

# **The eJournal of Indigenous Early Childhood Education**

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## **eJIECE**

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**“You are never too little to understand your culture”: Strengthening early childhood teachers through the Diné Institute for Navajo Nation Educators**

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**“You are never too little to understand your culture”: Strengthening early childhood teachers  
through the Diné Institute for  
Navajo Nation Educators**

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There is international and widespread recognition that early childhood education must be fully inclusive and based on the language, culture, and epistemology of local Indigenous communities (Kitson, 2010). Early childhood education (ECE) programs can only deliver on the promises of culturally responsive schooling (Castagno & Brayboy, 2008; McCarty & Lee, 2014) when “staff members understand cultural expectations, relationships, and the subtleties of communication, including non-verbal communication” within the community (Kitson & Bowes, 2010, p.86). Furthermore, we know that “culture affects the ways children respond when entering early childhood settings” (Kitson & Bowes, p. 83; see also Ball & Pence, 2000). But all too often, educational programs are developed and implemented as if culture either doesn’t matter or is universally shared. In this article, we offer an alternative example. Specifically, we describe one effort to strengthen early childhood teaching in schools on the Navajo Nation. We center the work of two teachers (the second and third authors of this manuscript), and we situate their work within a program attempting to support teachers in the development of academically rigorous, culturally responsive curriculum across the Navajo Nation. Through these teachers’ narratives, we suggest that self-determination and nation-building ought to be the guiding principles for early childhood efforts in – and especially *with* and *by* – Indigenous communities.

**The DINÉ: Strengthening teaching in Navajo schools**

The Diné Institute for Navajo Nation Educators (DINÉ) is a partnership between Northern Arizona University (NAU) and Navajo schools aimed at strengthening teaching in schools serving Diné and other Indigenous students. The DINÉ was developed after a group of teachers from Navajo schools approached NAU with their idea of starting an institute modeled after the Yale National Initiative©. The teachers had been participating in the Yale National Initiative© since 2011 and were ready to lead a similar professional development effort closer to home that would serve many more of their colleagues. The requisite planning and partnership building began in 2016, and the DINÉ welcomed its first Teacher Fellows in 2018.

All the authors of this article are affiliated with the DINÉ, but their affiliations are quite distinct. Angelina Castagno is the Director of the DINÉ, and she previously served as the founding Planning Director. She is a White, non-Indigenous person who was brought into the planning of the Institute because of her research expertise in Indigenous education, teacher development, and educational policy. Tiffany Tracy and Desiree Denny are both teachers who participated in the DINÉ and served, with other colleagues, as teacher leaders. Tiffany Tracy represents the Tł'ízi lání (Many Goats) clan, born for the Kinyaa'áanii (Towering house) clan. Her maternal grandfather's clan is Nóóda'i dine'é Táchiiníi (Ute People of the Red Running into the Water) and her paternal grandfather's clan is Tábaqhá (Water's Edge). She is a second-grade teacher at a public school on the Navajo Nation, about one hour from her home community of Fort Defiance. Desiree Denny represents the To'aheedliini (Two Waters that Flow Together) clan, born for the To'dizhoni (Salt Water clan). Both her maternal and paternal grandfathers' clans are To'tsohni (Big Water). She is originally from the Lukachukai Community, and she now teaches Kindergarten at an elementary school about 90 minutes away on the Navajo Nation. Breanna Davis represents the Ma'iideeshgiizhni (Coyote Pass - Jemez) clan, born for the Tł'áashchí'í (The Red Bottom People) clan. Her maternal grandfather's clan is Tótsohni (The Red Bottom People) and her paternal grandfather's clan is the Lók'aa' dine'é (Reed People). She is from the Many Farms community on the Navajo Nation, and currently works with the DINÉ as an undergraduate student researcher at NAU. Hosava Kretzmann is a graduate student researcher with the DINÉ. He earned his Bachelor's degree from Fort Lewis College and is currently pursuing his Master's Degree at NAU in Public Health, with a focus on Indigenous Health. He is an enrolled member of the Navajo Nation, and is the son of Homana Pawiki. His Hopi clans are Bow (Aawatwungwa) and Spider (Kookyangwungwa).

The DINÉ professional development model emphasizes (1) multi-grade and cross-content-area collaboration among teachers, (2) teacher-developed instructional units, and (3) culturally responsive approaches to STEM teaching. These innovations are particularly critical for teacher professional development efforts in Native-serving schools. Because of the rural context and large geographic distances between schools/communities on the Navajo Nation, teachers rarely have access to professional development (PD), and what they do receive is generally district-led, short-term, and not content-specific. Teachers need and crave professional learning spaces that are collaborative, intellectually stimulating, and relevant. The DINÉ model aims to provide that space; and we take collaboration even further by structuring seminar groups with teachers from diverse grade levels, content areas, and schools. Furthermore, most teachers in reservation-based schools are constrained by *either* lack of curricular resources *or* mandates to use one-size-fits-all, scripted curriculum provided by their districts. In both cases, it can be challenging for teachers to fully engage culturally responsive instructional practices. The DINÉ model addresses this challenge by supporting teachers in the development of self-authored instructional units that are aligned to state content standards and Diné cultural standards. The DINÉ model embodies many best practices of teacher PD: it focuses on content knowledge, is long-term, engages active learning strategies, and is aligned to local and state standards (Archibald et.al., 2011; Benilower, Heck, & Weiss, 2007; Kisker, 2015; Penuel, 2007; Penuel et.al., 2009; Penuel et.al., 2015). High teacher turnover is a barrier to maximizing the impacts of PD (Shear & Penuel, 2010), and teacher turnover is an especially significant problem across Indian Country. But we also know that collaborative approaches are particularly well-suited for Indigenous contexts (Cronin & Ostergren, 2007; McCarty et.al., 1997; Parker & White, 2015), and that culturally responsive curriculum produces more engagement and learning (Castagno & Brayboy, 2008).

Linda Smith and her colleagues (2018) pose three questions for Indigenous education broadly, and we think these questions are compelling for those of us who work in early childhood settings. The questions are:

1. Who is making the call?
2. Who is controlling the way the call is articulated?
3. What Indigenous capacity is being developed, and how is that being sustained over the long term?

In the case of the DINÉ, the call was made by K12 teachers from a handful of communities across the Navajo Nation. It was their interest, commitment, and perseverance that initiated the program. Our work was self-determined and guided by the desire of teachers – who are also parents, grandparents, and community members – to impact their own communities. Because the DINÉ is teacher-driven, the call was and remains articulated by the teacher leaders in the DINÉ. It is not, a perfect system because the partnership also requires the guidance and buy-in of other constituents (such as superintendents and university faculty), but we are constantly and consistently reminding one another that this is a teacher-driven initiative.

A full description of the DINÉ is not possible within the constraints of this article, but we hope the discussion in the sections that follow provides additional insight into the program.

### **Early Childhood Education in/by/with Indigenous communities**

Our work builds on others' who have noted that early childhood education in formalized school settings is a relatively recent phenomenon among Indigenous (and other) communities. The push to expand schooling to younger and younger children could be viewed as an effort to simply advance the assimilatory function of schools (Lomawaima & McCarty, 2006; Spring, 2001). We agree with researchers and community leaders who have offered pointed critiques of the push to extend schooling to younger and younger children *if and when* those initiatives are not led by Indigenous communities themselves, *and if and when* those initiatives are in conflict with Indigenous communities' goals and aspirations for their own children (Prochner, 2004; Romero-Little, 2010). This is why we rely on the guiding principles of self-determination and nation-building in our efforts to strengthen early childhood education in Navajo schools. Romero-Little (2010) offers the following insight:

The principle of cultural self-determination must be central to the design of any educational program for the diverse Indigenous cultural groups in our nation. That means that communities must consider what constitutes a culturally appropriate early education for their children; they must be clear about their beliefs and socialization practices; and they must consider whether anything needs to be modified in order to prepare their children more successfully for their eventual entry into the society's schools. (p. 4)

Instead of thinking about early childhood efforts *in* Indigenous communities, we should be thinking about early childhood efforts *with*, and ultimately *by*, Indigenous communities.



The DINÉ is a partnership *with* Indigenous communities and, specifically, with a Native Nation. But the core work of the DINÉ is engaged *by* teachers themselves, as is evidence in the following examples.

In 2018, Tracy participated in the DINÉ and created a curriculum unit for implementation in her classroom. She focused on students' understanding of where food comes from and on being self-sufficient. This included cultural teachings of raising a dá'ák'eh (corn field). Her school has a garden that she had been working for the past two years, but she noticed a clear difference in 2018 as a result of the curriculum she developed through the DINÉ. *[F]or the past two years, we've planted and had some success but this year with the unit implemented as well as the activities, I'm happy to say that the garden looks really well with the corn growing very strongly, as well as the waffle style layout of it. I attribute that to the students' knowledge and excitement coming from the [curriculum] unit itself...[A]ll the students in my class that were involved enjoyed planting, hearing the stories, and having people come out to talk to them, as well as being a part of creating their own public service announcement...[T]hey had to go tell someone in the community about how a garden keeps them healthy mentally, physically, and spiritually...In their groups of three, there were roles each had to play, one being a cameraman, one who made sure they followed the script, and lastly the person giving the announcement...It brought tears to my eyes seeing how beautiful some turned out to be, and to see them work together and having fun with it.*

Tracy aligned her curriculum unit to the Common Core State Standards and the Department of Diné Education standards. Her curriculum encompassed writing, reading, math, social studies, and science. She explained the academic and cultural elements of her unit in this way: *The kids were excited and surprised with how much math was involved with measuring, using a ruler, as well as measuring cups. There was also science included with the plant life cycle, as well as some social studies with cardinal directions. So, I was able to integrate writing, reading, math, and science in my curriculum unit, as well as the Diné cultural standards by using Diné language, the k'é affiliation, and some of the cultural teachings from the dá'ák'eh.*

Tracy's curriculum was impactful because it was interdisciplinary and deeply connected to her students' lives. Denny also developed a curriculum unit that she knew would be meaningful for her Kindergarten students. She knew her students needed a strong focus on reading and writing, but she wanted to try something new. Her primary focus was keeping her students interested by including poetry and writing on a topic to which they could relate – sheep. She organized her curriculum unit around sheep-related poems



from the classic Mother Goose Collection. *Most of my students struggle with their attention span so having something other than a teacher-led lesson heighten their interests... When I started most of the students were clueless about what I expected from them and it was difficult for them to get anything written; however after seeing the first two finished products, they were more involved with the completion of their own poems. Every week my students wanted to start on a new poem. They really enjoyed having something to say about their flocks and their own experiences. I notice that the students were more involved with the drawing they had to do that reflected their words and their ideas. They were so engaged that they didn't notice family members or other staff members coming into the classroom. They were proud to show off their work and explain what they were drawing in their own words. They told stories of grandmothers, grandfathers, aunties, and silly uncles. They lit up with excitement when they talked about their own livestock – names and humorous situations they got into. What I noticed most was how the boys in my class really got into their stories and how they tried to explain their poems... They performed way better than I expected. They used academic vocabulary to share personal experiences from words they heard and wrote. Denny was able to help her young students articulate ideas, stories, and experiences both verbally and in writing. Just as Tracy noticed a change in the school garden, so too did Denny notice a change in her students' growth.*

### **One size does not fit all**

There are at least three ways that early childhood educators need to think about resisting the tendency to standardize our initiatives. The first is to know that there are over 550 federally recognized tribes in the United States, and that every Native Nation and Indigenous community has their own history, culture, language, and leaders. Educators and researchers have a tendency to take a program or model that is working in one community and simply transfer it to another. Instead, we must understand and be guided by the uniqueness of Native Nations and Indigenous communities when considering ECE initiatives.

The second point we want to make about one size not fitting all is that there is actually very little research on early childhood efforts and best practices for and with Indigenous children, so we should be cautious about assuming that what we think we know about best practices actually applies in every community and every context. Niles and his colleagues (2007) note that although there is a robust literature on best practices and evidence-based early childhood programs that have clear short and long term positive impacts on children, virtually none of this literature includes Indigenous children. Therefore, research gives “little support that they should be considered either best practice or evidence-based models for Indigenous communities” (Niles, p. 111). These researchers go on to note that “despite this, researchers and policymakers have targeted Indigenous children as a population that could benefit from such programs” (p. 112). The tenets of cultural responsiveness help de-center our assumptions about “best practice” as a one-size-fits-all truth:

In many Indigenous communities, best practice is more complex than reading and math levels. The social roles in Indigenous communities are multifaceted. Personal strength is derived from knowing one's culture, the basis for identity. Identity is strongly associated with family roles, relationships, and responsibilities (Paranjpe 1998; Smith 1999)...Indeed, working with Indigenous communities requires knowledge of what it means to be part of an Indigenous population (Niles, p. 112).

This is not to say that these mainstream programs are not beneficial for Indigenous youth and communities. But it is to say that we don't actually know if they are beneficial in Indigenous contexts. And perhaps it is unfair to assume that they are, and go all-in in implementing them without a clear and explicit method for evaluating their impacts among Native children.

And third, as we think about children being in schools at younger and younger ages, we have to consider not only what we think children might gain, but also what might be lost. Romero-Little is a leading scholar on Indigenous early childhood education, and she reminds us that language and culture – and at a fundamental level, the core socialization of children – are all impacted when we put children in schools. “A community must first decide what they want their children to learn. In the design of an early childhood education initiative, it is essential that a community identify its cultural precepts and beliefs about children, their growth and development, and their early learning experiences at home and in their community, including what, how, why, and when they learn” (Romero-Little, 2010, p. 12). Romero-Little has conducted research on Pueblo views of childhood and the socialization of children in various pueblos in the Southwestern United States. She notes a shared understanding across Pueblo communities about the sacred role of adult caretakers to ensure that young children are nurtured and properly socialized into their local communities. Tracy's curricular focus on the Daké (garden) illustrates the importance of community, responsibility, relationality, and nurturing. *Culturally responsive teaching has to involve the community. The Daké, the garden, represents all your relations to everyone around you...I had kids help me clear out the field. We all worked together. We got a lot done very fast with the planting. And they were really excited to hear that the seeds and the plants like hearing little kids. Because there's a whole story about children and the Daké. That's the place where their sacredness is – just this massive ball of beautiful light. Them knowing that and going out to the garden...is a reason why it's doing so well right now—because of all the good thoughts they had and those good words they brought into it. And when I communicated that to the parents, they were all for it. They were excited about it. And I made it a habit to send a weekly newsletter informing parents of what's going on in the classroom...The parents would come to me and explain that this year their child really opened up, and they're really excited to see their kid talk about what they're learning. [I try to] get the support and involvement of the parents because that's really a strong bond, and when you tap into that strong bond, I think great things can happen.*

Teachers have incredible wisdom about children and educational approaches. But one-size-fits-all programs prevent teachers from engaging their craft. This is why the Diné Institute for Navajo Nation Educators insists on developing teacher leadership and on growing teachers' capacity to write their own curriculum. When we create spaces in which teachers can be creative, intellectual, and cultural knowledge-producers, the uniqueness of children's lives and communities takes center stage. Denny's students used the poems as a way to articulate similar experiences in their own lives, and how this process built important relational bonds between the students and the teacher. *As I was developing my unit I thought long and hard about how to incorporate Navajo culture... I wanted to keep the lessons and content close to home in order to get the students to relate to the poems we discussed in school. I felt having our main source of livelihood, the sheep, as a main focus would pull the imagination and creativity out of my students more easily to allow them to show their thoughts. My students come from homes where they still raise sheep flocks. They know how difficult some of the tasks are and how to care for them. The poem “Ba, Ba, Black Sheep” talks about preparing the wool from the sheep. I heard sheering stories and packing up for the market to sell the wool. “Mary had a Little Lamb” brought out how the sheep or little goats get their ears cut to show ownership. I also heard stories about how they too*

*lost sheep and had to go out to find them. I also heard stories of how grandmothers cared for their sheep and how they were able to stay connected to their families because they had to work together. When the unit ended, my students had opened up to me like I have never had any student do. I felt like I was a part of their family; I was welcomed into their universe. We all became a new family and were able to understand where we come from...I got to see them as individuals and future leaders of their family. I heard their family teachings that would never have been measured in a Western society classroom. Most importantly I saw my group of 15 strangers come together at the close of my unit as family. Today they still greet each other with respect because they know they all come from the same upbringing. They, in a sense, come from the same Hogan and all have the same mother or grandmother teaching them the same concepts of Navajo philosophy. I am proud of my little Kindergarten students. They have shown me that you are never too little to understand your culture.*

### **Self-determination & Nation-building as guiding principles for ECE**

Our experience highlights that early childhood educational efforts in Indian Country must be thoughtful, intentional, and deeply guided by the core principles of cultural responsiveness. Tracy explains: *[I]f we are going to be teaching language and culture, I don't feel like it needs to be separate. Just like learning to read and literacy. You can't just teach spelling one time and then writing. It has to be holistic, everything has to be together. It's the same with a culture and language...I think that culturally responsive curricula and pedagogies are important at the early childhood stage because that's where the seed starts...The whole analogy of the garden is that you start with the seed and it's your life, your lifeline. And it goes in a cycle, and we want to plant that seed with prayers and with thought. [Our children are] the little seedlings, they're the ones that we need to take care of and nurture in order to have a strong corn stalk.*

Culturally responsive education is absolutely about how culture – and usually language – are integrated into curriculum, teaching, and learning. It is also about how sovereignty, self-determination, and nation building are centered as the driving forces and ultimate goals of early childhood efforts. In order for these to be the guiding forces, educators have to work hard to break down the many walls that exist between schools and communities. Denny and Tracy narrate two examples of what this can look like. One of our primary goals in the Diné Institute for Navajo Nation Educators is to develop the capacity of individual teacher leaders. But we also strive to develop the capacity of Indigenous school systems to engage culturally responsive schooling. We know systems, and institutions, do not change overnight. And capacity building is hard work. But we continue to believe that as teachers grow and have greater capacity themselves, the schools in which they work will also grow in their capacity to deliver on the promises of culturally responsive schooling. We share a belief that communities are strengthened, and tribal nations are strengthened, by and through leaders like Denny and Tracy. They know best what they need, what their children need, and what their communities need. The rest of us need to listen and follow their lead.

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# eJIECE

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## **Strengthening the Link between Education Policy, Culturally Responsive Schooling, and American Indian and Alaska Native Health**

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## ABSTRACT

The impact of education, federal policy, and health are intricately linked in the United States. American Indian and Alaska Native (AI/AN) communities have experienced educational policies, including the policy that sent thousands of adolescents to federal boarding school, that negatively impact health and cultural identity. The purpose of this article is to explore the relationship between federal education policy, Culturally Relevant Schooling (CRS), and AI/AN health. One promising method to improve the education and health outcomes for AI/AN adolescents is to develop CRS systems. Culturally Relevant Schools have positively impacted affective, cognitive, behavioral, and academic outcomes in AI/AN adolescents. In order to improve AI/AN education and health outcomes, federal and state policies should focus on strengthening CRS systems in collaboration with local public education departments and sovereign AI/AN governments.

*Keywords: American Indian/Alaska Native, health, education, culturally relevant school*

## **INTRODUCTION**

Education has been a strategic political attempt to eradicate culture and traditions of American Indian and Alaska Native (AI/AN) students. As a result, has impacted the health and wellbeing of AI/AN students in a negative manner (Running Bear, Beals, Kaufman, Manson, & The AI-SUPERPFP Team, 2018). Through decades of commitment, activism, and partnership, AI/AN communities have started to reclaim the inherent sovereign right to educate their own peoples. A promising method that has been gaining momentum is to provide culturally relevant schooling (CRS) to improve educational outcomes, assert tribal sovereignty, and improve wellbeing. According to Klug and Whitfield (2003, p.151), “CRS is that which ‘makes sense’ to students who are not members of, or assimilated into, the dominant social group.” Additionally, Pewewardy and Hammer (2003, p. 1) describe CRS as, “That which ‘builds a bridge’ between a child’s home culture and the school to effect improved learning and school achievement.” CRS was first introduced in education anthropology in the 1980’s and is also referred to as “culturally relevant,” “culture-based,” or as “multicultural education” (Castagno & Brayboy, 2008). The purpose of this article is to explore the relationship between federal education policy, CRS, and AI/AN health, and to encourage inter-professional collaboration to improve AI/AN education and health outcomes.

The introduction of this article includes information that describes American Indian (AI) populations and Alaska Native (AN) populations. For the sake of consistency, this report will use the term American Indian/Alaska Native (AI/AN).

## **ACADEMIC ACHIEVEMENT AND HEALTH**

A relationship between academic achievement and health outcomes has been established in all populations, including AI/AN (Hummer & Hernandez, 2013). Although life expectancy has increased for both men and women over the past 50 years, a continuing disparity exists between those who graduate high school and those who do not (Hummer & Hernandez, 2013). The relationship between mortality and level of education is evident in morbidity trends. Data from non-AI/AN populations indicates that individuals with higher levels of education are less likely to suffer from chronic diseases including hypertension, emphysema, and diabetes (Cutler & Lleras-Muney, 2006). Freudenberg and Ruglis (2007) reported health is aligned with levels of education through occupation and an increase in available income, allowing an individual to purchase healthcare, housing, and food. Subsequently, individuals that have obtained higher levels of education are more likely to avoid engaging in unhealthy behaviors (e.g. binge drinking, smoking) than are those who do not graduate from high school (Freudenberg & Ruglis, 2007). Although all populations are impacted by academic achievement, some groups experience greater disparities.

### **American Indian/Alaska Native Academic Achievement**

AI/AN populations have the benefit of multiple modes of literacy through storytelling and oral tradition; however, low levels of academic achievement are prevalent and contribute to lifelong poverty that in turn is linked to poor physical and mental health (Faircloth & Thompson, 2012). In 2010, 69% of AI/AN students graduated from high school compared to 78% of all students in the United States (US) (National Indian Education Association, 2013). In 2009, 7% of AI/AN students dropped out of school and did not receive a diploma compared to 3% of all students in the US (NIEA, 2013). In 2011, AI/AN students

represented 0.9% of the US population that was enrolled in undergraduate and graduate studies at a Title IV higher education institution while White students represented 53% of the undergraduate and graduate student population (NIEA, 2013). It is helpful to take a thorough look at factors that contribute to success in the academic world.

Powers (2006) reports on factors that contribute to school learning for non-AI/AN students and factors that are of particular importance for AI/AN student learning. Universal factors that impact all students regardless of race and ethnicity include student characteristics, quality of instruction, and school and home support for learning (Powers, 2006). Taking a closer look at the aforementioned factors in an AI/AN context reveal slight differences in impact. For example, parental involvement is an essential factor but has been hindered in AI/AN communities by a history of distrust in Western education ever since the boarding school era (Powers, 2006). AI/AN parents can impact the education of their children in a positive way by helping to navigate the educational system and to act as a bridge between home and school. Additionally, student motivation is a consistent positive factor associated with educational attainment. Student motivation is intricately tied to teachers' expectations, parental involvement, and connectedness to school atmosphere. Although even more difficult to manipulate, family income level has consistently proven to impact student achievement (Powers, 2006). Implementing a CRS framework can be an innovative way for schools to increase student motivation.

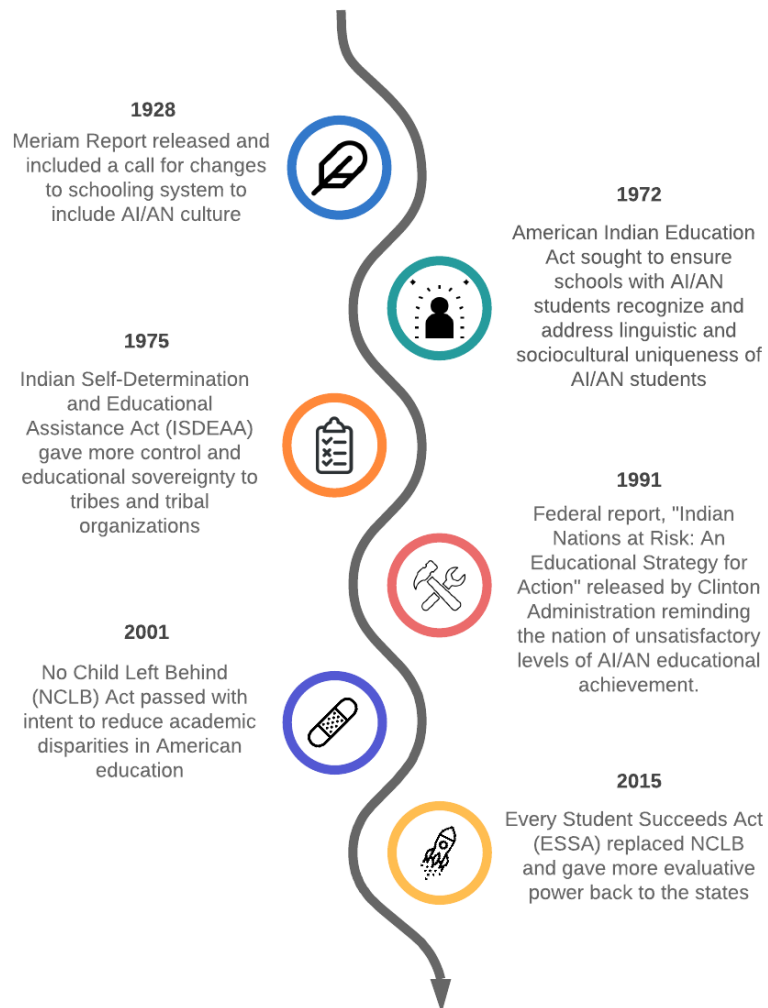
High quality instruction including setting high expectations, providing constructive encouragement, and sufficiently challenging students is crucial for AI/AN success in the educational system (Powers, 2006). Quality instruction now includes aspects that are known in CRS and include a positive teacher-student relationship that sets the ground for a positive classroom environment (Powers, 2006; Reyes, Brackett, Rivers, White, & Salovey, 2012). Quality instruction and a positive school climate are also related to underachievement. Students receiving low quality instruction in an unwelcoming environment suffer from underachievement that then feeds into a vicious cycle low sense of academic self-competence (Powers, 2006). CRS seeks to replace the notion that the burden of education lies solely on AI/AN students with the knowledge that the school and teachers bear a large portion of the responsibility in assuring student academic success.

Lower levels of academic achievement in AI/AN students has been included in the national dialogue since the Meriam Report was published in 1928 (Castagno & Brayboy, 2008). The Meriam Report called for a reform in the treatment of AI/AN communities and a reorganization of the educational policies and procedures impacting AI/ANs (Reyhner & Eder, 2004). Amongst other topics, the Meriam Report emphasized the importance of recognizing the diversity of each AI/AN tribe and student and called for incorporating cultural aspects into the education program (Bahr, 2014). Contemporary research maintains the call to incorporate AI/AN culture into educational systems and concludes the low educational achievement is largely due to the difference in culture and expectations between AI/AN home culture and the culture of Western schools (Castagno & Brayboy, 2008). This realization has resulted in a growing need to institutionalize and implement CRS and has been continuously advocated for by AI/AN communities.

## EDUCATION POLICY AND CULTURALLY RESPONSIVE SCHOOLING

Federal education policy is rarely cited when describing the relationship between education and health although it is intricately related. Traditional forms of education for AI/AN communities preexist the arrival of colonial settlers (Coleman, 2008). Today, the Western view and evaluation of education dominates the US schooling system, even for tribal communities. AI/AN students are often expected to adopt Western, individualistic and competitive ideals that can hinder educational growth (Reyes, Brackett, Rivers, White, & Salovey, 2012). Although calls for including AI/AN culture in education started with the Meriam Report in 1928, change did not occur for decades after the initial report was published. Increasing national tension and activism in the 1960's and 1970's led to a wave of federal policies impacting AI/AN education and CRS; now known as the Era of Self-Determination and Civil Rights (Senese, 1986). The American Indian Education Act (1972) sought to ensure that schools with AI/AN students recognize and address linguistic and sociocultural uniqueness of their AI/AN students (Beaulieu, 2000). AI/AN-controlled schools opened and included tribally-controlled community colleges. The Self-Determination and Civil Rights era gave AI/AN peoples a new sense of hope for the future.

Three years later, the US government passed the Indian Self-Determination and Educational Assistance Act of 1975 (ISDEAA). An evaluation of ISDEAA showed that tribes and tribal organizations enjoyed more control of their educational sovereignty. A majority (69%) of schools in the BIE system and almost all tribal colleges and universities are now managed by tribes (Strommer & Osborne, 2014). Tribes are able to offer more transformative education but there are still challenges that remain to implementing CRS, even after changes to ISDEAA. AI/AN education programs are still grossly underfunded and do not investment enough in the maintenance of existing tribal school facilities, and there are still inconsistencies in the BIE organization that centralizes power itself rather than entrusting tribally-owned schools (Strommer & Osborne, 2014). Although challenges persist, progress was still being made in the CRS system.



**Figure 1.** Education Policies and Reports that have impacted the development of CRS for AI/AN communities.

Implementation of CRS and improving educational sovereignty experienced mixed progress in the 1990's and 2000's. A federal report, "Indian Nations at Risk: An Educational Strategy for Action", was released by the Clinton Administration in 1991 reminding the nation of the unsatisfactory levels of AI/AN educational achievement (Castagno & Brayboy, 2008). In response, the No Child Left Behind (NCLB) Act was passed in 2001 with the intent to reduce academic disparities in American education between Whites and students of color by holding educators accountable for standardized test scores (Huffman, 2013). Although the Act had good intentions, NCLB largely negated progress made in CRS efforts by placing added pressure on funding- and faculty-strapped schools (Huffman, 2013). Mandatory, standardized tests were accused of being culturally biased and poorly constructed and were associated with consequences of reduced school funding and teacher support (Huffman, 2013). In 2015, President Obama replaced NCLB with the "Every Student Succeeds Act" (ESSA). ESSA was passed through Executive Order and, while it does give more evaluative power back to each state, it is still a policy based on similar test-based accountability methods (Mathis & Trujillo, 2016). The educational policies surrounding CRS throughout time have led to positive impacts in health and education for AI/AN adolescents.

## **STUDENT OUTCOMES IN RESPONSE TO CRS**

There have been numerous calls to report quantitative academic outcomes of AI/AN youth participation in CRS in an attempt to better understand the causal link between CRS and student achievement (Castagno & Brayboy, 2008; Sleeter, 2012; Aronson & Laughter, 2016). There are inherent challenges in collecting and evaluating statistical information involving AI/AN populations that make it necessary to include a disclaimer of lack of generalizability. For example, AI/ANs have only been included as a separate statistical "category" in recent years so it is difficult to make historical comparisons. Additionally, many AI/AN peoples are multiracial and may not choose to identify with one race/ethnicity on census inquiries. Also, a majority of AI/ANs live off of the reservation, creating another logistical challenge for those attempting to organize research efforts (Amerman, 2010). There is an enormous amount of work being done within AI/AN communities and organizations in an attempt to address educational and health disparities, however, they may not always be reported on in an academic setting. Nevertheless, there have been reports that include outcomes of participation in varying levels of CRS.

### **Affective Outcomes**

Positive affective outcomes have been reported by schools that implement a CRS framework and practices including increases in feelings of belonging and identification and connectedness with the school (Reschly & Christenson, 2012). Although feelings of belonging, identity, and connectedness can be difficult to quantify, they often have a positive impact on student self-esteem (Castagno & Brayboy, 2008). Aronson and Laughter's (2016) report on culturally relevant education detailed outcomes across content areas and indicated that students felt an increase in cultural pride and identity (Aronson & Laughter, 2016). Affective outcomes are essential when discussing educational achievement as they correlate with higher test scores. Implementing CRS for AI/AN has resulted in affective outcomes including increased student motivation and interest in course content, increases in student ability to appropriately discuss course content, demonstrating mastery of content, and enhancing self-perception of academic capability. Lastly, given the nation's current affinity for standardized testing, CRS has shown to

increase student confidence when taking standardized tests (Aronson & Laughter, 2016). Internal, affective outcomes can also lead to improvements in external, cognitive outcomes.

### **Cognitive Outcomes**

Cognitive outcomes related to educational achievement include self-regulation, realizing the relevance of school to future aspirations, and realizing the value of learning (goal setting) (Reschly & Christenson, 2012). Students involved in a CRS setting have demonstrated ability to self-direct and become more politically active (Castagno & Brayboy, 2008), displaying their awareness of the impacts politics can have on all aspects of AI/AN life, including education and health. Students in some studies were also able to make connections and see value in subjects that were seemingly irrelevant to AI/AN daily life including mathematics (Aronson & Laughter, 2016). Additionally, CRS students express more comfort and motivation for learning subjects that have been considered more difficult conceptually, like science (Aronson & Laughter, 2016). CRS has promise in helping AI/AN effectively analyze and apply information that does not seem to apply to daily life. Students are able to look forward and see the value of education in a larger, political context as well as the value in their lives.

### **Behavioral Outcomes**

Available literature on CRS also shows improvements in student behavioral outcomes including increases in attendance, participation, and decreases in behavioral incidents (Reschly & Christenson, 2012). Behavior while in school tends to improve with the implementation of CRS (Castagno & Brayboy, 2008). While this is a positive development for individual students, it can also impact other students and quality of teacher instruction by improving the overall classroom disposition and climate and creating fewer negative distractions (Aronson & Laughter, 2016). When students believe their teacher understands, respects, and is knowledgeable about their culture, they are more likely to adhere to behavioral expectations (Castagno & Brayboy, 2008). Behavioral improvements due to access to CRS also extends outside of the classroom. Students often give more respect to tribal elders and have a positive influence in their tribal communities (Brayboy & Castagno, 2008). Improvements to behavioral outcomes can also lead to more positive outcomes in an academic setting.

### **Academic Outcomes**

Finally, participation in CRS has shown to improve academic outcomes for AI/AN students when compared to students who do not have the opportunity to engage in CRS. Academic outcomes can include metrics such as time on task, credit hours achieved towards graduation, homework completion rate and accuracy, and class grades (Reschly & Christenson, 2012). Given the difficulties in collecting and evaluating statistics regarding AI/AN students, literature has reported modest increases in academic performance after implementing CRS (Castagno & Brayboy, 2008). After exposure to CRS, students experience more success in math classes and saw increased proficiency, test scores, whole letter grades, and better scores on standardized tests (Aronson & Laughter, 2016). Nationally, Indigenous Maori students saw an increase in standardized metrics that has sustained since the beginning of the program when compared to students that did not receive culturally responsive schooling (Bishop, Berryman, Wearmouth, & Clapham, 2012). There is also a noted decrease in dropout rate of AI/AN students that experience CRS (Castagno, & Brayboy, 2008). The link between education policy, health, and academic



outcomes can often be seen most obviously through academic outcomes that are reported to state and federal legislators.

### **Student Engagement as a Mediator to Academic Achievement**

When evaluated for commonalities, the affective, cognitive, behavioral, and academic outcomes suggest that there is an important factor acting as a bridge between CRS and academic achievement. CRS improves affective outcomes by helping to create a safe classroom environment where students feel respected as and AI/AN person. CRS improves cognitive outcomes by helping AI/AN students realize their academic potential and by instilling confidence in existing community knowledge as it relates to scholastic subjects including math, science, reading, and writing. CRS improves behavioral outcomes by encouraging students to participate without repercussions and by making lessons more relatable to AI/AN lives, thereby, increasing interests and attendance. CRS improves academic outcomes by contributing to the overall improvement in self-concept and self-esteem that is necessary for students to concentrate and succeed in the required standardized testing. All outcomes are intricately interrelated and suggest that CRS ultimately increases student engagement in school and academic endeavors because students find CRS more interesting, respectful, and that it mediates the impacts of racism in schools (Reschly & Christenson, 2012). Student engagement is the glue that holds CRS and academic achievement together.

### **DISCUSSION**

American Indian and Alaska Native individuals, families, and communities have endured constant persecution based on cultural and linguistic differences. The federal US government has consistently established policies that attempt to assimilate and destroy AI/AN appearance, language, name, and history through the educational system. This repeated cultural assault in the guise of education has had devastating impacts on health that persist over time. AI/AN communities have only recently been in control over the education of their own people and empirical evidence of the benefits of CRS are starting to come to light. Although there are many challenges that stand in the way of tribal communities' capacity to establish tribally-owned schools, the tribally-owned and culturally relevant schools that do exist have shown improvements in education and health outcomes. Improving educational outcomes is the most beneficial step in improving the health of AI/AN communities. Future research and evaluation endeavors should focus on measuring short-term and long-term academic and health impacts of participation in CRS. Additionally, efforts should be made to research and understand the factors that mediate success for students who are able to engage in CRS.

### **Conclusion**

As history has shown, federal law and policy plays a vital role in shaping the status of AI/AN education, for better or worse. In order to continue rebuilding AI/AN nations and improving the education and health status of AI/AN peoples there needs to be more collaborative efforts between legal, public health, tribal, and educational professionals including an increase in efforts and value of Indigenous Evaluation and well-designed studies on the connection between CRS and academic outcomes.

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## **Examining Early Childhood American Indian/Alaska Native Disproportionate Representation in Special Education**

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Examining Early Childhood American Indian/Alaska Native Disproportionate Representation in Special  
Education

By Candi Running Bear



## Abstract

American Indian and Alaska Native (AI/AN) students have been disproportionality represented in special education. This position paper is intended to relay information of the disproportionality in early childhood special education for AI/AN students. Studies have concluded that AI/AN early childhood students are overrepresented and other studies reveal AI/AN students are underrepresented in special education. This position paper seeks to document the differences between these studies and share possible solutions to the disproportionality of AI/AN students. There is a dire need for more research to be conducted in the disproportionality of early childhood special education in American Indian/Alaska Native students.

## Examining Early Childhood American Indian/Alaska Native Disproportionate Representation in Special Education

The disproportionality of minority students in special education has been a concern for decades (Zhang & Katsiyannis, 2002; Zhang, Katsiyannis, Ju, & Roberts, 2014). According to the U.S. Department of Education (2016),

Children of color – particularly African-American and American Indian youth – are identified as students with disabilities at substantially higher rates than their peers. It is critical to ensure that overrepresentation is not the result of misidentification, including both over- and under-identification, which can interfere with a school’s ability to provide children with the appropriate educational services required by law (para. 5).

Correspondingly the Office of Special Education Programs (2018) reported, American Indian/Alaska Native (AI/AN) students, ages 3 to 5, have the highest risk ratio compared to the six other racial groups (Asian, Black/African American, Hispanic/Latino, Native Hawaiian/Pacific Islander, White and Two or more races) under Part B of the Individuals with Disabilities Education Act (IDEA). The literature, however, has reported that AI/AN students in early childhood special education programs are underrepresented (Morgan, Farkas, Hillinger, & Maczuga, 2012); yet other studies have declared AI/AN students are overrepresented (Zhang, & Katsiyannis, 2002; Zhang et al., 2014). This position paper seeks to document the differences between studies about the disproportionality of early childhood AI/AN students in special education. Research about disproportionality in early childhood education is lacking (Morrier & Gallagher, 2014).

### **Literature Review on Disproportionality**

Skiba et al. (2008) defined disproportionality “as the representation of a group in a category that exceeds our expectations for that group, or differs substantially from the representation of others in that category” (p. 266). AI/AN students are disproportionately represented in special education (Hibel,

Faircloth, & Farkas, 2008). Disproportionality of AI/AN students with disabilities has been debated in research as being overrepresented and/or underrepresented. According to Morgan et al. (2018), the confusion in results for disproportionality may be attributed to the different methods each study has used to analyze data; for example “using aggregate-level data to make individual-level inferences” (p. 272). Further examination on disproportionality of AI/AN students with special needs is needed to assure they are receiving the early support they need or to affirm that AI/AN early childhood students are not being overrepresented. In fact possible negative repercussions of disproportionality are inferior academic success during school years and disadvantageous outcomes after high school (Zhang, Katsiyannis et al., 2014).

According to Barrio (2017), overrepresentation and underrepresentation of culturally and linguistically diverse students can happen contingent on the disability category. There could be various reasons for disproportionality of culturally and linguistic diverse students (Morgan et al., 2012). For example poverty is associated with risk factors that could contribute to a child being referred for special education services and possibly influence disproportionality (Skiba et al., 2008). The Annie E. Casey Foundation (2017) reported that 47% of AI/AN children were living in low poverty areas (<20% poverty). In addition, racial bias, test bias, and inequity have also been criticized as being causal factors of disproportionality (Skiba et al., 2008). The research, however, is inconclusive as to the primary causes of the disproportionality of minority students in special education (Skiba et al., 2008).

### **Research for Overrepresentation**

Zhang and Katsiyannis’s (2002) study found that minority students are disproportionately represented in special education; however, no causal deductions were found. Similarly, Zhang et al. (2014) found that minorities continue to be over identified in special education when looking at racial trends in data from Part B of IDEA from 2004 to 2008. AI/AN were the second most represented racial group at 14.10% to 15.21% after African Americans at 14.79% to 15.45% (Zhang et al., 2014). The group

that showed the most change throughout the 5 years was the AI/AN group, which had an increasing trend; meaning AI/AN student overrepresentation in special education grew (Zhang et al., 2014).

Hibel et al. (2008) conducted a study using data from the Early Childhood Longitudinal Study – Kindergarten Cohort (ECLS-K) a nationally representative longitudinal survey of children, parents, teachers and school administrators. Commissioned by the United States Department of Education's National Center for Education Statistics, Hibel et al. (2008) hypothesized that the increase of early identification of AI/AN students occurred because of an enhanced awareness and availability of early childhood services such as Head Start or the use of unsuitable assessments for AI/AN students which all could possibly contribute to over identification. Using the ECLS-K data, Hibel et al. (2008) found that AI/AN students exhibited the highest rate of placement in special education at 14.6% compared to African Americans at 8.6% and Whites at 8.3%. Hibel et al. (2008) also found that students' academic readiness may contribute to the over identification of early childhood AI/AN students in special education. The disproportionality of AI/AN students in early childhood special education is demonstrated in this study and school readiness has been addressed at the culprit of over identification in the early grades.

The Office of Special Education Programs (OSEP) provides risk ratio data according to race in an annual report to congress (see Figure 1). From 2011 to 2014 AI/AN children ages 3 through 5 served under part B of IDEA had the second highest risk ratio out of six other races. Meaning that besides Native Hawaiian or other Pacific Islander children, AI/AN children were more likely to be placed in special education than children from five other racial groups (Asian, Black/African American, Hispanic/Latino, White and Two or more races). Most recent data available from 2015 and 2016 reveal that AI/AN children ages 3 to 5 had the highest risk ratio of 1.3 and 1.4, indicating that AI/AN children are .3 or .4 times more likely to be placed in special education compared to other races. Furthermore, this demonstrates AI/AN children ages 3 through 5 are disproportionality overrepresented in special

education; however, risk ratios have been criticized as not providing a clear visual of racial disparities and risk ratios provide no set comparison group (Skiba et al., 2008).

### **Research for Underrepresentation**

In contrast, Morgan et al. (2018) sought to discover if the disproportionality of Hispanic, Asian, AI/AN, or English Language Learners in special education was due to racial or ethnic bias. Morgan et al. (2018) synthesized 22 studies using a best evidence methodology. Morgan et al. (2018) found that minority students are not overrepresented in special education due to cultural or racial bias; rather Hispanic, Asian, and AI/AN children are less likely to be placed in special education than comparable White children. Therefore, Morgan et al. (2018) stated that the United States Government should be granting all students access into special education regardless of language, race, or ethnicity, as is the student's civil right. The overrepresentation of minority students in special education was not found to be an issue according to this study.

Similar to the Hibell et al. (2008) study Morgan et al. (2012) used data from the Early Childhood Longitudinal Study (ECLS); however, they used data from the Birth Cohort (ECLS-B), children born in the United States in 2001. Morgan et al. (2012) found that minority children were disproportionately underrepresented in early intervention and early childhood special education before and after statistical controls (i.e. socioeconomic status, low birth weight); however, the reasons why could not be addressed. Morgan, Farkas, Hillemeier, and Maczuga (2012) also found that the disproportionate representation of minorities was not from cultural, linguistic or racial bias. Morgan, Farkas, Hillemeier, and Maczuga (2012) used statistical controls to account for the following areas sociodemographic, gestational and birth history, behavior and academic knowledge, and access to health care. However, Skiba, Artiles, Kozleski, Losen, and Harry (2016) have criticized using statistical controls to manipulate data to explain disproportionality because it fails to take into account the various aspects that contribute to disproportionality. The use of statistical controls is a common practice in the studies that have found underrepresentation of minority children in special education.

## **Culturally Relevant Education/Early Childhood Intervention**

Although not much is known about the effects of interventions for disproportionality Skiba et al. (2008) suggested the following best practices in relation to culturally responsive practices:

- Provide culturally relevant education training to teachers
- Provide training in culturally responsive behavior management
- Practice equity in prevention and early intervention
- Use multiple and effective interventions in the pre-referral process and in response to intervention
- Utilize assessments taking into account the culture and language of the student, perhaps use a functional assessment model
- Include the family in the response to intervention process
- Assess school and district policies to produce a culturally relevant learning environment

Using more culturally responsive teaching interventions is necessary when dealing with disproportionality (Zhang et al., 2014). In developing connections with AI/AN families Pewewardy and Fitzpatrick (2009) point out that educational personnel should be cognizant of the disproportionate representation of AI/AN students in special education, the familial or cultural view of disabilities and culturally relevant educational practices that can be used with AI/AN students with disabilities at school and home. Furthermore, Morgan et al. (2012) support that early intervention and early childhood special education should be delivered in culturally relevant ways. In addition, culturally appropriate screening and assessment procedures should be used when evaluating children for special educational services (Morgan et al., 2018). Research is needed to find out if and how culturally relevant practices (e.g. in teaching, assessment, screening, teacher training, early intervention) impact the disproportionality of AI/AN early childhood students with special needs.

## **Implications**

The United States Department of Education (2016) has addressed the disproportionate representation of minority students by issuing a rule for all districts to pinpoint the cause of under- or over-identification in their district and address these causes; however, since the Equity in IDEA was delayed, states and districts will not need to comply with this rule until July 1, 2020 (National Archives, 2018). Equity in IDEA also calls for states to report the disproportionality of students using a standard approach since every state has been gathering data about their districts in different ways; this standard approach will allow for more precise comparisons across states and within states (National Archives, 2018). According to Morgan et al. (2018), federal legislation may be making minority disproportionality worse due to restricting minority student access to receive special educational services. All children regardless of race should be granted access to special educational services if they need it (Morgan et al., 2018).

It is true that any child that needs special educational services should be granted access; however, it can be argued that even though Morgan et al. (2012) and Morgan et al. (2018) have found that AI/AN students are underrepresented in special education, placing more AI/AN children in special education without taking into account other factors such as culture, language and other external influences that contribute to scholastic performance further exacerbating the disproportionality of AI/AN students in special education. Educators, as part of creating a culturally relevant teaching environment and providing interventions during the pre-referral process, should implement a culturally relevant educational program for their AI/AN students, keeping in mind that this is a diverse group and programs will differ by tribal affiliation (Demmert, McCardle, Mele-McCarthy, & Leos, 2006).

Future questions for research concerning the disproportionality of AI/AN students in early childhood special education include the following:

- Are early childhood AI/AN children being disproportionately placed into special education due to academic readiness in kindergarten?
- What types of early childhood culturally relevant curriculums are being implemented in AI/AN communities? Is overrepresentation of AI/AN students an issue in these communities?
- Does the implementation and following of Equity in IDEA aid in reducing disproportionality in AI/AN communities?
- Do schools that primarily serve AI/AN students provided teachers with culturally responsive teacher training? How does disproportionality look in these schools?
- What views do AI/AN families/communities have regarding disabilities and how does this affect special education identification?
- What are different tribal views of early childhood special education? How do these views effect special educational placement in these early years?

Tribally specific studies can aid in understanding if disproportionality is occurring in these communities. Communities can work with nearby colleges to create early childhood education programs that instill their educational values and beliefs. Large generalizable studies can also benefit AI/AN communities and are needed as well.

## **Conclusion**

The results of different studies regarding the disproportionality of AI/AN early childhood students can be confusing. Zhang and Katsiyannis's (2002), Zhang et al. (2014), Hibel et al. (2008), and OSEP risk ratio data have shown that AI/AN students are overrepresented. Morgan et al. (2018) and Morgan et al. (2012) found AI/AN students are underrepresented in early childhood special education. There is a need for more research on this topic in order to definitively report on the over or underrepresentation of AI/AN students. AI/AN children make up one percent of the child population in



the United States (The Annie E. Casey Foundation, 2018). Perhaps this is a reason why there is limited research on AI/AN children. Moreover research on the disproportionality of AI/AN children is deficient (Morgan et al., 2018). The disproportionality of AI/AN students in early childhood special education needs to be corrected if all children are to have appropriate services.

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## OSEP Risk Ratio 2011-2016

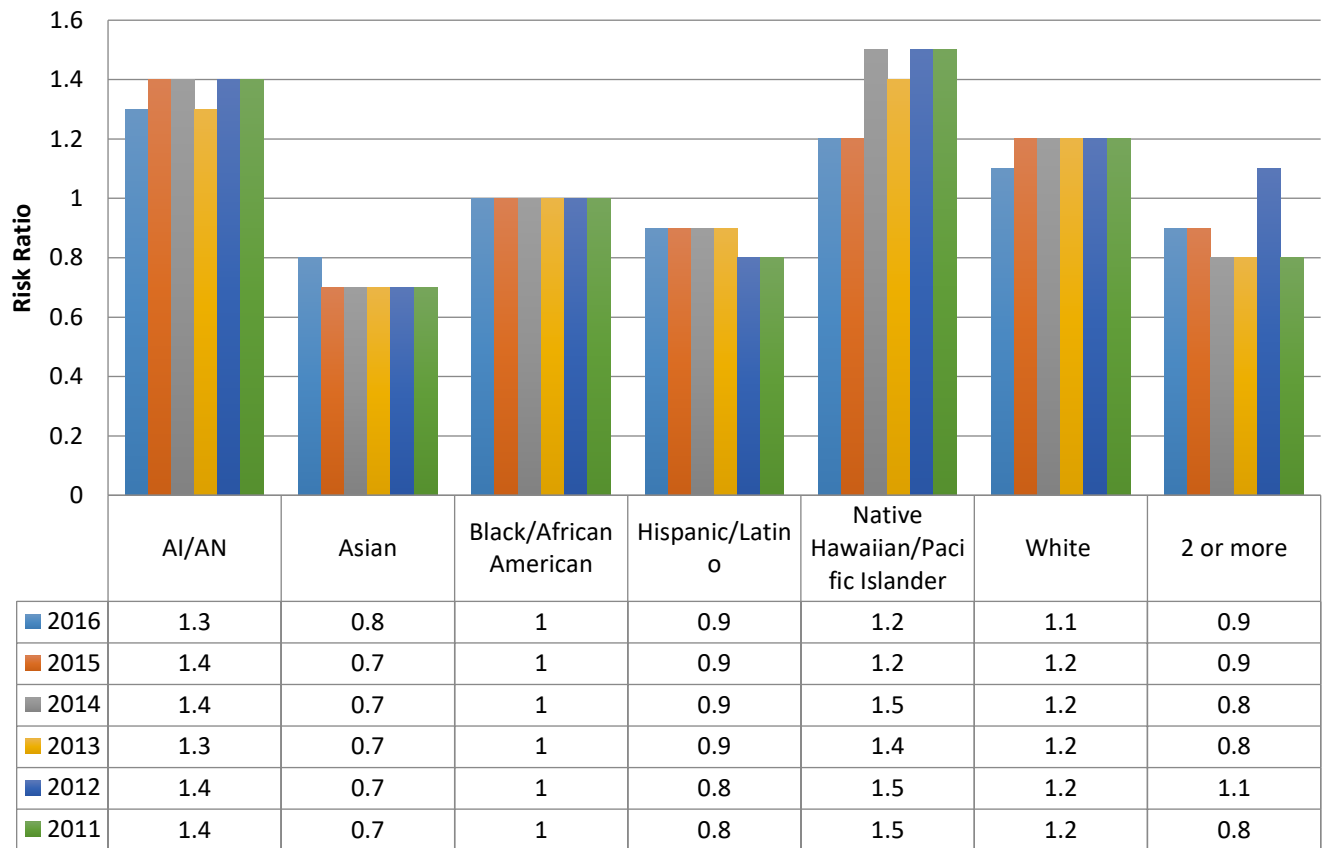


Figure 1



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# Parents' Perception of Working with Early Care and Education and Health Care to Prevent Childhood Obesity

## Abstract

**INTRODUCTION:** Parents/grandparents, early care and education (ECE) teachers, and health care professionals are essential stakeholders in promoting healthy development of young American Indian (AI) children. The purpose of this study was to develop understanding of how parents/grandparents perceive their unique and shared role in the development of young AI children. Additional goals included developing understanding of how parents and grandparents of young AI children envision collaborating with ECE teachers and health care providers (HCP) to enhance health. ECE teachers are a critical link between education systems and families.

**METHODS:** Twenty parents/grandparents of young AI children were interviewed. Two to three themes emerged for each of the three study aims as a result of thematic qualitative analysis.

**RESULTS:** Addressing the first aim, parents are aware of their role and others in healthy child development. Their personal experience shaped view on childhood obesity and parents valued participation in cultural practices for shaping children holistically. In regards to partnership with ECEs, parents implicitly trusted their ECE programs and teachers, they were unaware of daily activities but appreciated communication and relationship. In regards to partnership with HCPs, parents value the personal relationship of the HCP caring for their family. Parents reported the decision to address health issues with HCP is complex and were interested in greater guidance and real-life application. **CONCLUSIONS:** ECE teachers and HCP can support parents and work towards a comprehensive approach to enhance young AI children's health. This is evident by the trust placed in ECE. Integration of these three systems may build on strengths of each to enhance health of young AI children.

Obesity in early childhood is predictive of obesity later in life (Cunningham, Kramer, & Narayan, 2014) and is associated with cardiovascular disease, diabetes, certain cancers, and depression (Grundy et al., 2017; Resnick et al., 2003; Shomaker et al., 2011). Notable ethnic differences in overweight and obesity prevalence exist in preschool-age children. Of the 2-to 5-year-olds in the general population, 23% are classified as overweight and obese, while between 38% and 48% of similar age AI children in Southern and Northern plains tribes are overweight and obese (Ogden, Carroll, Kit, & Flegal, 2014). Eating patterns and physical activity in early childhood contribute to healthy growth and prevention of obesity (Fox, 2004; Wolfenden et al., 2012). Focusing on early eating patterns and physical activity in American Indian (AI) youth is critical to enhance quality of life and health outcomes (Guyer et al., 2009). Children's health is influenced by interactions with key individuals, such as early care and education (ECE) teachers, and their environments, such as ECE programs (Bronfenbrenner & Morris, 2007).

Many AI tribes and nations have ECE programs (S. B. Sisson et al., 2016), where young children spend up to 8 hours a day, eat meals, and participate in physical activity (IES, 2005; USDHHS, 2011). Tribal Head Start and Early Head Start also have performance standards related to nutrition and physical activity (USDHHS, 2011). It is important to incorporate tribally-affiliated ECE programs into interventions aimed to enhanced children's health. However, responsibility for children's health is shared with others, such as parents/grandparents and health care providers (HCP).

Parents/grandparents are the primary influence on children's nutrition and physical activity behaviors. Parents shape children's nutrition through providing food, role modeling, and parenting skills while facilitating physical activity in the home environment (Sinley & Albrecht, 2016). HCPs (such as nurses, physicians, and dietitians) serve as the primary source of health information in early childhood (Nelson, Vos, Walsh, O'Brien, & Welsh, 2015), and many tribes have health clinics. However, HCPs may have limited opportunity to discuss obesity-related behaviors with parents due to infrequent and brief appointments and competing for health priorities (such as infectious disease or injury concerns) (Shreve, Scott, & Vowell Johnson, 2017).

Integration of multiple stakeholders (i.e., teachers, parents, and HCP) and consistent health messaging is important for sustained health behavior change (Fleischhacker, Roberts, Camplain, Evenson, & Gittelsohn, 2016) and has been successful in mental health, substance abuse, and HIV programs for AI communities (Nebelkopf & King, 2003). However, AI parents' perception of teachers and HCP in developing children's healthy behaviors and opportunities for coordination of care is unknown. The purpose of this study was to explore perceptions of how parents of young AI children perceive their role and how they envision working with ECE teachers and HCPs in the healthy development of young AI children.

## **Methods**

### **Design**

Twenty individual interviews with parents were part of a more extensive study of 60 interviews, including 20 ECE teachers (Kracht et al., 2019) and 20 HCPs (Kracht et al., 2018). The collective goal of all the interviews was to understand, from each group's unique perspective, collaborative opportunities for parents, teachers, and HCP to prevent childhood obesity. The detailed study process is diagramed (Figure 1). Interview questions were informed by the literature, prior research, and community partner input. The interviews included three sections of

questions: (a) role in developing health behaviors; (b) views on their cultural influence on health behaviors; and (c) interest and desired modes of working with tribally-affiliated ECE teachers and HCPs. The interview questions were pilot tested with AI parents not included in analyses, and feedback was incorporated into the final question path (Table 1). University and tribal Institutional Review Boards approved this study.

### Participants

Twenty participants, including parents/grandparents of AI children ages 2-to-5-years-old, were recruited using existing networks of university researchers including Women, Infant, and Children clinics (WIC), health clinics, and ECE programs in tribal communities.

### Data Collection

Five trained interviewers, one of whom self-identified as AI, conducted the semi-structured interviews from April 2016 to July 2016. Interviews involved one parent, one interviewer, and one assistant, and were conducted in a private setting. Interviews were audio-recorded with two digital recorders and transcribed. Typed transcripts were reviewed while listening to the audio recording to ensure accuracy, and checked for accuracy. Any errors in transcription were corrected.

### Data Analysis (Figure 1)

Authors individually developed codebooks from complete transcripts then convened to refine the codes. The authors independently coded the remaining transcripts with the final codebook. Coding discrepancies, such as the same quoted being coded differently by different authors, were discussed until consensus was reached. The consensus process included each author describing why they coded the particular quote in the manner they did. Other authors listened and posed divergent perspectives. Conversations ensued until an agreement between authors was reached. Three authors are AI and contributed native insight and perspective throughout analyses, representing triangulation within the study (Patton, 2005). NVIVO 10.0 was used to organize the data. Four member check meetings were convened across Oklahoma, and all themes were confirmed.

## Results

The majority (78%) of participants were the child's biological parent and the median age was 30 years. For each of the three major aims, two to three themes emerged. Supporting quotes for each theme can be found in Table 3.

In regards to parents' perception of their role in the health and development of their child, three themes emerged. The first theme was: Parents are aware of their role and others in the development of the child. Parents were very aware of their role in healthy development, including role modeling and supporting healthy habits. However, parenting skills, such as saying "no" to the child, were linked to nutritional concern for their children. Parents also acknowledged that other people, including grandparents and ECE teachers, take a part in nutrition of their child and are important to consider when thinking about the child's health. The second theme was: Personal experience shaped parents' views on childhood obesity. Parents who had personal experiences with obesity or excess weight in the family were concerned about excess weight gain in children. Most parents mentioned they had a family experience with diabetes as well, and felt it was important to take preventive measures early in the child's life.

Other parents thought the excess weight gain was only a problem in other families. The third theme was: Parents valued participating in cultural practices and shaping the child holistically. Parents believe attending and participating in traditional AI practices, such as pow wows and stomp dances, were important early in life and developing the child's connection to their culture. Parents understood that early childhood was an important time to shape the child holistically, including character traits and physical development. Parents valued teaching their child manners and building moral character in this early stage. Overall, parents were keenly aware of their role and understood that their actions, and others around the child, were important to shaping their development. Many parents reported that cultural practices were crucial during this time, due to their importance in understanding the culture and life principles.

Parents offered interesting ideas with two emergent themes regarding current and future collaboration with ECEs to enhance children's health. The first theme was: Implicit trust for the nutrition and physical activity provided at the ECE programs. Parents trusted the nutrition provided from the ECE programs. Many parents valued the physical activity opportunities provided for their children at ECE programs, and thought the ECE teachers keeping them active was important for their development. The second theme was: Unaware of ECE daily activities, but appreciated communication. Though parents appreciated ECE teachers providing nutrition and physical activity, most parents were unaware of the specific daily activities at their ECE program. Parents trusted ECE program care as they were aware that ECE programs required certain licensing to operate. Accordingly, parents enjoyed menus, schedules sent home and communication with their ECE teacher. In sum, the parents felt they did not have to worry as much about nutrition and physical activity for their child while they were away. Parents valued a personal connection with the ECE teacher and being informed on daily activities of their child.

The final aim of these interviews was to understand parents' perspective on current and future partnerships with HCP. Three themes emerged from the interviews. The first theme was: Value of individual relationship and the HCP caring about the family and the child. Quality of interactions with HCPs ranged from strong satisfaction and feeling well-informed to strong dissatisfaction and frustration. Of the instances of a positive quality of care, parents felt that the HCPs were invested in the family and the child becoming healthier. The personal connection made parents feel as though the HCP had their child's best interest in mind. There is a sentiment of frustration with impersonal or contradictory care, which is indicated this participant. The second theme was: Decision to address health problems was complex. The decision for parents to mention concerns to the HCP was dependent on many factors including available time, health priorities, personal confidence in their own understanding of health, and respect of the HCP. In some instances, parents were unaware the behavior was problematic or that developmental concerns existed and assumed HCP would discuss important topics. The third theme was: Interested in greater guidance, explanation, and real-life application. Parents reported that HCPs should take the initiative to discuss realistic recommendations with them. There were conflicting views on the use of health education materials, with some interest in informational pamphlets, while others interpreted them as an impersonal practice and generic advice. Taken together, there were a variety of experiences from the parents in relation to their HCP. Most parents with positive experiences attribute it to the individualized attention and actionable advice from the HCP. Parents appreciated the personal connection and feeling the HCP saw the child as their

own and had the child's best interest at heart. Communicating with HCP concerns about their child was complicated, but understood to be an important practice for parents.

### **Discussion**

The main findings of this indicate that parents identify their central role and personal experiences in growing healthy children. Further, children's involvement in cultural AI practices was very important during early childhood to teach heritage and instill principles early in life. The importance of cultural involvement (Brown et al., 2010; Kulis, Ayers, Harthun, & Jager, 2016), Indigenous healing practices (Struthers & Eschiti, 2005), and ways of understanding disease (Bourque Bearskin, 2011; Struthers, 2003) in health behaviors is documented (Brown et al., 2010; Kulis et al., 2016). Cultural participation empowers personal health changes through feelings of belonging (Carlson et al., 2017) and family involvement in cultural practices may instill character traits in the young child and encourage the healthier behaviors as a family. If ECE and HCP are attentive to or involved with community cultural practices, this may allow for better understanding of their cultural values and relating to parents (McCollum, Kovner, Ojemeni, Brewer, & Cohen, 2017). However, ECE and HCPs must recognize the family's personal adaptation of their culture and tradition, and be open-minded to their interpretations (Browne, 2005).

Parents who had personal experience with obesity and diabetes indicated they did not want the same fate for their children, however did not express urgency for their children to engage in healthy behaviors. We hypothesized this may be related to the common perception held by some AI that obesity and diabetes are inevitable and subsequently do not prioritize health behaviors (Carlson et al., 2017). Parents who did not believe their children were overweight were unconcerned about health habits, which can be alarming since one third of AI parents underestimated their kindergarten child's weight status (Arcan et al., 2012). This findings emphasizes the critical opportunity provided by tribally-affiliated ECE to create environments to support the healthy growth and development of their children and families (Story, Kaphingst, & French, 2006).

Parents were implicitly confident in the care provided by ECE programs. This may stem from, awareness of ECE licensing, tribal affiliation, the daily contact and relationship building with the ECE teachers (McSweeney, Rapley, Summerbell, Haighton, & Adamson, 2016; S.B. Sisson, Smith, & Cheney, 2017). Although they were unaware of specific daily activities. Parent's value the ECE environment and their child's growth as a person, thus addressing academic and mental development may reinforce the importance of behavior change (Lemstra, Rogers, Redgate, Garner, & Moraros, 2011). ECE may work with parents to increase health literacy and self-efficacy may empower all to evaluate health information and enact long-term behavior changes (Howe, CIPHER, LeFlore, & Lipman, 2015).

Tribal HCPs were not afforded the same level of confidence due to unfavorable personal experiences and identified the complex decision-making process to ask questions and sought greater real-life application. A variety of experiences were reported with HCP and some parents discussed unhappiness with the HCP, as supported by previous literature (Pickner et al., 2017). The HCP distrust and perceived care disparity may perpetuate an unhealthy cycle where child health issues go unaddressed as parents are hesitant to openly discuss concerns. It is

hypothesized the roots of distrust stem from historical trauma inflicted on indigenous populations (Maxwell, 2014). Difficulty in establishing necessary trusting relationships between AI community and HCP is exacerbated by the difficulty of retaining HCPs in rural areas (MacQueen et al., 2017). Parent's desire for real-life applications and individual attention is not unique (Foster & Whitehead, 2017).

The family relationship with HCPs and ECEs were highly regarded, which is anticipated given literature demonstrating the importance of balance and connection (Nebelkopf & King, 2003; Struthers, 2003). Early and frequent efforts to create personal relationship with both the parent and the child may lead to increased trust and willingness to bring up health issues with HCPs. ECE partnership with HCP to provide comprehensive care to families may build on strengths of relationship building, which ECE appears to have mastered, according to these parents/grandparents interviewed.

Strengths and limitations warrant discussion. Strengths of this study include aspects of study design and cultural interpretation. Grandparents are valued caregivers in AI families and frequently provide substantial care for grandchildren (Cross, Day, & Byers, 2010; Fuller-Thomson & Minkler, 2005) and were included in interviews. Interview questions were tribally approved, pilot tested, culturally relevant and administered by trained researchers. Three investigators were of AI descent, which lead to a deeper understanding of the transcripts, history, and dynamics of this population. Limitations include specific information on child and health care from families. There was no measure of child care use or frequency and no measure of the health insurance status, HCP used, and length of HCP use was used. These details were not part of the specific aims and considered to be unnecessarily intrusive. Lastly, the focus was on the collective AI parental viewpoint, instead of generational comparisons precluding stratified analyses.

Overall, parents understood there were many influences on their child's health, and personal experiences increased awareness of health behaviors. Parents want to include children in cultural practices and traditions related to education and health. Parents trusted the ECE programs with their children but this trust was not universally extended to the HCPs. The ECE familiarity may be leveraged as an avenue to communicate health information to parents in a safe environment. Further, parents felt that the individual connection about their child's health and real-life recommendations was indispensable for making changes. Considering the parents' comfort and abilities when providing guidance may be an important area to consider in future interventions. A multilevel intervention using existing infrastructure of tribal communities to address early health behaviors of young AI children could be supported by the integration of ECE programs, HCPs, and parents.

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Table 1

*Interview Guide for Parents on Their Role in Healthy Development of Young American Indian Children and Working with Early Care and Education (ECE) Teachers and Health Care Providers (HCPs)*

Aspect	Interview Questions
Parent's experiences and concern for healthy development of young American Indian children in their care	What are three things you worry most about regarding your child's health?
	Compared to those things how often do you think about nutrition for your child?
	Are you concerned about young children gaining too much weight?
	As a parent, what things about your child gaining too much weight do you think you have influence over?
	Describe for me things you may do to help your children grow up healthy?
Parent's perception of cultural influence on healthy behaviors*	How does your culture influence healthy behaviors, specifically regarding family?
	How does your culture influence healthy behaviors, specifically regarding food?
	In your community, what can you think of that provides information for children to lead a healthy lifestyle?
Parent's perception and working with ECE teachers	How do you see preschools (ECE teachers) working to promote healthy child development?
	Do you feel support from preschools (ECE teachers) in your efforts to help children grow and be healthy?
	In what ways would you like to see more support from preschools [ECE teachers] to help children grow up healthy and prevent excess weight gain?
	Regarding health, what would you say in confidence or in secret, to the preschools [ECE teachers] about working to prevent excess weight gain in children?
Parent's perception and working with HCPs	How do you see health care providers working to promote healthy child development?
	Do you feel support from health care providers in your efforts to help children grow and be healthy?

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In what ways would you like to see more support from health care providers to help children grow up healthy and prevent excess weight gain?

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Regarding health, what would you say in confidence (or in secret), to the health care providers about working to prevent excess weight gain in children?

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\*Before these three questions, participants were asked if they identify with the American Indian culture. If the participant did not identify with the American Indian culture, the interviewer asked the participant to answer the following three questions referencing the culture of the local community / city.

*Figure 1. Overview of the qualitative analysis process and sub-process with parents on their role in healthy development of young American Indian children and working with early care and education teachers and health care providers*

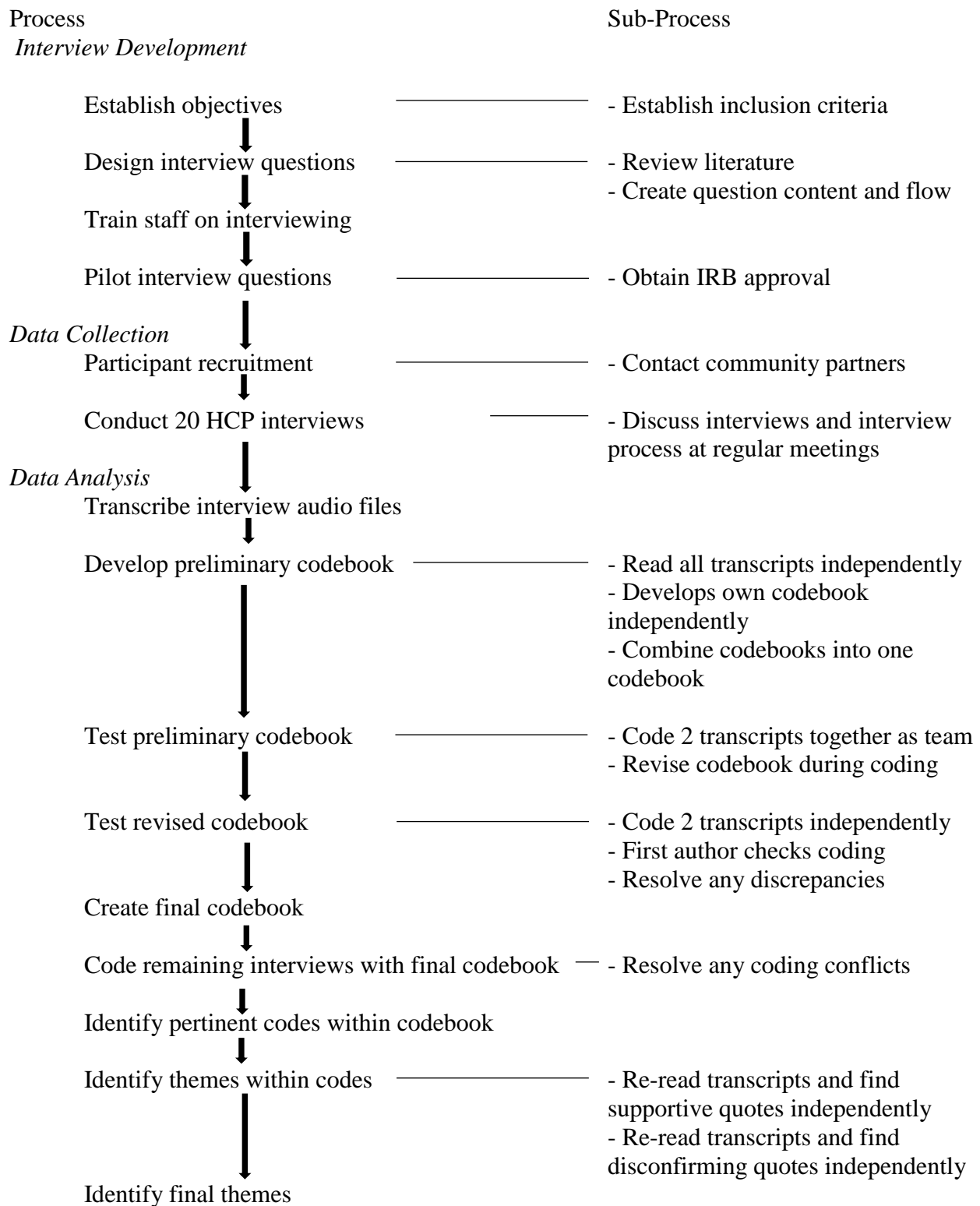


Table 2

*Descriptive Characteristics of Parents/Grandparents Participating in Interviews (n=20)*

<u>Variables</u>	<u>Total n (%)</u>	<u>Mean (SD)</u>
Female^	17 (89)	
Hispanic^	3 (15)	
Race		
American Indian	14 (70)	
White	2 (10)	
African American	1 (5)	
Other/Mixed	3 (15)	
Relationship to child^		
Parent	15 (78)	
Grandparent	3 (15)	
Other	1 (7)	
Employment		
Fulltime	15 (75)	
Student	3 (15)	
Unemployed seeking work	2 (10)	
Parents in household		2.21 (0.9)

^1 participant missing information, \*Participant could select multiple types of facilities,

Table 3

*Research Aims, Themes, and Supporting Quotes Emerging from Parents of Young American Indian Children*

Themes and Subthemes	Supporting Quotes
<b>1. Parent's perceived influence in promoting young children's healthy development</b>	
1.1 Parents are aware of their role and others in the development of the child	<p><i>"Her eating habits, she doesn't eat well. I worry about her oral care because I try really hard to take care of her teeth but she likes to eat a lot of candy and I'm not very strict I guess when it comes to... at night I try to make her drink water but I give in if she starts crying, she's begging for orange juice and milk. I know I shouldn't but it's just hard sometimes especially when you're tired and you just want to go to sleep and you're like here just have it." (Parent #1)</i></p> <p><i>"... because I have custody of them but he's actually been raised by his other grandma too like tonight I'll drop him off and I don't know what they do with him. You know how they feed him or what they do." (Parent #2)</i></p>
1.2 Personal experience shaped their views on childhood obesity	<p><i>"I'm like overweight or something and I know it's something I need to control for myself...look at my child I don't want them to end up like me, I don't want them to take the footsteps I took." (Parent #4)</i></p> <p><i>"I really don't worry about [excess weight gain] because my kids are not overweight." (Parent #5)</i></p>
1.3 Parents valued participating in cultural practices and shaping the child holistically	<p><i>"I always try to get them involved they love to dance they always ask let's – pow wow papa the older granddaughter does and we dress [child name] up and he is ready." (Parent #6)</i></p> <p><i>"[Our culture] it teaches you respect for not only other but for oneself as well. Especially when it comes to like let me give you pow wows for an example healthy behaviors it brings us together as not only as a tribe, community, culture, whatever you want to call it but it brings us together closer as a family." (Parent #7)</i></p>
<b>2. Parent's perspective about current and future collaboration with ECEs</b>	
2.1 Implicit trust for the nutrition and physical activity provided at the ECE centers	<p><i>"My kids, I know they're on these meal plans, and I know that they get served good food at school. They have a good breakfast; they have a good lunch. They're active during the day. So, it's just easy at night, when we go home to just</i></p>



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*go through McDonald's or go, and that's kind of why, I guess, I don't think about it as much." (Parent #8)*

*"I've seen them feed their kids and I think they are doing a pretty good job. But you know they have to be licensed and everything so I would imagine they'd follow the rules." (Parent #9)*

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2.2 Unaware of ECE daily activities, but appreciated communication

*"I know that my own daughter's preschool have been, with it being early head start, then they have a lot of things that they're required to have to be funded. I haven't really, with my schedule, I haven't really been in on too many of the classes, unless it's a party day? But I like to think they're finding active activities instead of just being a daycare. It's more like a preschool." (Parent #3)*

*"I just think more communication like can you send me a sheet of paper that tells me what my child did you know cause when I get there only one of the teachers is there and she's got 10 other kids she's got to take care. So I mean I just need more one on one like how did he do today, did we have any you know incidents, what did he learn. I want to know what he learned like instead of my two year old coming and telling me mom Crab says (makes a noise) you know like I want you to tell me what else he learned not what he can remember." (Parent #10)*

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### **3. Parent's perspective on current and future collaboration with Health Care Providers (HCP)s**

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3.1 Value of individual relationship and the HCP caring about the family and the child.

*"Yes, his Pediatrician is very good, she gives us a lot of information on that and also he was a part of WIC for his first two years so we got a lot of information there." (Parent #10)*

*"If they were more engaging with the parent and made them feel like that they really were being sincere and cared about what was going on in these young people's lives you know and even in my life with my little grandson I think you know maybe some of these things wouldn't be to the point where they are .... healthcare providers they are not engaging like they used to be they don't try to engage the families and what they need to do just you know here you go here is what you need, bye" (Parent #11)*

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3.2 Decision to address health problems was complex.	<p><i>“it’s more of us as parents reaching out to them for more information too, because I know I haven’t really... the last couple of appointments I haven’t... but how do I keep her from becoming overweight, I know that’s something I need to open up to them about too.” (Parent #12)</i></p> <p><i>“Because this could this and this could happen. It’s usually, if I ask, then yeah, I’ll get answers and stuff and they’re like okay with me asking, but if I don’t ask, then, it’s just whatever.” (Parent #8)</i></p>
3.3 Interested in greater guidance, explanation, and real-life application	<p><i>“I’ve talked to the doctor but they’ve never give me anything that’s... it’s always information you’re like I know that but how do I implement it” (Parent #1)</i></p> <p><i>“I feel like they should take more about it, instead of being so quick to hand you a pamphlet.” (Parent #13)</i></p>

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