive education," "culturally responsive education and Native American students," "culturally relevant practices and Native American students," "culturally responsive writing instruction," "Cherokee students and writing," and "Cherokee students and culturally responsive education." Although there were many articles on culturally responsive and culturally relevant educational practices with African American, Hispanic, and Latinx students, little research is available concerning Native American students, especially K-12 students. By using a snowballing technique (Noy, 2008), I was able to gain information from references within books on Native American practices and from Amazon's search engine on Native American books on the topic of Native sovereignty. The lack of research in the area of instructional practices for Native students along with the lack of data on specific reading and writing progress is, I believe, a testament to the continuing marginalization of Native Americans in our educational system.

Writing in Context

In completing the review of literature on writing, it is important to put written text and the act of writing within its historical context because it has implications for teaching writing in the classroom for cultures that are based on an oral system rather than a written one. Writing in its most basic form is the representation of speech (Olson, 2009). Although the act of speech is

inherent at birth with the first cries of a newborn, the act of writing most certainly is not. In the context of this literature review, it is important to acknowledge the division between orality and writing and the connotations associated with the idea of literacy and being literate. Havelock proposed that the Greeks abandoned the prosody of epic poetry with the invention of alphabetic-script literacy and with the adoption of this form of communication, the emotional connection, the trance-like quality of rhythmic story telling came to an end (Gee, 2015; Havelock, 1963). But the invention of alphabetic-scripts and Gutenberg's invention of the printing press did not change every corner of the world.

Street (1994) acknowledges the power of literacy, words in particular, when he writes, "the power to define and to name is itself one of the essential aspects of the use of literacy" (p.95). The autonomous model, as Street (1984) has termed it, suggests that the acquisition of one form of literacy, in particular academic literacy, determines an individual's level of economic success. In his discussion of literacy and identity, he notes that different forms of literacy, domestic rather than academic for example, are viewed differently. Gee (2015) also speaks of the differences in social behavior, values and meanings among discourses. These differences in literacies and discourses are also associated with inequality of power based on their dominance or lack thereof within society's institutions, in particular school (Janks, 2010; Street, 2012). The 'literacy myth' (Street, 1994) suggests that those who are not proficient in academic or mainstream literacy are prevented from achieving success. In other words, those who cannot read and write have a distinct social and economic disadvantage over those who can. Literacy as a sociocultural construct is, therefore, not neutral (Janks, 2010; Turner & Griffin, 2019). The act of reading and writing is then a staple of public-school culture. It is the idea that without learning to read and write, one cannot enter the power houses of the elite who can presumably read and

write well. Goody and Watt (1963) asserted that even the idea of logical thinking and abstract thought was a result of being literate. Walter Ong, in his 1982 book *Orality and Literacy*, suggests that humans simply cannot achieve their full potential without being literate, without being able to write and ponder what has been written. This narrow view of literacy is what Street contributed to a deficit view of literacy (2012) that has been destructive for students whose language and literacy skills are not in line with the dominant view of mainstream school literacy (Alford, 2014; Alvermann, 2001; Lesley, 2008)

This dichotomy, the haves (literate) and have-nots (non-literate), creates a tension that is weaved within our educational system. It is a belief that subjugates those groups who are not literate or those groups whose ways of knowing include experiential and oral learning to an inferior position. It tends to silence those whose cultures embrace orality as the primary form of communication. Within the belief that reading and writing is the superior way of knowing, further gradations of competency are created to denote poor versus accomplished writers, successful versus failing students. These labels of ability along with standardized test scores can produce an environment that is less than ideal for students of any culture let alone cultures that emphasize orality, collaboration, and community (Alvermann, 2001; Lesley, 2008;).

A sociocultural approach to literacy focuses on the context in which written and spoken language is being used. This perspective allows for the study of the social practices surrounding the level of writing or types of speech used (Chafe, 1985; Gee, 2015). Within the context of school, particular emphasis has been put on certain types of literacy along with conventions and practices that privilege certain forms of literacy over others (Janks, 2010; Street, 2012). This privileging of school-literacy for social and economic mobility has led to other relevant concerns for students whose home culture does not parallel the dominate culture, such as the use of

literacy as a socializing tool and the use of literacy as a possible threat to those who hold power (Gee, 2015; Janks, 2010).

Teaching Writing

The research on writing instruction, despite its importance, is considerably less than research in reading and some other areas of instruction (Graham & Perin, 2007). However, similar to the idea that literacy should be studied within the context of its use (Vasquez, et al, 2019), writing instruction should be taught with the idea that no one form of writing instruction is best for teaching writing; however, there are general guidelines of evidence-based research that help in planning for writing instruction. Based on an extensive review of 19 studies in writing instruction from 1993 to 2013, Graham, Harris, and Chambers (2016) concluded that the following practices all had a statistically significant impact on student writing:

- Process approach to writing
- Strategies approach to writing
- Facilitating motivation for writing

There is no agreed upon definition of process writing; however, there are several guiding principles of this approach. As the term suggests, process writing is a series of stages within the writing process that may be cyclical but may involve the intermixing of stages throughout the writing process. These stages include the planning of the writing, the actual writing where thoughts become print, and reviewing what has been written (Graham & Sandel, 2011). The process writing approach gives students a roadmap to follow as they brainstorm ideas, organize their thoughts, write to make their ideas known to others, and edit and revise for clarity. A process approach to writing also includes writing for authentic audiences and purposes, ownership, self-reflection, and evaluation, as well as writing collaboratively in a non-threatening

environment (Graham & Sandel, 2011). However, specific skill-based instruction is sometimes lacking that puts students, especially those who struggle with writing, at a disadvantage.

To address skill-based writing concerns, there is research on the strategies approach to writing instruction. In a review of 39 studies conducted with students first through twelfth grade, Graham found that strategy instruction significantly improved students' writing (2006). In addition, Graham and Sandmel (2011) reviewed 29 studies involving students' writing from first through twelfth grade that focused on strategy-based instruction. Results from these extensive meta-analyses of writing research have helped inform writing instruction. For example, in a more culturally responsive strategy approach to writing, the use of mentor texts that reflect a student's culture or texts that are written by authors who share a student's ethnicity may be more effective than those texts that do not (Kinloch & Burkhard, 2016). Scaffolding, modeling, and the use of mentor text should be included in writing instruction. (Winn & Johnson, 2011) as well as teaching the construction of complex sentence writing (Rouse & Graham, 2017). Other effective practices include the need to model the planning of writing, demonstrate what a draft looks like and how to revise and edit (Graham, et al., 2016).

The overall environment in which writing takes place and the purpose for writing is an important part of both process and strategy approaches to writing and can have a positive effect on students' motivation to write as well (Kinloch & Burkhand, 2016; Ruday, 2019). Furthermore, the relevancy of writing tasks, their purpose and audience should be considered (Vasquez, et al, 2019). These approaches to writing (process approach, strategies approach, and facilitating motivation) are all important, and the attributes of each approach are congruent with culturally responsive pedagogy. In working with culturally diverse students, a combination of these approaches should be considered when planning instruction.

Writing and Collaboration

Classroom environments that invite peer collaboration during the writing process serve to support students in their understanding of concepts and ideas through dialogic interaction much like literacy events wherein "written language is integral to the nature of participants' interactions and their interpretive processes and strategies." (Heath, 1982 p.50) These collaborative interactions, however, can be problematic for many teachers citing issues such as difficulty with student assessment, monitoring off-task behavior, and designing effective group tasks (Le, et al., 2017). Teachers' negative impressions of collaborative activities are particularly concerning given opportunities for peer collaboration are an important part of culturally responsive instruction (Winn & Johnson, 2011) and congruent with Native American ways of knowing (Cajete, 2015; Morgan, 2009; Pewewardy, 2002).

In a qualitative study by Le, et al. (2017), 19 teachers and 23 pre-service teachers in Vietnam were interviewed with the goal of determining the causes for ineffective peer collaboration among their students. The study's findings suggest that simply creating opportunities to collaborate during writing may not prove as productive as demonstrating what collaborative writing actually looks like. Teacher modeling of appropriate and effective collaboration skills with their students first may serve to encourage teachers to utilize purposeful peer collaboration during the writing process. Prewriting activities that encourage collaborative and cooperative learning activities such as small group discussion and whole class peer interaction may serve as effective scaffolds for Native students' writing.

Providing opportunities for students to collaborate on a writing assignment that has benefit to their community gives writing real purpose and a sense of importance for students (Bazerman, 2016). In a qualitative study focused on the use of collaborative writing as a strategy

for learning philosophical thinking, Seuba & Castelló (2015) analyzed student writings of six 16 year-olds in a secondary school in Spain. The students worked in two teams on an argumentative writing activity. The researchers focused on the effect collaboration had on the students' ability to conceptualize philosophical ideas, problem solve, talk collaboratively and write argumentatively. The findings of the study demonstrated that through collaboration students were able to move from abstract thinking to concrete explanations of concepts that were related to their own experiences. Students also showed an increased ability to pose arguments and provide evidence to support claims. Providing various opportunities for students to share their thinking can be a powerful tool for the co-construction of knowledge. Further research is needed to identify the forms of collaboration that best extend thinking for Native students.

Writing and Attitude

Creating an environment that generates student motivation to write includes several core classroom characteristics (Kinloch & Burkhart, 2016; Rouse & Graham, 2017; Ruday, 2019; Winn & Johnson, 2011). First, it is important that teachers convey enthusiasm about writing by sharing their own writing and encouraging students to make their ideas visible. In addition, classrooms must be accepting and respectful, focusing on the importance of positive, constructive feedback (MacArthur, 2016). Finally, in planning instruction, students need to have the opportunity to write every day, reflect on learning, and understand that writing can facilitate and extend learning (Rouse & Graham, 2017).

A positive environment, however, may not be enough to change a student's attitude about writing since Boscolo and Gelati (2007) suggest that a "lack of motivation to write can also be conceptualized in terms of attitudes and beliefs that develop through school years as the result of repeated writing experiences" (p. 204). However, culturally relevant teaching validates writing

(Winn & Johnson, 2011) by viewing writing as both an extension of our thinking (Moffet, 1982) and a situated practice (Lave & Wenger, 1991). Through culturally responsive instruction, a student's culture is acknowledged and validated. This in turn can serve to empower students (Gay, 2018). Gloria Ladson-Billings (1994) defines culturally responsive teaching as a pedagogy that "empowers students intellectually, socially, emotionally, and politically by using cultural and historical referents to convey knowledge, to impart skills, and to change attitudes" (p.13). This change in attitude can occur when students see that their home lives and forms of communication (including dialect and language) are valued and legitimized, gaining a sense of competence in their learning (Ruday, 2019). Furthermore, culturally responsive teaching embraces a growth mindset that focuses on transformative learning (Dweck, 2006/2016; Hammond, 2015). It is within this context of change that students who may have been marginalized through mainstream instruction gain competence and agency through culturally responsive writing instruction that positions writing as a means of empowerment, seeing themselves as writers (Muhammad, 2020).

In a series of ethnographic studies, Martin (2009) studied the effects of culturally responsive teaching of mathematics on African American high school students. Through these studies teachers were made aware of their own deficit views of African Americans' mathematical abilities and transformed their teaching practices to be more culturally inclusive. As a result, students experienced greater competency in mathematics. Students merged their cultural identity with their identity as "doers of mathematics" (p. 326), an identity that developed "based on their ability to participate and perform effectively in mathematical contexts and to use mathematics to change the conditions in their lives" (p.326). Students' attitudes regarding math changed as they gained mathematical competence, agency, and belonging.

In a qualitative interview study with 120 First Nations, American Indian, and Alaska Native students, Cleary (2008) sought to identify aspects of literacy instruction that served to encourage and motivate students in their literacy learning. Interviews with the students revealed that teachers that supported intrinsic motivators in their classrooms such as encouraging curiosity, providing for choice, allowing for self-expression, and supporting feelings of competence play a crucial role in students' engagement in literacy instruction. Students reported that they felt validated when class texts represented their lived experience. Students also noted that when they had choice in what they wrote about, they found the act of writing to be much more enjoyable and personal. Student responses from the study suggests that students used writing as a tool for coping with trauma, personal encouragement, and self-expression. Viewing writing as relevant and receiving encouragement and support for their writing from their teachers helped students develop positive attitudes about writing and themselves as writers.

Writing Types and Frequency

Providing students opportunities to write often and reflect on new learning comes in many forms. To understand the effects of quick writes on student learning and critical literacy skills, Dreissens and Parr (2020) conducted a qualitative study in Ontario, Canada with five focus groups of eighteen sixth graders each over a six month period of time. The authors focused on how quick writes can be used to facilitate critical literacy within the context of both teaching and learning. Quick writes were presented as a low-risk space for students to address issues of social justice and civil rights. The classroom teacher acted as both a facilitator of writing as well as an active collaborator, "Learning, and growing alongside her students" (p.418) as the more knowledgeable other (Vygotsky, 1978). The classroom teacher introduced a topic at the beginning of each week through the discussion of a text and students were asked to write on the

topics in their class journal. The study showed that the students' journal writing provided authentic representations of student thinking and learning. The study's results support the use of both structured and unstructured writing opportunities that "allowed students to think at their own pace, comfort level, and modality of choice" (Dreissens & Parr, 2020, p.424). By allocating time to write each day, students were able to connect to real world issues as well as extend their understanding beyond literal interpretation of texts. The use of frequent, unstructured, reflective writing on classroom topics may serve to not only lower stress levels for those with writing anxiety, giving students "low-risk" sp aces to write but also increase meaning-making connections that extend beyond the text itself. Since reflection is a critical part of the learning process in Native ways of knowing (Cajete, 2015), research is needed to determine if writing to reflect offers promise as a particularly useful learning tool for Native students.

In a qualitative study that focused on writing with relevancy and cultural empowerment, Morrell and Duncan-Andrade (2002) combined the study of Shakespeare's sonnets with hip-hop music having students write poetry that blended form with rhythm into a new hybrid writing of poetry. Students engaged in critical dialogue, making connections to larger social issues beyond the words embedded in Shakespeare's sonnets and the lyrics of hip-hop resulting in increased student engagement in the writing process and feelings of empowerment for the students. Based on Morrell and Duncan-Andrade's study (2002) on students' connections to culturally relevant music, other forms of artistic expression such as paintings, photographs and graphic designs may serve to encourage engagement in writing tasks as a culturally responsive approach, particularly with students whose culture include various forms of art, music, and dance as a form of communication and community identity (Faust Gallery, 2019; Rood, 2011).

Reader Response and Empowerment

Writing instruction is often an extension of reading (Graham, 2020; Shanahan, 2016). It is important that students are exposed to many diverse texts, especially those texts that serve as "mirrors, windows, and sliding glass doors" of their own lived experience and identity (Bishop, 1990). Students need opportunities to see themselves reflected in the texts they read, to be exposed to different cultures and perspectives other than their own, and to engage fully, allowing them to use their imagination and to become part of the world created in the text.

This activation of the imagination is part of the power of storying as a transformative action in that it is a "dialogic sharing and reflection of lived realities through the construction of a shared story" (San Pedro, 2015). As such, teachers must allow students to reflect on the stories they hear and read. They must also be given the opportunity to share their understandings of and their connections to stories with others. As San Pedro (2015) explains, "It is through communication that silence extends its power" (p.143). How do teachers get students to tap into their own perspective on a text or their own personal experience with a story so it can be shared with others? Reading is both an "intensely individual and an intensely social activity" (Rosenblatt, 1994, p.1089). It is important that the instructional environment includes opportunities not only for students to reflect individually on a text but to also share their thoughts about a text with others.

In Rosenblatt's transactional theory, the reader of a story brings his or her own personal experiences, emotions, and cultural understandings to a story in what is referred to as the aesthetic stance (Rosenblatt, 1994). In clarifying and extending upon Rosenblatt's transactional theory, Pike emphasizes the idea that adolescent readers have individual reading styles whereby texts or combinations of texts that are compatible or a "best-fit" produce positive reactions that

can result in the amplification and growth of the reader (2003, p. 68). Furthermore, the response an individual reader has to a text along with his or her understanding of a text can be mediated by collaborative discussions with others who have differing perspectives. The experience of "human diversity and variety through an eclectic range of texts as well as readers provides the conditions for aesthetic reading to thrive" (p.71).

This inclusion of diverse texts is the focus of Ortega's (2003) analysis of Latinx students' narratives generated from the introduction of culturally diverse text in a high school American Literature class. Data for this qualitative study was collected over a period of 2 years. The classroom teacher acknowledged her students' backgrounds using texts - such as *The House on Mango Street* by Sandra Cisneros and *The Lone Ranger and Tonto Fist Fight in Heaven* by Sherman Alexie - that centered around their interests. Opportunities to write their thoughts to the texts in the form of narratives was also included. Analysis of the students' narratives showed that the use of texts that reflected the students' interests and culture helped to form a positive relationship between the classroom teacher and her students. Student narratives also reported the teacher's commitment to caring as part of their success in this classroom. Acknowledging students' culture by including culturally relative texts in the curriculum may help to build stronger, more positive relationships between students and their teachers that can lessen student anxiety and increase student engagement.

In a qualitative case study, Kim (2014) examined six first and second-generation Korean/Korean American adolescents' responses to three YA novels about Korea and Korean-American experiences with racism in the United States. Using Rosenblatt's transactional theory, participants were encouraged to make connections between their own experiences and the experiences of the characters in the texts. Findings from student writing and discussion

demonstrated participants' increased awareness of racial injustice. Second-generation group members expressed new understanding of the issues of Korean immigrants. Most importantly, participants who struggled with reading were more engaged when the texts were culturally relevant.

In literacy instruction it is important to acknowledge each reader's unique reading, writing, and life experiences because these experiences contribute to every literacy event (Heath, 1983) the student has as well as generating a diversity of responses (Rosenblatt, 1994). To capitalize on the diversity of responses to a text, attention must be given to the kinds of talk promoted in the classroom as well as providing time for students to reflect on classroom discourse. Rosenblatt's transactional theory emphasizes the socio-historical aspects of literacy learning. One of the fundamental tenants of sociocultural theory is that cognition and critical thinking has its genesis in social interaction. Speech is the mediating tool by which we make sense of our world. As Vygotsky explains:

Every function in the child's cultural development appears twice: first, on the social level, and later, on the individual level; first, between people and then inside the child. This applies equally to voluntary attention, to logical memory, and to the formation of Concepts. All the higher functions originate as actual relationships between individuals. (1978, p.57)

Within a sociocultural framework, student writing as well as reading is recognized as a social practice. There are important connections between the reading and writing students engage in and the influence the classroom has on student literacy as a community of practice (Pantaleo, 2013; Lave & Wenger, 1998). Culturally responsive educational practices in tandem with key tenants of sociocultural theory - speech as a mediating tool, emotion as inseparable from thinking, and scaffolding of learning - work to provide all students rich, equitable literacy instruction (Smagorinsky, 2011, 2013). In this vein, research is needed to determine to what

extent the use of culturally relevant texts help Native students engage with texts and gain a deeper understanding of their own and others' lived experiences.

Visual Literacy

The New London Group introduced a new approach to literacy instruction and new ways of viewing what constitutes literacy in their introduction of "multiliteracies" (New London Group, 1996). The New London Group's definition of multiliteracies broadened the definition of a text, encompassing a more inclusive view of the means by which we communicate with each other and the world. Their argument of this expansion of print text to multiliteracies of diverse formats set out to not only acknowledge the variety of text forms available through multimedia technology but also to validate and support the culturally diverse societies in which we live (New London Group, 1996). What denotes a text, then, is to include any form of expression in which we communicate meaning. From this much broader definition of what constitutes a text, other forms of communication, the New London Group reasoned, could be viewed as a text, including art, music and multimedia. Given that all texts convey meaning and are produced within a sociocultural context (Gee, 2015; Street, 2005, 2009), it is natural to include visual art as a literacy form. Art can act "as a bridge between the biological and the social in man" creating a sense of balance between the personal and the social self (Lima, 1995, p.421). When we inject art into our literacy instruction, the experience "projects us toward new personal and social horizons (Lima, 1995).

In a qualitative case-study, Pantaleo (2013) explored students' aesthetic response to Shaun Tan's graphic novel, *The Arrival*. The study centered on one fourth grade student's visual meaning-making in the reading of a text as part of a larger study on visual meaning-making.

After being introduced to the basic elements of visual art found in children's books, students

engaged in reading and guided response to *The Arrival*. Results of the study showed the student's deep engagement in writing about the text, making direct references to visual elements in the story to support her thoughts. This study suggests that the use of diverse forms of text and instruction on visual elements can aid students in their thinking as well as increase student engagement with texts.

Using qualitative, action research, Dallacqua and Sheahan (2020) studied the effects of pairing a canonical text with multimodal texts in a 10th-grade language arts class. A canonical play was read alongside a graphic novel in the hopes of shifting student understandings of power and privilege in literature. By placing a dominant, canonical text such as Shakespeare's *Hamlet* in dialogue with a contemporary graphic novel such as Neri's *Yummy: The Last Days of a Southside Shorty*, the study's results found students accessed multiple perspectives that allowed for emotional, academic, and critical learning. The findings in both Dallacqua and Sheahan (2020) and Pantaleo (2013) speak to the value of using diverse, multimodal texts in literacy instruction, enabling multiple perspectives in conversations across various literary narratives and forms, and positioning nontraditional literacies as equitable texts to be studied.

In acknowledging art as a form of text, students are able to engage in complex meaning-making through intertextual relationships between visual art and print texts, and "When learners juxtapose different languages, discourses, styles and approaches, they gain substantively in metacognitive and meta-linguistic abilities and in their ability to reflect critically on complex systems and their interactions." (New London Group, 1996, p.69). A culturally responsive approach to literacy embraces not only print texts that act as "mirrors and windows" (Bishop, 1990) but also multiliteracies that when mediated through our own experience and the "places and spaces" we

occupy create new ways of meaning making that work to support critical thinking and empowerment (Vasquez, et. al, 2019, p. 301).

Place-based Practices

The places and spaces of experience are more than geographical locations. John Dewey explained that the environment of experience "is whatever conditions interact with personal needs, desires, purposes, and capacities to create the experience which is had" (1938, p. 44). In short, a place or space encompasses more than location, it includes the interactions of self, of others, of the tangible as well as the ideological (Rodgers, 2002). Dewey's view of experience is one of a semiotic action between the world and the self (Dewey, 1938) and it is a key to his definition of education as "reconstruction or reorganization of experience" (p.99). Within this context, Sobel focuses on education that connects the learner with their immediate environment and their community (Smith & Sobel, 2010; Sobel, 2004). Sobel's work using place-based education in schools and with students has led to students' increased engagement, improved problem-solving skills, and changes in attitudes about school and learning (Smith & Sobel, 2010; Sobel, 2004). This focus on the interaction between learners and their environment, known as place-based education, is not new. Native cultures have long connected with the environment, as the origins of identity, learning, and community (Deloria & Wildcat, 2001). David Orr, who coined the phrase "place-based education" along with other board members of the Rural School and Community Trust, explains that "place-based education is learning that is rooted in what is local – the unique history, environment, culture, economy, literature, and art of a particular place." Furthermore, focusing on the local is a powerful form of engagement, "pairing real-world relevance with intellectual rigor" (Rural School and Community Trust, 2005).

There is much to learn from our sense of place. Place as a multimodal text draws upon "intertextual chains" of meaning (New London Group, 1996, p. 82) integrating community with environment as a meaning-making tool. As Wildcat explains, "Place is not merely the relationship of things, resources, objects, it is the site where dynamic processes of interaction occur – where processes between the other living beings or other-than-human persons occur" (Deloria & Wildcat, 2001, p.144). There is a sense of relevance and the personal within place-based education. Place like art is a "result of social and historical shaping of materials" (Kress, 2010, p.11). Integrating place and art may serve to increase student engagement, create relevancy, and connect students emotionally to their learning. Furthermore, place-based art may serve as a way to engage students in social and political issues that connect them to community in a more personal and empowering way (Inwood, 2008).

In a qualitative case-study, Godinho, et al. (2014), examined the influence place-based learning had on the literacy development of a group of Indigenous middle school students in a remote Indigenous community school in Australia. The teachers in the study utilized the "Eight Ways of Learning" interactive framework for Aboriginal language (New South Wales Department of Education, n.d.) developed in collaboration with the Aboriginal community and its elders. The framework served to facilitate the instruction of standard Australian English literacy within a place-based learning context. Students collaborated to create pocket-sized books on localized, Indigenous knowledge using a variety of expository text forms, sharing them with their peers and community elders. The study showed that students increased their engagement with writing, forged meaningful relationships between the school and their community, and cultivated positive attitudes toward writing. The study's findings support the use of place-based

literacy learning in engaging students in meaningful content, connecting students with local, culturally appropriate pedagogies and promoting positive student attitudes toward writing.

Cultural Responsiveness: The Need for Research

Research in the area of culturally-based education continues to grow, but there is a continued need for evidence-based research. As Sleeter (2012) notes, "There is a clear need for evidence-based research that documents connections between culturally responsive pedagogy and student outcomes" (p.578-579). Aronson and Laughter (2016) conducted a meta-analysis of research studies that used culturally relevant pedagogy or culturally responsive teaching as a research framework across content areas from 1995 through 2013. They analyzed 286 studies, but most of these studies focused on the preparation of teachers to be culturally relevant and responsive rather than student outcomes of culturally responsive education. Of the 286 studies, only 40 studies specifically focused on student outcomes in areas related to student motivation, empowerment, agency and critical discourse. Eight studies focused on culturally responsive instruction in math with results showing students' increased time on task and increased confidence in taking tests when math instruction drew upon real-world contexts and connections to students' lives. Students also showed an understanding of the value of multiple perspectives when engaged in collaborative problem solving (Aguirre & Zavala, 2013; Civil & Khan, 2001; Ensign, 2003; Fulton, 2009; Gutsein, 2003; Hubert, 2013; Langlie, 2008; Tate, 1995). Five studies in science demonstrated increased student engagement and motivation when teachers acted as good listeners and created an inclusive environment. Furthermore, results from one study (Dimick, 2012), a field trip to a local river to actively experience the collecting of data, showed students felt more empowered, more comfortable with the procedures of data collection, motivating students to ascertain solutions to environmental problems (Adams & Laughter, 2012; Dimick, 2012; Johnson, 2011; Milner, 2011; Rodriguez, et al, 2004). Results from six studies conducted in social studies classes demonstrated increased student engagement and critical thinking when exposed to multiple perspectives and interdisciplinary, project-based activities (Choi, 2013; Coughran, 2012; Epstein, et al., 2011; Esposito & Swain, 2009; Martell, 2013; Stovall, 2006). The remainder of the studies occurred in language arts classrooms. Increased student engagement, motivation and critical thinking were demonstrated when diverse, culturally relevant texts were studied in the classroom or students were allowed to show their understanding of a text in more culturally responsive ways (Bui & Fagen, 2013; Caballero, 2010; Christianakis, 2011; Conrad et al., 2004; Duncan-Andrade, 2007; Feger, 2006; Hefflin, 2002; Hill, 2012; Johns, 2008; Irizarry & Antrop-González, 2007; Morrell & Duncan-Andrade, 2002; Nykiel-Herbert, 2010; Ortega, 2003; Robbins, 2001; Savage et al, 2011; Souryasack & Lee, 2007; Wortham & Contreras, 2002). For example, in one study, the students in a ninth grade class created a film version of Shakespeare's Romeo and Juliet that reflected their own culture (Morrison, 2002). Another study involved a high school classroom with predominantly Latinx students. Students "reconfigured their identities in positive ways" when exposed to literature providing multiple perspectives from both Hispanic and White authors (Aronson & Laughter, 2016, 176). Students' journal writing and verbal responses in the study demonstrated a broader understanding of social issues, holding critical conversations in mixed-race groups. These studies demonstrate the effectiveness of culturally responsive instruction, however, there is still a need for research that connects culturally relevant education to student academic outcomes in a variety of contexts.

Aronson and Laughter (2016) and Sleeter's (2012) call for additional research focused on student outcomes as a result of culturally responsive education echoes Demmert and Towner's

(2003) report on the research literature concerning culturally based education and academic performance for Native American students. There is a desire to find programs and culturally based activities for Native youth that unite academic performance with spiritual wellness, understanding that without attending to a students' sense of identity, community, and place, academic success is elusive (Demmert & Towner, 2003). Furthermore, the analysis of data and conclusions drawn from research with Native students can be subject to long-held biases and prejudice. For example, studies by Goin (1999) and Ross (1982, 1989) assert that Native students are right-brain dominant and should be taught with right-brain functions. These assertions have been long-held by educators and researchers and are based on assumptions, even racist views (Castagno & Brayboy, 2008). The challenge is to conduct research with Native students that focuses on positive emotional and academic outcomes.

Contextual Framing: Native American Students in Public Schools

The American College Test, better known as the ACT, is a college readiness test composed of four sections that include English, Reading, Math and Science. Each section is scored 1(low) to 36 (high) with a final, composite score computed from 1 to 36. English and reading scores for Native American students on the ACT, are low, ranking lowest among all racial groups with an average score of 17.3 in reading subsection and 15.8 in the English subsection (ACT, 2018). Furthermore, scores on the NEAP for 2015 also report low achievement in reading for both 4th grade and 8th grade. ("Education of Native Americans," 2018; NAEP Reading: National Achievement 2017; Native American Advisory Council, 2015; Ninneman, et. al., 2017). The education of our Native youth has and continues to be in a state of crises. I contend that the achievement gap is the result of a cultural gap, a contrast of two ideologies. The disconnect between Indigenous ways of knowing and Western ideology is gaining increased

scrutiny among Native Nations as they seek increased tribal sovereignty, tapping into the power of shared ideas in multimodal ways such as film making, podcasts, and phone apps (Schlichting, 2016).

Native Americans view the world as cyclical, not linear, and it is within this frame that knowledge is imparted through storytelling (Beltran, et al., 2015; Craig, 2015). Each narrative originates from oral tradition and may not start at the beginning but rather somewhere in the middle of the action. The narrator then connects the action to some event or person from the past only to loop back to the center of the action once again. It is an interweaving of thought with connections to the past, present and the future (Cushman, 2013; Gritter et al., 2016). These stories are place-based in that the natural elements of a place familiar to the storyteller become the characters, conflicts, themes, and motifs of the stories themselves (Donovan, 2016; Gritter et al., 2016; Smith, 2002; Surface, 2016). The orality of the story is a powerful mediator of values, traditions, and beliefs (Deschenie, 2007; Thompson, 2007). The story told in its native language embodies cultural meaning that is shared between the storyteller and the hearer. The connection to place is tied to the community of that place; everyone is then connected to each other through shared history, geography, and cultural ways of knowing (Four Arrows, 2016; Heart, 2010; Surface, 2016; Thompson, 2007)

Hawaiin nationalist Haunani-Kay Trask writes, "Thinking in one's own cultural referents leads to conceptualizing in one's own world view, which, in turn leads to disagreement with and eventual opposition to the dominant ideology" (1993, p. 54). In creating a curriculum that liberates Native students to write their own truth and become empowered as writers, Luther Standing Bear, one of the first graduates of the Carlisle Indian School, writes in 1933 that "The Indian should become his own historian, giving his account of the race - fewer and fewer

accounts of the wars and more of statecraft, legends, languages, oratory, and philosophical conceptions" (Standing Bear, p. 254). It is from a social justice perspective that writing instruction can be both liberating and cathartic (Lyons, 2000).

Culturally Responsive Pedagogy: Giving Voice to the Silent

Native American students come to school with rich, diverse funds of knowledge. It is within this general context that many Native students come to know the world around them. Tribal critical race theory states that stories and storytelling are foundational for education, for knowing, and for being (Brayboy, 2005). Stories hold wisdom and community values that are relative to place, and learning is authentic, made real through the interaction between the learner and the world around him. The learner understands certain concepts by observing nature. Through this connection to place and community, the child develops a sense of belonging and a sense of identity that is acknowledged and appreciated (Horne, 2003). When this child goes to school, he or she will be seeking affirmation of his developing identity. If the stories heard and images seen in the classroom do not reflect what he or she has come to know, a disconnect between home and school may occur (Dimmert, 2001; Reyhner, 2017). This sense of alienation may grow, and in time lead to self-deprecation, a characteristic of the oppressed in which they come to internalize the view the oppressor has for them, even to the extent of distrusting themselves and their sense of self-worth (Freire, 1970/2000). This is the pedagogy of oppression, the stripping of self-worth through the practice of colonization.

What can teachers do to create classrooms that are culturally sustaining so that students can find affirmation and acceptance of who they are and experience success in literacy practices? Freire says the oppressed "must perceive the reality of oppression not as a closed world from which there is no exit, but as a limiting situation which they can transform" (p. 49). Teachers

must seek opportunities for transformative literacy practices. To Paulo Freire (1970/2000), transformation and even the gaining of knowledge, could only come about through the act of inquiry and reflection on experience. Transformative literacy practices for all students are embedded in inquiry-based learning, experiential learning, and literacy events that promote critical thinking and reflection (San Pedro, 2015; Surface, 2016).

One aspect of Native American student success is the ability to "code switch", that is the ability to utilize differences in language based on context or differences in communities of practice (Hollie, 2018; Gee, 2015). Students need to be able to communicate effectively within their home culture as well as the school culture. Culturally responsive education means building bridges not assimilating from one culture to another. Gee points out that there exist conflicts between the home-based, dominant discourse of some minority students and the discourse of the school (2015). Words have power and literacy practices can sponsor forms of liberation (Freire, 1970/2000). However, students will often "disidentify with teachers and schools that they perceive as hostile, alien, or oppressive to their home-based identities" (Holland & Quinn, 1987 as quoted in Gee, 2015, p. 42). When schools provide students with the knowledge and skills to function successfully in the mainstream culture as well as honoring a student's home culture by providing opportunities to learn about their native language, cultural beliefs and values, true respect for diversity is established (Pewewardy & Hammer, 2003).

Writing as a literacy tool can be somewhat complicated for Native American students because Native communities in general value the spoken word over the written one (Four Arrows, 2016; Thompson, 2007). There are historical and cultural reasons for this view. The dismal history of broken treaties written on paper between the United States government and various tribal groups in this country has only reinforced a distrust between tribal groups and

public schools and Bureau of Indian Affairs or BIA schools that operate under the federal umbrella of control (McKinley & Brayboy, 2006). The oral tradition of storytelling and the power of the story to communicate values, beliefs, and ways of knowing is another valid reason for a preference of oral communication over the written form (Thompson, 2007). Native people as a whole are not text centric. They do not privilege writing unlike mainstream America and especially school culture. As one Native American elder, Yellow Hawk, explains, "focus on the value of listening. And the elders we know recognize that one needs trust to listen well" (Thompson, 2007, p. 14).

With this overview in mind, the chart below suggests literacy practices that may hold promise for improving writing skills for Native students, including specific, culturally responsive pedagogy such as culturally relevant texts, curricular connections to place, multimodal texts, peer collaboration, and reflective practices. These ideas are taken from a variety of books and articles on Native American epistemology, literacy practices, Native American charter school curriculums, statewide curriculum changes in public education for Washington, Montana, and South Dakota, and studies focused on the effects of culturally responsive instruction on student outcomes. In addition, the Table 5 reflects studies highlighted in this chapter.

 Table 5

 Culturally Sustaining Writing Pedagogy for Native Students

Culturally Sustaining Writing Pedagogy for Native American Students

Provide reading materials, posters, etc. that reflect students' lives and identities ie...stories by Native authors (Landry, 2015; Bishop, 1990; Cajete, 2015; Gay, 2002; Indian Community School, 2018; Kinloch & Burkhard, 2016; Kim, 2014; Pike, 2003; Ortega's, 2003)

Curriculum should acknowledge the importance of the Native American experience within a geographical location or place (Deloria & Wildcat, 2001; Godinho, et al., 2014; Rural School and Community Trust, 2005)

Table 5 (Cont.)

Culturally Sustaining Writing Pedagogy for Native American Students

Provide opportunities for peer collaboration on projects *including writing assignments* (Bazerman, 2016; Berninger, 2014; Indian Community School, 2018; Le, et al.,2017; Seuba & Castelló, 2015)

Invite a Native American storyteller to the classroom to share the art of oral storytelling. (Anishabe Academy, 2017; Gay, 2002; Indian Community School, 2018)

Go outside! Model the use of figurative language in writing by gaining inspiration from nature. (Simpson, 2013; Indian Community School, 2018; Sobel, 2004)

Make time for students to reflect on learning every day ie ... exit ticket writing, journaling, etc. (Cajete, 2015; Dreissens & Parr, 2020; Harford, 2008; San Pedro, 2015; South Dakota Native American Student; Achievement Advisory Council, 2015)

Set goals for writing (individually and as a class), model the writing process. (Graham & Sandmel, 2011; Heidorn & Lee Rabine, 1998; Johnson & Eubanks, 2015; Chiu et al, 2017)

Teachers share their own writing and the revision process; modeling ways to revise for clarity, audience, and purpose (Chiu et al, 2017) and provide positive, constructive feedback (MacArthur, 2016; Vasquez, et al, 2019)

Model strategies for writing and allow for pairing of students for practice; continue to come back to these same strategies again (Berninger, 2014; Callins, 2006; Graham & Sandmel, 2011; Heidorn & Lee Rabine, 1998; Chiu et al, 2007)

Create opportunities for publishing student work ie. class recipe book, class digital magazine, newsletter, etc. (Anishabe Academy, 2017; Indian Community School, 2018)

Create opportunities to build a safe, supportive classroom community through activities that support emotional resilience. (Anishabe Academy, 2017; Callins, 2006; Cajete, 2015; Gay, 2002)

Communicate with parents and guardians; they are your students' first teachers, create a welcoming environment for them. (Anishabe Academy, 2017; Cajete, 2015; Gay, 2002; Indian Community School, 2018)

Summary of Chapter Two

This chapter focused on the theoretical underpinnings of the research study and previous studies whose outcomes not only demonstrate the effectiveness of culturally responsive

instruction in general but also the need for more studies focused on academic as well as emotional outcomes of culturally responsive instruction on Native students. Writing in the history of human experience is a fairly new invention and does not come naturally unlike human speech. Communication using oral rather than an alphabetic code marginalized Indigenous cultures within the dominant, mainstream school-culture, making the bridge between home culture and school culture difficult. The framing of literacy in a sociocultural context expands the definition of what constitutes texts. As previous studies included in this chapter suggest, place-based pedagogies and the visual arts seek to allow for more meaningful pathways for culturally responsive literacy instruction. Culturally responsive education seeks to rebuild those bridges between home and school and is a natural extension of the foundations of sociocultural theory. For underrepresented groups, a culturally responsive approach to education provides more equitable access to literacy learning.

CHAPTER 3

Methodology

This study explores the effects of culturally responsive instruction on high school Native American students. As a classroom teacher working with increasingly diverse student populations, I was prompted to understand more deeply the role culture has on student learning. An experience as a novice researcher at a retreat for teachers working with students on Native American reservations in South Dakota led me to investigate the culturally responsive pedagogy implemented in public schools with a high concentration of Native American students. My experience in conducting Lesson Study research led to a working relationship with a high school that has a large population of Cherokee Native students. Further inquiry into the academic performance of these students led me to the overall goal of this study – to identify elements of culturally responsive pedagogy that make a positive difference in the writing skills of high school Cherokee students.

This chapter details the methods and process of the study by discussing the design of the research, the process of data collection, the analysis of data, and the context of the study. This chapter also seeks to describe the study's participants, researcher positionality, and limitations.

Research Design

I wondered whether a culturally responsive stance to instruction can lead to measurable improvements in the writing of Native American high school students as well as promote a positive attitude toward writing. A pragmatic philosophical base is appropriate for this study and its goal because it is within this philosophical stance that research is driven by the search to find what works within real-world settings. It is to this end that my research questions ask the following:

- 1. How does a culturally relevant curriculum focused on reading culturally representative text and utilizing culturally responsive pedagogy affect high school Native American students' attitudes toward writing?
- 2. What specific changes if any- are demonstrated within the students' writing after participating in a culturally responsive approach that exposes students to culturally responsive activities and texts?

This study hopes to shed light on culturally responsive pedagogy that aids teachers in developing an effective stance for working with Native American high school students and empowering them as writers. Given the context and goals of this study, I used a bounded, single group, instrumental case study method of inquiry. This case study approach allows for the study of a group in a real-life, contemporary setting (Creswell, 2013; Stake, 1995; Yin, 2009) and utilization of a strategy of inquiry (Denzin & Lincoln, 2005; Merriam, 1998, Yin, 2009) that allows for the gathering of multiple forms of data in real time. I could then focus on an in-depth understanding of the problem and draw conclusions or "lessons learned" from the study (Creswell, 2013, p.99). This case study generates both quantitative and qualitative data; however, there is an emphasis on the qualitative data because the study is a "situated activity" that "consists of a set of interpretive, material practices that make the world visible" (Denzin & Lincoln, 2005, p. 3). This means that the data collected represents the participants' ideas and work at the time of the study in the place of the study made manifest or "visible" by the researcher. It is a case study bounded by several contexts. These contexts include the participants themselves, the specific classroom, the specific subject area, and the specific location of the school (Merriam, 1998; Yin, 2003).

Formative and Design Experiment

A formative and design experiment approach was used in this study. "Formative and design experiment" as one unified research approach is a term coined by Reinking and Bradley (2008) in *Formative and Design Experiments: Approaches to Language and Literacy Research*. The term originates from both Reigeluth and Frick's (1999) use of the term formative research, design studies and teaching experiments (Kelley & Lesh, 2000) and design-based research (Design-Based Research Collective, 2003). A formative and design experiment approach reflects two approaches to research that are particularly fitting to this study. First, the work of the researcher is to design an instructional intervention, in this case, culturally responsive pedagogy or CRP, to achieve a valued goal, that of identifying elements of culturally responsive pedagogy that make a positive difference in the writing skills and attitude about writing of high school Native American students. Second, achieving this goal within an authentic classroom environment "implies modifying the intervention formatively in response to data suggesting factors that enhance or inhibit the effectiveness of the intervention (Reinking & Bradley, 2008).

To utilize a formative-design experiment approach, the intervention – in this case culturally responsive pedagogy – must be studied in an authentic instructional environment "where all naturally occurring variation is allowed to operate and where instructional responses to those variations are not unnaturally constrained by the researcher" (Reinking & Bradley, 2008, p. 18). Furthermore, a formative experimental design approach is guided by theory; however, the role of theory for the researcher is one where the focus is on either the development of new theories that enhance or inhibit the effectiveness of an intervention or the quest to understand the conditions that enhance or inhibit the intervention, theory, or both (Reinking & Bradley, 2008). Unlike an emergent design in research that rests on a foundation of opportunism that expects that

the design path and research goal(s) will change (Gasson, 1997) or grounded theory research wherein the focus is on the generation or discovery of a theory (Creswell, 2013), the goal of a formative-design experiment does not change. In fact, the goal is an integral part of the rationale for the research (Cobb et al, 2003; Reinking & Bradley, 2008). To ensure that instruction is culturally responsive and effective at improving student writing performance and promoting a positive view of writing in general, the research design was adaptive (Reinking & Bradley, 2008).

Mixed Methods

The formative and design experiment model lends itself naturally to a mixed methods approach in research as defined by Tashakkori and Teddlie (1998) as a combination of "qualitative and quantitative approaches into the research methodology of a single study or multi-phased study (pp. 17-18). This approach allows for analysis of qualitative and quantitative data in an effective, meaningful way. Using a multi-strand typology (Teddlie & Tashakkori, 2009; Johnson & Turner, 2003; Johnson & Christenson, 2008) allowed me to use an identical, sequential sampling process, sampling both qualitative and quantitative data from the same population of interest within multiple phases (Onweughuzie & Collins, 2007; Teddlie & Tashakkori, 2009). In the development of the mixed methods conceptual framework for this study, a modified version of the 13-step model developed by Collins, Onweughuzie and Sutton (2006, p.271) was used. The model illustrated in Figure 6 includes the following steps: state the goal, formulate research objectives, determine a research rationale, formulate research questions, determine the purpose for the research and mixing of data types, select a sample design, choose a mixed methods typology, collect data, analyze, validate, and interpret data, write up the results of the study then determine next steps, if any.

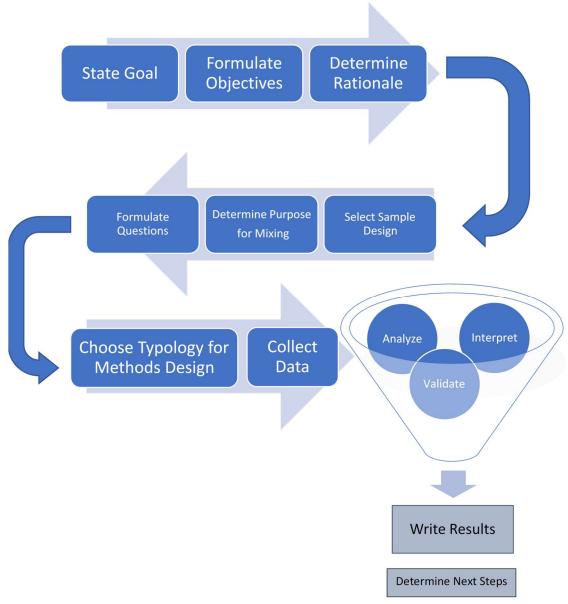


Figure 5
The 13-Step Model

Analysis of the data during the study determined when and if changes in the type and amount of data collected were warranted in order to meet the goals of the study. Changes made to instruction resulting in changes to data type and amount were made possible through the flexibility of micro-cycles – instruction, student assessment, and analysis - built into the research design. Additionally, the research questions of this study generated both quantitative and

qualitative "strands" (Tashakkori & Teddlie, 2003) that drove the collection of both quantitative and qualitative data and served as "an extension of the statement of purpose" (Johnson & Christensen, 2008, p.78).

Qualitative Strands. Qualitative research situates the researcher within the context of the space being observed. Qualitative researchers describe a space in terms of how that space can be represented. These representations may include field notes, interviews, photographs, recordings, even memos to self (Denzin and Lincoln, 2011). Creswell's definition of qualitative research focuses on the process used to study a problem or phenomenon including the need to be sensitive to people and places that are a part of the study and being mindful to establish patterns and themes within what researchers collect (Creswell, 2013). A qualitative researcher explores a situation, group, or phenomenon. Qualitative data collected within this study (described in detail below) included student writing samples, field notes, transcribed audio recordings of classroom instruction, lesson plans and instructional materials, open-ended short answers to attitudinal surveys, and student work samples including student journals.

Quantitative Strands. The inclusion of quantitative data is beneficial in this study because having both quantitative and qualitative data gives the researcher a fuller explanation of how CRP may affect Native American students' writing and their attitudes about writing. Using both qualitative and quantitative research methods and data may provide different perspectives on the data collected (Creswell & Plano Clark, 2018). One important aspect of CRP is the validation of multiple perspectives on a topic. Likewise, multiple perspectives gleaned from both quantitative and qualitative data sources and analysis methods within this case study gives a richer, fuller view of CRP as it relates to instructional stakeholders including the teacher and the students. Quantitative data in this study (described in detail below) included data from the Daly-

Miller attitudinal survey used to measure changes (if any) in students' attitudes about writing and mean scores from the pre and post essays used to determine changes (if any) in student writing. Specific quantitative data included: mean and mode scores of each question on the Daly-Miller attitudinal survey, overall mean and mode scores of both the pre and post surveys, a paired *t*-test of the pre and post surveys' overall mean scores, the holistic writing scores on the pre and post writing assessments, including the overall mean scores in each subcategory of the writing rubric, a paired *t*-test to compare the overall pre and post writing scores, and paired *t*-tests for the overall mean scores of each subcategory both pre and post.

The purpose of including both quantitative data from the pre and post writing scores and pre and post Likert-style attitudinal survey scores is to help validate meta-inferences gleaned from the qualitative data generated in the study and to allow for comparison of both data types. A mixed method approach was optimal in investigating whether culturally responsive instruction has a positive effect on students' writing and their attitudes about writing.

Additionally, Nastasi et al. (2007) suggests that identifying and developing culturally appropriate evidence-based practices requires qualitative data to identify the culturally appropriate pedagogy within a particular, cultural context and both qualitative and quantitative data to measure whether the culturally responsive practices are effective. Complementarity, different methods utilized to assess various dimensions of a phenomena, is an integral part of this study's design and informs the methods that were implemented in data collection and analysis (Greene, Caracelli, & Graham, 1989).

Researcher's Role

In developing this study, I am aware of what Greene (2007) refers to as the researcher's mental model, consisting of the personal assumptions, experiences, values, and beliefs of the

researcher. A tension exists between researchers who follow a more conventional method of enacting an intervention in a social setting and researchers who adapt a formative design approach, understanding that the contextualization of the intervention necessarily relies on adjustments to determine effectiveness (Reinking and Bradley, 2008). This is at the heart of the pragmatic researcher who seeks to know "what is useful, is practical, and 'works'" (Creswell, 2013 p.36).

My overall role as researcher was that of a participant observer. As an observer, I looked for ways in which the students' and teacher's Native American culture was manifested within the classroom environment, particularly how the participants communicated with each other and with their peers. As a participant researcher familiar with culturally responsive education and the tenants of CRP, I also served as a coach to the classroom teacher, suggesting activities, texts, and classroom pedagogy that have formed the foundations of CRP. It is in these purposeful interjections of CRP that I hoped to observe positive responses from the participants. Within the framework of a formative and design experiment, the researcher often acts as a change-agent, requiring the researcher to enter more deeply into the ecology of the classroom in order to achieve the goal of the research (Reinking and Bradley, 2008). Additionally, at the request of the teacher, I conducted a mini lesson (Hometown Mural) in the two class periods prior to the class being observed in this study that introduced art as an additional way to make connections with the anchor text we had chosen to read for the unit. The classroom teacher had not used art as a segue to writing or extending comprehension of a text in the past. I saw this as an opportunity to model the approach in a culturally relevant way. Utilizing a formative and design experiment design allows the researcher to be engaged with the activities and interactions

occurring within the classroom, even teaching whole class lessons, working with small groups, and working one-on-one with students (Reinking and Bradley, 2008).

In my role as both observer and participant observer, I was keenly aware of the interactions between and among the students and the classroom teacher. In addition, my willingness to interact with the students and support the classroom teacher by conducting the mini-lessons on art integration created more cohesion in the planning of the unit and a positive, mutually supportive relationship between the classroom teacher and myself. In the first two weeks of classroom observation, students were quiet and reserved. The classroom teacher even noted the reticence to answer questions about the content by making comments aloud about their lack of interaction. After discussing it after an observation, it was decided that I would need to be more "present" with the students by interacting with them. Simply observing the class without purposeful interaction, created an atmosphere of artificiality that worked to inhibit the students' level of comfort and natural interaction between the classroom teacher and the students and among the students themselves.

It is, admittedly, a fine line to walk as both observer and the much more expansive role of participant observer in a formative and design experiment framework. However, the role of the researcher in a formative and design experiment may include what Cole and Knowles (1993) refer to as "teacher development partnership research." It is within this collaborative relationship between the teacher and the researcher that "strengths and available time commitments to process are honored" (p.486). The classroom teacher was able to demonstrate a culturally responsive stance with her students, and I was able to share with the teacher a culturally responsive way to teach reading and writing. This mutually advantageous collaboration led to practical professional development for the classroom teacher and allowed me to interject culturally responsive

instructional activities into the planning of the unit in order to fulfill the research goal of evaluating the effectiveness of culturally responsive pedagogy on student writing and their attitudes toward writing.

Participants

Through email, I reached out to an English teacher I had worked with during previous research at the school explaining the study's goals (Appendix B) along with a general timeline for collecting data and the approximate number of classroom visits. I was interested in gaining this particular teacher's support for this study because I knew she was a Cherokee Nation citizen of mixed Cherokee and White heritage, had intimate knowledge of the community, and excellent rapport with the Cherokee students at the school. She had also earned a degree in Native American Studies. The teacher emailed back to let me know she was interested in participating in the study, and I scheduled a meeting with the teacher to discuss the study in greater detail.

A purposive sampling method was used because specific, individual characteristics were required that address the research question from a socio-cultural framework (Tashakkori & Teddlie, 2010; Miles & Huberman, 1994). This case study is a homogenous one using a criterion sampling scheme since the sample of participants were selected based on certain, researcher prescribed characteristics (Onwuegbuzie & Collins, 2007). The participants were high school students with a Native American, specifically Cherokee, cultural background. Participants were selected from one English class. The number of participants for the sample met what is referred to as the "gold standard" (Guest et al., 2006, p.60) to achieve saturation, that is the minimum number of participants needed along with a sufficient amount of data collected to develop an indepth understanding of the phenomenon or concept being studied (Creswell & Plano Clark, 2018). It is important to note that in qualitative research, the concern is with meaning and not

making generalized hypothesis statements (Crouch & McKenzie, 2006; Mason, 2010). As Creswell states, the purpose of qualitative research is "to elucidate the particular" (2013, p. 157).

Achieving saturation is, however, optimal in that the researcher can draw meta-inferences and conclusions from the participant pool knowing that additional participants will most likely not provide additional or new information for the study (Tashakkori & Teddlie, 2010).

Determining a sample size that meets saturation is complex and can be mediated by a number of factors that in the case of this study included the quality of the data in amount and degree and the resources used by the researcher (Guest et al., 2006; Ryan & Bernard, 2003). Creswell (2005) recommends a minimum of 3 to 5 participants in a case study as noted in a table of recommended minimum samples sizes by most common design by A.J. Onweugbuzie and K.M.T. Collins (2007). Homogeneity of the participants is also a factor in achieving saturation (Creswell and Plano Clark, 2018; Guest et al., 2006). Although there is no definitive minimum number of participants to meet saturation in a qualitative case study, it is generally agreed that the sample size should ensure that "most if not all perceptions that might be uncovered are uncovered" and "when the collection of data does not shed any further light on the issue under investigation" saturation has been achieved (Mason, 2010).

As Creswell (2013) notes, in ethnographical studies, "well-defined studies of single culture-sharing groups, with numerous artifacts, interviews, and observations collected until the workings of the cultural group are clear" suggest this as an important factor in saturation (p. 157) In this case study, the participants were a homogeneous group consisting of 18 male and female high school students consisting of either Cherokee and White or Cherokee and Hispanic ethnicity. All 18 students shared a common context that of a small, rural public school within the 14 counties of the Cherokee Nation and a common ethnicity, that of Cherokee.

Teacher Participant

The classroom teacher in this study is a certified secondary English Language Arts and social studies teacher with fourteen years of experience, with all fourteen years of experience at the high school in this study. Furthermore, the classroom teacher is female, of Cherokee and White ethnicity and is a member of the Cherokee Nation. She received her bachelor's degree in Native American Studies at a nearby university. Her husband is Cherokee and they have been residents of the town all their lives, with both of them graduating from the high school in this study. The classroom teacher is known for having excellent rapport with the high school students. She is extremely active in the students' extracurricular activities including basketball, baseball, and girls' softball. She is also sponsor of the high school's student council and prom. She gave up her planning period for the school year to teach an additional class that was needed at the high school due to teacher shortages. The district compensated her in additional pay, but this left no time at school for planning. Consequently, the demands on her time during this study were extreme. The teacher was selected because the teacher is knowledgeable of Native American, particularly Cherokee, culture and able to shed light on additional "moves" within CRP that have a positive effect on the participants and lend a more nuanced interpretation of participants' responses. She was also receptive to implementing additional culturally responsive pedagogy in her classroom teaching. The classroom teacher had a positive, supportive classroom environment and actively sought to build effective relationships with each student which are critical tenants of culturally responsive teaching (Gay, 2002, 2018; Hammond, 2015; Ladson-Billings, 1995; Rudy, 2019;). At the start of the study, an additional teacher was sought to support the scoring of pre and post writing assessments to reduce any bias in the scoring;

however, this was not possible due to teacher shortages, lack of interest, and the demands on teachers' time.

Student Participants

Purposeful selection was used to select student participants. The classroom teacher also checked with each student to ascertain tribal affiliation. I emailed the administrator in advance to explain the purpose of the study, ensuring the anonymity of the participants so that the classroom teacher would be able to ascertain this information. In addition, a consent form to participate in the study was signed by each participant (Appendix C). The student participants were from one 11th grade English Language Arts class that met late morning. The study consisted of 18 students, all of which identified as either Cherokee and White or Cherokee and Hispanic. Three students were removed from the pre and post essay data because they were unable to complete the preessay prior to the instructional unit and five students absent the last day of the post writing were unable to complete the post unit writing assessment due to the early closing of schools in response to the Covid-19 pandemic.

Data was collected for this study on (n = 18) students who were able to complete both the pre and post writing attitude survey. Sixteen of the 18 students identified as both Cherokee and White and 2 students identified as Cherokee and Hispanic. Furthermore, pre and post essay data was collected on (n = 11) of the 18 students who were able to complete the pre and post essay writing with nine students identified as Cherokee and White and 2 students identified as Cherokee and Hispanic.

Setting

The study occurred at a selected rural high school (grades 9 through 12) in the southern United States that is easily commuted from the researcher's home so that frequent classroom

observations were possible. The high school campus is a part of the overall elementary and middle school campus with all three campuses sharing a cafeteria and a total student population for the high school of 634 students. The community in which the school district resides had an estimated median household income in 2017 of \$27,805 with 40% of residents living in poverty. The population consists of 49% American Indian, 25% White, 15% Hispanic, and 11% identifying as belonging to two or more races. Only 1% of the population is Asian. The educational attainment demographics for residents of the community include high school or higher: 76.2%, Bachelor's degree or higher: 13.3%, and Graduate or professional degree: 3.6%. with the majority of employment in the food production, canning and distribution services (Advameg, n.d.).

Instruments

The study included a writing assessment given prior to introducing the new unit of study and a writing assessment given at the end of the unit, scored with a writing rubric. A writing attitude survey designed to measure students' attitudes about writing, the Daly-Miller Writing Attitude Test, was also given before and after the unit of study and a culturally responsive observation checklist was used to gather information during classroom observations.

Writing Assessments

The writing assessments consisted of two writing prompts to which students had two class periods of forty-five minutes each to respond. All writing was completed in class. The prompts were previously released ACT writing test prompts. Pre and post writing prompts mirrored each other in format (Appendix D). The first essay prompt asks the core question: *What is lost when we replace humans with machines?* Students were given three perspectives to choose from or they could use their own or another perspective in answering the prompt. The

second (post) essay prompt asks at its core: *Does the best innovation come from amazing individuals or from great organizations?* The ACT writing prompt format was ideally suited in that it provides a lengthy context for the question as well as provide three differing perspectives the students can ponder before developing their response. The writing rubric utilized in the study was constructed for the study and used for teacher scoring (Appendix E). The rubric was holistic in that student writing was evaluated based on the overall degree by which the students could write an effective and engaging response to the prompt, state their ideas with substantive supports as well as acknowledge alternate perspectives.

The rubric used contains components from well-known and utilized rubrics including the National Writing Project's Analytic Writing Continuum (Smith, M. & Swain, S., 2017) and the ACT writing test rubric (ACT, 2020). In reviewing various writing rubrics for assessing students' writing for this study, no one writing rubric contained all the areas that I wanted as my focus for this study. Furthermore, the rubric needed to be user-friendly. The classroom teacher had little time to score student writing with a rubric that was convoluted or difficult to interpret. For example, the National Writing Project's Analytic Writing Continuum (Smith, M. & Swain, S., 2017) has 6 levels of writing performance and an area of evaluation focused on stance as well as two separate areas of evaluation for diction and sentence fluency. The ACT Writing Test rubric is designed as a holist score of 1-6 with 6 levels of writing performance in four general areas including an area of evaluation entitled "organization." The writing rubric used for this study is focused on three areas of writing: Ideas and Analysis, Development and Support, and Language Use, with the emphasis overall on content rather than mechanics. The rubric more closely resembles the ACT Writing Test rubric but does not include organization as a separate area of evaluation and is condensed to four levels of student skill rather than six. Slight nuances in

language on the ACT writing rubric are somewhat confusing and demands calibration of scoring based on previously scored anchor papers which were not available. The score levels consist of a score of 1 "Needing improvement", score of 2 "Demonstrates developing skill, score of 3 "Demonstrates developed skill" and score of 4 "Demonstrates effective skill".

Attitudinal Surveys

Students also completed a brief 20 question Likert-style survey regarding their attitude about writing and themselves as writers. In addition, three open-ended questions were added to the survey that asked for more personal information regarding their thoughts about previous writing assignments and how they view themselves as writers. The purpose of the survey was to establish the students' views about writing prior to instruction to determine a base score for each student so that a comparison could be made to determine changes in students' writing attitudes (if any) after the unit. The attitude survey used was the Daly-Miller Writing Apprehension Test (Appendix F). The Daly-Miller Writing Apprehension Test (WAT) is a Likert-style attitudinal survey that assesses an individual's attitudes about writing and themselves as capable writers (Daly, J.A. & Miller, M.D., 1975). The questions are scaled by degree from 1 to 5 with 1 = Strongly Disagree, 2 = Disagree, 3 = Neutral, 4 = Agree and 5 = Strongly Agree. Each of the 20 statements target the level of anxiety students have with writing and their view of themselves as competent writers. The original Daly-Miller WAT test consisted of twenty-six questions. Six questions from the original survey focused specifically on student attitudes regarding their view of composition classes taken as electives and the addition of peer editing within the class. A second, modified version that consisted of 20 questions was used in a subsequent study by Daly and Miller (Daly, J.A. & Miller, M.D., 1975, p.247). The shorter version of the survey was used for this study because it was better suited for high school students. Some of the questions in the

twenty-six item survey referenced contexts that were not relevant to the participants in this study. The students in the study did not have a choice in taking an English Language Arts class, had not had an experience peer editing nor would they be assessing their peer's writing during the unit. The scoring used in this study was in accordance with the Daly and Miller's 20 item survey (1975).

At the conclusion of the study, the same writing attitudinal survey was given with the identical twenty writing statements; however, the exit survey consisted of three short answer questions that asked whether or not students found any of the writing activities from the unit enjoyable or informative and whether their attitude about writing had changed after the reading of the assigned text from the unit. Additional follow-up interviews with the students were not possible due to the closing of schools from the Covid-19 pandemic.

Additional Materials

The collection of data also included student writing journals and post gallery walk writings. In addition, field observations in the form of photographs, written field notes that include thick and rich descriptions of the setting, tasks, participants and teacher pedagogy, as well as class audio recordings, and CRP & Native Student Observance forms were also collected (see Appendix G). I constructed the CRP & Native Student Observance form to help guide my classroom observations during this study. It was constructed based on culturally responsive pedagogy discussed by researchers whose body of work has focused on culturally responsive education in K-12 school environments. Many of the instructional components are based on Geneva Gay's *Culturally Responsive Education* (2018). Additional components in several areas of the checklist including the classroom environment are specifically supported in the 2nd Edition of *Culturally and Linguistically Responsive Teaching and Learning* by Sharroky Hollie

(2018). To address ways of knowing for Native students, instructional components including place-based education, experiential learning, and time for reflection espoused by William Demmert in his comprehensive research on the education of Native American students were also included (2001).

A list of data sources collected in each phase along with validity and reliability factors for the data types is provided in Table 6.

Table 6Data Collection Type and Sequence

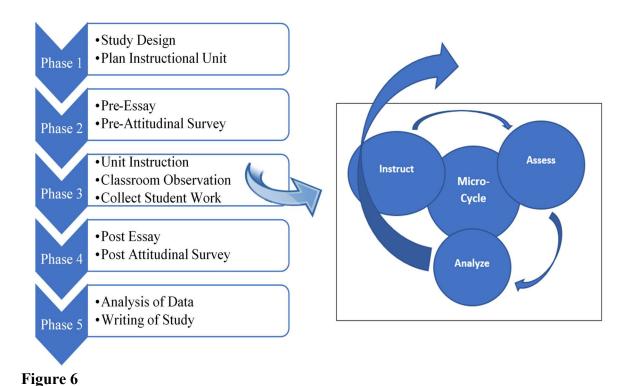
Pretest writing sample	 Used rubric to assess what we want to know about student writing. Established interrater reliability in the scoring of essays to establish pre-instruction writing skill level for each student (Creswell & Plano Clark, 2018)
	 Pretest writing sample not scored solely by researcher to avoid bias (Creswell & Plano Clark, 2018)
Attitudinal Survey (pre)	Likert style attitudinal survey (Creswell & Plano Clark, 2018)
Classroom Observation	 Utilized consistent method for tracking qualitative data for easy retrieval and analysis (Creswell & Plano Clark, 2018) Field notes: reflect on observations immediately after the event to be sure that gaps in note taking are filled and running record of events is accurate. Utilized a checklist of behaviors that may be considered culturally responsive in nature rather than relying on memory to use during observation Audio recordings of classroom activities and transcribed for analysis. Obtained photographs, student class work, instructional materials
Posttest writing sample	 Used same rubric to score posttest as pretest for consistency and reliability Established interrater reliability in scoring to assure valid and reliable scores (Creswell & Plano, 2018) Posttest not scored solely by the researcher to avoid bias (Creswell & Plano, 2018)

Table 6 (Cont.)

Attitudinal	Likert-style attitudinal survey same as prior to the unit of instruction.
Survey	
(post)	

Procedures

Teddlie and Yu's (2007) typology for mixed sampling techniques as well as Reinking and Bradley's (2008) format for assessing and adjusting various types of classroom interventions formed the framework for a series of micro-cycles in data collection, the content of each being dependent upon the analysis of the previous micro-cycle of data collection. For example, the collection of student writing from the pre-essay writing suggested a greater focus on techniques that illicit more elaboration and the development of ideas gleaned from resources such as the synthesizing of multiple perspectives. Pre-survey results suggested planning activities that would be more engaging to promote a positive view of writing. In addition, the inclusion of *The Danger* of a Single Story video sought to engage students and address the importance of multiple perspectives. The writing that followed led to planning The Hometown Mural to give students a way to tap into their funds of knowledge and further engage students in the writing process. Furthermore, students in their reading of the anchor text expressed some difficulty in understanding the limitations of the main character in relation to life on a Native reservation in the United States. The video Rez Ball: Basketball in Lakota Nation sought to fill this void in understanding. The changes in activities and writing goals demonstrate the formative design of this study. The sequential design of the case study is illustrated in Figure 6. There are five phases of the study.



Sequential Flow of the Study

The first phase involved the initial planning of the study, including participant permission and teacher-researcher planning prior to beginning the culturally responsive unit. Phase two involved conducting and assessing student writing attitude surveys followed by a writing assessment to establish base line scores for later comparison after the unit. Phase three consisted of the instructional phase of the study that included a series of micro-cycles or individual lessons within the unit that were assessed prior to moving to the next micro-cycle. It is within this phase of the study that students completed journal writing, art activities, and class discussion. Phase four, the exit phase, included students completing a post writing attitude survey and a post essay. The final phase included all analysis of the data and the writing of the results.

Phase 1 Planning

The first phase involved the initial planning of the study. Participant consent forms along with IRB approval for the study were obtained (Appendix A). The culturally responsive checklist

was created. Initial recruitment of a teacher who met the demographic requirements for the study was secured and teacher-researcher unit planning prior to beginning of the study was completed.

Unit Development. The classroom teacher and I met in person in January at the start of the spring semester to discuss the study's goals in more detail and plan a unit of instruction that would focus on meeting the general criteria of culturally responsive instruction. The meeting took place over four hours. After the meeting, I was able to introduce myself to the students of the class that I would be observing, explain the purpose for my future visits to the class over the next nine weeks and invite students to participate in the study. The participant permission forms were then distributed to the students. The students had one week to return the forms before I began my observations.

During our initial meeting, the classroom teacher emphasized the need to prepare the students for the ACT test. Because of an increased focus on the students' and district's overall ACT and ACT Aspire scores, writing prompts with a format that matched the upcoming ACT writing tests in the spring would be used as the format for the pre and post essay writing. I searched previously released ACT writing prompts for content that matched or closely matched the essential themes within the unit for both the pre and post writing assessments for this study.

In the initial planning, it was important that texts that represent varying perspectives were introduced. It was important that the texts act as mirrors and windows to the students so that relevant connections could be made (Bishop, 1990). It was also important that the text be empowering and offer accessibility to all students' reading ability. We decided that a diverse literature unit focusing on a Native American author or main character and the use of other multimodal and multiliteracies as connections to the main text would work well within the study's time frame. The school had a limited choice of texts, especially texts that serve to reflect the

students' culture. The novel we chose was Sherman Alexi's *A True Diary of a Part-Time Indian*. The school had a class set (30) of this novel and it was determined that the text was at a Lexile level that was accessible to all students in the class, offered the perspective of a Native American writer (Spokane-Coeur d'Aléne) with characters who are both White and Native American high school students, and addressed relevant themes for the students in the class. Although the author is not Cherokee, personal experiences with poverty, race, addiction, and lack of opportunity were topics readily familiar to the students in the class. In addition, the classroom teacher wanted to expose the students to writing that exhibited humor as well as a character who was an example of a positive role model.

Communication and Observations. Prior to data implementation and collection, I communicated with the classroom teacher via email and created a shared Google drive folder so that both of us would be able to access instructional materials at any time. Distance between the school and my home as well as work commitments limited the feasibility of daily visits to the classroom; however, bridging the distance and availability gap was possible through simple phone calls, phone texting and email. These options offered an easy, effective ways to keep in communication with the teacher. I observed the class twice per week during a 45-minute class period for a period of nine weeks. A schedule of the meetings and general content of each class period is in Appendix H. It was optimal to begin the study when the spring semester began and a new unit was being introduced. A document focused on the overall unit goals and objectives and are included in Appendix I. The Google share drive folder was invaluable in the process since it allowed the sharing and collaboration of teaching materials in a more flexible online environment.

Phase 2 Data Collection

The second phase focused on the collection and analysis of data that would provide a baseline to use in determining the amount (if any) of growth in student writing scores and their attitude toward writing. The first data piece is the Daly-Miller Writing Apprehension Test (Appendix F). The survey, designed to take a maximum of 20 minutes in class, was given to the participants prior to the introduction of the new unit of instruction by the classroom teacher. All students in the class were given the survey assessment since all students returned the IRB approved student participation form. After completing the survey, the classroom teacher then assigned the pre-essay writing prompt (Appendix D) to the students, giving them an additional class period, if needed, to write their responses. Students were not allowed to take their writing home with them; they could use their phones to look up how to spell or look up a word if they chose to. Students were informed that the scoring of the essays would be based on a first draft response, but that they were encouraged to do their best, first draft writing. After participants completed the attitudinal survey and the essay response, the classroom teacher placed the surveys and essays in a folder to be shared with me on my first observation day in the classroom.

Phase 3 Instructional Unit

The unit of instruction was nine weeks in length. A framework of the unit that includes the objectives and essential questions is included in Appendix I and activities in Appendix H. The classroom teacher began the unit of instruction by having the students create a personal journal using a one-subject spiral notebook for recording their responses to the anchor text as it was read in class. Based on the writing survey results and the essay responses, the classroom teacher and I agreed that frequent and shorter writing assignments would be incorporated within the unit to encourage additional student writing moving forward in the unit.

Data from pre-survey and pre-essay also pointed to less emphasis on ACT prep activities and more focus on overall student engagement and the formation and elaboration of ideas in students' writing.

As an observer in the classroom, I took field notes throughout. Audio recordings were also completed at each visit and photographs taken when a new activity such as reading a painting and the gallery walk was introduced. The classroom teacher did not feel comfortable having the class video recorded so no video recordings were a part of this study. A form to help me observe culturally responsive pedagogy (Appendix G) was used during classroom observations. This form helped me identify whether CRP was being utilized, and if so, which type of CRP, its form and degree of implementation. Audio recordings were transcribed using a transcription service, REV (rev.com) and reviewed for additional examples of student engagement and class instruction, serving as a useful supplement to field notes.

Additional data collected included student writing contained in their classroom journals. The student journal responses were taken up after the first three weeks of instruction by the classroom teacher to read student written responses and respond back to students, writing general comments throughout. The journals were then given to me for general assessment of responses. Journals were then returned and taken up again at the sixth week with the same process and then again in the eighth week so that I could evaluate the student responses for a final time.

Phase 4 Data Collection

In the ninth week of the study, a post writing attitudinal survey and an end of unit essay prompt were given to the students to complete. Students were given the identical Daly-Miller Likert-style writing attitude survey questions. The three open-ended questions at the end of the survey were changed to ascertain their thoughts about writing in connection to the unit. The

survey took approximately 20 minutes in class to complete. Surveys were then turned in for data analysis. Additional interviews with students to clarify and extend their written answers had been planned; however, schools closed due to the Covid-19 pandemic, so interviews were not possible.

After students completed the post survey, an essay prompt was given that served as the post-writing assessment. The same writing prompt format and writing rubric were used in the post essay assignment as had been used in the pre-essay assessment, for consistency both for student familiarity with the ACT essay format and in scoring the essays. Students were given two 45-minute class periods in which to write their responses.

In addition, student journals were collected, the gallery walk student writings, and the culturally responsive observation forms were gathered along with all field notes, photographs, and audio recordings from the study.

Phase 5 Analysis and Conclusions of Study

The final phase of the study focused on the analysis of data that would provide a comparison to the baseline scores of the attitudinal survey and essay scores generated before the beginning of the unit to determine the amount (if any) of growth in student writing scores, changes (if any) in their attitude toward writing and their view of themselves as writers.

Transcriptions of classroom audio recordings were reviewed and matched with field notes from each class observation in order to give a fuller picture of classroom instruction and student engagement. Student writing from the gallery walk activity was collected. Journal entries of the student participants were reviewed. Finally, results of the study were analyzed and meaning extrapolated from the data.

Data Analysis

Data was collected throughout the study serving to not only determine any changes in students' attitudes and in their writing but to also direct the planning and implementation of classroom instruction within the study.

Pre-Survey Analysis

Descriptive statistical analysis was completed with the pre-surveys that consisted of mean and mode for each survey question, as well as a general mean of the overall responses. A Microsoft Excel spreadsheet was created to house the data from the surveys. Each row consisted of a student's name. Columns in the spreadsheet consisted of the overall mean score for each student and their numerical score (scale of 1-5) for each of the twenty statements, Additionally, an assessment was made of each student's survey mean to determine whether a student responded as having high, average, or low anxiety about writing. An overall mean score for a student one standard deviation below the overall sample standard deviation was rated as having high anxiety and those scoring one standard deviation above were rated as having low anxiety about writing. Written statements from the participants in the open-ended questions at the end of the survey were also assessed for any indications that the written responses corresponded to the overall mean computed for each student. The analysis of the survey responses took place within the first week of observation so that any information gleaned could be used to plan future instruction.

Pre-Essay Analysis

Additionally, the classroom teacher and I read and scored the student pre-essay responses using a writing rubric that focused on three areas: Language Use, Ideas and Analysis, and Development and Support. The student names on the essays were covered up and a number

assigned to each essay. The essays were then scanned into the school's copier. The original student essays were placed in an envelope with the numbers still attached until after scoring. The classroom teacher scored the scanned essays with a number only from her location and I scored the same essay copies from my location. Using a shared Google drive, two scores were recorded for each student. Any discrepancy found between the classroom teacher and the researcher's score on an essay was pulled and discussed to determine an agreed upon score for the student. Scores were given for each of the three subcategories with the overall essay score the average of those three subcategory scores. Each subcategory was scored from 1 to 4. A score of 1 in a subcategory denoted "Needs Improvement", a score of 2 denoted "Demonstrates Developing skill", a score of 3 denoted "Demonstrates developed skill" and a score of 4 denoted "Demonstrates Effective Skill". These score designations have an element of subjectivity; however, a detailed description of each category and score rating was provided to give guidance in the scoring process. These scores were then recorded in a Microsoft Excel spreadsheet along with each student's sub-scores in the three focus areas already noted. After the scoring of essays, the classroom teacher and I then discussed the specific areas of writing that would be the emphasis of instruction during the unit. Based on pre-essay scores, it was agreed that we would focus on the skill of elaboration and the development of ideas. Furthermore, based on student survey scores on writing anxiety, changes were made to some activities within the unit. This ability to modify instruction and maintain flexibility in order to achieve the research goal is a hallmark of the formative experimental design. It allows for a broader view of research in order to accommodate "the considerable variation that is characteristic of classrooms and school and nearly impossible to subject to careful control" (Reinking & Bradley, 2008 p. 38).

Student Instructional Data

Responses to four classroom activities were particularly illuminating and therefore chosen for further analysis. All 18 students did not attend every lesson in the unit, but these four lessons had all students in attendance. This was particularly important because the lesson using the Hometown Mural focused on how to "read" an image and was the foundation for "reading' an image in the gallery walk. In addition, the students' writing was particularly informative for these four activities and writing could be analyzed using more generalized categories from the pre and post essay rubric. Additional lessons in the unit included activities such as identifying figurative language in a text passage, responding to a chapter in the anchor text using images rather than words, and working with ACT grammar questions using sentences from the anchor text.

Lesson: The Danger of a Single Story. The first lesson of the unit and taught by the classroom teacher was a viewing of a Ted Talk video, "The Danger of a Single Story" by Chimamanda Ngozi Adichie (Ted, 2009). The short video is a discussion on the importance of being exposed to multiple viewpoints. Adichie discusses her own experiences with being stereotyped and the dangers that having only one viewpoint can have. After viewing the video, students were asked to respond to the ideas presented in the video by writing in their journal. Student journal entries were first deductively coded using a structured format that specifically looked at student writing in terms of language use (particularly clarity of meaning), personal connections to the content, and analysis of ideas. Although the areas of focus within this student writing task were associated with aspects of student writing emphasized on the pre and post essay writing rubric, the criteria used on the pre and post essay rubric was specifically designed for a longer piece of writing. The pre and post essay rubric includes the synthesizing of multiple

perspectives, the recognition of tensions or complications associated with the extended essay prompt, and a focus on the clarity of writing that is more attainable with extended writing time. The codes used and their definitions are shown in Table 7.

Table 7 *Codes and Their Definitions*

Code	Definitions
(C) Clarity of Meaning with Syntax and Language	Sentence structure makes meaning clear. Fragments, run-ons, missing words are minimal or absent from writing, specific nouns, verbs, etc. are used. Not vague in meaning.
(P) Personal Connection to Content	Use of personal pronouns such as I or me, we, us or phrasing such as "I believe, I think embedding of a writer's personal connection to the prompt through people, places and events.
(I) Insightful Comment and Analysis of Ideas	Response that includes a 'thinking through' of a problem or idea for consequences, implications, or extensions of an idea, inclusion of a differing opinion, or acknowledgement of the complexity of an idea.

Lesson: Hometown Mural. The Hometown Mural lesson was the fifth lesson within the unit. Students had been responding to the text read in class with journal entries; however, inclass observations of students and their writing exhibited general lack of interest and short journal entries. Using a strategy of place-based education, the classroom teacher introduced the students to "reading art" using a photograph of a mural painted on brick that was once prominently displayed on the side of a café in the middle of town. The mural image was displayed to the entire class using a projector. The mural was a mosaic of the community's historical events. The mural includes the images of the founding of the town to a famed, yearly festival. In between these prominent events are smaller scenes of historical and economic interest

to the town over the past one hundred or so years. The mural was colorful, upbeat, and full of interesting objects to investigate. After a whole class discussion of the mural, students were asked to write in their journal about the mural and any connections to the anchor text the class was reading.

Coding student writing followed the same protocol as "The Danger of a Single Story" student writing using the codes and their definitions in Table 1 above.

Lesson: Rezball. The classroom teacher's sixth lesson included viewing a short video on basketball then writing a narrative on an event in their own lives. "Rezball: Basketball in Lakota Nation" (VICE Sports, 2017) is a poignant glimpse into the importance of high school basketball on the Pine Ridge reservation of the Lakota Nation. The short documentary discusses the importance of basketball as a source of pride for the community and a source of opportunity for seniors to earn scholarships to nearby colleges. It is a story of tug-a-war, with young men wanting to leave the reservation for economic opportunity but feeling the pull from family members to stay and support the family. The video is fast-paced and narrated with vivid descriptions of life on the reservation as well as moments on the court. After viewing the short video, students were asked to write about an important event in their own lives using what is referred to as an "explode a moment" narrative (Lane, 1998). Students were asked to slow down the action of the event and focus on recreating a moment in time that uses descriptive words and figurative language to "paint a picture" in the reader's mind and feel what the writer feels.

I read through the students' snapshots then analyzed the writing using in vivo coding, focusing on specific words and phrasing that students used for the elaboration of ideas. These coding examples were then grouped under "Forms of Elaboration." I chose in vivo coding for the analysis of this writing assignment because the task was not to make personal connections to the

video or to analyze the ideas or make insightful comments about the video. This writing task's goal was to give students the opportunity to reflect on their lived experiences and use descriptive writing as an elaborative tool for expanding one moment within a chosen experience. The experiences students wrote about were further grouped by topic.

Lesson: Gallery Walk. The final lesson for the unit was a writing piece connected to a gallery walk art activity. The gallery walk was created from a series of nine poster sized copies of artwork the classroom teacher displayed in one of the school's hallways. Students were asked to observe and discuss each piece of artwork together in groups of three. Students were introduced to reading art in a class activity prior to the gallery walk with the Hometown Mural. This gallery walk activity included a writing piece that asked the students to choose one of the nine examples of art arranged as a gallery walk and make a connection between the chosen artwork and the anchor text, *The Absolute True Diary of a Part-Time* Indian by Sherman Alexie (Alexie, 2007). The student writing was read and initially coded using the codes in Table 3.1. Additionally, phrases that showed insightful analysis of either the anchor text or the image chosen were extracted for additional analysis that led to the grouping of these phrases by theme.

Pre-Post Survey Analysis

Descriptive statistical analysis was completed with the post surveys that consisted of mean and mode for each survey question, as well as a general mean of the overall responses. A Microsoft Excel spreadsheet was created to house the data from the surveys. Each row consisted of a student's name. Columns in the spreadsheet consisted of the overall mean score for each student and their numerical score (scale of 1-5) for each of the twenty statements. Additionally, an assessment was made of each student's survey mean to determine whether a student responded as having high, average, or low anxiety about writing. The overall mean score for a

student one standard deviation below the overall sample standard deviation was rated as having high anxiety and those scoring one standard deviation above were rated as having low anxiety about writing.

Written statements from the participants in the open-ended questions at the end of the survey were also assessed for any indications that the written responses corresponded to the overall mean computed for each student. Finally, pre and post overall writing attitudinal survey scores were compared using a paired-samples t-test and comparisons were made between the pre and post writing survey mode scores for each of the twenty statements.

Pre-Post Essay Analysis

The classroom teacher and I scored each student's post essay using the same rubric as the pre essay (Appendix D). Any discrepancies in the score for each area of the rubric was discussed using Google chat since schools were closed. All essays were scanned by the researcher twice and sent as pdf. files to the classroom teacher. The essays were first scanned with no student names showing and sent as one large pdf file. Student names on these essays were removed to lessen any bias and given a number instead. Student names with corresponding numbers were kept on a separate Google document for later use. This large pdf file was emailed to the classroom teacher so she could score each essay from home. Each essay number and corresponding score and sub-scores were then added to a Google sheet for tracking. The Google sheet was a shared document with the researcher also scoring essays without a name and placing scores in the Google sheet. The classroom teacher and I were able to discuss the students' essays in real time with both of us having access to student writing. The essays were then scanned again with the names for her own records since no physical contact could be made with the classroom teacher.

Using the scores posted from the pre and post essays in an Excel spreadsheet, a paired t-test was performed to look for differences in the overall pre and post essay scores. In addition, a paired t-test was conducted on the pre and post subcategory mean scores: Pre-Post Language Use, Pre-Post Development, and Pre-Post Ideas & Analysis.

Student Engagement

In addition, descriptive field notes and class observation audio transcripts were analyzed for indication of student engagement for each of the four lessons. The four lessons were then further scrutinized to determine the type of engagement demonstrated and the amount of time students spent on the writing task assigned with each lesson. Low engagement is defined as 69% or less than 11 students of n=18 participants actively engaged in instruction. Medium engagement is defined as approximately 70% or 12 to 13 of n=18 participants actively engaged in the instruction and subsequent writing activity. A high level of engagement is defined as approximately 90% or 16 or more of n=18 participant engagement. In addition to the number of participants engaged in an activity, the amount of time of the lesson, the amount of time students spent in sustained writing, and the transition time between the two was also noted.

Addressing Validity

There are several perspectives regarding the credibility of qualitative data. Eisner states that we "seek a confluence of evidence that breeds credibility" (1991, p.110). In other words, we need several forms of evidence that together create believability of our findings. Angen (2000) even casts validation as interpretative, questioning what makes research worthy of our trust. Creswell also considers the idea of substantive validity, the degree of understanding that one has for a topic and all the sources used for that degree of understanding as important to establishing validity (2013). Given these perspectives, Creswell's understanding meets the view of this

researcher in that validation is an "attempt to assess the 'accuracy' of the findings as best described by the researcher and the participants" (2013, p 249-250). So, validity can be rather subjective. However, there is much that qualitative researchers can do to increase validity or credibility in the research.

Thick and rich descriptions of participants and their actions, persistent and prolonged observation of the topic of study, an in depth, even intimate understanding of the context of a study, triangulation of data and peer review all serve to provide credibility to a research project (Creswell, 2013). Along with these tenants of validity in qualitative research are the standards introduced by Lincoln (1995) that pertain to validity and include the need to consider positionality as a researcher, the goals of the research in relation to the community the research serves to address, and the researcher's emotional connection to the participants and place.

A form to help me observe culturally responsive pedagogy was constructed from several well-known researchers in the field of culturally responsive education (Gay, 2018; Hollie, 2018; Demmert, 2001). This form helped guide me as I observed classroom instruction and the interaction among the students in the class. Furthermore, the process of audio recording instruction and interaction helped maintain inclusivity of the interactions in class rather than only relying on in the moment field notes. Taking time to immediately reflect on observational data after class observations was invaluable in keeping interactions among participants fresh.

In preparation for scoring student essays, both the classroom teacher and I discussed the scoring rubric in depth within the four-hour initial planning meeting in Phase 1. In this study the researcher became a rater of the pre and post writing assessments. As Berelson notes, "content analysis must be objective" (1952, p. 171). Although, it is acknowledged that bias may occur when scoring writing, every precaution that could be made to avoid such bias was incorporated

within the scoring. Both pre and post essays were kept anonymous until scoring was completed and each essay was scored separately by both scorers before discussing any differences in assigned values. There was high inter-rater reliability score of .81. Inter-rater reliability is the extent to which two or more raters agree, addressing the issue of consistency in the implementation of a rating system. The validity of textual analysis relies on inter-rater reliability (Bergman, 2010). The classroom teacher and I scored the writing samples independently. We addressed discrepancies in the scoring of papers online through Google chat. Consensus was reached on each area of the rubric for each essay to generate interrater reliability (Creswell & Plano Clark, 2018).

The survey was brief and therefore optimal for minimizing student fatigue while providing time for thoughtful responses. The Daly-Miller Writer's Attitude Test has a reliability coefficient of .92 (Daly, J. & Miller, M., 1975). Although post survey interviews were not possible due to early school closures, written responses to open-ended questions on both the pre and post surveys were checked against the overall survey score for each student. Students scoring as having high anxiety in writing were expected to have written responses that would reflect this level of anxiety and vice versa.

Limitations of the Study

This case study is limited by its unique context. One teacher's classroom with a small number of participants may not lead to insights about culturally responsive pedagogy for Native students that can be applied to any classroom with any group of students or any group of Native American students. The very nature of CRP is to act as a bridge between the student's unique home culture and that of the mainstream school classroom. A student's home culture varies with geographical location, economic diversity, societal norms, native language, and much more;

therefore, generalization from this study to other Native students in other public-school classrooms may be limited. Due to time limitations, the study focuses on only one unit of instruction which may limit any impact CRP has on the students' views of writing, student writing and their view of themselves as writers. Despite these limitations, this study can show the potential power of CRP, casting a spotlight on the effects CRP can have on Native American high school students.

Summary Chapter 3

Through a case study approach that sought to utilize both quantitative and qualitative data, this study explored the effects of culturally responsive instructional methods that may lead to measurable improvement in the writing skills of Native American high school students.

Culturally responsive pedagogy was woven throughout a unit of study lasting approximately nine weeks in an effort to not only shed a light on the impact of CRP, but more importantly to aid teachers in developing an effective stance for working with Native American high school students. The process and details of the study have been presented in this chapter along with the guidelines for addressing validity.

CHAPTER 4

Findings

This case study's overall goal was to identify how culturally responsive pedagogy affects Native American students' attitudes toward writing (if at all) and to identify specific changes (if any) to their writing. To this end, the study was designed to collect both quantitative and qualitative data. Using a formative design experiment approach, specific lessons based on the tenants of culturally responsive teaching were included. A culturally responsive stance to instruction may lead to measurable improvements in the writing of Native American high school students as well as promote a positive attitude toward writing. To that end, the first question of the study asks:

1. How does a culturally relevant curriculum focused on reading culturally representative text and utilizing culturally responsive pedagogy affect high school Native American students' attitudes toward writing?

Attitudes About Writing

Eighteen participants completed the Daly-Miller Writing Attitudinal Test twice, once before the start of the instructional unit and once after the instructional unit. Scores on both the pre and post survey questions were calculated using the shortened Daly-Miller Writing Attitudinal Tests formula published in the literature. Twenty questions were used from the original twenty-six with questions 4,5,6,18,21 and 22 being omitted because they specifically dealt with peer editing and course selection on the college level. Those twenty survey statements were given in a Likert-format with 1= Strongly Disagree, 2 = Disagree, 3 = Neutral, 4 = Agree, and 5 = Strongly Agree. The scoring formula was 48 + Positive Scores – Negative Scores =

Writing Apprehension score. The scores for the twenty-question test had a range from between 21 for a low and 105 for the high. Individuals scoring at least one standard deviation above the mean are classified as having "high anxiety" about writing and those individuals scoring at least one deviation below the mean are classified as having "low anxiety" about writing.

A mean score for the pre-unit WAT sample was 54.1 with a calculated standard deviation of 12.5. Those with an overall survey score less than 41.6 were considered to have low writing anxiety and those scoring above 60.5 were considered to have high writing anxiety. In the pre-test survey, 12 participants scored at or near the mean with three participants scoring above a 60.5 and classified as "high anxiety" and three participants scoring below 41.6 and classified as having "low writing anxiety". Participant post-attitudinal test scores had a mean score of 56 and a standard deviation of 15.05, with 14 participants scoring at or near the means and 3 participants scoring above 71.05 and considered "high anxiety", and one participant scoring as "low anxiety" in the post survey.

A paired-samples t-test was conducted to compare the overall mean of both the pre and post surveys. The paired-samples t-test showed no significant difference between the pre-survey (M=54.1, SD=12.5) and post-survey (M=56, SD=12.05); t(17)=1.213, p=.24. A correlation coefficient using Spearman Rho indicated a .78 correlation between pre and post survey scores. In addition, a visual inspection of the scores showed that the same three participants who scored as high anxiety on the pre-survey scored high anxiety on the post survey. The range of the individual students' pre and post survey scores as well as the overall mean scores of both surveys are shown in Figure 8.

Pre-Post Writing Attitudinal Survey Results

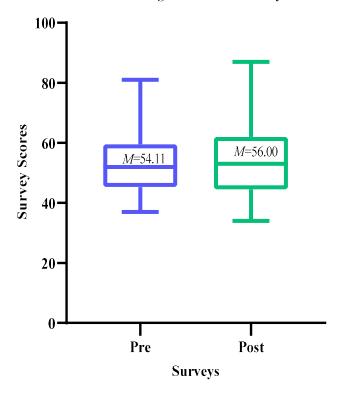


Figure 7
Pre and Post Survey Range and Mean Scores
Note. The range of raw scores for the Pre-survey was 37-81. The range of raw scores for the Post-survey was 34-87.

A comparison of the pre and post mode scores for each of the 20 statements is shown in Table 8. A closer comparison of mode scores for each statement shows that, although there are some positive differences for some of the survey statements, there is a negative trend overall between pre and post ratings. As shown in Table 4.1, if a gain towards a less anxious and more positive attitude toward writing was evident based on a change in mode scores, a (+) is used to indicate the change. If a change toward a more anxious, negative attitude toward writing was evident, a (-) symbol is used. For many of the statements, no change was noted which is indicated by (NC).

Table 8Pre and Post Survey Statement Mode Scores with Differential

Question	Pre-Survey	Post Survey	Difference (+, -, NC)
	Negative WAT Statements		
# 1 I avoid writing	3,4	4	-1
# 4 My mind seems to go blank when I work on a composition	3	3	NC
# 5 Expressing ideas through writing seems a waste of time	2	1,3	NC
# 10 I am nervous about writing	3	2	+1
# 13 I never seem to be able to clearly write down my ideas	3	3	NC
# 18 I don't think I write as well as other people do	4	2	+2
# 19 I don't like my compositions evaluated	3	3	NC
# 20 I am no good at writing	2,3,4	3	NC
Overall Mode	3	3	

Table 8 (Cont.)

Question	Pre-Survey	Post Survey	Difference (+, -, NC)
	Positive WAT Statements		,
# 2 I have no fear of Writing	3,4	3	+1
#3 I look forward to	2	3	+1
writing down my ideas # 6 I would enjoy submitting my writing for publication	2	1	-1
# 7 I like to write my ideas down	3	2	-1
# 8 I feel confident in my ability to clearly express my ideas in writing	3	2	-1
# 9 I like to have my friends read what I have written	3	2	-1
# 11 People seem to enjoy what I have written	3	2	-1
# 12 I enjoy writing	1	3	+2
# 14 Writing is a lot of fun	2	2	NC
# 15 I like seeing my thoughts on paper	3	2	-1
# 16 Discussing my writing with others is an enjoyable experience	2	2	NC
# 17 It is easy for me to write good compositions	2	1	-1
Overall Mode	3	2	

Note. Overall mode score is the mode value taken from each statement.

Question #1. Indicates a negative change overall, but 4 participants in the post survey had a score of 1, meaning they strongly disagreed with the statement. Participants, according to question #10, did not seem to feel as nervous about writing nor did they view themselves as being less competent as a writer than their classmates which was a slight improvement. Students did not seem to feel either positive or negative regarding having their writing evaluated; however, students did not feel comfortable about sharing their writing or having it published in any form both in the pre and post survey. This may indicate that students did not mind having their writing evaluated by a teacher, which is something students are familiar with as part of school instruction; however, having their peers evaluate their writing or having their writing published or displayed leads to additional writing anxiety for students. Question #3 and Question #12 both address writing as an activity to "enjoy" or "like." The post survey mode scores showed a marked positive difference with more students expressing positive attitudes towards the overall activity of writing. The writing attitude survey was one measure of the students' attitudes about writing and was an overall measure of writing apprehension.

Culturally Responsive Writing Instruction

Four instructional activities within the culturally responsive unit in which all 18 participants were present and specific culturally responsive pedagogy was observed are included in Table 9.

Table 9 *Instructional Activity and Culturally Responsive Attributes*

Instruction and Writing Task	Culturally Responsive Attributes	
Video Response: "Danger of a Single Story" Reflection – Journal Entry	• •	
Reading Art: Hometown Mural Reflection – Journal Entry	 Texts that reflect students' lives and identities Use of multi-modal text (mural art) Students have time to reflect on new learning Connecting to community Encouraging dialogue in a safe environment Use of graphic organizer and teacher modeling 	
Video Response: "Rezball: Basketball in Lakota Nation" Snapshot Creative Writing - Journal Entry	 Create texts that reflect students' lives and identities Use of multi-modal text (video) Encourage student voice Student choice in topic 	
Reading Art: Gallery Walk Connections to text and self	 Texts that reflect students' lives and identities Use of multi-modal text (copies of artwork) Students have time to reflect on new learning Acknowledge importance of Native voices Opportunity for peer collaboration through discussion Use of same art reading strategies with graphic organizer Student choice in topic 	

Qualitative Data: Engagement Factors

Field notes taken during classroom instruction and the use of the Culturally Responsive Checklist (Appendix G) as a general guide in observing for attributes of culturally responsive instruction noted the type of instruction, the culturally responsive attributes observed, and student behavior observed during each classroom visit. Differences in the type of instruction, writing tasks and activities led to differences in the length of time students were on task,

differences in the type of interaction exhibited by the students and differences in individual responses. Student engagement was particularly high during the lessons that incorporated art as noted in the Hometown Mural lesson and the Gallery Walk lesson.

Hometown Mural Lesson

Injecting components of place-based education, students were introduced to a mural created by a local artist. The discussion that followed noted students in the desks at the back of the room were standing and leaning in to view the mural. Students who had been noted as reserved in previous classroom observations were vocal, engaging in conversation about the mural with those seated next to them. One male student in the back of the room asked, "Why did the painter want to paint about our town for?" Another student, one of the quieter students in class, said, "I think it would be less depressing if we had murals all over downtown." Students wanted to know more about the artist and wanted to know if some of the inferences made about some of the mural's scenes were correct. As one male student asked, "Does the artist still live here?" and "Did the store pay her to paint the mural?" I offered to try and locate the artist. Another teacher in the building knew the artist and let me know she was on Facebook. I messaged her and let her know that we had viewed her mural in class and asked if she would answer some questions the students had about the mural. She obliged and the students were excited to hear back from her. The students wanted me to read her written responses to their questions. The entire class was quiet and focused on my reading of her Facebook reply. A few of the students from the class, I learned later, actually took time to find the mural and take pictures of the only remaining section of the mural still remaining (most of the mural was covered up with the addition of an adjoining building).

Gallery Walk Lesson

Field notes of the gallery walk activity noted high student engagement with discussion within groups focused on the artwork, posing of questions about the artwork with the classroom teacher, frequent pointing by students to various areas of the artwork, and eagerness to view all of the art in the gallery walk. One female student called me over to a particular piece of art depicting the Dakota Access Pipeline controversy saying, "I went up there (Standing Rock Indian Reservation) with my family in 8th grade." One female student who was viewing an artist's satirical rendition of a photograph of the Battle at Wounded Knee asked the classroom teacher, "What is this war?" Students were reticent to discuss their thoughts about the artwork at first, but comments they made to each other that responded to color and shape soon turned to connections students made between the artwork and the anchor text. One group of boys who was viewing an image of salmon swimming upstream, responded to the text by discussing fishing in general and talking with each other about types of fish, but one student noted, "I think the picture represents Junior." Another student in the group responded, "Yeah, Junior has to struggle to get ahead, like his handicap when he was born." Students used their cell phones to take pictures of their favorite art, using these pictures to help write their responses when we all returned to the classroom. The four lessons included in Table 9 are also included in Figure 8, illustrating the connection between each lesson and its subsequent student behavior. In addition to the students' physical and verbal responses to the lessons, time on task when students were focused on writing was also noted in field notes. Table 10 shows data related to classroom engagement and writing instruction when all 18 students were present and a writing activity was central to instruction.









Figure 8 *Lesson and Student Physical and Verbal Responses*

The Danger of a Single Story

Student Physical Responses

- Eyes on video, relaxed sitting
- No questions or comments
- Off topic talking after video by small group
- Difficulty getting started w/writing

Hometown Mural

Student Physical Responses

- Leaning in to view art, 2 boys in the back standing up
- Students commenting to each other about the art, asking questions about art
- · Students began writing immediately
- Students asked for more time to write

Rez Ball Video

Student Physical Responses

- · Students focused on video
- Questions were asked about the assignment but not video
- Two students struggled with thinking of a moment in their life to write about
- · Some off task talking

The Gallery Walk

Student Physical Responses

- Students excited to leave class and view art
- Peer interaction, commenting on art, asking questions, talking with the teacher about art
- Taking pictures of the artwork
- Some students smiling, pointing at objects in art, other students had serious expressions
- Focused on writing with heads down

Each class was 45 minutes in length. The first column notes the total time spent in whole class instruction at the beginning of each class period. The second column notes the total time it took

to transition from whole class instruction to student writing time where students began writing in their journal or, in the case of the gallery walk, began writing their personal thoughts and connections to an image using the handout provided before writing in their journal (Appendix J). It should be noted that the amount of time that passed between the end of instruction and the time students took to begin writing is the total time that elapsed until all students in the class were fully engaged in the writing task. The number of minutes during class that most students engaged in sustained writing time is also included in the last column. The total number of minutes in sustained engagement with the writing task is not the total number of minutes all students had to complete the writing task but rather the total number of minutes that all students in the class were engaged in writing with little or no peer interaction or off-task behavior.

Table 10 *Class Instruction and Student Engagement*

Instruction - Whole Class	Transition Time Between Instruction to Writing	Sustained Writing Time for All Students
Video Response: (25 minutes) "Danger of Single Story"	4 minutes	8 minutes
Reading Art: The Hometown Mural (25 minutes)	1-2 minutes	16 minutes
Video Response: "Rez Ball in Lakota Nation" (20 minutes)	5 minutes	10 minutes
Reading Art: The Gallery Walk (28 minutes)	2 minutes	15 minutes

Note. Number of minutes are based on time stamped transcription notes and written field notes.

Synthesis of Data Sources

Synthesizing data from the pre and post WAT and students' behavior as noted in field notes and the Culturally Responsive Checklist during classroom instruction and writing gives a better, more informed decision in answering this study's first question: Did the students' attitudes about writing change? The comparison of mean scores on the WAT did not show a significant change between pre and post mean scores indicating that there was no significant change in the participants' overall attitudes about writing as measured by the WAT. The three students who scored as high anxiety in the pre-unit WAT remained high anxiety in the post WAT. However, an analysis of the students' observed behavior during writing activities points toward an increase in student engagement during writing activities, especially those activities using art.

Changes in Writing

To determine if there were any actual changes in the students' writing from the beginning to the end of the instructional unit, a second question was posed.

2. What specific changes – if any – are demonstrated within the students' writing after participating in a culturally responsive approach that exposes students to culturally responsive activities and texts?

Quantitative Data: Essays

Students were given an essay assignment prior to the introduction of the culturally responsive instructional unit. The essay score served as a baseline measure for writing in three areas: Ideas and Analysis, Development and Support, and Language Use. Students could score from 1 "Needing Improvement" to 4 "Demonstrates Effective Skill". The first essay prompt asks the core question: *What is lost when we replace humans with machines?* (Appendix D). Students

were given three perspectives to choose from or they could use their own or another perspective in answering the prompt. The second essay was completed at the end of the instructional unit. This essay served to measure any differences in writing after the completion of the unit. No direct writing instruction was a part of the unit, but writing was an integral part of the unit as a form of meaning making, reflection and meta-cognition. The second (post) essay prompt asks at its core: *Does the best innovation come from amazing individuals or from great organizations?* Again, the prompt included three differing perspectives or students could utilize their own and other perspectives to answer the prompt.

Scoring of essays with (n = 11) included an overall score that was the average of each of the domain scores. Ideas and Analysis X + Development and Support X + Language Use X / 3 = overall score. The mean score for the pre-essays was then compared to the mean score of the post essays using a paired t-test in Excel. In addition, a comparison was made between the pre and post essay sub-category mean scores. Eleven students completed the pre and post essays for this study. Table 11 contains the results of the paired t-tests on overall mean score for the pre and post essays as well as the results of the t-tests conducted on each of the pre and post sub-category mean scores.

The paired *t*-tests of pre and post mean scores revealed statistically-significant improvement between students' pre and post overall essay mean scores as well as the pre and post overall mean scores in the subcategories of language use and development.

Table 11Results of Paired T-Tests in Overall and Sub-Category Mean Scores

	T-Test M	t	SD	95% CI	d	p
Pre/Post Overall	2.03 2.66	3.324	.4506 .7647	[.2012 to 1.019]	.97	.0077
Pre/Post Language Use	2.00 2.77	4.224	.6325 .8174	[.3651 to 1.180]	1.05	.0018
Pre/Post Development	2.091 2.636	3.464	.3015 .6742	[.1946 to .8963]	1.04	.0061
Pre/Post Ideas & Analysis	2.091 2.591	1.454	.7355 1.020	[-0.2660 to 1.266]	.56	.1765

Note. Pre score values are listed first in M and SD columns followed by post score values. P values are based on p < .05.

Qualitative Data: Class Writing

I focused my attention on areas within student writing that may suggest personal connections or relevancy between the writer and the topic, clarity of meaning, and the analysis of ideas. Four writing assignments completed in class were chosen for more in-depth qualitative analysis because the same students who completed the pre and post essay writing assessments were also present for these four instructional days.

Video Response: The Danger of the Single Story. The first writing assignment during the unit was a response to Chimamanda Adichie's Ted Talk video "The Danger of a Single Story" (Adichie, 2020; TED, 2009). Students were asked to write down their thoughts about Adichie's claim that only being exposed to one 'single story' gives us an incomplete, narrow view of people and the world. The length of the writing varied but the average student wrote two or three sentences with unwieldy syntax and no clear indication of the students' views.

Deductive coding was used that specifically looked at student writing in terms of language use (particularly clarity of meaning), personal connections to the content, and analysis of ideas. The three codes used to evaluate the writing and examples are included in Table 12.

Table 12Coding of Student Writing After "The Danger of a Single Story"

Codo	Evamulas		
Code	Examples		
(C) Clarity of Meaning with Syntax and Language	"It is a good example of how having one story can be bad."		
	"I think it's true that a lot of people only have single stories of other people."		
(P) Personal Connection to Content	"I liked that she talked about other countries other than her own."		
	"I think it's true that a lot of people only have single stories of other people."		
(I) Insightful Comment and Analysis of Ideas	"Adichie mentions some great points that explain how stereotypes get started and why people are so biased in the world."		
	"She has been stereotyped. She is from another country so people thought she wouldn't know English and their viewpoint of her life is totally different than what it actually is."		

Student journal entries revealed a predominance of personal pronouns, but of the eighteen journal entries, only a few of the students included personal connections between the content of the video and their personal lives. Two students made insightful comments and they are included in the coding chart. One student extended her thinking of stereotypes and why they are so prevalent, and one other student thought through the fact that Adichie had experienced

being stereotyped herself. The clarity with which students expressed their ideas was, for some students, problematic. Five students had difficulty conveying their understanding of the video. Two examples are given in the chart. Student writing for this entry can be characterized as having very brief statements with little to no extended reasons for their views or connections to their own lives.

Reading Art: The Hometown Mural. Students were introduced to "reading art" using a photograph of a mural painted on brick that was once prominently displayed on the side of a café in the middle of town. The mural image was displayed to the entire class using a projector. The mural was a mosaic of historical events from the founding of the town to a famed, yearly festival to smaller scenes of historical and economic interest to the town over the past one hundred or so years. The mural was colorful, upbeat, and full of interesting objects to investigate. After the viewing of the mural and a whole class discussion on possible meanings of people and events depicted, the discussion shifted to the contrast between how the students' town is depicted in the mural and how the town is perceived today by the students. It was in this shifting of perspective that students began to make connections between how they saw their town and how Junior in *The Absolute True Diary of a Part-Time Indian*, the anchor text they were reading, viewed the reservation. After several minutes of discussion, students were asked to write in their journal about the mural and any connections to the anchor text they were reading.

The responses to the mural in their journal writing were significantly longer and more personal than their previous journal entries. I read through them, looking for connections between the visual text and the printed, anchor text and between the mural and themselves. In the beginning, I highlighted specific words and phrases that stood out and were representative of these connections, but I began to realize that many of the students had insightful commentary.

The writing overall was more thoughtful, personal, and clear. I followed my coding procedures from earlier looking at clarity of meaning with syntax and language, personal connections to content and comments that were insightful or demonstrated analysis of ideas. There were 18 journal entries. Excerpts from each of the 18 responses are included in the chart below. Table 13 includes the codes used and examples.

Table 13 *Coding of Student Writing After Hometown Mural*

Code	Examples		
(C) Clarity of Meaning with Syntax and Language	"The strawberry festival is not like it used to be."		
, 2 2	"The mural has the history of (town) from beginning to the end."		
	"I can't believe (town) was the strawberry capital of the WORLD!"		
	"I think the girls in the mural are runners not swimmers."		
(P) Personal Connections to Content	"I never knew train was so important to (town) because no one really talks about it, my grandpa worked for them."		
	"Our town used to be so beautiful. I want to know what caused it to change."		
	"I wonder if the artist still lives in (town) and if she still does art."		
	"My grandparents used to work at the plant that did the canning. I don't know anyone who works there now."		
	"I didn't see any churches or Cherokee in the mural."		
	"I think we should do our own mural of the town."		

Table 13 (Cont.)

Code	Examples	
(I) Insightful Comments and Analysis of Ideas	"Our town is just like the rez in the book now. That's why no one wants to live here anymore."	
	"The mural tells the story of our town like Alexie tells the story of his life."	
	"This place used to be exciting from all the color in the mural. I think if someone painted (town) today, it would be depressing in all browns and blacks."	
	"This place doesn't change because no one wants it to change. If they did they would do something about it."	
	"I never knew you could get so much from art. I think artist really loved (town) and wanted to show everyone how thankful she was."	
	"If the founding man hadn't built the railroad with his own money we wouldn't have a town at all. Not all rich people are bad."	
	"Junior sees his all White school like the artist sees (town). They see things as though everything is better that it really is."	
	"I don't think we know as much about our own town as the artist who wasn't from here. We should know more about where we actually live!"	

Students responded enthusiastically to this writing task. Only two of the students in the class had difficulty describing connections between the mural and either themselves or their community. Six individuals made specific connections between the mural and the anchor text. It was interesting to read the responses from students that demonstrated how they felt about their community. For the most part, students viewed their town as having limited opportunities, "depressing" and a place that "doesn't change." Based on my observation and field notes, it was

apparent that the students were interested in knowing more about the place where they lived and as one student noted in her journal, "I don't think we know as much about our town as the artist who wasn't from here."

Video Response: Rezball in Lakota Nation. The students in the study engaged in different school activities, the most popular being basketball. Out of the 18 students in this study, 10 students played either girls or boys basketball. According to the classroom teacher who was involved in operating the home game concession stand as student council sponsor, all the students in the class attended the basketball home games when possible. The short video, *Rezball: Basketball in Lakota Nation*, was a particularly relevant connection to the anchor text since Junior, the main character, plays basketball on an all-White team and has to confront his long-time friend, now rival, in a tournament game against his old high school on the reservation. Taking as Barry Lane coined an "explode a moment" (Lane, 1998) students were asked to write about a significant moment in their life and slow the moment down like a camera's snapshot or slow motion video, recalling details so the reader can see and feel what the writer sees and feels. Students were encouraged to use detail and figurative language to elaborate the moment.

This writing task's goal was to give students the opportunity to reflect on their lived experiences and use descriptive writing as an elaborative tool for expanding one moment within a chosen experience. Since this writing task did not call for the analysis of ideas but rather asked for students to write creatively about a personal experience, using the coding format used for previous writing tasks was not possible. I read through the students' snapshots, analyzing the writing using first cycle in vivo coding and later, second cycle descriptive coding. Two themes were revealed within second cycle coding focused on Forms of Elaboration and Topics of writing. Specific examples from in vivo coding and descriptive coding are included in Table 14.

Table 14 *Coding of Student Snapshot Writing*

Code Type	Example Quote			
In Vivo: Elaboration	"bat wrap squeaking as I gripped it tighter and tighter" "the smell of home" "the soft carpet" "sweating profusely" "triple kill" "my grandma hugged me as tight as her wavering strength allowed her" "beaming sun" "black pavement of the road" "I can hear pinto beans being spilled onto a table for bingo"			
	"The smell of turkey filled the house like a lit candle." "My heart was pumping fast as a hummingbird's."			
Descriptive: Topic of Writing	Competition: baseball, rocket launch, basketball, performing a speech Home: coming back home, holiday at home Challenge: playing guitar, distance running, wrestling, football Hope: grandmother's death, Cherokee Homecoming			

Student Elaboration. The students wrote on a variety of topics with some elaboration; however, students found it difficult to 'show' rather than 'tell' their snapshot moment. Students were slow to get started on the writing of their snapshots in comparison to writing tasks involving art (see Table 14), asking for assistance on the assignment. Most students summarized their event using such repetitious connectives as "and then" or "after that" and past tense verbs rather than expressing the event as it happened, lacking the abundance of rich detail that comes with a laser focus on the moment with a present tense narrative. Some examples include:

"The basketball was given to me and then I heard the buzzer."

"The game was the most important of the season."

"After that I went to class."

"I walked all the way home after the game."

It was a writing assignment with the opportunity to be creative, and students for the most part used various forms of elaboration, but only minimally so.

Student Topics. The topics the students chose to write about varied, but all their snapshots could be organized into four common themes: competition, home, challenge, and hope (see Table 4.6). In vivo coding revealed that students used words with a warm, positive connotation when describing experiences related to home such as "The smell of turkey filled the house like a lit candle". Even the topic of the passing of one student's grandmother centered on hope "She is still with me in the good things I do". Writing focused on a form of competition or a challenge, described physical sensations such as sweating, heart pounding, and pronounced hearing such as ""I can hear pinto beans being spilled onto a table for bingo" or "My voice was loud in my ear." Students used a variety of sensory words to describe their experiences but used figurative language such as similes only minimally.

Reading Art: The Gallery Walk. In the gallery walk activity, students were given a choice among nine different pieces of artwork in which to make connections to the anchor text. Students were then asked to write responses to one of the nine images, making connections between the chosen image and the novel. The goal of this writing activity was to have students focus on insight and analysis within their writing. Art served as a mediating tool between the details (ie...characters, settings, events) of the anchor text and the students' own meaning-making about those details. I once again used deductive coding that specifically looked at student writing in terms of language use (particularly clarity of meaning), personal connections to the content, and analysis of ideas. Examples of student phrasing that illustrates insightful analysis and clarity of meaning are included in Table 15. Students' personal connections to the art was

not the focus of this assignment; however, some students did write personal connections to the art (see Table 15), but the number of personal connections was usurped by the insightful connections students made between the art and the anchor text.

Table 15Student Analysis and Support of Ideas from Artwork

Artwork Title & Topic	(C) Clarity of Meaning with Syntax & Language	(P) Personal Connections	(I) Insightful Comments & Analysis of Ideas
Sweet Dreams of a Grandmother by Jody Bergsma (watercolor)	"The painting of the grandmother uses soft colors because the grandmother in the text was very loving and warm."	"I miss my grandma. She was soft and gentle."	"The colors are soft like the baby she's holding. They go together.", "The boy is dreaming of his grandmother to get comfort."
Old Indian Fire Water Flask by Trixie & Milo (photograph of object)	"The label is using a stereotype of Native Americans."	No personal connections noted in writing.	"alcoholism is a problem for Native Americans for generations", "trying to sell using Indians", "Using a stereotype with headdress"
The Great Basin by A. Gatjaiaka (photograph)	"The artwork reminds me of the type of road Junior probably walked on his way to school. It is a lonely but beautiful road."	"It makes me feel peaceful."	"society hasn't ruined it [the land] yet", "Junior doesn't know where his life will lead to."
Going to Santa Fe Indian Market by Brent Learned	"He painted the two people on an old car door which is creative."	"This picture makes me laugh. It reminds me of my uncle."	"most Native Americans look and act hateful but actually they are funny and really nice", "it's the past and the present all together"

Table 15 (Cont.)

Artwork Title & Topic	(C) Clarity of Meaning with Syntax & Language	(P) Personal Connections	(I) Insightful Comments & Analysis of Ideas
Statue of Poverty by Jacob Brest (acrylic & oil)	"The painter shows chaos and no justice in America through the way the statue of liberty is represented."	"I thought this was a very colorful picture."	"Society and Sherman's Rez", "America is poor", "shows chaos and no justice in America"
Winter Still Life Landscape by George Longfish	"This shows how the truth is covered up or forgotten by people."	No personal connections noted in writing.	"people hide behind the truth", "this advertises a lie"
Standing Rock Awakens the World by Hock E. Aye Vi Heap of Birds (monoprints of red brick writing)	"This image is powerful because it lists the problems that we still have today."	"The messages on the bricks are depressing."	"exemplifies anger and resentment Native Americans have for the government", "atrocities and broken promises in writing"
Art N Wordz Purple Caterpillar Butterfly Original Dictionary Sheet by Whinycat (graphic art)	"The letters repeat themselves behind the butterfly. They look like a barcode but they represent Junior's speech problems as a boy."	"I like art that is beautiful and colorful."	"soft shades of nature cover Junior's stuttering"

Students also included details from the images to support their thinking. These details were examples of elaboration in writing that included the use of descriptive words and phrases such as "colors are peaceful", "like heaven", "paint is running like tears", "food stamp", "angry face", "death not natural", and "Water is life".

The students' meaning making was integrally tied to the art. After reading through the students' responses, I chose to focus on the depth of thinking that occurred during this particular

activity. First cycle in vivo coding and later, second cycle descriptive coding was utilized revealing two emerging themes that of Conflict and Contentment.

The Theme of Contentment. Some students chose art that helped them make connections to relationships and settings (people and places) that exemplified feelings of contentment. One student connected to the photograph entitled The Great Basin with the long walks that Junior had to make in the novel between his home on the reservation and the all-White school he had decided to attend. Another student viewed the landscape of the basin as somewhat pristine, commenting that "society hasn't ruined it yet". Four students viewed the Sweet Dreams of Grandmother with reverence, noting the peaceful, supportive quality of the grandmother in the painting with that of Junior's grandmother in the text. Another student commented on the graphic image Art N Wordz Purple Caterpillar Butterfly stating, "soft shades of nature cover Junior's stuttering." Students used these descriptive phrases to reveal emotion and extend thinking gleaned from the images.

The Theme of Conflict. Some students chose art that they interpreted as representative of some form of conflict (objects and events) noting some form of tension between societal issues such as poverty and alcoholism, both prominent themes in the text, and its relationship to Native Americans as a whole. As one student wrote, "alcoholism is a problem for Native Americans for generations" and other students' comments of "lies" and "broken promises" when it comes to the relationship between Native Americans and the federal government. The contrast between what is readily seen and what lies beneath the surface is stated by one student in his comment in response to Going to Santa Fe Indian Market, "most Native Americans look and act hateful but actually they are funny and really nice."

Student Level of Engagement

Figure 9 summarizes the students' writing and level of engagement in each activity. The level of engagement for each instructional activity was determined from field notes during each classroom observation.

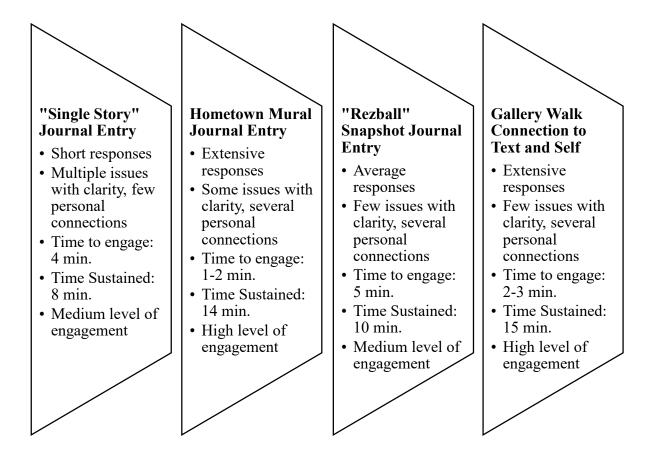


Figure 9
Instructional Activities and Student Writing in Chronological Order

Note. n = 18. Time to engage is number of minutes until majority of students begin writing.

Sustained time is the number of minutes most students engaged in writing. Engagement refers to overall engagement in the class instruction and writing task.

The level of engagement was categorized as medium or high. The four instructional tasks included in analyses had at least medium engagement. The "Danger of a Single Story"

activity showed a medium (n=12) level of engagement, whereas the "Hometown Mural" lesson indicated a high (n=18) level of student engagement. The "Rez Ball" lesson demonstrated medium (n=13) levels of engagement, however, the "Gallery Walk" activity indicated a high (n=18) level of engagement.

Synthesis of Data Sources

Synthesizing qualitative and quantitative data from the pre and post essays and the four writing tasks gave a more nuanced view of changes in students' writing in order to answer this study's second question: What changes, if any, are demonstrated within the students' writing as a result of a culturally responsive instruction? Statistically-significant improvement between students' pre and post overall essay mean scores as well as the pre and post overall mean scores in the subcategories of language use and development suggest culturally responsive instruction may have had a significant influence on the students' overall writing during the nine-week period of this study. Qualitative data regarding student engagement suggest students were engaged in writing tasks, particularly instruction that emphasized art. Furthermore, qualitative data suggests during the art-related lessons, students exhibited better language control and clarity due to fewer errors in syntax and word usage than on the pre essay assessment or the shorter writing tasks for Danger of a Single Story and Rez Ball. There was also an increased development of ideas in comparison to the pre essay, Danger of a Single Story, and Rez Ball with those writing tasks associated with art. "Hometown Mural" and "Gallery Walk," writing activities that included art as a springboard for thinking about personal connections to the novel and generating insightful ideas beyond the text, were particularly effective.

Summary

Chapter 4

This chapter discusses the findings from the qualitative and quantitative data generated from the study. Both qualitative and quantitative data were needed to give a fuller view of student writing and student attitudes about writing. Statistically-significant changes were found in the student's writing between the pre and post essays, and qualitative data suggests that culturally responsive instruction, particularly with the use of art, contributed to positive changes in language use and the development as well as support of ideas. Although no changes in students' writing attitudes were evident in the survey results, changes in student engagement on writing tasks suggests there may have been some positive changes in students' attitudes regarding writing.

CHAPTER 5

Discussion

The purpose of this case study was to identify elements of culturally responsive pedagogy that lead to positive differences in high school Cherokee Native students' writing skills and attitudes about writing. Another goal of the study was to aid teachers in developing an inclusive stance for working with Native American students as well as provide an effective, culturally responsive pedagogy that empowers Native students as writers. The following research questions guided this study:

- 1. How does a culturally relevant curriculum focused on reading culturally representative text and utilizing culturally responsive pedagogy affect high school Native American students' attitudes toward writing?
- 2. What specific changes if any- are demonstrated within the students' writing after participating in a culturally responsive approach that exposes students to culturally responsive activities and texts?

To address the study's first question, students were given the Daly-Miller Writing

Attitude Test (WAT), a Likert-style survey that asks students about their attitudes towards writing
both before and after the study's culturally responsive unit of instruction. The scores of the pre
and post survey were compared using a *t*-test and additional qualitative data from the study's
field notes. In addressing the study's second question, students completed a pre and post unit
essay for comparison of writing in three areas: Ideas and Analysis, Development and Support,
and Language Use. In addition, student writing from a variety of activities included in the
culturally responsive unit was analyzed. Finally, observational field notes were collected and

analyzed for additional qualitative data that included both students' verbal comments and physical behavior.

This chapter includes a discussion of the study's exploration of the effects of culturally responsive pedagogy on high school Cherokee Native students' writing and attitudes about writing. In addition, this chapter discusses the study's findings in connection to the extant literature. Findings demonstrate the effectiveness of culturally responsive education, specifically place-based education and the use of art to support students' writing and to increase student engagement. Students' personal engagement with the text is also interpreted through a sociocultural context and Rosenblatt's transactional theory.

Attitudes About Writing

To ascertain the effect that culturally responsive pedagogy had on the students' attitudes about writing, students completed a writing attitude survey. In addition, classroom observations noted student engagement on writing tasks with the results supporting the following statement:

Culturally relevant curriculum focused on reading culturally representative text and utilizing culturally responsive pedagogy may have a positive impact on high school Native American students' attitudes about writing.

I used a modified version of the Daly-Miller Writing Attitude Test. The overall mode score for each attitudinal post survey statement compared to mode scores for pre survey statements did not change on the negatively worded statements. The statement: *I am nervous about writing* changed to the more positive view of disagreeing with the statement rather than sitting on the fence as neutral. This change may be due in part to the variety of writing tasks and their focus primarily on personal responses to the texts that are by their nature more open to interpretation. At the same time there was a negative change regarding the statement: *I avoid writing*. Students

tended to see writing as a task to be avoided. Although student writing was evaluated holistically not punitively, which may account for feeling less anxious or nervous about writing, students still wanted to avoid writing as a classroom activity. The overall mode score for the positively worded statements shows a more negative trend with the exception of one statement: *I enjoy writing*. Students on the post survey scored this statement in a 2 point gain from strongly disagreeing with the statement to feeling less strongly and taking a more neutral stance. The overall mode scores for the pre and post surveys showed no significant change in the overall attitudes of the students toward writing. The absence of a significant change in students' attitudes about writing could suggest that students needed more time than the nine weeks of the study or that students needed more varied writing tasks within the nine weeks, or both.

Writing tasks, with the exception of the pre and post essays, were reflective in nature, having students think about their reading in connection to their own lives, or making connections between an image and the anchor text the class was reading. Although reflection is important, even critical to learning, results of the WAT suggest that reflective writing or writing about the students' own experiences within their community may not be sufficient in leading students to more positive attitudes about writing. However, native students who view writing as a tool for community change, tribal sovereignty, and social justice may have a more positive view of classroom writing tasks and writing in general (Brayboy & Lomawaima, 2018; Kinloch & Burkhard, 2016; Ladson-Billings, 1995; Winn & Johnson, 2011). Writing tasks that foreground writers as agents of change within their community can lead to positive changes in students' attitudes about writing. The writing tasks in this unit focused on reflection and the intertextual construction of meaning rather than writing as a tool for community and societal change, which may play a role in the lack of overall change in students' writing attitudes.

One statement on the WAT mode scores that was of particular interest was the students' views to #6 I would enjoy submitting my writing for publication. Writing is often seen as a personal act and the writing tasks during this unit sought to help students focus on their own personal connections to texts. The idea of sharing these personal views with their peers and with a larger audience was not viewed as a positive act as the mode score of 2 on the WAT survey statement: I like to have my friends read what I have written can attest. Might their reticence to share their writing with their peers or for a larger audience be the result of lacking confidence in their own writing ability and/or fear of negative judgements from others? Students did not mind having their writing evaluated by a teacher since the mode score on their attitudes about having their writing evaluated was consistently neutral (score of 3) both pre and post survey. Having writing evaluated or graded is something students are familiar with as part of school instruction but receiving feedback by peers or adults other than their teacher is something the students had not experienced. Student scores to other aspects of writing on the WAT suggests that students lack confidence in their writing ability and therefore fear the evaluation of their writing by others, especially their peers, more than they dislike writing itself. Classroom teacher feedback on journal writing entries was mostly generic in nature, with comments such as "good thought", "nice response", and "good job" being the norm rather than the exception. Students may benefit not only from writing that extends beyond personal reflection but also from peer and teacher feedback on their writing that is positive, substantive, and empowering for them as writers (MacArthur, 2016; Winn & Johnson, 2011).

Writing Engagement

Students were asked to keep a personal journal in which to record their reflections on various classroom activities as well as their responses to the anchor text. Four writing tasks

became the focus of further analysis. The four writing tasks included a reflective writing in response to a video (*The Danger of a Single Story*), a reflective writing in response to a mural (Hometown Mural), a personal narrative that extends a moment of importance (Rez Ball video), and an intertextual response to a piece of art (Gallery Walk) that connects an image to *The Absolutely True Story of A Part-Time*. Analysis of the students' writing along with time on task among all four writing activities suggests that students were more engaged in the writing process, wrote more clearly, and extended their thinking beyond the text when the writing was connected to art. Student physical and verbal responses during the art-based activities pointed toward increased student-to-student dialogue, frequent questions about the artwork, and more time engaged in sustained writing.

Students' writing and students' physical and verbal responses in this study suggest that creating opportunities that incorporate art within instructional activities played a significant role in students' positive engagement with writing tasks that explicitly utilized art as a scaffold for deeper understanding of the anchor text and its themes. Student interest and engagement in writing tasks helps to create a classroom environment that views writing as important (Rouse & Graham, 2017), encouraging opportunities for writing that help develop student writing competencies (Bazerman, et al., 2017; Graham, 2019; Rouse & Graham, 2017) and develop positive writing identities (Kinloch & Burkhard, 2016). Student engagement in classroom instruction has been shown to increase student achievement (Fredricks, et al., 2004). This strongly suggests that incorporating a culturally responsive tool like art, a tool that this study has shown to lead to greater student engagement in writing tasks, may lead to improved writing performance.

Changes in Writing

Students also wrote a pre and post essay as well as additional short writing within the culturally responsive unit that led to the following statement:

Improvements were demonstrated within students' writing following instruction using a culturally responsive approach that exposed students to culturally responsive activities and texts.

The paired t-test of the overall essay mean scores showed a significant, positive difference between pre and post essay scores. By disaggregating scores for individual criteria, there were significant positive differences in the pre and post mean scores in the "Development and Support" subcategory and the "Language Use" subcategory. Both the pre and post essay prompts included three perspectives from which students could choose to help develop their responses. The essays did not connect to the unit per se; however, it was possible for students to discuss the first prompt: What is lost when we replace humans with machines? from a world view not necessarily connected to a free-market economy and individual competitiveness most often espoused in the White, mainstream culture (Cajete, 2015; Garrett, M.T.; 1970; Hart, 2010; Little Bear, 2000; Nerburn, 2016; Street. 1984; Totton, 2012). Students chose to connect what was given from the prompt tangentially with their own opinion. Pre-essays were much shorter than the post essay writing with less development of ideas through elaboration and a lack of original ideas and questioning of any of the given perspectives on the prompt. Students responded well to the post essay prompt: Does the best innovation come from amazing individuals or from great organizations? Student writing revealed greater development of ideas through various forms of elaboration including some students' use of the anchor text in their

responses. Increased language control was evident in students' lack of problematic syntax such as fragments or word usage.

Why did students perform better on the post essay prompt? It is possible that the second prompt was somewhat more approachable in topic, but the development of ideas and better language usage suggests students were more familiar with in-class writing tasks where a more meta-cognitive approach through journal writing was taken. Giving students time to think about new information presented and how that new information connects to themselves, the world, or another text (Pendidikan, 2016; Rodgers, 2002; Rosenblatt, 1988) may have served as an extended scaffold for answering the post essay prompt with student development and support of responses that included connections to the anchor text and their own lives. Scaffolding is a system of support that enables students to reach an intended goal or next stage in learning. Vygotsky's concept of the Zone of Proximal Development (ZPD) describes an area between what the learner can do on his or her own and what he or she cannot yet do without support (Vygotsky, 1978). Giving students practice with reflective writing prior to post essay writing served as an extended scaffold in that over time students had the opportunity to repeatedly grapple with conceptual understandings from both the anchor text and art. Dewey explains the function of reflection as a meaning-making experience that considers the "relationships and continuities" (as cited in Rodgers, 2002) within the particulars of an experience, among experiences, and between an experience(s) and the knowledge of the thinker (Rodgers, 2002). Students were given time on a routine basis to make intertextual connections and think about their own learning through their experiences with the anchor text, art and videos.

Students' mean score (M = 2.591) on the post essay in the subcategory "Ideas and Analysis" did not show significant improvement. A strong score in the area of "Ideas and

Analysis" indicates that a student is generating a response that is "critically" engaging, insightful and demonstrates the complexity of the topic. Although writing tasks in the unit encouraged critical thinking and insightful views on a topic, students' thinking was not stretched to an extent that facilitated practice with grappling with multiple perspectives or considering the implications and complexities of a particular topic. In addition, student connections to texts were limited to text to self or text to text rather than considering multiple perspectives and further analyzing those perspectives for more in depth, nuanced meanings (Clarke & Whitney, 2009; Tschida et al, 2014). For example, in the post essays, some students used the anchor texts as a means of developing their answer to the post essay writing prompt. Junior, the main character in the anchor text, makes significant, positive changes in his life, but not without the help of others around him. Many students picked up on this idea from the anchor text; however, they did not extend this thinking to include other perspectives (counter-arguments) within their response, even ones provided with the prompt. This may have been due to the limited time of the study in that students did not have enough experience working with multiple perspectives. Being exposed to texts with multiple points of view may be beneficial in analyzing and integrating multiple perspectives to reveal the tensions, implications and complexities of a topic (Bishop, 1990; Clarke & Whitney, 2009; Jones & Clarke, 2007; Ruday, 2019; Smagorinsky, 2013). The understanding of how their unique perspective fits in the mosaic of alternate, even competing perspectives, serves not only to empower students but to also realize ways to effect social change (Freire, 1980; Gay, 2018).

Extended Thinking Through Placemaking

Although students may not have included multiple perspectives other than their own on topics within their writing, their responses did include multiple connections to community, expressing connections to both people and place.

The Hometown Mural. During the sustained writing time of the Hometown Mural twice the amount of sustained writing time as The Danger of a Single Story- students wrote substantive comments that demonstrated multiple personal connections to the mural as well as connections between the images in the mural and the anchor text. Some students actually suggested the need for change either in their own communities or in their school learning with comments such as "I think we should do our own mural of the town", "We should know more about where we live" and "Our town used to be so beautiful. I want to know more about it". Several responses included negative attitudes about their community such as "I think if someone painted (town) today, it would be depressing in all browns and blacks", but students also acknowledged personal attachments to their community and a new perspective based on the information in the mural. For example, one student wrote, "I never knew train was so important to (town) because no one really talks about it, my grandpa worked for them". Another student wrote, "My grandparents used to work at the plant that did the canning." Still other students voiced a curiosity to know why their community had changed. One student even expressed surprise saying, "I can't believe (town) was the strawberry capital of the WORLD!" These student voices echo an Indigenous view of place. As Vine & Wildcat (2001) point out, "Indigenous People represent a culture emergent from a place, and they actively draw on the power of that place physically and spiritually." (p. 32).

The Hometown Mural lesson combined a form of artistic expression with some of the tenets of place-based education (Sobel, 2004). One of the objectives of place-based education is for students to become knowledgeable of the place they live. In this knowledge, students develop a respect for the culture, history, and people of that place (Rural School and Community Trust, 2005; Sobel, 2004; Vine Deloria and Daniel Wildcat, 2001). As Gay points out, "Culturally relevant curriculum content should be chosen and delivered in ways that are meaningful to the students for whom it is intended" (2018, p.143). Although the students did not travel to where the mural was located, the mural was able to come to the classroom. The image of the mural was displayed through a projector on the classroom wall, essentially moving the mural to the classroom. This translocating of *place* to the classroom juxtaposes the common implementation of place-based learning whereby the students learn through their experiences of place outside of the classroom. During the Hometown Mural activity, students demonstrated a curiosity in the mural for the history it depicted. It was their history, with deep, personal connections to family, economic livelihood, and the past. Some students voiced a deeper appreciation for where they live while others expressed a curiosity to know more about the history of their community.

Students engaged with the mural, asking questions, turning to share their thoughts with peers, and leaning in to pick up as many details as possible, looking for details like children reading a giant *I Spy* book that would reveal secrets about their community. The mural was a mosaic of color and contrasts. Students were quick to understand the contrasting perspectives of the artist and themselves. An interdisciplinary approach that includes local art to spark critical thinking and sustains student engagement in the writing process breaks down what Lomawaima refers to as "silos" or the "disciplinary tunnel vision blocking our view of useful – even necessary- sources" for gaining knowledge (p.1, 2014). By using a culturally responsive,

interdisciplinary approach that brought art, history, geography and literature together, students were able to form multiple connections that traversed the themes within the anchor text, forming more personal and multifaceted perspectives (Cajete, 2015; Deloria, Jr. & Wildcat, 2001; Gay, 2018).

The Gallery Walk. The Gallery Walk lesson also utilized a visual approach to literacy instruction using images of various forms of art as a mediating tool between the students understanding of the anchor text and the students' own meaning-making beyond the anchor text and the image. Students rotated in groups of three to view each of nine images. Students were able to choose which image they felt helped them make connections to the anchor text of the unit. Student writing in response to the gallery walk activity focused on two themes: conflict and contentment. Feelings of contentment focused on connections made with people or places while feelings of conflict focused on objects and events. Those students who chose images representing a place such as *The Great Basin* made comments such as "It makes me feel peaceful." When students discussed the colors and objects in images, students referenced nature with calming adjectives such as "soft" and "beautiful". Students also responded to images of people in positive terms such as "gentle," "loving" and "nice." These positive connections to the environment both in terms of land and relationships are congruent with what Totton calls "placemaking" (2012). Although placemaking occurs in cultures throughout the world, an orientation to place as a "connective relationship to the cosmos, nature and each other" is at the heart of an Indigenous world view (Totton, 2012, p.3). This view of spiritual connectiveness with the environment is in direct contrast to the students' comments on images that represented society and actions that harm the environment. The view of mainstream's symbols of America (Statue of Poverty) and the actions of natural resources for profit (Standing Rock Awakens the World) using such words

as "anger," "resentment," "lies" and "chaos" indicate an undercurrent of conflict between two ideologies – one that exemplifies community as a "web of connectiveness" with all life (p. 6) in direct contrast with one that celebrates the individual's dominance over the environment and apart from community.

Student Snapshot Narratives. In the narrative writing task assigned after viewing the video Rezball: Basketball in Lakota Nation, students again connected positive wording with themes of Home (place) and Hope (relationships). By viewing the video, students were introduced to the descriptive language of the narrator and the personal story of high school native students living on the Pine Ridge Reservation. After viewing the video, students were asked to write a narrative about a moment in their own lives. Students were explicitly encouraged to slow down the moment into an "explode a moment" (Lane, 1998), using rich, elaborative language to draw the reader in. Student narratives included an abundant use of figurative language that connected to the students' environment. Phrases such as "heart was pumping fast as a hummingbird's" and "beaming sun" were included along with a feeling of hope in "my grandma hugged me" in one student's recollection of her grandmother's passing. Hope found a place in the cultural events that shape the community in one students' writing of the Cherokee Homecoming celebration. Other students wrote about moments that connected relationships to home. Students' narrative writing of a significant moment in their lives used imagery that incorporated the sights, sounds, smells, and textures of places.

The students' narratives that centered on themes of Home and Hope echo an Indigenous view of place as "concrete and palpable" and a "relationship of things, resources, and objects" where 'dynamic processes of interaction occur" (Deloria & Wildcat, 2001, p.144). The moments in time that students chose to share included the sights and sounds of nature along with the

emotions felt while interacting with family. These scenes represent what Cajete (2015) calls community; wherein community is "both the medium and the message of humans 'being' human" (p. xvi). As one student wrote, "I could feel the warmth in my mother's hands as she scooped me up in her arms. Her smile was bright sunshine and flowers." This is the language of "placemaking" (Totton, 2012, p.3), allowing for the building of bridges between a student's funds of knowledge (Kinloch & Burkhard, 2016; Moll, et al., 1992) and written expression.

Extending Meaning Through Visual Art

Unlike activities that utilized videos, students were focused and excited when viewing art. In the students' responses to art in this unit, it is apparent that students were able to use art as a tool for meaning-making that extended their thinking. Throughout both art activities, students demonstrated insightful, reflective and critical perspectives both verbally either as a whole class discussion (Hometown mural) or in peer dialogue (Gallery Walk) or in writing, interweaving the artist's message with the students' own perspectives about the anchor text, the image, and society. Peer interaction was both substantive and fluid. Students used their phones to take pictures of the images during the Gallery Walk pointed to details in each image, asking questions, and sharing their thoughts with students in their small group. Student comments in their writing demonstrated the powerful impact viewing art had on their thinking. After the Gallery Walk, one student wrote in her viewing of Going to Santa Fe Indian Market, "most Native Americans look and act hateful but actually they are funny and really nice." Common stereotypes of Native Americans were mentioned in their responses, even though the images in the gallery walk (except Old Indian Fire Water Flask) did not directly depict a stereotype. Another student commented after his reading of the image Winter Still Life Landscape, "This shows how the truth is covered up or forgotten by people." This comment was particularly

poignant given the superimposed text over a still photograph of the dead at the Battle of Wounded Knee. Student writing after the gallery walk demonstrated an extension of their thinking beyond the anchor text and certainly beyond the images. Integrating art within the writing process allowed students to think beyond the boundaries of printed text, to grapple with the representation of ideas in multiple forms in order to synthesize the information in a more intimate and critical way (Eisner, 2002; Spitler et al., 2017; Westraadt, 2016). This study's synthesizing of information among the anchor text, the artwork, and the students' own cultural funds of knowledge (Moll, et al., 1992) extends on the analysis of visual literacy alone by adding an element of intertextuality by which the students were able to reconstruct new meanings from both the art and the anchor text.

Theoretical Considerations

The study's unit of instruction incorporated elements of culturally responsive instruction that would ideally bolster student confidence in literacy tasks, particularly writing, and improve student attitudes about writing. From this perspective, culturally responsive instruction is instruction that provides students the opportunity to draw upon their cultural strengths in order to make sense of the world around them. Education and literacy, in particular, is by nature cultural (Gay, 2018; Gee, 2015; Street, 2005). The American public school system's historical origins and purpose advantage a White, European view of literacy and what it means to be literate (Boykin, 1994; Gay 2018). This view can limit the way we teach literacy and writing. Embracing a culturally responsive approach to literacy gives teachers the freedom to explore and create classrooms that are authentic, engaging, and transformative learning spaces for students. This study integrated culturally responsive activities and multi-modal texts that led to increased student engagement and more substantive, expressive writing.

Art in Literacy Instruction

Vygotsky explains that art is a "social technique of emotion, a tool of society which brings the most intimate and personal aspects of our being into the circle of social life" (1971, p.72). Art can act "as a bridge between the biological and the social in man" creating a sense of balance between the personal and the social self (Lima, 1995, p.421). When we inject art into our literacy instruction, the experience "projects us toward new personal and social horizons (Lima, 1995). In this study, students demonstrated emotional and cultural connections to the art that extended their thinking beyond the classroom, and certainly beyond the anchor text. Incorporating a time for students to write and explore the connections and ideas the artwork generated allowed students to stretch their thinking (Smagorinsky, et al., 2013). Art seen as a cultural artifact necessarily imposes the idea that it is created by a society to make visible the world. When we are exposed to art, we are in essence reading the world (Freire, 1985, Freire & Macedo, 1987). One student's comment, "Our town used to be so beautiful. I want to know what caused it to change" allows us to see how reading the world, in this case the Hometown Mural, led her to questions that involve changes in her community and her place in it. Additional student comments about the mural, "We should know about more about where we actually live" and another, "I think we should do our own mural of the town" suggest that art is both personal and emotional, eliciting responses that question, validate and provoke us to act. Using art as a tool for teaching about literature initiated class discussion and peer interactions leading to increased student engagement with the art, each other, and their writing. This study's findings demonstrate that the inclusion of art acts as a tool for meaning-making. Students' responses to art and the social and cultural connections made support socio-cultural theory in its focus that human

learning is largely a social process; wherein, the social is found both in the genesis of the art and in the interaction by the students when viewing and writing about the art.

Transactional Stance in Literacy

The definition of 'text' has evolved from a print-dominant form within an autonomous view of literacy (Street, 2017, 2005) which is to say a literacy form separate from its social context. The New London Group's (1996) definition of 'texts' or multiliteracies recognizes the full spectrum of human communication and meaning-making forms, including visual art (Gee, 2015; New London Group, 1996). In placing art as both an artifact of culture that must be read and interpreted and a myriad of shapes, colors, and objects one can appreciate (or not) for its composition, the student shifts between an efferent and aesthetic stance (Rosenblatt, 1978). Student responses to both the Hometown mural and the art in the gallery walk suggest that the meaning-making that occurred depended upon a transaction between the reader and the text (Rosenblatt, 1978). In this instance, the art was the text that the student was asked to read, making personal connections with the text, the anchor text, society, and themselves. In essence, each student brought their cultural knowledge, understanding of both texts, and personal experience to bear in the meaning-making process. From this reading of the text, students were able to write responses that extended their thinking beyond both the art and the anchor text (Pendidkan, 2016; Rosenblatt, 1988). In Rosenblatt's discussion of the relationship between reading and writing, she states, "words do not function in isolation, but always in particular verbal, personal and social interactions" (1988, p.3). Reading a text parallels writing of a text in that both are dependent upon language and as such, the writer is then "transacting with a personal, social, and cultural environment" (p. 7). Students in this study were able to transact with their environment when they made connections to home and family, writing about the

inspiration felt from a beloved grandmother, the humor of an uncle, and the smell of fry bread. Students extended their thinking beyond the texts when writing statements that go beyond the objects in a painting or the words on a page. Through the viewing of art, students extended their thinking, including that "people hide behind the truth", that "water is life" and that America is a place of "chaos and no justice." Students were given the time to reflect on their learning, creating connections between home, school and community when they wrote "this place doesn't change because no one wants it to change" and "I can hear pinto beans being spilled onto a table for bingo." Culturally responsive literacy instruction embraces these interactions, changing the role of the teacher from imparter of information to facilitator of transacting among students and among students and multimodal texts.

Culturally Responsive Perspective

There is an element of criticality to culturally responsive literacy instruction. The purpose for writing, like other forms of texts, is to communicate ideas. This study infused an anchor text that served as a mirror and a window (Bishop, 1990) for Native students because they could see aspects of themselves and their culture within the text while being introduced to Native students' experiences in a community unlike their own. Activities including art served to connect them to their community and make intertextual connections to diverse images. Students were given time to reflect on their experiences and draw upon their unique funds of knowledge in interpreting texts. Writing reflectively helps students to grapple with new information, synthesize multiple perspectives, and to make sense of the world and our place in it (Yancey, 1998). This process of reflection is an endeavor to make sense of what we experience. It is what Yancey describes as the making of a "tapestry" composed of "threads of disconnects as well as

connects" in our thinking (p. 194). This is the power of what Freire refers to as "reading the world" (1985, 2014).

A student's ability to read diverse, multimodal texts, synthesize multiple perspectives, and reflect on new learning aids students in their ability to construct meaning and problem solve. As Zaretta Hammond's notes, "Cognition and higher order thinking have always been at the center of culturally responsive instruction" (2015, p.4). Student journaling reflecting on classroom activities gives examples of writing that are increasingly more substantive, illustrating more nuanced thinking. Student comments to the Hometown Mural including "This place doesn't change because no one wants it to change" and "They see things as though everything is better than it really is" demonstrates the connective threads of thinking that Yancey suggests is an outcome of reflective thinking. Furthermore, these two examples demonstrate the type of thinking Cajete (2015) sees as necessary when discussing Indigenous education as a transformative process "rooted in critical thought and awareness of the dynamics that have brought us to where we are (p. 68).

One of the key components of culturally responsive education is the use of diverse texts and the inclusion of multiple perspectives. Both Fisher (2007) and Kirkland (2009) suggest a broader view of literacy and the inclusion of multiliteracies in the classroom that encourages multiple voices and perspectives for the critical exchange of ideas (Fisher, 2007; Kirkland, 2009, as cited in Winn & Johnson, 2011). Eisner in his work *The Arts and the Creation of the Mind* (2002) maintained that art was a manifestation of culture and a tool by which students learn to think critically (pp. 70-92). Art as a multimodal communicative text, like print text, conveys meaning. Cerveny (2001) later highlighted Eisner's views, suggesting the visual arts extend meaning-making beyond words and incorporate a sense of emotionality to form, nuance, and

symbol. The visual arts then can be an effective catalyst for both reflective writing and critical thinking that not only capitalizes (when coupled with another text) on the intertextuality of meanings but transformative in creating new ways of thinking between the local and the global. As one student wrote in response to the Hometown Mural, "Junior sees his all White school like the artist sees (town). They see things as though everything is better than it really is." This student points out the rose-colored glasses that people wear in viewing their environment, seeing what they want to see rather than the reality it is. During the Gallery Walk, students made comments that stretched their thinking beyond the image, beyond the anchor text and even their own community. One student wrote, "truth is covered up" and another wrote, "America is poor from the inside", and yet another, "everyone travels their own path and needs the help of others". These comments have connections beyond the texts, noting that America is not only poor but "poor from the inside". The inclusion of the word "everyone" in the statement of traveling one's own path gives the statement a global meaning. The ideas that truth can be hidden, that a country can outwardly express wealth while its people are poor, and that we need each other for support are complex and demonstrate thinking that has stretched beyond the texts and the walls of the classroom.

Student engagement levels and writing responses in this study suggest that the inclusion of visual art was an effective, culturally responsive tool for both reading and writing instruction for these Cherokee Native students. Including time for students to reflect and write about their learning experiences encourages extended thinking through connections between and among texts, through emotional nuances of self-meaning, and through newly-created student perspectives. Furthermore, visual texts that connect students to a sense of place serve to engage

students in a more personally relevant way and create pathways to criticality of thought as they assess their community, their world, and their role in both.

Limitations and Implications

This study sought to answer whether culturally responsive pedagogy coupled with culturally relevant texts would have an effect on high school Cherokee students' writing and attitudes about writing. This study focused on high school students of Cherokee heritage. Although saturation for this study was met given the purposeful sampling of the participants, a more expansive approach that includes students from other Native American groups would increase the generalizability of the study's findings. Extensive amounts of data were collected in this study; however, the Covid-19 pandemic prevented me from ascertaining additional post essays from some of the participants as well as conducting follow-up interviews with the students. Follow-up interviews may have added information regarding changes in student attitudes toward writing. For example, students on the post WAT survey indicated they felt less nervous about writing but also indicated more of a tendency to avoid writing. Follow up questions may have clarified student responses by offering reasons for students' views. In addition, student interviews may have led to extrapolations regarding student views of the writing tasks assigned during the unit and how they view writing as a tool for self-expression, community change and social justice.

Another qualitative study that focused on the intertextuality of art and print text for both developing critical thinking in writing and as a strategy for reading comprehension could help teachers further define instructional methods for teaching reading and writing in a culturally responsive way. Further investigations that focus on reflective writing as a tool for making meaning could lead to changes in the planning of instructional time and in-class writing

assignments. Opportunities for student travel outside the classroom, especially for secondary students, is often problematic for a variety of reasons including time conflicts, transportation funding, and liability concerns. In this study, the workaround for these issues was to engage with a place-based artifact without leaving the classroom. Student engagement and responses to the Hometown mural suggest that place-based education can be modified to bring representations of place into the classroom as an effective tool for igniting curiosity about and personal connections to a student's community. The implications of this study for teachers who work with students from diverse backgrounds include:

- Teaching print texts that act as mirrors of the students they teach and serve to illustrate characters who are resilient, overcoming obstacles rather than succumbing to them.
- Introducing art as a text to which students can make text to text, text to self, and text to world connections.
- Encouraging activities that give students the opportunity to make intertextual connections between print and art.
- Creating opportunities for students to make connections to place, understanding that place can be represented by art and artifacts that can be shared in the classroom.
- Planning class time for students to reflect on new learning, understanding that writing is a
 powerful tool for making connections and constructing new meaning.

Conclusion

In summary, culturally responsive instruction that includes multiple forms of literacy, particularly the visual arts, and connects students to representations of a familiar place and what one feels or does in that place can be a powerful catalyst for writing. Frequent opportunities to write, multimodal texts, and culturally relatable texts create a supportive, culturally responsive

learning environment that supports students' learning. Print texts paired with visual art and reading art that centers on a place-based, geographically familiar location increases student engagement and reflective, critical writing. The results of this study demonstrate that culturally responsive texts that include art serves as a mediating tool for making meaning between the anchor text (print) and the students' own funds of knowledge. Allocating time for students to engage in writing to reflect on new learning is an important extension of instruction that allows for meaning-making.

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APPENDICIES

Appendix A



To: Angelia Christine Greiner

From: Douglas James Adams, Chair

IRB Committee

Date: 12/18/2019

Action: Expedited Approval

Action Date: 12/18/2019
Protocol #: 1911231605

Study Title: Culturally Responsive Pedagogys Effects on Writing Performance and Students Attitudes

about Writing for 9-12th grade Native American students.

Expiration Date: 12/05/2020

Last Approval Date:

The above-referenced protocol has been approved following expedited review by the IRB Committee that oversees research with human subjects.

If the research involves collaboration with another institution then the research cannot commence until the Committee receives written notification of approval from the collaborating institution's IRB.

It is the Principal Investigator's responsibility to obtain review and continued approval before the expiration date.

Protocols are approved for a maximum period of one year. You may not continue any research activity beyond the expiration date without Committee approval. Please submit continuation requests early enough to allow sufficient time for review. Failure to receive approval for continuation before the expiration date will result in the automatic suspension of the approval of this protocol. Information collected following suspension is unapproved research and cannot be reported or published as research data. If you do not wish continued approval, please notify the Committee of the study closure.

Adverse Events: Any serious or unexpected adverse event must be reported to the IRB Committee within 48 hours. All other adverse events should be reported within 10 working days.

Amendments: If you wish to change any aspect of this study, such as the procedures, the consent forms, study personnel, or number of participants, please submit an amendment to the IRB. All changes must be approved by the IRB Committee before they can be initiated.

You must maintain a research file for at least 3 years after completion of the study. This file should include all correspondence with the IRB Committee, original signed consent forms, and study data.

oc: Vicki S Collet, Investigator

Appendix B

Letter of Invitation

I'm reaching out to you in the hope that you might be willing to work with me on an exciting research project focused on culturally responsive teaching (CRP) and writing instruction. The research focuses on the effects culturally responsive pedagogy has on the writing skills of Native American high school students, research that may help Native student to be more successful in school and, more importantly, empower them as writers.

As a classroom teacher of Native students, you are in a unique position to help enact change in the way we engage Native students in literacy activities. As you know culturally responsive teaching is teaching that is responsive to ALL students, so the culturally responsive pedagogy utilized during the project will continue to be of benefit to you and all your students long after the research ends.

The research project will last approximately 8-9 weeks and involve one class where at least some of the students identify as Native American. I would be your partner in this project, helping you plan, grade, and implement CRP within your instruction. I would need to observe the students during instruction twice per week during that time. The goal is for this to be an enriching experience for both of us and not a burden to you.

I would love to talk more about the research project with you. Please let me know if you have an interest in knowing more. I am available to visit at your convenience.

Sincerely,

Angie Greiner

Appendix C

Participants' Consent Forms

Culturally Responsive Pedagogy's Effects on Writing Performance and Students' Attitudes about Writing for 9-12th grade Native American students

Consent to Participate in a Research Study Teacher Consent Form

Principal Researcher: Angelia C. Greiner

INVITATION TO PARTICIPATE

You are invited to participate in a research study about culturally responsive teaching practices for improving writing instruction and attitudes about writing for Native American students. You are being asked to participate in this study because you have first-hand experience teaching Native American students.

WHAT YOU SHOULD KNOW ABOUT THE RESEARCH STUDY

Who is the Principal Researcher?
Angelia Greiner is the principal researcher.

Who is the Faculty Advisor? Dr. Vicki Collet collet@uark.edu Phone: 479-575-2224

What is the purpose of this research study?

The study will explore the effects of culturally responsive pedagogy on students' writing skills and efficacy. Additionally, the study will investigate culturally responsive instructional methods.

Who will participate in this study? Approximately 2 adults and approximately 12 students

What am I being asked to do? Your participation will require the following:

You are being asked to allow the researcher to observe one of your English Language Arts classes, focusing on culturally responsive instructional practices during the class period. Observations will be limited to twice per week for approximately 9 weeks. During that time the researcher will collect instructional materials, student work samples, and audio and video record portions of lessons or student group interaction. The teacher is asked to score pre and post writing samples by her students in collaboration with the researcher and one other teacher using a rubric provided by the researcher. The teacher will be asked to provide class time for the students to complete a pre and post writer attitudinal survey, the Daly-Miller Attitude About Writing Survey, as well as write to the pre and post writing prompts provided by the researcher. It is hoped that the teacher will be willing to discuss with the researcher specific ways in which culturally responsive instruction (including texts) can be included in the teacher's regular instruction and implement these practices when possible during the study. The study will commence at the beginning of the Spring semester no later than January 30th with the study

ending no later than March 20th. The teacher is also being asked to consent to being audiotaped during any meetings with the researcher concerning the study.

What are the possible risks or discomforts?

There are no physical or psychological risks. Participation in this study is voluntary.

What are the possible benefits of this study?

Participating in the research may provide you with a chance to reflect on your teaching practices, which may prove useful as you continue to teach Native American students. Additionally, this study may help create a collective voice by which you can suggest effective changes in your high school curriculum and classroom practice in helping Native students experience greater academic success.

How long will the study last?

Participation for both students and teachers will begin no later than January 30th and last approximately 9 weeks with observations occurring twice per week. The study will end by March 20th.

Will I receive compensation for my time and inconvenience if I choose to participate in this study?

No.

Will I have to pay for anything?

No.

What are the options if I do not want to be in the study?

If you do not want to be in this study, you may refuse to participate. Also, you may refuse to participate at any time during the study. Your job will not be affected in any way if you refuse to participate.

How will my confidentiality be protected?

All information will be kept confidential to the extent allowed by applicable State and Federal law.

All information such as audio and video recordings and the collection and photographing of curriculum materials will be kept in a secure location and will not be disseminated to the public. Pseudonyms will be assigned and used throughout analysis and in any publishable documents.

Will I know the results of the study?

At the conclusion of the study you will have the right to request feedback about the results. You may contact the faculty advisor, Dr. Vicki Collet or Principal Researcher, Angelia Greiner. You will receive a copy of this form for your files.

What do I do if I have questions about the research study?

You have the right to contact the Principal Researcher or Faculty Advisor as listed below for any concerns that you may have.

Principal Researcher: Angelia Greiner

agreiner@email.uark.edu

Faculty Advisor: Dr. Vicki Collet collet@uark.edu

Office: 479-575-2224

You may also contact the University of Arkansas Research Compliance office listed below if you have questions about your rights as a participant, or to discuss any concerns about, or problems with the research.

Ro Windwalker, CIP
Institutional Review Board Coordinator
Research Compliance
University of Arkansas
109 MLKG Building
Fayetteville, AR 72701-1201
479-575-2208
irb@uark.edu

I have read the above statement and have been able to ask questions and express concerns, which have been satisfactorily responded to by the investigator. I understand the purpose of the study as well as the potential benefits and risks that are involved. I understand that participation is voluntary. I understand that significant new findings developed during this research will be shared with the participant. I understand that no rights have been waived by signing the consent form. I have been given a copy of the consent form.

Participant's Signature	Date	

Culturally Responsive Pedagogy's Effects on Writing Performance and Students' Attitudes about Writing for 9-12th grade Native American students Research Study Administrator Consent Form

Principal Researcher: Angelia C. Greiner

INVITATION TO PARTICIPATE

You are invited to participate in a research study about culturally responsive teaching practices for improving writing instruction and attitudes about writing for Native American students. You are being asked to give consent for this study because you have first-hand experience working with Native American students as the building administrator and instructional leader in the building in which the study will take place.

WHAT YOU SHOULD KNOW ABOUT THE RESEARCH STUDY

Who is the Principal Researcher?
Angelia Greiner is the principal researcher.

Who is the Faculty Advisor? Dr. Vicki Collet collet@uark.edu Phone: 479-575-2224

What is the purpose of this research study?

The study will explore the effects of culturally responsive pedagogy on Native American students' writing skills and efficacy. Additionally, the study will investigate culturally responsive instructional methods.

Who will participate in this study? Approximately 2 adults and approximately 12 students in one English Language Arts classroom

What am I being asked to do? You are consenting to the following:

You are being asked to allow the researcher to observe one teacher's English Language Arts class, focusing on culturally responsive instructional practices. Observations will be limited to twice per week for approximately 9 weeks. During that time the researcher will collect instructional materials, student work samples, and audio and video record portions of lessons or student group interaction. The classroom teacher is also asked to score pre and post writing samples by her students in collaboration with the researcher and one other teacher in the building using a rubric provided by the researcher. The teacher will be asked to provide class time for the students to complete a pre and post writer attitudinal survey, the Daly-Miller Attitude About Writing Survey, as well as write to the pre and post writing prompts provided by the researcher. It is hoped that the teacher will be willing to discuss with the researcher specific ways in which culturally responsive instruction (including texts) can be included in the teacher's regular instruction and implement these practices when possible during the study. The study will commence at the beginning of the Spring semester no later than January 30th with the study ending no later than March 20th. The teacher is also being asked to consent to being audiotaped during any meetings with the researcher concerning the study. You are being asked to allow one additional teacher to score student post writing samples in collaboration with the

researcher and the classroom teacher whose class is a part of the study using a rubric provided by the researcher. The scoring of post writing essays will commence in March with a collaborative training session lasting approximately 45 minutes to review the prompt and calibrate scoring using a rubric provided by the researcher.

What are the possible risks or discomforts?

There are no physical or psychological risk to participants. Participation in this study is voluntary.

What are the possible benefits of this study?

Giving consent for the research may provide you with a chance to reflect on teaching practices in your building, especially as they relate to writing instruction which may prove useful in the education of Native American students. Additionally, this study may help create a collective voice by which you can suggest effective changes in your high school curriculum and classroom practice in helping Native students experience greater academic success.

How long will the study last?

Participation for both students and teachers will begin no later than January 30th and last approximately 9 weeks with observations occurring twice per week. The study will end by March 20th.

Will I receive compensation for my time and inconvenience if I choose to participate in this study?

No.

Will I have to pay for anything?

No.

What are the options if I do not want to be in the study?

You may choose to revoke permission for the study at any time. No negative consequences will result from such a decision.

How will my confidentiality be protected?

All information will be kept confidential to the extent allowed by applicable State and Federal law.

All information such as audio and video recordings and the collection and photographing of curriculum materials will be kept in a secure location and **will not be** disseminated to the public. Pseudonyms will be assigned and used throughout analysis and in any publishable documents.

Will I know the results of the study?

At the conclusion of the study you will have the right to request feedback about the results. You may contact the faculty advisor, Dr. Vicki Collet or Principal Researcher, Angelia Greiner. You will receive a copy of this form for your files.

What do I do if I have questions about the research study?

You have the right to contact the Principal Researcher or Faculty Advisor as listed below for any concerns that you may have.

Principal Researcher: Angelia Greiner

agreiner@email.uark.edu

Faculty Advisor: Dr. Vicki Collet collet@uark.edu
Office: 479-575-2224

You may also contact the University of Arkansas Research Compliance office listed below if you have questions about your rights as a participant, or to discuss any concerns about, or problems with the research.

Ro Windwalker, CIP
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109 MLKG Building
Fayetteville, AR 72701-1201
479-575-2208
irb@uark.edu

I have read the above statement and have been able to ask questions and express concerns, which have been satisfactorily responded to by the investigator. I understand the purpose of the study as well as the potential benefits and risks that are involved. I understand that participation is voluntary. I understand that significant new findings developed during this research will be shared with the participant. I understand that no rights have been waived by signing the consent form. I have been given a copy of the consent form.

Participant's Signature	Date	

Culturally Responsive Teaching Practices for 9-12th grade Students Participation in a Research Study Student & Parent Consent Form

Principal Researcher: Angelia C. Greiner

INVITATION TO PARTICIPATE

You are invited to participate in a research study about culturally responsive teaching practices.

WHAT YOU SHOULD KNOW ABOUT THE RESEARCH STUDY

Who is the Principal Researcher?
Angelia Greiner is the principal researcher.

Who is the Faculty Advisor? Dr. Vicki Collet collet@uark.edu Phone: 479-575-2224

What is the purpose of this research study?

The study explores culturally responsive instructional methods and their effects on student learning.

Who will participate in this study? Approximately 2 adults and approximately 12 students

What am I being asked to do? Your participation will require the following:

You are being asked to have your class work analyzed as part of this study. In addition, you are being asked to allow yourself to be video and audio taping during class. You may be invited to participate in a brief interview with the researcher, which would be audio recorded.

What are the possible risks or discomforts?

There are no physical or psychological risks. Participation in this study is voluntary.

What are the possible benefits of this study?

Participating in the research may provide you with a chance to reflect on the types of classroom practices that are particularly meaningful to you. This study may provide the opportunity to suggest effective changes in your high school curriculum and school experience.

How long will the study last?

Participation will be limited to approximately nine weeks. The study will begin no later than January 30th and end by March 20th. Observations that include audio and/or video recording will occur during classroom observation with the researcher. The researcher will observe the class no more than twice per week for nine weeks.

Will I receive compensation for my time and inconvenience if I choose to participate in this study?

No.

Will I have to pay for anything? No.

What are the options if I do not want to be in the study?

If you do not want to be in this study, you may refuse to participate. Also, you may refuse to participate at any time during the study. Your grade and your class participation will not be affected in any way if you refuse to participate.

How will my confidentiality be protected?

All information will be kept confidential to the extent allowed by applicable State and Federal law.

All information such as audio and video recordings, the collection and photographing of curriculum materials, student writing and survey responses will be kept in a secure location and will not be disseminated to the public.

Pseudonym will be assigned and used throughout analysis and in any publishable documents.

Will I know the results of the study?

At the conclusion of the study you will have the right to request feedback about the results. You may contact the faculty advisor, Dr. Vicki Collet or Principal Researcher, Angelia Greiner. You will receive a copy of this form for your files.

What do I do if I have questions about the research study?

You have the right to contact the Principal Researcher or Faculty Advisor as listed below for any concerns that you may have.

Principal Researcher: Angelia Greiner

agreiner@email.uark.edu

Faculty Advisor: Dr. Vicki Collet

collet@uark.edu Office: 479-575-2224

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I have read the above statement and have been able to ask questions and express concerns, which have been satisfactorily responded to by the investigator. I understand the purpose of the study as well as the potential benefits and risks that are involved. I understand that participation is voluntary. I understand that significant new findings developed during this research will be shared with the participant. I understand that no rights have been waived by signing the consent form. I have been given a copy of the consent form.

Student Signature	Date	
Parent/Guardian Signature	Date	

Appendix D

Pre/Post Essay Prompts

Intelligent Machines

Many of the goods and services we depend on daily are now supplied by intelligent, automated machines rather than human beings. Robots build cars and other goods on assembly lines, where once there were human workers. Many of our phone conversations are now conducted not with people but with sophisticated technologies. We can now buy goods at a variety of stores without the help of a human cashier. Automation is generally seen as a sign of progress, but what is lost when we replace humans with machines? Given the accelerating variety and prevalence of intelligent machines, it is worth examining the implications and meaning of their presence in our lives.

Read and carefully consider these perspectives. Each suggests a particular way of thinking about the increasing presence of intelligent machines.

Perspective One

What we lose with the replacement of people by machines is some part of our own humanity. Even our mundane daily encounters no longer require from us basic courtesy, respect, and tolerance for other people.

Perspective Two

Machines are good at low-skill, repetitive jobs, and at high-speed, extremely precise jobs. In both cases they work better than humans. This efficiency leads to a more prosperous and progressive world for everyone.

Perspective Three

Intelligent machines challenge our long-standing ideas about what humans are or can be. This is good because it pushes both humans and machines toward new, unimagined possibilities.

Essay Task

Write a unified, coherent essay about the increasing presence of intelligent machines. In your essay, be sure to:

- clearly state your own perspective on the issue and analyze the relationship between your perspective and at least one other perspective
- · develop and support your ideas with reasoning and examples
- · organize your ideas clearly and logically
- · communicate your ideas effectively in standard written English

Your perspective may be in full agreement with any of those given, in partial agreement, or completely different.

The Source of Innovation

Oftentimes our society praises individuals as the forces responsible for our greatest achievements. Whether it's the CEO of a top corporation on the front page of a magazine or a civil rights activist of a past decade with her face on a postage stamp, these individuals often receive a great deal of commendation. But is this praise warranted? Not only are other individuals often involved in great innovative endeavors, but large groups of people also serve to create change in our society. Research institutes, global corporations, and grass roots organizations also stimulate innovation. Does the best innovation come from amazing individuals or from great organizations? Does our society place too much emphasis on the individual and fail to recognize the role that everyone plays in innovative progress?

Read and carefully consider these perspectives. Each suggests a particular way of thinking about how innovations develop.

Perspective One

The great minds of individuals are responsible for some of society's greatest innovations. Without exceptional individuals, many of our greatest human achievements would not exist.

Perspective Two

No one innovates in a vacuum. Individuals by nature must rely on the research, thoughts, and discoveries of others in order to make progress.

Perspective Three

Groups of people working together lead to greater innovation and change. Many minds working together are more conducive to ideas and progress than an individual working alone.

Essay Task

Write a unified, coherent essay about the increasing presence of intelligent machines. In your essay, be sure to:

- clearly state your own perspective on the issue and analyze the relationship between your perspective and at least one other perspective
- · develop and support your ideas with reasoning and examples
- · organize your ideas clearly and logically
- · communicate your ideas effectively in standard written English

Your perspective may be in full agreement with any of those given, in partial agreement, or completely different.

Appendix E

Essay Scoring Rubric

	Ideas & Analysis	Development & Support	Language Use
Score 4 Demonstrates effective skill in writing to address prompt	Generates a response that is critically engaging with varied perspectives including their own. Insightful, includes thoughts on implications, tensions, and/or complexities within the topic. Demonstrates in depth thought of topic.	Ideas support claims, deepen insight, broaden context. Enriching details. Integrates ideas thoughtfully. Ideas are skillfully organized.	Effective, vivid word choice. Sentence structure is consistently clear and varied. Voice is clearly present and effective. Minor errors in mechanics do not impede understanding.
Score 3 Demonstrates developed skill in writing to address prompt	Generates a response that includes a perspective on the topic that may be their own or someone else's. Responds to the prompt with thoughtful analysis and clear understanding of topic. Attempts to touch upon the implications, complexities and/or tensions related to the topic.	Ideas support claims and clarify meaning. Clear reasoning illustrates significance of the topic. Adequate elaboration of ideas.	Word choice is accurate and provides clarity of ideas. Voice is present. Sentence structure is somewhat varied for interest. Mechanical errors may be present but do not impede understanding or flow of thoughts.
Score 2 Demonstrates developing skill in writing to address prompt	Responds with a perspective on the topic that may be their own or someone else's, but the perspective(s) may not be clear. An attempt is made at analysis but does not introduce any implications, other perspectives, tensions or complications related to the topic. Demonstrates some understanding of the topic.	There is an attempt to support ideas with claim but they are weak or irrelevant. The grouping of ideas may be disjointed or unclear. Circular writing (repetition of ideas) may be present.	There is clarity of ideas in some areas of the writing. Sentence structure may be error free but lack variation for interest -leading to some flatness. Voice is inconsistent and/or weak. There may be some distracting errors in mechanics.
Score 1 Needs improvement in writing to address prompt	Attempts to generate a response to the prompt but perspective is not clear or absent. Ideas and analysis offered may be simplistic, lacking in depth, clarity, or relevance. Demonstrates little or no understanding of the topic and/or off top	Supported ideas may be unclear, unconnected, or missing. Circular writing may be present. Little or no elaboration. This may be a response that is off topic or only opinion based.	Word choice may be inaccurate or simplistic. May be multiple mechanical errors impeding clarity and flow. No voice. Overall impression is flat.

Appendix F

Writing Apprehension Test (WAT)

Directions: Below are twenty statements that people sometimes make about themselves. Please indicate whether or not you believe each statement applies to you by marking whether you:

Strongly Disagree = 1; Disagree = 2; are Neutral = 3; Agree = 4; Strongly Agree = 5
1. I avoid writing.
2. I have no fear of my writing being evaluated.
3. I look forward to writing down my ideas.
4. My mind seems to go blank when I start to work on a composition.
5. Expressing ideas through writing seems to be a waste of time.
6. I would enjoy submitting my writing to magazines for evaluation and
publication.
7. I like to write my ideas down.
8. I feel confident in my ability to clearly express my ideas in writing.
9. I like to have my friends read what I have written.
10. I am nervous about writing.
11. People seem to enjoy what I write.
12. I enjoy writing.
13. I never seem to be able to clearly write down my ideas.
14. Writing is a lot of fun.
15. I like seeing my thoughts on paper.
16. Discussing my writing with others is an enjoyable experience.
17. It is easy for me to write good compositions.

 _18. I don't think I write as well as most other people do.
 _19. I don't like my compositions to be evaluated.
_20. I am no good at writing.

Scoring: To determine your score on the WAT, complete the following steps:

Step 1. Add scores for items 1, 4, 5, 10, 13, 18, 19, and 20

Step 2. Add the scores for items 2, 3, 6, 7, 8, 9, 11, 12, 14, 15, 16, 17

Step 3. Complete the following formula:

WAT = 48 - Total from Step 1 + Total from Step 2

Your score should be between 20 and 100. If your score is below 20 or

above 100, you have made a mistake in computing the score.

The Daly-Miller Test

How to Calculate and Read Your Score

To determine your score, first, add together all point values for positive statements (PSV) only. Second, add together all point values for negative statements (NSV) only. Then place those scores into the following formula to discover your Writing Apprehension (WA) score:

$$WA = 78 + PSV-NSV$$

PSV questions = 1; 4; 5; 7; 8; 13; 16; 18; 21; 22; 24; 25; 26

NSV questions = 2; 3; 6; 9; 10; 11; 12; 14; 15; 17; 19; 20; 23

Writing Apprehension scores may range from 26 to 130. The following general observations may be made about scores in certain ranges, and only general observations, but note that the further a score is from the mean of 78, the more likely the description of a range of scores will apply.

Range 60-96:

Most students who score in this range do not experience a significantly unusual level of writing apprehension. However, the closer the score to the limits of this range--that is, scores close to 60 and 96--the more apt you are to experience feelings or behaviors characteristic of the next range of scores. A score of 78 places you as a writer on the mean, which is the middle point between two extremes, or conditions recorded in a large sample of students. The closer you are to the mean, the better. Nonetheless, you should be alert to the fact that you may manifest signs of writing apprehension in performing certain writing tasks or in writing with varying purposes for different types of audiences. While you may not experience harmful apprehension while writing an expository essay, for example, you may experience excessive apprehension writing a placement essay for faceless evaluators or in writing an in-class essay exam for a history professor.

Range 97-130:

A score in this range indicates that you have a low level of writing apprehension. The higher your score in this range, the more troublesome your lack of apprehension. You may not be motivated to listen or read carefully your assignments, to pay attention to due dates, to remember criteria for evaluation, or to act upon recommendations that might improve subsequent drafts of your essays. You do not fear writing or evaluation of writing, but you may not be adequately motivated to work on your writing.

Range 26-59:

A score in this range indicates you have a high level of writing apprehension. The lower your score in this range, the more severe your anxiety. You are nervous about writing and fearful of evaluation. In fact, research shows that those who score extremely low in this range will not take a course, select a major, or accept a job they know involves writing.

How to Understand Your Score

If your score indicates either low or high levels of writing apprehension, then look closely on the questionnaire to see if you can determine which component(s) of the writing process you need to more closely monitor. Most problems of this kind fall into three main categories:

- * evaluation apprehension,
- * stress apprehension, and
- * product apprehension.

When these specific components of writing apprehension are cross-referenced with your scoring level information, you will receive further insight into your particular attitudes toward writing and toward the evaluation of your writing.

Student writers who experience evaluation apprehension expect to do poorly in composition courses even before the courses begin. You feel as though the teacher will give you a poor grade because you cannot express your ideas clearly. As a result, you often claim to be nervous about writing, dislike showing or talking about your writing even to friends, and do not like seeing your ideas expressed in writing. If you are evaluation apprehensive you believe other students write more clearly and, as a result, receive higher grades than you do.

Questions which you should examine to help you determine if you are evaluation apprehensive are 2, 5, 9, 11, 12, 13, 14, 16, 18, 19, 20, 22, 23, 24, and 25.

Those student writers who encounter stress apprehension experience fear early in the writing process, sometimes even before they have written anything. You often procrastinate and report that you do not look forward to beginning a piece of writing, even one required for a course. You experience writer's block. Your hands may cramp soon after you begin a timed writing exercise. Once you are able to begin writing, you claim to run into great difficulty organizing your thoughts.

Questions which you should examine to help you determine if you are stress apprehensive are 1, 3, 7, 10, 15, 21, and 26.

For those students who experience product apprehension, the problem does not exist at a particular stage in the writing process (as with evaluation apprehension) or with a particular skill such as invention (as in stress apprehension). Rather, product apprehensives claim that expressing ideas through writing is a waste of time. Such student writers do not clearly envision an audience or a purpose for academic writing. If you are one of these writers you tend to compose a single draft only, yet you feel uneasy about submitting as essay for a grade. Questions corresponding to product apprehension are 6, 8, and 17.

Diagnosing your writing process problems will not automatically alleviate them, of course. But the information gleaned from the Daly-Miller questionnaire allows you to anticipate your particular needs and to devise strategies for reducing stress that often inhibits the development of cognitive skills.

Source: From John Daly and Michael Miller's, "The Empirical Development of an Instrument to Measure Writing Apprehension." Research in the Teaching of English 12 (1975): 242-49. Adapted by Michael W. Smith in Reducing Writing Apprehension (Urbana: NCTE, 1984).

Open Response: Please respond in writing to the following questions.

- 1. Have you experienced a writing assignment in the past year that you enjoyed? If so, what was the assignment and why did you find it enjoyable.
- 2. How do you see yourself as a writer?
- 3. What aspect of writing do you find particularly frustrating?

Post Survey Open-Ended Questions:

- 1. Was your experience with the writing assignments enjoyable during the current unit (Diary of a Part-Time Indian)? If yes, why did you find the writing enjoyable?
- 2. How do you see yourself as a writer after this unit?
- 3. Is there an activity that you found enjoyable or informative from this unit? If yes, please explain.
- 4. After reading *The Absolute True Diary of a Part-Time Indian*, what is your view on the importance of reading and writing in your own life?

Appendix G

CRP & Native Student Observance Form

Environment	Teacher	Instruction	Students
70/30 authentic printrich environment Student Work displayed	Explicitly validate/ affirm students	Opportunities for collaboration	Facial expression
Learning Stations: Inquiry-Problem-Based	Hold students accountable	Class discussion w/multiple perspectives	Physical gestures
Culturally Colorful The 5 senses	Hold high expectations for students/rigor	Practice social appropriateness (code-switching)	Tone/volume of voice
Furniture Arrangement optimal for movement/ presentation /collaboration	Actively call out inappropriate behavior	Incorporate Physical movement	Participation in activities
Use and Display of diverse texts (Native voices)	Give students voice	Inquire- based/problem solving	Engagement with peers,
Student Centered	Advocate for students	Utilize culturally diverse, relevant texts	Accepting/Tolerant/ respectful of others
Supportive Sentence stems, anchor charts, etc.	Acknowledge & Respect diversity/Avoid deficit thinking	Diverse Learning Styles Role playing, Story Telling, music, drama, dance	
Parents/Care Takers are welcome (may be guest speakers)	Model strategies/concepts	Multi-modal texts	
High Expectations for students Can Do atmosphere	Call on students by name	Infuse experiential learning ie. Nature	
Productive talk encouraged	Mindful of microaggressions	Place-Based connections	
Warm and welcoming community		Multiple ways to contribute one's voice	
		Provide time for reflection	
		Interdisciplinary connections	

Appendix H

Schedule of Observations and Class Activities

$\mathbf{Observe} = \mathbf{O}$

	Monday	Tuesday	Wednesday	Thursday	Friday
Week 1 Jan. 6th	First Day of new semester: Shortened classes	Instruction on commas	ACT practice (commas)	ACT practice (commas)	Make up work Day.
Week 2 Jan. 13th	ACT practice English passage O	ACT practice English passage	WAT survey/ Essay (pre- assess) O	Essay (pre- assess)	Make up work Day.
Week 3 Jan. 20th	MLK/ NO SCHOOL	READ: How to Mark a Book - Whole Class Journaling	How to Mark a Book / Visual annotation graphic notes w partner - illustrate a take-away Journaling O	Video: Danger of a Single Story and journal writing Journaling	Students out for away basketball game/ Make up day for some
Week 4 Jan. 27th	Video: Sherman Alexie: Interview part 1 w/Think, pair, share Journaling	Video: Sherman Alexie: Interview part 2 w/ whole class discussion Journaling O	Reading w/ partner Alexie's "Superman" essay (annotating w/visuals)	Superman Essay: complete ACT type questions over reading of essay	Reading Chapter 1 Diary of Part time Indian whole class Journaling O
Week 5 Feb. 3rd	Reading chapter 2 and 3	Journaling over C. 2 or. C.3 then reading Chapter 4	Snow Day	Reading through chapter 5 and journaling	ACT Review (Test at school Sat.)/
Week 6 Feb. 10th	Reading chapter 6 and 7 Journaling	Similes & Metaphors in anchor text	Reading chapter 8 and Journaling O	Reading Art - The Mural: lesson & Writing Journaling	Reading chapter 9 and 10 Journaling

				0	
Week 7 Feb. 17th	No School	Writing with Imagery - Rezball video & Descriptive writing O	Army Recruiter Guest Speaker	Reading chapter 11 Visual Journal entry and Opinion on book Journal	Reading through chapter 13
Week 8 Feb. 24th	Reading chapters 14- 17 Journaling	Reading chapters 18- 20 Journaling O	Gallery Walk & writing Journaling/ Short write O	Reading chapters 21- 23	Reading C.23- 24 and Journaling
Week 9 March 2nd	School Computer survey/ no instruction	Reading C. 25-26 O	Reading C. 27 Journaling	Reading C. 28 Journaling O	Partner up and prepare for Socratic discussion with questions
Week 10 March 9th	Working with partners on discussion questions	Socratic Discussion Day O	Post Survey and Post Assessment Essay	Post Assessment Essay O	No School - Parent/Tea cher Conf
Spring Break	Spring Break	Spring Break	Spring Break	Spring Break	Spring Break

Appendix I

Culturally Responsive Unit

Learning Goals and Objectives Framework

STAGE 1: Goals, Essential Questions, and Objectives

Established Goals:

- Students will make personal connections to texts (narratives, art, their own writing).
- Students will make connections between and among multimodal texts.
- Students will be able to reflect on their own experiences and their own sense of self.
- Students will recognize themes that are shared human experiences.
- Students will find their own voice both orally and in writing.
- Students will listen to and respect the perspectives of others.
- Students will work respectfully and collaboratively with others.

Essential Questions:

What is the purpose of stories?

Why is telling our own stories important?

How do writers use language to create meaning?

How does one's culture, environment and personal experience shape an individual's identity?

Is success in life an individual or collaborative effort or both?

What is the value of human interaction?

Understandings & Knowledge:

- Understand the power of storytelling, the bias of omission, and the danger of the single story
- Understand that a 'text' comes in many forms and that texts used outside of school are valid forms of communication ie... texting is a form of both reading and writing.
- Understand that a text can have more than one meaning and that meaning is constructed by an individual's experiences and perspectives.
- We tell stories in order to connect, heal, process and reflect.

- Language can be used in different ways to create different meanings.
- Define culture
- Art and writing are forms of human expression with no right or wrong interpretation of meaning

Standards:

Skills: Students CAN...

- *analyze* substantive, complex expository works of literary nonfiction as well as a diverse spectrum of stories, poems, plays, novels and other multimodal literacies for understanding and use relevant evidence to support their analysis.
- *determine* how multiple themes or ideas combine and intertwine to produce a complex narrative or explanation as well as evaluate the premises, arguments, and rhetoric present in a text.
- *demonstrate* listening skills by synthesizing the comments and claims of others, responding thoughtfully when encountering diverse perspectives, and by skillfully presenting findings both orally and in writing.
- recognize forms of bias, identifying tone, and making inferences.
- *engage* in collaborative reading and writing tasks to understand and produce projects that demonstrate understanding,
- manipulate elements of language for effect including syntax and punctuation for clarity and meaning.
- *Identify* and *Understand* the format of the English and Reading sections of the ACT including Comma rules for *ACT* (as well as other rules in punctuation specific to the test) and common sentence stems for questioning reading passages.
- Write an effective response to a prompt that is clear, synthesizes information and ideas effectively and utilizes personal voice for interest and style.

Appendix J

Reading a Painting Handout

"READING A PAINTING" Activity	Name
Title	Artist
MAKING A CONNECTIONS	
What do you find particularly interesting about the image	e?
How does the image make you feel?	
What other thoughts do you have about the image?	
	how does the image relate to your reading of Alexie's from the image and general information from the text
Please write your anal any additional though	rysis and hts in your
any addition journal!	