Teaching Education

Self-determination through self-education: culturally responsive schooling for Indigenous students in the USA

Bryan McKinley Jones Brayboy a, Angelina E. Castagno c

a Educational Leadership and Policy Studies, Arizona State University, Tempe, AZ, USA
b Office of the President, University of Alaska Fairbanks, Fairbanks, AK, USA
c Department of Educational Leadership, Northern Arizona University, Flagstaff, AZ, USA

Online Publication Date: 01 March 2009

To cite this Article Brayboy, Bryan McKinley Jones and Castagno, Angelina E.(2009)'Self-determination through self-education: culturally responsive schooling for Indigenous students in the USA',Teaching Education,20:1,31 — 53

To link to this Article: DOI: 10.1080/10476210802681709
URL: http://dx.doi.org/10.1080/10476210802681709

PLEASE SCROLL DOWN FOR ARTICLE

Full terms and conditions of use: http://www.informaworld.com/terms-and-conditions-of-access.pdf

This article may be used for research, teaching and private study purposes. Any substantial or systematic reproduction, re-distribution, re-selling, loan or sub-licensing, systematic supply or distribution in any form to anyone is expressly forbidden.

The publisher does not give any warranty express or implied or make any representation that the contents will be complete or accurate or up to date. The accuracy of any instructions, formulae and drug doses should be independently verified with primary sources. The publisher shall not be liable for any loss, actions, claims, proceedings, demand or costs or damages whatsoever or howsoever caused arising directly or indirectly in connection with or arising out of the use of this material.
Self-determination through self-education: culturally responsive schooling for Indigenous students in the USA

Bryan McKinley Jones Brayboy, Angelina E. Castagno

In this article, we outline culturally responsive schooling (CRS) for Indigenous youth and situate this concept within a larger history of US federal and community-based efforts to educate Indigenous youth in the USA. We examine what we know from the research literature about the impacts of CRS among US Indigenous youth. In exploring the research, we rely on national datasets of Indigenous youth’s achievement on standardized tests, qualitative approaches to examining CRS in schools serving Indigenous youth in the USA, and case studies of successful efforts at CRS. We pay special, though not exclusive, attention to the evidence regarding Indigenous students’ reading and literacy skills since this is an area that is particularly revealing of what happens when CRS is not engaged. We will argue throughout this paper that a growing body of literature points to the fact that community- and culture-based education best meets the educational needs of Indigenous children.

Keywords: Indigenous education; culturally responsive schooling; culture; self-determination

Introduction

The history of American Indian education can be summarized in three simple words: battle for power (Lomawaima, 2000, p. 2).

There are two models that dominate conversations and approaches to Indian education in the USA: the assimilative model and the culturally responsive model. We want to acknowledge that the debate regarding these two models is far from complete. There are communities and parents and teachers who continue to rely on, and advocate for, the assimilative model. However, the research is quite clear: there is no evidence that the assimilative model improves academic success; there is growing evidence that the culturally responsive model does, in fact, improve academic success for American Indian/Alaska Native children. Importantly, we have found no evidence in Indian Country that parents and communities do not want their children to be able to read and write or do mathematics, science, etc. Quite the contrary, these communities are keenly aware of this need and are engaged in this process – but they insist (rightly, in our minds) that children’s learning to “do” school should not be an assimilative process; rather, it should happen by engaging culture. Indeed, this education continues...
to be framed and lived within a framework where larger assimilative forces and local, Indigenous forces are engaging in a “battle for power.”

In this paper, we will outline what is meant by culturally responsive schooling (CRS) for Indigenous youth and situate this concept within a larger history of federal and community-based efforts to educate Indigenous youth. We then turn our attention to what we know from the research literature about the impacts of CRS among Indigenous youth. In examining the research, we rely on national datasets of Indigenous youth’s achievement on standardized tests, qualitative approaches to examining CRS in schools serving Indigenous youth, and case studies of successful efforts at CRS. We pay special, though not exclusive, attention to the evidence regarding Indigenous students’ reading and literacy skills since this is an area that is particularly revealing of what happens when CRS is not engaged. We will argue throughout this paper that a growing body of literature points to the fact that community- and culture-based education best meets the needs of Indigenous children. And in terms of Indigenous students’ reading and literacy, there is no scientific evidence in the USA that phonics-based approaches serve American Indian and Alaska Native students. More pointedly, there is a set of emerging studies that demonstrate that an infusion of language (where possible) and culture assists Indigenous children’s ability to read and write in English, do mathematics, and succeed in school.

CRS for Indigenous youth has been widely viewed as a promising strategy for improving the education and increasing the academic achievement of American Indian and Alaska Native (AI/AN) students in US schools. CRS is not only advocated for by a number of scholars, but also by many tribal communities and Indigenous educational leaders (Beaulieu, 2006; Beaulieu, Sparks, & Alonzo, 2005; Demmert, Grissmer, & Towner, 2006; Demmert, McCardle, Mele-McCarthy, & Leos, 2006; Dick, Estell, & McCarty, 1994; Klump & McNeir, 2005). Emerging largely from the cultural difference literature, CRS assumes that a:

…firm grounding in the heritage language and culture Indigenous to a particular tribe is a fundamental prerequisite for the development of culturally healthy students and communities associated with that place, and thus is an essential ingredient for identifying the appropriate qualities and practices associated with culturally responsive educators, curriculum, and schools. (Alaska Native Knowledge Network, 1998)

This educational approach requires a shift in teaching methods, curricular materials, teacher dispositions, and school–community relations.

One of the most general but direct explanations of CRS is that this type of schooling is that which “makes sense” to students who are not members of, or assimilated into, the dominant social group (Klug & Whitfield, 2003, p. 151). In a similar vein, CRS has also been described as that which “builds a bridge” between a child’s home culture and the school in order to effect improved learning and school achievement (Pewewardy & Hammer, 2003, p. 1). Also related, but still more specific, Klump and McNeir (2005) draw on the multicultural education literature to note:

…culturally responsive education recognizes, respects, and uses students’ identities and backgrounds as meaningful sources for creating optimal learning environments. Being culturally responsive is more than being respectful, empathetic, or sensitive. Accompanying actions, such as having high expectations for students and ensuring that these expectations are realized, are what make a difference (Gay, 2000). (Klump & McNeir, 2005, p. 3)
CRS in historical perspective

CRS is certainly not a new phenomenon or a passing fad; instead it has been central to tribal nations’ calls for improved schooling since at least the early part of the twentieth century. Perhaps the first officially recognized call for CRS came in 1928 with the publication of the Meriam Report (Meriam et al., 1928; Prucha, 2000). Although the Meriam Report criticized a number of areas of governmental policy with respect to tribal nations, it noted American Indian education as one of the most deficient areas with the most negative consequences for tribal communities. The Meriam Report called for more Indigenous teachers, early childhood programs, and the incorporation of tribal languages and cultures in schools. The report was “a forerunner in the idea that incorporating culturally-based education was a necessary component of a school’s culture if Native American students were to succeed academically as students and play a meaningful role as citizens” (Demmert & Towner, 2003, p. 2). Although the Meriam Report was a clear call for change in Indian education, little change occurred until over 30 years later.

In the 1960s and 1970s, tribal nations and urban Indian communities increased pressure on the federal government to facilitate educational change and greater tribal control over the education of Indigenous youth. These efforts led to a number of important pieces of legislation and federal investigations related to American Indian education and, specifically, the role of tribal languages and cultures in schools serving Indigenous youth. In 1969, the US Senate issued a report entitled Indian education: A national tragedy – a national challenge, which was the beginning of a series of important events (Special Subcommittee on Indian Education, 1969). The Havighurst Report of 1970 offered data on the academic performance of Indigenous youth and the lack of curriculum that supported tribal languages and cultures in schools (Fuchs & Havighurst, 1973; Havighurst, 1970); the Indian Education Act of 1972 included opportunities and funding for creating tribal culture and language programs for schools and support for increasing the number of Native educators; and the Indian Self-Determination and Education Assistance Act of 1975 facilitated the development of schools and educational programs that were tribally controlled (Demmert & Towner, 2003).

In the 1980s, the educational anthropology literature exploded with a focus on CRS (called by a number of names) (e.g., Brown, 1980; Deyhle, 1986; Greenbaum & Greenbaum, 1983; McLaughlin, 1989). This scholarship, combined with related work in the fields of education and multicultural education, seemed to bring the discussion of CRS into the mainstream. Furthermore, the rapidly increasing racial and ethnic diversity among youth in US schools in the 1980s and 1990s also resulted in an increased interest in CRS among a wide array of educators. Scholarship from disciplines as diverse as anthropology, psychology, applied linguistics, and sociology added to the growing body of knowledge about the challenges minoritized students were facing in schools. As Pewewardy and Hammer (2003) note, “much was learned about student motivation, power relations, and resistance...; language and cognition...; culture and cognition...; and motivation and learning styles..., to mention only a small sample of this body of work” (p. 1).

In the 1990s, another series of federal legislation and reports were issued relating specifically to Indigenous youth in schools. The Native American Languages Act of 1990/1992 formalized the importance of the federal government’s role in preserving, protecting, and promoting the rights and freedoms of tribal language use
and preservation. In 1991, the United States Department of Education issued a report entitled *Indian nations at risk: An educational strategy for action final report* (Indian Nations at Risk Task Force, 1991), and in 1992, the White House Conference on Indian Education and a follow-up report were completed (White House Conference on Indian Education, 1992). In 1998, President Clinton issued Executive Order 13096 on American Indian and Alaska Native education, which included recognition of the “special, historic responsibility for the education of American Indian and Alaska Native students”, a commitment to “improving the academic performance and reducing the dropout rate” of Indigenous students, and a nationwide effort among tribal leaders and Indian education scholars to develop a “research agenda” guided by the goals of self-determination and the perpetuation of tribal cultures and languages (*American Indian and Alaska Native Education*, Executive Order 13096, 1998). This 1998 Executive Order includes the goals of evaluating “promising practices used with” Indigenous students; evaluating “the role of native language and culture in the development of educational strategies”; and assisting “tribal governments in meeting the unique educational needs of their children, including the need to preserve, revitalize, and use native languages and cultural traditions”.

However, a new Executive Order (13337) signed into law on April 30, 2004 did not include the final of these three goals (*American Indian and Alaska Native Education*, Executive Order 13337, 2004); instead, this new Executive Order focused attention on Indigenous students meeting the goals established in the No Child Left Behind Act (NCLB) of 2001. This is a significant change and highlights our concern – and that of many Indigenous communities – that schools are moving further away from providing an effective, high-quality, and culturally responsive education to Indigenous youth. We agree with Inupiaq scholar Leona Okakok’s (1989) insightful commentary. She writes, “to me, educating a child means equipping him or her with the capability to succeed in the world he or she will live in” (p. 253). She continues by making a powerful (and political) statement that “education is more than book learning, it is also value-learning” (p. 254). Indeed, to equip a child with the capability to exist in the world requires value judgments about what that child needs in order to succeed. The values, ideas, and priorities embedded in NCLB are not necessarily shared within tribal nations and Indigenous communities.

**What does the research tell us about the impacts of CRS among Indigenous youth?**

Figures 1–4 illustrate the average scores on the National Assessment of Educational Progress (NAEP) for various racial groups between 2003 and 2007. We have included scores at both the fourth- and eighth-grade levels and for both the reading and mathematics assessments. As is evident in these figures, average scores for Indigenous youth (and others) at both grade levels and in both core subjects have largely remained flat. This is an important point because these years have seen a significant increase in the use of standardized, remedial, and scripted educational programs in schools serving AI/AN youth.

Recent research by McCarty, Romero, and Zepeda (2006) among Indigenous youth in the south-western USA suggests that many young people in tribal communities have pride in their heritage, language and culture. Although some youth also recognize the privileging of English within the USA and the connections between English and
Teaching Education

whiteness, many still possess a genuine interest in learning and retaining their linguistic abilities in their tribal language. As McCarty, Romero, and Zepeda (2006) note, these interests among youth “constitute crucial resources to be tapped in tribal-community efforts to revitalize heritage languages” (p. 42). However, these interests among youth and the efforts within tribal communities are in jeopardy given the ways that No Child Left Behind (NCLB) has been enacted and the intense pressures on schools to make adequate yearly progress. In fact, a major concern among Indigenous educators is the impact of NCLB on CRS efforts (Beaulieu et al., 2005) – in other words, many Native adults see value in facilitating the learning of tribal cultures in the schools, but they see this goal taking a backseat to the priorities mandated by the federal government. Importantly, however, although most Indigenous parents are interested in and supportive of including culture in the school curriculum, Yazzie (1999) points out that “how

Figure 1. Fourth-grade average scores on NAEP reading by student group: 2003–2007.

Figure 2. Eighth-grade average scores on NAEP reading by student group: 2003–2007.
This interest and controversy is highlighted in recent scholarship published by the US Department of Education:

Research generally supports the premise that students do well when their culture and language are incorporated into their education. There appear to be at least two approaches in the views of educators and parents about the proper role of Native language and culture in the school. The first perspective generally appears in situations where the tribe or village’s language and culture ought to be pervasive and structure the overall educational experience. This perspective does not exclude having the student master English or the subject matter that is expected of students in majority culture schools, but it puts a premium on local ways of knowing. The second perspective appears

Figure 3. Fourth-grade average scores on NAEP mathematics by student group: 2003–2007.

Figure 4. Eighth-grade average scores on NAEP mathematics by student group: 2003–2007.
where Native students are not in the majority in the schools and Native parents are only one strand among the voices seeking to shape the school’s approach. In this second perspective, the objectives appear to be more limited although no less important; that is, the school should respect the cultures of its Native students, support and promote the search by Native students to understand who they are in a multicultural world, and provide opportunities for those students and the students from other backgrounds to learn about Native languages and cultures. The goal in this second perspective is to teach non-Indian students about Indian cultures and history, and to instill respect for these cultures. (US Department of Education, 2001, p. 16)

Other research supports this summary, adding that a number of Indigenous adults believe that children should have an opportunity to learn their culture and language in order to preserve their tribal identities, that they should learn traditional values from elders, that tribal languages and cultures are an important aspect in the education of Indigenous youth, and that schools ought to become clearinghouses for community traditions and cultures (Agbo, 2001, 2004). It is important for teachers to realize that they are inherently and consistently engaged in cultural production and reproduction. The transmission of dominant cultural knowledge and norms occurs on a daily basis in US schools, and the consistent message in much of the research is that successful teachers of Indigenous youth also work to transmit values, beliefs, knowledge, and norms that are consistent with their students’ home communities (Franklin, 1995; Grant & Gillespie, 1993; Ogbu, 1987). This message comes not only from researchers, but also from Indigenous parents, youth, and educational leaders; thus, the teaching of tribal cultures and languages in schools serving Indigenous youth is a shared priority among a range of constituents (Cahape & Howley, 1992; Tharp & Yamauchi, 1994). In Cleary and Peacock’s (1998) research with both Native and non-Native teachers of Indigenous youth, this message was central. Although both groups of teachers believed it was important to teach tribal cultures alongside “academics”, the Native teachers in the study “saw it as an imperative, essential part of the school” (Cleary & Peacock, 1998, p. 109).

None of the research suggests that Indigenous youth should learn tribal cultures and languages at the expense of learning mainstream culture, English, and the typical “academic” subjects generally taught in schools. This is an important point because the shared assumption by most scholars, parents, and educational leaders is that schools should facilitate the acquisition of all of these knowledges and skills – what we might call a “both/and” approach rather than an “either/or” approach. The scholarship on multicultural education provides a nice backdrop for this argument. Scholars such as Delpit (1988, 1995), Ladson-Billings (1994, 1995a, 1995b), Sleeter and Grant (2003), and many others have suggested that students must become knowledgeable about and comfortable within both the mainstream culture and their home cultures. Delpit (1988, 1995), for example, argues that students who are not part of the “culture of power” must be explicitly taught the rules and codes of that culture in order to be able to negotiate it successfully and make decisions about how and when they will negotiate it. Ladson-Billings (1994, 1995a, 1995b) adds the important component of high expectations and academic success for all students. Scholars discussing American Indian education make similar arguments about the need to teach Indigenous youth about the dominant culture (Franklin, 1995); hold them to the same high academic expectations that we hold for their White peers (Agbo, 2001, 2004); and provide explicit and direct instruction about dominant cultural and academic norms, expectations, and skills (Cleary & Peacock, 1998). Fortunately, over the past three decades:
a growing number of Indigenous students have the opportunity to use Indigenous knowledge and language to meet ‘both’ local ‘and’ Western education goals (Swisher & Deyhle, 1987; Swisher & Tippeconnic, 1999; Yazzie, 1999). This ‘both/and’ paradigm (Lipka & McCarty, 1994) supports an educational approach that values both Native and Western knowledge. (Lipka, 2002, p. 3)

What this amounts to is the need and desire for Indigenous youth to become bi/multicultural and the important role of schools in facilitating that process. This is perhaps the most fundamental goal of CRS addressed in the literature. When teachers, curricula, and schools provide a challenging and high-quality education that is intimately connected and relevant to tribal communities, they will be far more likely to graduate youth who are academically prepared, connected to, and active members of, their tribal communities, and knowledgeable about both the dominant and their home cultures. Cleary and Peacock (1998) sum up the message many scholars send when they note, “a primary ingredient of American Indian student success is the ability to live successfully in both the American Indian culture and the majority culture” (p. 121). Successfully negotiating these “two worlds” requires students to “code switch” (Delpit, 1988; Klug & Whitfield, 2003), a skill that is more easily obtained when tribal cultures are a visible and central part of the school (Gilliland, 1995). This code switching results in Indigenous youth who are both academically and culturally prepared to succeed in the mainstream culture and in their tribal communities (Deyhle, 1995; Deyhle & Swisher, 1997; Reyhner & Jacobs, 2002).

CRS, reading, and literacy among Indigenous students

To take a closer look at the impact of CRS (or lack thereof) among Indigenous students, we turn to what we know about Indigenous students’ reading achievement and literacy experiences in schools. There are a few key pieces of scholarship that help shed some light on reading and literacy for Indigenous youth. The primary data source for learning how AI/AN students perform on standardized measures of reading achievement is the National Indian Education Study (NIES), which relies primarily on NAEP data from the National Center for Educational Statistics (Moran & Rampey, 2008; Moran, Rampey, Dion, & Donahue, 2008).

The NIES includes a nationally representative sample of over 10,000 Indigenous students in the 11 states with over 50% of the nation’s AI/AN population. The study includes student test scores on the NAEP reading and mathematics assessments at the fourth and eighth grades in 2005 and 2007. It also includes survey data from over 10,000 Indigenous students and their teachers and school administrators in the same years. According to the NIES data, the average reading scores of Indigenous youth are lower than the scores of their White and Asian peers, but very similar to the scores of their Black and Latino peers. On the fourth-grade NAEP reading assessment, 18% of Indigenous students scored at or above the proficient level, compared with 33% of all non-Indigenous students, and 43% of White students (see Figure 5).

Similarly, on the eighth-grade NAEP reading assessment, 18% of Indigenous students scored at or above the proficient level, compared with 31% of all non-Indigenous students, and 40% of White students (see Figure 6).

Essentially, then, these data confirm what many educators already know – that is, that Indigenous students are not achieving at the same levels as many of their peers.
But what else does the NIES tell us? There was no significant change in reading scores between 2005 and 2007. In other words, about the same percentages of students performed at the same levels in both 2005 and 2007. Girls at both the fourth- and eighth-grade levels outperformed their male peers – which may not be surprising given what we know about college-going rates between men and women. Students in “high-density” schools – that is, schools with more than 25% Indigenous students – scored lower than students in “low-density” schools, or those with less than 25% Indigenous student populations. Students in Bureau of Indian Education (BIE) schools scored lower than students in public schools. And finally, lower-income students performed worse than their upper-income peers – a correlation that is consistent across all ethnic and racial groups of students. There was significant variability in how Indigenous students in the various states performed on the NAEP reading assessment. Indigenous students in Oklahoma and Oregon performed better than their Indigenous peers in other states, and students in New Mexico, Arizona, South Dakota, and Alaska performed worse than their peers in other states. The percentages of students who performed at or above the basic level of reading proficiency ranges from the lowest in Arizona, with just 29% of Native students meeting at least the basic level of reading proficiency, to the highest in Oklahoma, where 60% of Indigenous students score at or above the basic level. Importantly, however, the NIES data do not help explain why these variations occur.

Figure 5. Percentage of fourth-grade students scoring ‘proficient’ or higher on the NAEP reading test.

Figure 6. Percentage of eighth-grade students scoring ‘proficient’ or higher on the NAEP reading test.
Another helpful data source on AI/AN reading achievement is the BIE Reading First program. After its first three years of implementation, a summative evaluation report was conducted in 2006–2007 examining all BIE schools that received Reading First funding in Cohort 1 (17 schools) and Cohort 2 (13 schools) (Callow-Heusser & Chapman, 2007). The executive summary provides a concise overview of the progress made in BIE Reading First schools. According to the report:

On average, a substantial number of K–3 students in BIE Reading First Cohorts 1 and 2 schools made progress during the 2006–2007 school year. In fact, over 67% of Cohort 1 K–3 students made progress (e.g., stayed at “benchmark” or changed classification in the positive direction, as indicated by Instructional Recommendations on the DIBELS benchmark assessments), with the percentage of K–3 students who made progress in individual schools ranging from 81% to 33%. Percent progress in Cohort 2 schools ranged from 74% to 45%. Additionally, the percentage of students who begin the year at high risk of reading failure has dropped from 40% at baseline to 18% in Cohort 1 schools (three years of implementation), and from 41% at baseline to 29% in Cohort 2 schools (one year of implementation). The percentage of students reading at grade level has changed from a baseline of 28% to 59% in Cohort 1 schools and from 26% to 44% in Cohort 2 schools based on DIBELS scores. (Callow-Heusser & Chapman, 2007, p. i)

And later, the executive summary concludes that “overall, the BIE’s Reading First program has demonstrated high levels of success in changing the reading trajectories of struggling readers and increasing the percentages of students reading at grade level” (p. ii). The report also describes positive outcomes in the areas of student engagement, fidelity of implementation, knowledge of effective practice and research-based instruction, and professional development. The report notes that these successes were accomplished despite many geographic, leadership, and implementation challenges faced by BIE Reading First schools.

Close scrutiny of the BIE Reading First summative report for 2006–2007, however, reveals that although these numbers sound impressive at first glance, they obscure a number of concerns. After three years of implementation in Cohort 1 schools, 59% of students are reading at grade level according to DIBELS (up from 36% in the first year), 77% are at grade level according to the SAT-10 phonemic awareness assessment (up from 68% in the first year), 48% are at grade level according to the SAT-10 phonics assessment (up from 36% in the first year), 48% are at grade level according to the SAT-10 vocabulary assessment (up from 32% in the first year), 56% are at grade level according to the SAT-10 reading fluency assessment (up from 39% in the first year), and 48% are at grade level according to the SAT-10 comprehension assessment (up from 34% in the first year) (Callow-Heusser & Chapman, 2007, p. 13). Although all of these percentages increased at the end of three years of implementation, they are still quite low if you consider that on most assessments, only around half of all Indigenous students in BIE Reading First schools are at grade level even after three intensive years of research-based instruction and intervention. Given the funding, resources, time, and energy devoted to these programs, we would expect some improvement, but what if this improvement is no better than improvements we might see with similar commitments to a completely different approach to reading and literacy instruction?

Another place in which numbers may obscure reality is in considering the “percent progress” of BIE Reading First schools. The percent progress measures the extent to which a school’s test scores have changed over a given period of time, and Cohort 1
schools average a 67% change (ranging from 81% to 33%) while Cohort 2 schools average a 55% change (ranging from 74% to 45%) (Callow-Heusser & Chapman, 2007, p.19). Certainly any change in the positive direction is good, but if a school started with low scores, it doesn’t take much to have a high percent change and even with a high percent change, many students may still be underperforming. Consider, for example, the school with the highest percent progress in Cohort 1, Nay Ah Shing. This school is considered a “model school” according to the BIE. It has an overall percent progress of 80%. After three years of Reading First implementation, although 77% of students are at grade level according to DIBELS and 75% are at grade level according to the SAT-10 phonemic awareness assessment, just 55% are at grade level according to the SAT-10 phonics assessment, 51% are at grade level according to the SAT-10 vocabulary assessment, 60% are at grade level according to the SAT-10 reading fluency assessment, and 47% are at grade level according to the SAT-10 comprehension assessment. Another “model school” with a “highly engaged principal” and “parents and community involved in school activities” is Jemez. Jemez has an overall percent progress of 80%, and although 80% of students are at grade level according to DIBELS and the SAT-10 phonemic awareness assessment, only 18% are at grade level according to the SAT-10 phonics assessment, 37% are at grade level according to the SAT-10 vocabulary assessment, 53% are at grade level according to the SAT-10 reading fluency assessment, and 35% are at grade level according to the SAT-10 comprehension assessment after three years of Reading First support. Chief Leschi is listed as another “model school” with a “high use of effective teaching practices” according to the BIE Reading First criteria, and yet, depending on the assessment used, anywhere from one third to more than half of its students are not at grade level. And in another example, Alamo Navajo has an overall percent progress of 70%, but only 53% of students are at grade level according to DIBELS, 56% are at grade level according to the SAT-10 phonemic awareness assessment, 15% are at grade level according to the SAT-10 phonics assessment, 12% are at grade level according to the SAT-10 vocabulary assessment, 17% are at grade level according to the SAT-10 reading fluency assessment, and 17% are at grade level according to the SAT-10 comprehension assessment. In looking at the results for individual schools, a number of schools report test scores that actually decrease from the second to the third year of Reading First implementation, and some show an overall decrease from the first to the third year.

Many schools, of course, also show improvements in their scores, but even in these improvements we have to wonder why so many students are still not at grade level after three years of Reading First intervention. We believe these data shed light on the impact of CRS (or lack thereof) among Indigenous students. The pervasive introduction of Reading First in schools serving Indigenous youth also brought a significant reduction in CRS for Indigenous youth. In other words, students’ scores appear to not be rising and they are being deprived of access to their home language and culture in schools. It is what some people call a “double whammy”.

**Teaching approaches to literacy among Indigenous students**

As Cleary (2008) recently asserted, “Attention only to basic skills and teaching to the test is precisely the kind of curriculum that will leave Native students behind” (p. 98). Especially since the advent of NCLB, multiple scholars have made similar points. Ironically, however, it is likely that many educators in schools serving Indigenous
youth resort to scripted and standardized reading programs because they truly care about their students’ success and hope that these approaches will be the magic bullet for improving their students’ school achievement. This is an important point because it is often with the best of intentions that educators adopt particular teaching approaches, and many educators in schools serving Indigenous youth praise programs like those associated with Reading First. Sometimes, of course, teachers know that these scripted and standardized programs are not best for their students but they are pressured, or sometimes forced, to use them anyway. In a recent issue of the *Journal of American Indian Education*, Reyhner and Hurtado (2008) note that “NCLB is especially detrimental to Indian students with regard to its Reading First provisions” (p. 85). They go on to argue that commercially developed reading programs are generally one-size-fits-all approaches targeted at predominantly White, middle-class students who speak a standard or mainstream dialect of English. They suggest that these programs be supplemented and adapted by teachers in order to be more relevant to their particular population of students.

A different, but related, issue is raised by Ladson-Billings (2005), who reminds us that racism – usually in subtle and somewhat unconscious forms – is an ongoing and pervasive issue in schools. She argues:

> I continue to have serious concerns about teachers’ willingness to unlearn racial codes and symbols and learn new ways of constructing and conceptualizing Blackness in general and African Americans in particular. Thus, the task is not so much how we teach students, but rather in how we construct them as students. (p. 147)

We can take this insight and glean something about the nature of reading teaching and learning among Indigenous students. Specifically, we should be asking ourselves the following: how are teachers and policy makers (still) constructing Indigenous youth as “poor readers”, “deficient in reading proficiency”, “illiterate”, and “at risk for reading failure”? Indeed, this question brings the socio-cultural context of schooling center stage and highlights that even though the federal government, NCLB, and Reading First see reading proficiency as a purely technical skill, we are talking about people and relationships.

In addition to these critical and questioning analyses of literacy teaching in schools, there are also some scholars who offer suggestions as to what teachers should be doing to improve Indigenous students’ reading and literacy achievement. In the early 1990s, Kasten (1992) argued that the whole language approach to teaching reading is most compatible with American Indian beliefs and the ways American Indian youth learn. A number of scholars have agreed with Kasten, but many others advocate a more balanced approach that combines whole language with phonics-based instruction. And still others, including the BIE’s Reading First initiatives, advocate a phonics-based instructional program as the most effective route to improved reading among Indigenous students.

A report issued by St. Charles and Costantino (2000) notes that educators working with Indigenous students should provide literacy experiences that are culturally relevant, use instructional materials that mirror the experiences and vocabulary of their students, and develop the English vocabulary of their students. The call for CRS that is connected to students’ lives is neither new nor revolutionary. We know that for effective and efficient comprehension, readers must be able to relate text material to their own knowledge. Scholars have also noted the importance of teachers using
books by Indigenous authors and about topics relevant to Indigenous students’ lives so that students have opportunities to see themselves in the texts and connect with what they are reading. In a similar vein, many scholars conducting research with African American and Latino communities have found that the literacy skills children already possess can be deployed and employed to help students acquire school literacy skills. In her work with Indigenous students, Ofelia Zepeda (1995) introduced the notion of the “literacy continuum” and other scholars have built upon this work. The literacy continuum refers to the fact that Indigenous youth come to school with a wealth of knowledge that can be drawn on and built upon in order to acquire literacy in English. The oral traditions and storytelling central to many tribal communities can and should serve as foundations for the written and text-based literacies required by and developed within schools. This requires, of course, that schools broaden their definitions of literacy, which is a formidable challenge within the current context of NCLB.

We can gain some insight on what is occurring in schools serving Indigenous youth from the NIES study we highlighted earlier. Recall that in addition to the NAEP data indicating how Indigenous students perform on standardized measures of reading achievement, the NIES study also includes a survey that was completed by AI/AN students and teachers and administrators working in schools serving Indigenous youth. Although this study includes information on the characteristics of Indigenous students and their teachers as well as the extent to which Indigenous languages and cultures are integrated into the education of AI/AN students, we will only discuss those aspects of the study that have direct relevance to reading and literacy issues among Indigenous students.

Overall, 77% of fourth-graders and 80% of eighth-graders are taught by teachers who indicated not speaking their students’ native languages at all (p.18). There is some variation depending on school type, however, as indicated in Table 1.

Overall, 87% of eighth-grade reading and languages arts students have teachers who provided instruction entirely in English (p. 38). Again, differences are apparent depending on the type of school students attend, as indicated in Table 2.

There is similar variability in the extent to which teachers integrate American Indian and Alaska Native culture and history into their curriculum (p. 39). Table 3 lists the percentages of students who had teachers that integrated Indigenous culture and language into their curriculum to varying degrees.

Teachers were asked the extent to which they used AI/AN content or cultural standards to plan their reading and language arts lessons (see Table 4). Overall, just

Table 1. Percentage of students with teachers who identify various degrees of speaking their students’ Native language.

<table>
<thead>
<tr>
<th></th>
<th>High-density school</th>
<th>Low-density school</th>
<th>Public school</th>
<th>BIE school</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fourth grade</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fluent native speaker</td>
<td>11</td>
<td>1</td>
<td>4</td>
<td>29</td>
</tr>
<tr>
<td>Not at all</td>
<td>54</td>
<td>97</td>
<td>83</td>
<td>27</td>
</tr>
<tr>
<td>Eighth grade</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fluent native speaker</td>
<td>6</td>
<td>Rounds to zero</td>
<td>2</td>
<td>20</td>
</tr>
<tr>
<td>Not at all</td>
<td>61</td>
<td>97</td>
<td>86</td>
<td>29</td>
</tr>
</tbody>
</table>

Note: BIE, Bureau of Indian Education.
3% of fourth-graders and 2% of eighth-graders had teachers who said they relied on Indigenous content or cultural standards “a lot” in their reading and language arts planning (Moran & Rampey, 2008, p. 40). Also troubling are the high percentages of students in all types of schools who have teachers who report not using Indigenous content or cultural standards and/or not being aware that such standards exist.

Based on these data from the NIES survey, it is clear that although many reading and literacy scholars have argued that students’ academic achievement and school performance improves when curriculum and pedagogy are relevant to students’ lives, many Indigenous students are not experiencing this sort of schooling. We should not be surprised, then, that there has been little, if any, improvement of students’ skills as assessed by the NAEP and other “standardized” measures. There are, however, pockets in the USA where Indigenous students are being exposed to their home culture and language and are thriving academically. It is to these places of possibilities that we now turn.

### Table 2. Percentage of students with teachers who identify various degrees of using their students’ Native language in classroom interactions.

<table>
<thead>
<tr>
<th></th>
<th>High-density school</th>
<th>Low-density school</th>
<th>Public school</th>
<th>BIE school</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>All fourth-grade students</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Frequent use of AI/AN language(s)</td>
<td>4</td>
<td>Rounds to zero</td>
<td>1</td>
<td>16</td>
</tr>
<tr>
<td>Instruction entirely in English</td>
<td>76</td>
<td>97</td>
<td>90</td>
<td>43</td>
</tr>
<tr>
<td><strong>Eighth-grade reading/language arts students</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Frequent use of AI/AN language(s)</td>
<td>7</td>
<td>Rounds to zero</td>
<td>2</td>
<td>27</td>
</tr>
<tr>
<td>Instruction entirely in English</td>
<td>76</td>
<td>97</td>
<td>91</td>
<td>39</td>
</tr>
</tbody>
</table>

Note: BIE, Bureau of Indian Education.

### Table 3. Percentage of students with teachers who identify various degrees of integrating AI/AN culture and history into their curriculum.

<table>
<thead>
<tr>
<th></th>
<th>High-density school</th>
<th>Low-density school</th>
<th>Public school</th>
<th>BIE school</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>All fourth-grade students</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Almost every day</td>
<td>15</td>
<td>2</td>
<td>5</td>
<td>19</td>
</tr>
<tr>
<td>At least once a week</td>
<td>21</td>
<td>7</td>
<td>12</td>
<td>34</td>
</tr>
<tr>
<td>At least once a month</td>
<td>24</td>
<td>17</td>
<td>20</td>
<td>30</td>
</tr>
<tr>
<td>At least once a grading period</td>
<td>35</td>
<td>57</td>
<td>51</td>
<td>13</td>
</tr>
<tr>
<td>Never</td>
<td>6</td>
<td>16</td>
<td>12</td>
<td>4</td>
</tr>
<tr>
<td><strong>Eighth-grade reading/language arts students</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Almost every day</td>
<td>10</td>
<td>1</td>
<td>4</td>
<td>31</td>
</tr>
<tr>
<td>At least once a week</td>
<td>12</td>
<td>2</td>
<td>5</td>
<td>30</td>
</tr>
<tr>
<td>At least once a month</td>
<td>29</td>
<td>9</td>
<td>14</td>
<td>31</td>
</tr>
<tr>
<td>At least once a grading period</td>
<td>31</td>
<td>56</td>
<td>49</td>
<td>8</td>
</tr>
<tr>
<td>Never</td>
<td>17</td>
<td>32</td>
<td>27</td>
<td>Rounds to zero</td>
</tr>
</tbody>
</table>

Note: BIE, Bureau of Indian Education.
Case studies of successful efforts at CRS

There are a number of examples in the literature of programs that have successfully developed and implemented CRS for Indigenous youth. What many of these case studies have in common is a “grass roots approach” in which local communities play a key role in developing and sustaining the program, sustained financial support, and careful record-keeping of both achievements and setbacks (Demmert & Towner, 2003; Lipka & McCarty, 1994; McCarty, 1993; Native Education Initiative of the Regional Educational Labs, 1995). We will review some of these examples here, but this is in no way meant to be an exhaustive list. We have focused on programs that integrated culture, broadly speaking, and omitted programs that are more focused on language issues and bilingual or language immersion models. We realize this is a somewhat superficial divide since language and culture are so intimately related, but as with the rest of this article, the focus remains on CRS for Indigenous youth who may or may not be second language learners. At the same time, we agree with Hermes (2005, 2007) that there is great potential in “teaching culture through language” because of the ways language forces the centering of Indigenous epistemologies and may transform the culture of schools serving Indigenous youth and tribal communities. Lomawaima and McCarty’s (2006) book discusses a number of educational programs for Indigenous youth that have focused more specifically on language issues, and we would direct the reader interested in case studies of language programs to their insightful work.

One of the most studied efforts at CRS for Indigenous youth is the Kamehameha Early Education Program (KEEP). This program provided culturally responsive language arts and mathematics instruction to Native Hawaiian students, which led to higher reading and mathematics achievement among students in the program as compared with students not in the program (Apthorp, D’Amato, & Richardson, 2002; Brenner, 1998; Lipka, 2002; Tharp & Yamauchi, 1994; Vogt, Jordan, & Tharp, 1993). When the techniques developed for KEEP were then attempted in a Navajo schooling context, similar results did not ensue – thus adding confidence to the conclusion that

<table>
<thead>
<tr>
<th></th>
<th>High-density school</th>
<th>Low-density school</th>
<th>Public school</th>
<th>BIE school</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fourth grade</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A lot</td>
<td>5</td>
<td>Rounds to zero</td>
<td>2</td>
<td>9</td>
</tr>
<tr>
<td>Some</td>
<td>18</td>
<td>5</td>
<td>10</td>
<td>27</td>
</tr>
<tr>
<td>A little</td>
<td>24</td>
<td>10</td>
<td>16</td>
<td>30</td>
</tr>
<tr>
<td>Not at all/unaware of standards</td>
<td>53</td>
<td>85</td>
<td>72</td>
<td>34</td>
</tr>
</tbody>
</table>

| Eighth grade         |                     |                    |              |            |
| A lot                | 4                   | Rounds to zero     | 1            | 17         |
| Some                 | 17                  | 4                  | 9            | 35         |
| A little             | 24                  | 8                  | 13           | 25         |
| Not at all/unaware of standards | 54        | 80                 | 76           | 22         |

Note: BIE, Bureau of Indian Education.
pedagogy and curriculum must be developed with the local culture in mind. Klump and McNeir (2005) note that the Center for Research on Education, Diversity, and Excellence has developed a set of standards for effective pedagogy based on the KEEP findings as well as other successful case studies. These standards include:

1. Teachers and students working together
2. Developing language and literacy skills across the curriculum
3. Connecting lessons to students’ lives
4. Engaging students in challenging lessons
5. Emphasizing dialog over lectures (Klump & McNeir, 2005, p. 6)

Again, we see the same message that schooling must be connected to students’ lives, engaging, and collaborative in order to be effective and culturally responsive for Indigenous youth.

Lipka (1990) shares a case study of a successful Yup’ik first-grade teacher. This teacher, Mrs Yanez, adapted her classroom to resemble the local community in terms of communication styles, values, praised behaviors, and curricular content. She taught students “the 3 R’s while teaching them to be Yup’ik” (Lipka, 1990, p. 25). Her success is highlighted in one particular lesson where she used a local activity to teach literacy and mathematics skills:

From the choice of activity, smelting, to presenting the lesson through demonstrating and observation, to connecting the importance of the lesson to community-based activities and kin, to the interactional style of the teacher all contribute to contextualizing this lesson. The implications of this case are that contextualizing classroom lessons and building on students’ prior knowledge can positively affect students’ classroom performance. (Lipka, 1990, p. 18)

Many of the elements discussed throughout this review of the literature on CRS for Indigenous youth are employed by Mrs Yanez. Barnhardt (1990) also shares an example of a school serving Yup’ik youth that integrates Yup’ik cultural values, employs a bilingual curriculum, and maintains strong community support.

Rock Point and Rough Rock community schools, both on the Navajo reservation, provide two examples that are cited often in the literature. Both have been described as schools in which teachers are able to resist conventional schooling and instead experiment with CRS in the community’s native language (Holm & Holm, 1995; Lipka & McCarty, 1994). Outcomes of these efforts include Navajo children learning Navajo at no expense to their knowledge of English, higher scores on mathematics and reading standardized tests, and more confidence and pride among students (Lipka, 2002). Similar efforts and results have also been reported at the Hualapai Bilingual/Bicultural Program in Peach Springs (Skinner, 1999; L. Watahomigie & McCarty, 1994; L. J. Watahomigie & McCarty, 1997; Watahomigie & Yamamoto, 1987).

Klump and McNeir (2005) provide four case studies of exemplary CRS programs for Indigenous youth across the nation. The Russian Mission School in rural Alaska integrates Native knowledge with academic standards through a hands-on curriculum centered around subsistence activities Indigenous to the local community. Students engage in learning experiences related to real activities that are of high interest to the community and draw on local resources, materials, and knowledge. As Klump and McNeir (2005) explain:
Traditional knowledge is carefully integrated with academic standards. A unit on berry picking, for example, asks students to study and identify five types of berries, learn where those berries are traditionally harvested, and then use the berries to create traditional Yup’ik foods. The berry picking activity incorporates benchmarks from science, health, and personal/social skills standards. Students then demonstrate what they have learned through writing assignments and using technology to create a PowerPoint presentation about making traditional foods. “We’re very aggressive about using the standards,” notes Hull [a local educator]. “But we see Native culture as the pathway to that.” (p. 12)

The results of the Russian Mission School’s efforts have been positive: enrollment rates have gone up; crime in the community has gone down; stronger connections between students, teachers, and elders have resulted; students are rediscovering aspects of their cultural heritage; and subsistence activities have increased throughout the community (Klump & McNeir, 2005).

The second case study provided by Klump and McNeir (2005) is also in Alaska. The Tuluksak School has acquired a school-based dog-sled racing team as a way to connect core curricular content and standards to culturally relevant, hands-on activities. The dogs are integrated into home economics, science, and even reading, and the efforts have resulted in improved social and interpersonal skills among students. Additionally, the Tuluksak School has focused on retaining and training faculty because it traditionally has a very high teacher turnover rate. They provide a six-credit professional development course on Yup’ik culture and language to all teachers, training on instructional strategies for English language learners, and improved living conditions in the local community. Here too, the efforts have paid off with a much lower turnover rate among teachers. This case study highlights the need for schools to assess their local needs and resources and develop strategies that are culturally specific and responsive to changing conditions.

Two other case studies provided by Klump and McNeir (2005) also emphasize the importance of teacher knowledge and sustained teacher training if schools hope to provide CRS to Indigenous youth. On the Flathead Indian Reservation, the Salish Kootenai College has provided sessions in which tribal elders teach school faculty important aspects of the local culture and language. The goal is to improve the cultural competency of teachers over the course of a number of days so that they retain the knowledge and implement it in their classrooms. And finally, the Title VII Indian Education Program at the Warren School has developed culturally responsive curricula and resources for teachers to use in their classrooms (Klump & McNeir, 2005). The materials are integrated throughout the school’s curriculum in every grade. Both of these examples point to the importance of teacher knowledge, pedagogy and curriculum in efforts to provide CRS to Indigenous youth.

A number of similarities can be drawn from the previous examples – all of which are highlighted throughout this article. These examples point to the importance of contextualizing or localizing curriculum and pedagogy so that it bears some connection and resemblance to the knowledge and learning of the local community. The examples also illustrate how the knowledge, norms, values, resources and epistemologies of local communities must be viewed as legitimate and valuable and intimately integrated into schools. And finally, many of the examples highlight the ways in which Indigenous students are engaged and learning school knowledge at the same time and through experiences that also facilitate the learning of their local community knowledge, culture and epistemology. Perhaps most importantly, these
case studies provide concrete, real-life examples of schooling for self-determination. In short, these examples also point to the weakness in offering a one-size-fits-all kind of curriculum or teaching instruction. Context matters; local contextual clues offer insights to connecting children to their schooling, and academic success follows.

In studies looking at successful school- and district-wide culturally responsive initiatives, a number of common characteristics emerge. One critical criterion is a strong and supportive administrator who shares the vision to make CRS a reality. Such an administrator must have a long-term commitment to the community, high expectations for faculty and students, and the ability to advocate for faculty to try new things in a risk-free school environment (McCarty, 1993; Rhodes, 1994). A core of primarily local school personnel, consistent financial support, and quality technical support are also needed at the school and district level in order for CRS to really take hold and have a lasting impact in tribal communities (McCarty, 1993). School climate is another critical element in successful CRS efforts. Powers’ (2006) and Powers, Potthoff, Bearinger, and Resnick’s (2003) research suggests that school climate – which Powers defines as supportive personnel in a safe and drug-free environment – has a very large effect on Indigenous students’ school success.

Research on efforts in Hawaii and communities on the Navajo Nation provides examples of effective school-wide efforts at CRS. Projects such as Hawaii’s KEEP and Arizona’s Rock Point, Rough Rock, and Fort Defiance illustrate a number of common elements. For example, schools and teachers must be viewed as the primary sites of change, rather than maintaining the dominant and often discriminatory belief that it is the students who must change (Jordan, 1995). The KEEP model stresses the importance of educators drawing on cross-disciplinary knowledge about students, culture, language, and learning, as well as recognizing that smaller, incremental changes may be more realistic within large, publicly funded school systems (Jordan, 1995; Vogt & Au, 1995). The KEEP project also highlights how critical it is for teachers to have support, including time, resources and tools, to reflect on their practice, conduct research within their own schools, and try new things with their students (Vogt & Au, 1995). The Rough Rock example provides pointed evidence of the importance of change being a grass-roots effort that emanates from and has the support of the local community (Begay, Dick, Estell, Estell, & McCarty, 1995; McCarty, 2002; McLaughlin, 1995; Vogt & Au, 1995). Another important condition for success at the school and district level is a re-evaluation of faculty and staff roles, status, and salaries so that hierarchies are minimized and locally specific cultures and languages are genuinely privileged (McLaughlin, 1995). And finally, regular program monitoring, consistent funding, and the support of outside collaborators have all been shown to be important factors in school- and system-wide efforts at CRS for Indigenous youth (Begay et al., 1995; Holm & Holm, 1995).

The support and buy-in of parents and the local tribal community are critical and can assist schools in providing valuable resources and support for culturally responsive educational efforts (Holm & Holm, 1995; McLaughlin, 1995; Vogt & Au, 1995; Ward, 1998). In order to ensure a critical mass of Indigenous students and parent support, Butterfield (1994) suggests that Native students be brought together in “schools of choice” or magnet schools in urban and racially diverse areas. This, of course, would require collaboration among neighboring districts and district leaders. On an even larger scale, Skinner (1999) recommends a “National Native Curriculum Project” funded and supported by the US Department of Education as a mechanism
for creating more accurate and culturally responsive learning opportunities for both Indigenous and non-Indigenous students in schools across the nation.

Policy and practice implications of CRS for Indigenous youth

Based on what we know about CRS for Indigenous youth, it is possible to make some recommendations for improved policy and practice. This list is certainly not meant to be exhaustive, but it does provide a starting point for beginning to think about how to improve the educational experiences of Indigenous youth. Recommendations for policy and practice include:

- Diverse curricular materials must be both immediately relevant to and mirror students’ lives and provide entry into the core subject areas that students will be expected to master in later grades.
- Educators must pay more attention to the ways colonization, racism, and power matter in educational settings and work towards more effective and longer-term pre-service and in-service training that helps educators understand and strategize about their role as agents for social change and greater educational equity.
- Federal and state educational policies that are consistent with the federal trust responsibility, tribal sovereignty, and self-determination.
- Funding formulas and guarantees that allow communities, schools, and teachers to build students’ multiple literacies.
- Locally developed and controlled educational and cultural standards and corresponding forms of assessment.
- Schools and school districts that recruit and retain more Indigenous teachers who are members of the local community and have a strong foundation in promising practices for reading and literacy teaching; collaborations between university teacher preparation programs, tribal colleges, and school districts in tribal communities will facilitate this process.

Given what we know about CRS among AI/AN students, there are many places for opportunity and improvement of educational policy and practice.

Notes

1. We intentionally capitalize Indigenous in this article, although APA suggests that indigenous is “correct”. Our intent here is to note the political nature of this word and the role of human rights where Indigenous peoples across the world are concerned. Although we limit our discussion in this article to Indigenous peoples of the USA, we stand in solidarity with Indigenous peoples globally.
2. Throughout this article, we will use American Indian, Alaska Native, American Indian/Alaska Native, Native or Native American, and Indigenous interchangeably. We are fully aware of the wide range and variation among the 500 tribal nation groups in the USA. The purpose of this article, however, is to offer an overview of the literature that addresses these groups broadly.
3. Although most of the literature references the goal of students becoming “bicultural” and able to “walk in two worlds”, we are cautious in our use of this language because of the way it obscures the complexity and multiplicity of the actual experiences and goals of many Indigenous youth and tribal communities.
4. DIBELS and SAT-10 are two different assessments used to measure students’ reading proficiency. DIBELS was initially developed to be used with “non-readers” before formal reading instruction occurred in school to identify which students might be at-risk for
reading failure. However, it is now widely used in the early elementary grades to assess students’ proficiency in reading-related tasks, and it allows educators to compare students’ performance against benchmarks. It measures specific, discrete skills that are correlated to reading proficiency such as sounding out words (both real words and nonsense words) and letter identification. The SAT-10 is the Stanford Achievement Test series and includes a number of subtests that measure students’ proficiency in similar skills related to reading.

References


