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Introduction: Student Achievement and High-Stakes Accountability in the U.S. Context

Public education in the United States is characterized by persistent disparities in opportunities and outcomes. More than half a century after the U.S. Supreme Court declared racially segregated schooling unlawful, and a quarter-century after the National Commission on Excellence in Education warned that the nation itself is at risk due to mediocre and unequal education, the gap between children with and without access to high-quality education is growing.¹ Mean academic achievement scores for African American and Latino students, as groups, are in the lowest quartile of White student achievement.² Two to three grade levels separate the reading and mathematics performance of American Indian and Alaska Native students from that of their White peers. Compared with White students, American Indian and Alaska Native students are 73% more likely to be placed in special education programs and 117% more likely to leave school before receiving a high school diploma.³

Since the passage in 1965 of the Elementary and Secondary Education Act (ESEA) – the most comprehensive U.S. education reform of the 20th century – the federal government has implemented successive waves of legislation intended to improve schools and enhance equity. These policies have had mixed results, with the National Assessment Governing Board – a bipartisan group of government and school officials, educators, and citizens who oversee the nation’s “Report Card” – citing no significant progress in reducing performance gaps over the past four years.⁴

The most recent version of the ESEA, the No Child Left Behind (NCLB) Act of 2001, has evolved in this context. NCLB's goals are laudable: Close the achievement gap once and for all by making schools accountable for learning among all student groups, and by ensuring that all students are taught by highly qualified teachers. As the Forum for Education and Democracy, a think tank of leading education scholars, writes in a 2008 report, NCLB was initially hailed by many educators, civil rights advocates, and parents as creating the possibility that federal educational policy would take seriously the challenge of providing equal access to a high-quality education for all children regardless of race, income, language background, or geography.⁵

In practice, NCLB has proven to be one of the most problematic education reforms in the nation's history. A primary reason for this is the law's high-stakes accountability system, which relies on a single achievement measure – English standardized tests – and metes out draconian penalties for low performance (e.g., school closure or takeover) without regard for school funding inequities, students' primary language, or long-term school improvement.⁶ There is mounting evidence that NCLB's high-stakes accountability system leads many “underperforming” schools to:

- teach to the test,
- remove low-performing students from the testing pool through admission restrictions, grade retention, and special education placements,
- eliminate or curtail “low-stakes” (untested) subjects such as art, physical education, and social studies, and
- artificially manipulate test scores and drop-out rates.⁷

“Rather than invest in equalizing opportunity and improving the capacity of schools,” the Forum for Education and Democracy writes, “NCLB focuses instead on mandating tests, allocating sanctions, and micro-managing school decisions about everything from testing requirements to tutoring strategies to reading programs.”⁸ And, as the research presented here shows, schools also have been forced to curtail successful programs to adopt highly scripted, unproven approaches.

This paper examines research on the impacts of high-stakes accountability policies – in particular, NCLB – on Native American learners. The paper begins with an overview of the demographic, linguistic, and educational diversity glossed by the term “Native

American.” It then explains the unique legal-political status that binds diverse Native American peoples as a group: tribal sovereignty and the tribal-federal trust relationship. The next section provides a fuller orientation to NCLB and its provisions for Native Americans. A subsequent section examines empirical research on NCLB’s impacts on Native American learners, relating this to a larger body of literature on high-stakes testing as a lever of education reform. A penultimate section provides evidence from select Native American education programs that exemplify promising practices from which to model alternate policies. A final section asks 3 key questions that reconfigure the accountability equation to hold policies accountable to Indigenous/minority learners, and draws out the implications for policy reform.

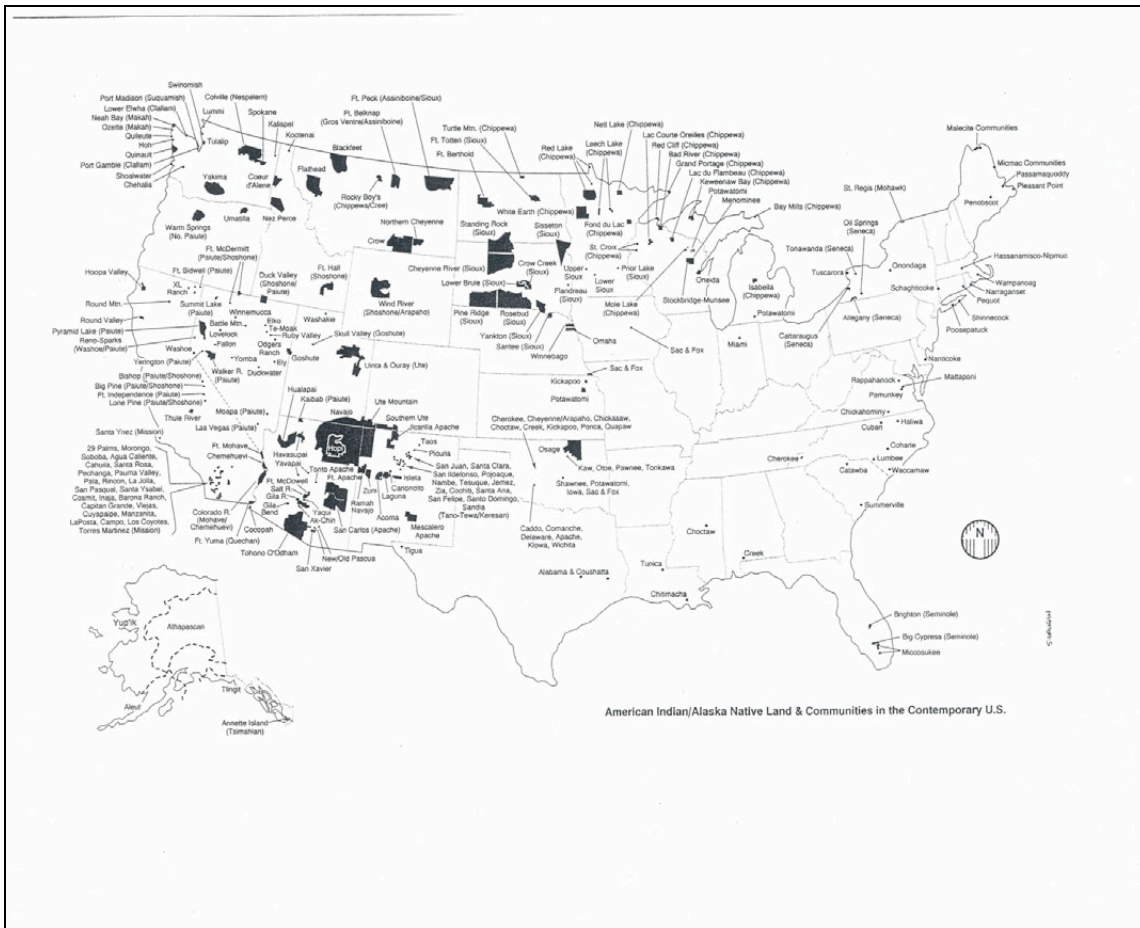
Native American Communities, Languages, and Education Systems

Demographic Profile

Native American communities are highly diverse. In the 2000 census, 4.1 million people in the U.S. (1.4% of the total population) identified as American Indian (AI) and Alaska Native (AN). An additional 874,000 people identified as Native Hawaiian and “other Pacific Islander.” Native Americans reside in every state of the union and its territories, with more than 560 federally recognized tribes and 619 reservations and Alaska Native villages (see Figure 1). Further heightening this diversity is the differential historical experience among Native peoples within the mainland, Alaska, and Hawai’i. The largest tribe numerically is Cherokee, with a population of 729,533. Navajo, with a population of more than 298,000, is the second-largest tribe and has the largest land base, with a reservation the size of the country of Ireland spread over 3 Southwestern states. Most tribes are smaller geographically and numerically.⁹

About 33% of the AI/AN population is under age 18, compared with 26% of the total population. Seventy-one percent have a high school degree, compared with 80% of the total population; 11.5% have a college degree, compared with 24% for the total population. More than a quarter of the American Indian/Alaska Native population lives below the federal poverty line – a figure double that of the nation as a whole.¹⁰

Figure 1. American Indian and Alaska Native Lands and Communities¹¹
 (Shaded areas indicate reservation lands.)



Children’s Language Proficiencies

Of 300 languages indigenous to what is now the U.S., 175 are still spoken. Most of these are no longer learned by children as first languages, with 72% of AIs/ANs 5 years of age or older reporting only English spoken at home.¹²

There are three points regarding language that are important for the present discussion. First, Native American experiences show that speaking English does not in itself ensure educational equity. Although Native American children increasingly enter school speaking English as a primary or sole language, they often speak a variety influenced by the Native language, leading them to be labeled “limited English proficient” (LEP) and

placed in remedial tracks. In 1999-2000, nearly 60% of all AI/AN students in federal Bureau of Indian Affairs (BIA) schools were classified as LEP.¹³

Second, children possess varied language abilities. While some come to school speaking the Native language and English, others may be predominately Native-speaking. Many are English-dominant with receptive (listening) abilities in the Native language. Still others may have no Native-language exposure at all. Students with each of these language profiles (or some combination) may be present in a single classroom or school. These varied language abilities are not amenable to a uniform, one-size-fits-all approach.

A third point concerns the root causes and lingering effects of Native-language loss. Beginning in the 19th century, the U.S. government implemented explicit policies designed to eradicate Native American languages and cultures as part of a broader campaign to consolidate and dispossess Native peoples of their lands.¹⁴ Punitive English-only schooling in federal boarding schools was a primary tool for implementing those policies. Like Australian Aboriginal and Torres Strait Islander “stolen generations,”¹⁵ Native American children were forcibly removed from their families and taken to boarding schools, where they were beaten and ridiculed, and had their mouths “washed” with soap for speaking the Native language. These practices persisted well into the 20th century. Although the boarding schools did not succeed in extinguishing Native American languages and cultures, the experience left a residue of linguistic ambivalence and mistrust of Anglo-American education that continues today.

In light of this historical experience, the effectiveness of any education policy must be measured by its ability to strengthen Indigenous community-school relations. Supporting tribes in retaining their languages and cultures is central to accomplishing this goal.

Native Students and Education Systems

In the 2006-07 school year, 645,601 AI/AN students – 1% of the U.S. student population – attended K-12 schools. In addition, there were 132,052 Native Hawaiian children between birth and age 17, a substantial proportion of whom attended K-12 schools.¹⁶

Native American students are served by schools operated by the federal Bureau of Indian Education (BIE), tribal or community controlled schools under BIE purview but operated by local Native school boards, state-supervised public schools, private schools, and parochial schools. Nearly 90% of Native American students attend public schools, although students often rotate through several school systems over their academic careers and even within in a single school year. While many of these schools are located within reservations or Alaska Native villages and have a majority AI/AN enrollment, half of all Native American students attend schools in which they comprise less than 25% of the student body. These schools are much less likely to have Native American teachers or teachers with proficiency in a Native American language. More than 60% of AI/AN students attend schools in which less than 5% of the teaching staff are Native American.¹⁷

A significantly higher percentage of Native American students than non-Native students are classified as English language learners (ELLs, also called LEP) and as students with disabilities. The proportions are highest in schools with 25% or more Native student enrollment.¹⁸

Fifty-six percent to 64% of AI/AN students qualify for the federal free school lunch program, a school poverty indicator.¹⁹ Federal funding for Native American education in general is low; between 1998 and 2003, funding was completely absent for many federal Indian education programs.²⁰

Tribal Sovereignty and the Federal Trust Responsibility

The previous section has highlighted Native American cultural, linguistic, and educational diversity. That diversity notwithstanding, all Native Americans share a status as First Peoples with a singular relationship to the federal government. From their first encounters, American Indian tribes and federal authorities operated on a government-to-government basis. The tribal-federal relationship was codified in the U.S. constitution and in treaties, executive orders, legislation, court decisions, and bureaucratic arrangements that establish a binding trust responsibility on the part of the federal

government “to represent the best interests of the tribes and their members,” including education.²¹

The cornerstone of the tribal-federal relationship is tribal sovereignty: the “right of a people to self-government, self-determination, and self-education.”²² Tribal sovereignty is complex, as political incorporation into the U.S. has been different for American Indians, Alaska Natives, and Native Hawaiians, and among American Indian tribes themselves. Nevertheless, all Native Americans share a distinct status as Indigenous peoples that entails the right to self-determination. This unique legal-political status is highly salient for the present discussion, as NCLB contains specific provisions for Native American education. Yet, as the following sections show, NCLB works at cross-purposes to its own Native American provisions, other federal Indian policies, and the principle of tribal sovereignty itself.

How NCLB Works

NCLB was signed into law on January 8, 2002. There is universal agreement that it ushered in unprecedented levels of testing aimed at making schools, students, and educators “accountable” for results. The theory behind the law is that schools, educators, and students who are held accountable to the tests will increase educational outputs, or, as education researchers Julian Heilig and Linda Darling-Hammond put it, that “[p]ressure to improve test scores will produce genuine gains in student achievement.”²³ The law requires K-12 schools in all states (including BIE and Native community- and tribally-controlled schools) to administer assessments tied to state standards in reading/language arts and mathematics for students in grades 3 through 8 and 10 through 12. As of 2005-06, schools also are required to administer state-aligned assessments in science at least once in grades 3 through 5, 6 through 9, and 10 through 12.

On the positive side, NCLB directs schools to disaggregate achievement data by race/ethnicity, socioeconomic status, gender, ability, and English proficiency, thereby motivating schools to focus greater attention on students who have historically been “left

behind.” At least 95% of students in each subgroup must be tested each year, and each subgroup as well as the school must meet annual testing objectives aligned with state standards. All students are expected to demonstrate “100% proficiency” by 2014.

Accountability is measured in terms of “adequate yearly progress” (AYP) based on all subgroups’ test performance and at least one other factor such as attendance or high school completion. If a school does not make AYP, it is initially placed on *alert* status. A second year of missed AYP moves the school into *school improvement* status, which mandates a 2-year improvement plan to raise each subgroup’s achievement. Schools in improvement status receiving funding under Title I of NCLB (“Improving the Academic Achievement of the Disadvantaged,” a grant program for high-poverty schools) must provide free tutoring and/or offer parents the option of moving their child to a school not identified as needing improvement (this is called “school choice”). If a school does not meet AYP after 2 years in school improvement status it is moved to *corrective action*, which entails replacing school staff, adopting new curricula, and decreasing school-level management authority. Schools not making AYP after one year in corrective action status are reclassified as *restructuring* and subject to the replacement of all or most staff and takeover by an outside management firm.²⁴

The status of individual schools is recorded annually in district and state Report Cards. These are public documents, and status labels are widely publicized in the news media – a further “high stake” in NCLB’s accountability system.

A few additional factors are important to understand how NCLB works vis-à-vis Native American learners. Title VII of NCLB is “designed with special regard for the language and cultural needs of [Native American] students.”²⁵ In this respect the law supports the 1990/1992 Native American Languages Act, the 2006 Esther Martinez Native American Languages Preservation Act, and other federal Indian policies which recognize the unique legal-political status of Native Americans and their cultural and linguistic rights, including the right to teach Native languages and cultural content in school.²⁶

At the same time, NCLB does 3 things that mitigate against Native language and culture teaching. First, it eliminates bilingual education funding. Indeed, the term “bilingual” has been expunged from this version of the ESEA, with the former Bilingual Education Act (BEA) replaced by the English Language Acquisition, Language Enhancement, and Academic Achievement Act; the office that administered former BEA programs renamed the Office of English Language Acquisition, Language Enhancement and Academic Achievement for Limited English Proficient Students; and the National Clearinghouse for Bilingual Education reconstituted as the National Clearinghouse for English Language Acquisition. Since its passage in 1968, the BEA has been a primary financial resource for bilingual-bicultural education in underfunded Native American schools. Elimination of targeted bilingual education funds has effectively ended those programs.

Second, NCLB requires schools judged to be in need of improvement to implement “scientifically based” reading programs specified in the Reading First provisions of the law. The goal of Reading First is noble: “to ensure that all children in America learn to read well by the end of third grade.”²⁷ Space prohibits a full discussion of Reading First, but the program has provoked an outcry from literacy researchers and practitioners due to its emphasis on highly scripted phonics drills (called “direct reading instruction”) devoid of academic content. Further, the time-intensive nature of the program comes at the expense of other content, including Native language and culture instruction.

Finally, the combination of English standardized tests as the sole measure of AYP, the high stakes attached to the tests, and mandated Reading First programs create enormous pressure on schools to reallocate instructional time toward test preparation. As the next section shows, this comes not only at the cost of Native language and culture instruction but also to the detriment of student performance on the tests.

NCLB Impacts: Evidence from Research

NCLB’s goal is to eliminate the gap in achievement between low-income African American, Latino, and Native American students and their more affluent White peers. A key question in assessing policy impacts, then, is whether the achievement gap has been

narrowed post-NCLB. A related question concerns the policy's impacts on educational programs and services for students targeted by the law.

This section reviews empirical evidence, both quantitative and qualitative, that addresses these questions for Native American learners. This is then related to a larger body of evidence on the impacts of high-stakes accountability policies in U.S. schools.

*Has the Achievement Gap Been Narrowed Post-NCLB?
How Has the Policy Impacted Instructional Programs and Services?*

The National Indian Education Study. In 2007, the National Center for Education Statistics (NCES) conducted the National Indian Education Study (NIES) on behalf of the U.S. Department of Education's Office of Indian Education. NIES is the only nationally representative assessment of AI/AN student performance. (Native Hawaiian students were not included in the study.) Part I of the study used the National Assessment of Educational Progress (NAEP), a nationally representative test of all major subject areas. Overseen by the National Assessment Governing Board mentioned earlier, NAEP divides scores into three achievement levels:

1. Basic = partial mastery of prerequisite knowledge and skills at a given grade.
2. Proficient = demonstrated competency over challenging subject matter.
3. Advanced = superior performance.²⁸

The NIES sampled 10,000 AI/AN 4th and 8th graders in reading and 10,300 AI/AN 4th and 8th graders in mathematics. Students represented 11 states which make up 6% of the U.S. student population and 50% of all AI/AN students.²⁹ Table 1 shows the distribution of participating schools and students. Data were analyzed by grade level and further broken down by high-density schools with 25% or more AI/AN enrollment and low-density schools with less than 25% Native American students enrolled.

Table 1. Participating NIES Schools and Students

Grade	Reading		Mathematics	
	Schools	Students	Schools	Students
4	1,470	5,300	1,450	5,700
8	1,260	4,800	1,270	4,600

Source: NCES (2008), *NIES Part I*, p. 2. Numbers of schools are rounded to the nearest 10. Numbers of students are rounded to the nearest 100.

In reading, the NAEP is designed to assess students' ability to read for:

1. *Literary experiences* – Exploring events, characters, themes, settings, plots, and action in novels, short stories, poetry, etc.
2. *Information* – Reading magazines, newspapers, textbooks, speeches, etc., to discern pertinent information.
3. *Performing a task* – Following directions, procedures, maps, etc.³⁰

In mathematics, NAEP measures:

1. *Content areas* – Number properties and operations, measurement, geometry, data analysis and probability, algebra.
2. *Mathematical complexity* – Low (routine procedures), moderate (requires flexible thinking and multiple steps), and high (requires abstract reasoning in novel situations).³¹

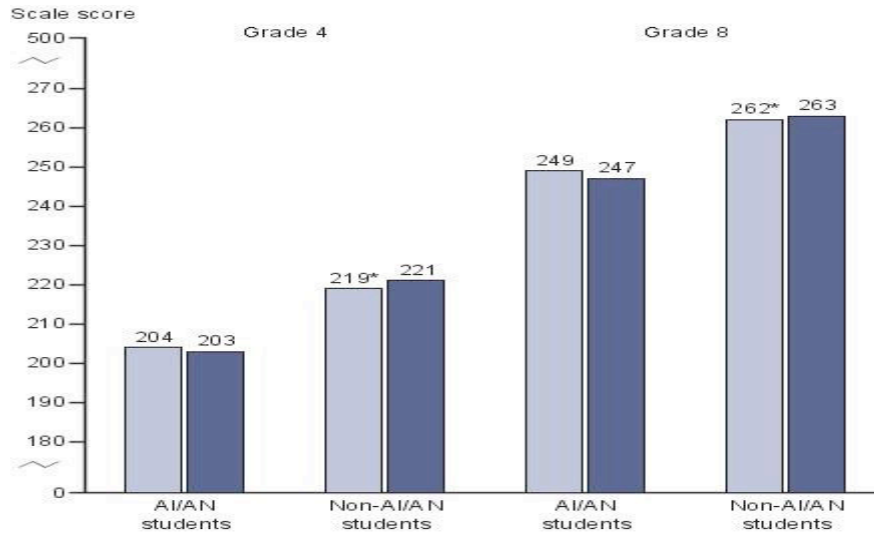
Figures 2 through 5 show NIES results for reading/language arts and mathematics. As these figures show, mean reading scores for AI/AN 4th and 8th graders did not change significantly between 2005 and 2007, and in some cases scores declined, while the performance of non-AI/AN students increased. Similarly, mean mathematics scores for AI/AN students did not change, while the scores of non-AI/AN students increased.

These findings indicate that the achievement gap has not been narrowed for AI/AN students since the implementation of NCLB.

The NIES data also suggest that NCLB's emphasis on high-stakes testing tied to state standards may lead schools to curtail or eliminate Native language and culture instruction. In Part II of the study, 5,100 students, 1,300 teachers, and 470 principals in 550 schools serving Native students were surveyed regarding curriculum, standards, and assessment.³² A key component of the survey was the extent to which AI/AN culture and language were incorporated into classroom instruction. As Table 2 shows, in grade 4, only 21% of students had teachers who reported daily or regular use of an AI/AN perspective in instruction, with the highest percentage occurring in high-density schools. Sixteen percent of 8th grade reading students had teachers who reported regular use of an AI/AN perspective, and 10% of 8th grade mathematics students had teachers who reported regular use of an AI/AN perspective. Of all students queried, only 4% reported they were learning how to speak and read their heritage language, and all of these

Figure 2. Average NAEP Reading Scores, by Grade and Student Group, 2005 and 2007

(Source: NCES [2008], *NIES Part I*, p. 8)



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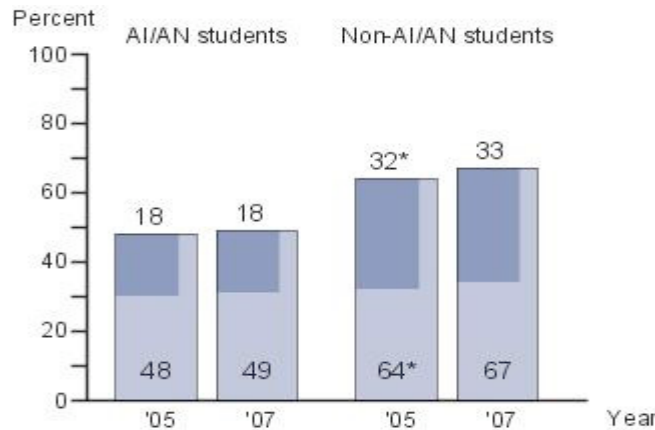
Light bar = 2005

Dark bar = 2007

* = Significantly different from 2007 ($p < .05$)

Figure 3. Achievement-Level Results in NAEP Reading, by Grade and Student Group, 2005 and 2007

(Source: NCES [2008], *NIES Part I*, p. 8)



KEY:

Light bar = 2005

Dark bar = 2007

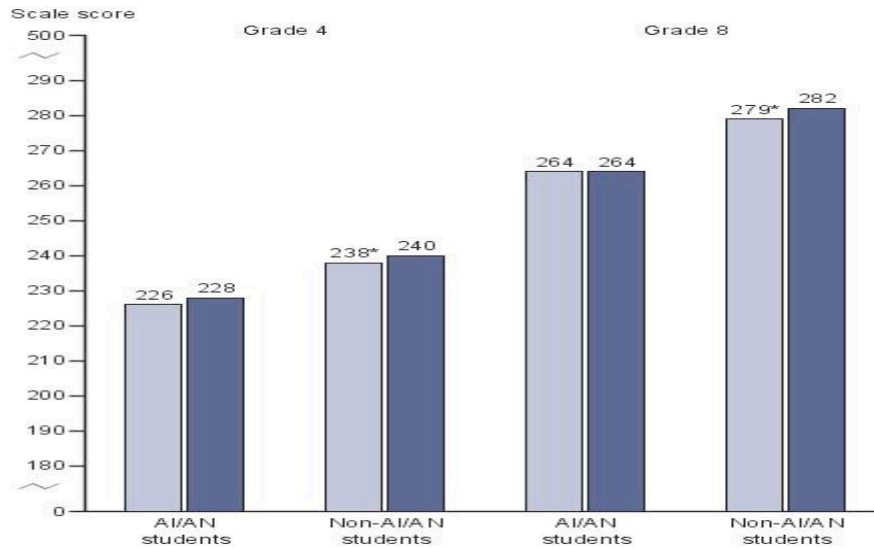
Shaded area (upper bar) = % at or above "proficient"

Unshaded area (lower bar) = % at or above "basic"

* = Significantly different from 2007 ($p < .05$)

Figure 4. Average NAEP Mathematics Scores, by Grade and Student Group, 2005 and 2007

(Source: NCES [2008], *NIES Part I*, p. 44)



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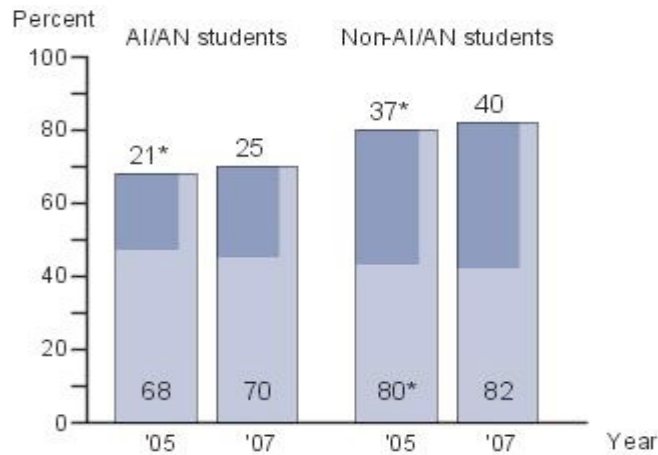
Light bar = 2005

Dark bar = 2007

* = Significantly different from 2007 ($p < .05$)

Figure 5. Achievement-Level Results in NAEP Mathematics, by Grade and Student Group, 2005 and 2007

(Source: NCES [2008], *NIES Part I*, p. 8)



KEY:

Light bar = 2005

Dark bar = 2007

Shaded area (upper bar) = % at or above "proficient"

Unshaded area (lower bar) = % at or above "basic"

* = Significantly different from 2007 ($p < .05$)

Table 2. Percentage of Grade 4 and 8 AI/AN Students Whose Teachers Incorporate AI/AN Perspectives into Classroom Instruction Regularly or Extensively

(Source: NCES [2008], *NIES Part II*, p. 52)

Grade/Subject Area	% of Students
4 – All subjects (self-contained classroom)	21%
8 – Reading	16%
8 – Mathematics	10%
All grades – Native language	4%

Table 3. Percentage of Grade 4 and 8 AI/AN Students Whose Teachers Report Extensive Use of State Content Standards or AI/AN Cultural Standards to Plan Instruction

(Source: NCES [2008], *NIES Part II*, p. 56)

Grade	% Who Use State Standards Extensively	% Who Use AI/AN Standards Extensively
4	90%	3%
8	81%	1%

were at high-density schools.³³ As one seasoned director of Native American programs explains, “[W]ho has time to teach in Navajo, Lakota, or Cheyenne when your survival, as a school, depends upon how well your students perform on a test?”³⁴

At the same time, the large majority of teachers (81% – 90%) reported relying almost solely on state content standards for instruction (Table 3). In contrast, only 4% of grade 4 students and 1% of grade 8 students had teachers who used AI/AN standards “a lot.”³⁵

The National Indian Education Association Study. In 2005, the National Indian Education Association (NIEA), the largest and oldest AI/AN education organization, conducted 11 regional hearings on NCLB throughout the U.S. The purpose of the hearings, which included testimony by 120 tribal leaders, educators, and community members, was to gather information about what is working within NCLB and how to support successful programs, with an eye toward making recommendations to strengthen the law for Native students.³⁶ In its report on the hearings, NIEA pointed out that making schools accountable to Native students is a welcome change from past colonial schooling.

Yet the report found no evidence of student achievement gains as a result of NCLB, and expressed concern that the law negatively impacts culturally based instruction, leads to an over-emphasis on tests at the expense of rich academic content, is inadequately funded, and compromises tribal sovereignty.³⁷

The Arizona Study. David Garcia of Arizona State University examined the academic achievement of Arizona Indian students from 2000 (pre-NCLB) to 2006 (4 years after NCLB was signed into law). The Arizona data are significant because the state is home to 22 Native nations and 41,861 Native American students are enrolled in the state's public elementary schools. This represents 6% of the statewide public elementary school population and 11% of AI/AN elementary school enrollments nationwide.³⁸

In this study, academic achievement was defined as a score at or above the “proficiency” level on the state test to assess content-area standards. Comparing American Indian student achievement to that of White students, Garcia used a common form of statistical regression, ordinary least squares, to calculate annual percentage point changes in students identified as proficient in reading and mathematics. To place these data in perspective, he also examined the achievement rates of African American and Latino students in Arizona relative to their American Indian and White peers.

Garcia's initial analysis showed that American Indian students made progress in most subjects and grades, and that their gains outpaced all other subgroups except White students. However, on closer inspection, he found that the greatest gains occurred in 2005 when Arizona policymakers lowered the bar for passing scores. When the 2005 test score spike is omitted, the achievement rates of American Indian students drop sharply, in some cases by 10 or more points.³⁹

Test score inflation has been identified in other states. In light of these findings, Garcia dismisses the gains as illusory, and cautions: “The adjustment of passing scores may work as a short-term strategy so that more schools make AYP, but...[i]f the underlying purpose of accountability systems is to provide assistance to students who are not

meeting state standards, then the manipulation of passing scores could deny American Indian/Alaska Native students the very academic assistance that NCLB is intended to provide.”⁴⁰

Local-Level Studies. Research on NCLB implementation at the local school level is limited but growing, with a recent theme issue of the *Journal of American Indian Education* devoted to this topic.⁴¹ Among the research reported in that volume is a study by Robert Patrick, an award-winning teacher-researcher who examined post-NCLB reforms at Warrior Elementary School (a pseudonym). Located in the Southwestern U.S., Warrior Elementary serves 359 students in grades K-5, 94% percent of whom are Navajo. Half are identified as English language learners and 76% are eligible for the federal free lunch program.

The study took place from 2001 to 2004. By 2003, the school had not met AYP for 3 years and faced imminent closure or private restructuring. Hiring a new principal, the school undertook major organizational changes, including an after-school program to prepare students for the test. Within a year, student achievement increased dramatically, with mean 4th grade mathematics scores rising from the 13th to the 69th percentile and reading scores increasing from the 28th to the 61st percentile.⁴²

At the same time, Patrick documents a school culture of fear (job termination, school closure) and teaching to the test that led to test administration improprieties (providing answers to exam questions) and the elimination of Navajo language and culture instruction. He also questions whether the gains are sustainable. At this school, he concludes, “a new era emerged under pressures [of] NCLB: achieving standardization.”⁴³

A multi-site study was undertaken by researchers at Arizona State University and the University of Arizona under the auspices of a 5-year (2001-2006) grant from the U.S. Department of Education. Although the study was not intended to assess NCLB impacts, the investigators found a strong correlation between the passage of NCLB and the curtailment of Native language and culture instruction. Romero-Little et al., McCarty

and Romero-Little, and McCarty et al. report on one school in which NCLB impacts were especially dramatic.⁴⁴ The school serves 600 Native American students in grades pre-K–12. Prior to NCLB, it had implemented a pre-K–6 bilingual, bicultural, biliteracy program for which it collected extensive data. The program used a teacher-developed curriculum organized around culturally relevant themes. Between 1988 and 1998, students in the program consistently improved their oral English and English reading scores as measured by a locally developed reading assessment, student portfolios, and standardized tests. Meanwhile, the students were becoming bilingual and biliterate in the Native language and English.⁴⁵

In 2002-03, bilingual program funding ended and the school was required to adopt a prescriptive English reading program under NCLB. Romero-Little et al. document this segment of a Reading First lesson at the school:⁴⁶

This is a mixed-grade class consisting of 9 students in grades 3-5. The teacher is preparing her students to read. She begins the lesson by instructing them to place their books flat on their backs with pages open on the table. No book should be standing on edge or held up towards one's face.

Teacher: Flat books, please. Flat books, girls. (All students open their books and lay them flat in front of them.)

Teacher: Now you look ready. Lana (student), what lesson are we starting?

Lana: 39.

Teacher: Okay, what color do I read?

Lana: Blue.

The teacher begins the reading lesson, a set of repetitious questions and responses. Every sentence is scripted for both the teacher and students, with color-coding in the books.

Teacher: Touch the first word in column A. What word?

Students: Beach.

Teacher: Touch the word in column B. Next word, what word?

Students: Bench.

This continues until the group gets to “sail.”

Teacher: What word, spell word.

Students: S-a-i-l.

Teacher: Next word.

Here the teacher has purposefully “tricked” students by *not* saying the phrase, “What word?” Students are not to respond unless she asks, “What word?”

In a subsequent interview, the teacher – a seasoned professional with many years of experience teaching Native students – described this approach as “not *real* teaching.” Certainly it is not conducive to developing reading for literacy experiences, information, and performing a task – the abilities assessed by the NAEP. Perhaps the most troubling finding in this case, though, is that standardized test scores declined post-NCLB, in some cases by as much as 50 percent.⁴⁷

Collateral Evidence

Evidence from Native American contexts shows little or no post-NCLB gap reduction and/or illusory gains. These studies also suggest that high-stakes testing can lead to score manipulation, test administration improprieties, teaching to the test, the deskilling of students and teachers through prescriptive reading routines, and the elimination of low-stakes subject matter, including Native language and culture instruction. Findings from these studies are buttressed by research in large, multiethnic school districts and by multi-state studies. Although space prohibits a full review of this literature, several key studies are instructive.

Heilig and Darling-Hammond conducted a longitudinal study (1995-2002) of 250,000 students in a large urban district in Texas, the state whose accountability system provided the model for NCLB. Using multivariate statistical methods and interviews with 160 students and staff in 7 high schools, they found sharp increases in student achievement, suggesting a substantial closing of the achievement gap. However, on closer examination, the increases were found to correlate with a school culture of “gaming the system” by retaining low-performing students in grade (more than 30% of 9th graders were retained for one or more years, and most eventually dropped out), denying admission to students deemed to be at risk of test failure, and otherwise pushing low-performing, mostly minority students out of the system. These researchers conclude that schools were “forced to organize their responses around snapshot accountability measures based on test scores,” with the onus of accountability falling on low-income minority students.⁴⁸

Jacob examined accountability policies in the Chicago Public Schools, one of the first large urban districts to implement high-stakes testing. The Chicago sanctions include high-stakes graduation exams (e.g., 8th grade students who fail the exam do not move forward with their cohort), personnel dismissals, and school reconstitution. Using longitudinal student data from Chicago and comparative data from large cities lacking a similar policy, Jacob found that math and reading scores on the exit exam did increase for some grade levels following implementation of the high-stakes policy. However, like the Texas study, the gains were correlated with increased special education placements, preemptive retention of students in grade, increased instructional time spent on test-specific skills, and decreased time spent on low-stakes subjects such as science and social studies.⁴⁹

In a 2002 study, Amrein and Berliner examined data from 27 states with “the highest stakes” attached to their testing programs (e.g., threat of school takeover or closure, personnel removal, and withholding high school diplomas from students who fail the exit exam, even if they meet other graduation requirements). This study showed no consistent effects across all 27 states, with one exception: After high school exit exams were implemented, student scores on college-entrance and advanced placement exams *declined*. On balance, these researchers say, high-stakes tests may inhibit students’ academic performance rather than foster their growth.⁵⁰

Nichols, Glass, and Berliner conducted a study of high-stakes testing and NAEP student achievement in 25 states representing a continuum of accountability pressure. With the exception of 4th grade mathematics, they found no relationship between testing pressure and student achievement for any grade or student subgroups. In the end, these researchers say, “high-stakes testing pressure might produce effects only at the simplest level of the school curriculum: Primary school arithmetic where achievement is most susceptible to being increased by drill and practice and teaching to the test.”⁵¹

The U.S. Commission on Civil Rights (USCCR) examined NCLB’s impacts in 2 eastern states with high minority enrollments, Maryland and Virginia. In Virginia, although

mathematics and reading pass rates on the state exam improved, the rates are still 13 to 22 points lower for minority students, students with disabilities, and LEP students than for White students. In Maryland, the gap-closing has been modest and high school completion rates for African American, Latino, and Native American students remain below those of Whites. The Commission concludes that NCLB has done little to close the achievement gap, adding that the prescriptive nature of the policy, its high stakes for minority students and schools, and lack of attention to eliminating financial disparities between rich and poor school districts may be widening the achievement gap.⁵²

High-stakes testing is particularly disadvantageous to English language learners (ELLs). A primary reason for this, as the *Standards for Educational and Psychological Testing* developed by 3 leading U.S. education research organizations point out, is that any test that uses language is in part a test of language skills.⁵³ Disadvantage also is conferred by the fact that ELLs comprise a tiny fraction of the sample used to establish testing norms and validate test content. The widely used Stanford (SAT) 9, for example, included only 1.8% ELLs in its norming pool.⁵⁴

But there are less obvious reasons why high-stakes assessments disadvantage ELLs. Wiley and Wright note the lack of an agreed-upon definition of limited English proficiency, making measurement across districts and states questionable.⁵⁵ And in a 2002 study of an inner-city elementary school in California, Wright found that pressures to focus on test-taking diminished the time teachers were able to devote to daily instruction in English language development.⁵⁶

A 2007 study by Nichols and Berliner explains all of these findings with reference to Campbell's Law. Formulated in 1975 by a respected social psychologist, Donald T. Campbell, Campbell's Law stipulates that the more any quantitative indicator is used for social decision-making, the more likely it is to distort and corrupt the processes it is intended to monitor. In an exhaustive review of quantitative and qualitative evidence on high-stakes testing, Nichols and Berliner found that it encourages inordinate cheating (teachers helping struggling students with test items; students taking "cheat sheets" into

exams), the exclusion of low-performing students from the testing pool, giving undue attention to students on the cusp of passing scores (so-called “bubble kids”), and state-level manipulation of results. Further, they say, high-stakes tests are unnecessary because there are other assessment options that are formative (ongoing) rather than summative (static), such as periodic inspections by independent monitors, end-of-course exams constructed by local education professionals, and panel-evaluated projects and portfolios.⁵⁷

In summary, there is no consistent evidence that high-stakes accountability policies improve academic achievement or ameliorate education disparities. Indeed, a large body of evidence indicates that the achievement gap is widening due to unchecked economic disparities and the adoption of strategies designed to avoid high-stakes penalties. Moreover, research shows that high-stakes accountability policies are especially detrimental to English language learners, who constitute a significant proportion of the student population the policies are intended to aid.

The next section considers 3 examples of local-level reforms developed by educators and community members in Native American settings. These examples offer insights into new ways of conceptualizing policy based on practices that are both academically rigorous and culturally responsive.

Promising Practices for New Policies: Three Examples

As the pressures of high-stakes accountability have mounted with no evidence that it improves learning outcomes for Native American youth, many Native communities have looked to innovative program models as a means of retaining control over their schools and ensuring that the curriculum is infused with local linguistic and cultural content. These programs often have Native-language revitalization as a high priority, even as they also promote high levels of academic achievement in English. What are some of the promising practices in these programs – and what lessons do they teach to inform policy change?

Defining “Promising Practices”

At their core, promising practices facilitate learners’ self-efficacy, their critical capacities, and their intrinsic motivation as thinkers, readers, writers, and ethical social actors. Promising practices support teachers’ professionalism and invest in the intellectual resources present in local communities. In addition to these qualities, promising practices for Indigenous learners:

1. Enable students to achieve full educational parity with their White peers, with the long-term goal of preparing Indigenous students for full participation in their home communities and as citizens of the world.⁵⁸
2. Contribute substantively and positively to learners’ personal well being and the development of their academic and cultural identities.
3. Promote positive, trusting relationships between the school and the community, helping to complete the circle of what language researcher Fred Genesee calls “the whole child, the whole curriculum, the whole community.”⁵⁹

The remainder of this section illustrates these characteristics with brief profiles of 3 contemporary Native American education programs.

Nāwahīokalani’ōpu Laboratory School⁶⁰

In Hawai’i, the Nāwahīokalani’ōpu Laboratory School (called Nāwahī for short), is an Hawaiian-medium, early childhood through high school affiliation of programs featuring a college preparatory curriculum rooted in Native Hawaiian language and culture. Named for a major 19th century figure in Hawaiian-medium education, the school grows out of the ‘Aha Pūnana Leo (Hawaiian “language nest”) movement that began nearly 3 decades ago. In 1983, a small group of parents and language activists established the Pūnana Leo preschools, which enable children to interact with fluent speakers entirely in Hawaiian with the goal of cultivating fluency and knowledge of Hawaiian language and culture, much as occurred in the home in earlier generations. Hawaiian-medium education now serves 2,000 students of Hawaiian and non-Hawaiian ancestry in a coordinated set of schools, beginning with the preschools and moving through full Hawaiian-medium elementary and secondary schools. The University of Hawai’i-Hilo even offers a doctorate in Hawaiian language and culture revitalization.

Founded in 1994, the Nāwahī School is affiliated with the University of Hawai'i-Hilo's College of Hawaiian Language. The school teaches all subjects through Hawaiian language and values. Reflecting the value of honoring one's ancestors, Nāwahī's curriculum includes other languages that are part of students' multiethnic heritage, such as Japanese and the Chinese characters used in the modern Japanese writing system (*kanji*).

Although it has emphasized Hawaiian language and culture revitalization over academic achievement, Hawaiian-medium schooling has yielded impressive academic results. Nāwahī students, many of whom come from poor and working-class backgrounds, surpass their non-immersion peers on English standardized tests. Many are concurrently enrolled in university classes and have won prestigious college scholarships. Two students recently were selected to attend a Harvard summer school program. The school has a 100% high school graduation rate and a college attendance rate of 80%. School leaders Kauanoē Kamanā and William H. Wilson attribute these successes to an academically challenging curriculum that applies knowledge to daily life and is rooted in Hawaiian identity and culture. According to Wilson, the school has succeeded “because we have rejected the measure of success used by the dominant society – speaking English and academic achievement – even though our children all can do that...we judge the school on Hawaiian language and culture achievement and holding Hawaiian language and culture high.”⁶¹

*Tséhootsooidí Diné Bi'ólta*⁶²

One of the better-documented Native American immersion programs operates on the eastern border of the Navajo Nation (Figure 1) in the Window Rock Unified School District (WRUSD). When the program began in 1986, less than a tenth of the school's five-year-olds were considered reasonably competent speakers of Navajo, and a third were judged to have passive knowledge of the language (i.e., comprehension but not speaking abilities). At the same time, many of these students were identified as LEP; they had conversational proficiency in English but struggled with decontextualized academic English.⁶³

In light of these circumstances, WRUSD opted for a voluntary Navajo immersion program similar to that developed for Hawaiian students and for the Māori in Aotearoa/New Zealand. Starting with a kindergarten through 5th grade Navajo-immersion track in an otherwise all-English public school, the program has blossomed into a full-immersion K-8 school called Tséhootsooí Diné Bi'Ólta' (TDB, The Navajo School at the Meadow Between the Rocks). In the lower grades, all instruction, including initial literacy, occurs in Navajo. English is introduced in second grade and gradually increased until a 50-50 distribution is attained by grade 6. The program is organized to afford maximum exposure to Navajo.

TDB's curriculum incorporates tribal standards for Navajo language and culture and content-area standards required by the state. It also emphasizes a Navajo-rich environment in which the language is used in the cafeteria, playground, hallways, school bus, and other informal contexts. Like Hawaiian immersion, a key program component is the involvement of parents and other caretakers, who commit to spending time interacting with their children in Navajo after school.

Longitudinal program data show that Navajo immersion students consistently outperform their peers in English-only classrooms on local and state-mandated assessments of English reading, writing, and mathematics. Not surprisingly, they also develop much stronger Navajo oral language and literacy skills. In short, these students are accomplishing what a wide body of research on second language acquisition predicts: They are acquiring Navajo as a second, heritage language without cost to their English-language development or academic achievement. According to program cofounder Wayne Holm, there is another benefit to this approach: "What the children and their parents taught us was that Navajo immersion gave students Navajo pride."⁶⁴

*Puente de Hozho Dual Immersion School*⁶⁵

A final example comes from a trilingual K-8 public school in Flagstaff, Arizona. Named Puente de Hozho (*puente* for the Spanish word "bridge," and *hozho* for the Navajo word "beauty"), the school's name means, literally, "Bridge of Beauty." According to the

school's cofounder, Michael Fillerup, in a school district in which 25% of students are American Indian and 20% are Latino, "local educators were searching for innovative ways to bridge the seemingly unbridgeable gap between the academic achievement of language-minority and language-majority children."⁶⁶

The school's mission is to build bilingual, biliterate, bicultural competence for all students, regardless of their language and culture background. To do this, Puente de Hozho offers 2 parallel bilingual programs: a conventional dual immersion model in which native Spanish- and native English-speaking students are taught jointly for half a day in each language, and one-way Navajo immersion in which English-dominant Navajo students are taught in Navajo. In the latter program, kindergartners receive 100% of their instruction in Navajo, with English instructional time gradually increased to 80/20 in 1st grade and 60/40 in 3rd grade, until a 50/50 balance is attained in grades 4 through 8. All the state standards are taught in either Navajo and English or Spanish and English.

Many promising practices are evident at this school, but 2 are especially noteworthy. First, the school explicitly rejects the remedial labels historically associated with bilingual and American Indian education programs in the U.S. Rather than "problems to be solved," students are considered an educational elite. For Navajo students, this means learning the language of the famous Code Talkers that defied translation and speeded the Allied victory in the Pacific during World War II. Second, like Nāwahī and TDB, Puente de Hozho has exceptionally high levels of parent involvement – a practice widely associated with higher student achievement.

Puente de Hozho has consistently met AYP, with its students outperforming comparable peers in monolingual English programs on English standardized tests (e.g., a 7-point difference in English language arts, a 10-point difference in mathematics, and a 21-point difference in English reading in 2004). But test scores are only one measure of the school's success. Equally important, Fillerup notes, are less quantifiable but nevertheless potent program effects: enhanced student motivation and the "smiles on the faces of

parents, grandparents, and students as they communicate in the language of their ancestors.”⁶⁷

Toward “Authentic Accountability”⁶⁸

What can be learned from these examples of promising practices in light of the research evidence on high-stakes accountability systems? How can we use this knowledge to promote fair, just, and equitable education policies in sync with Indigenous self-determination and cultural values? To address these questions, it is helpful to consider three questions that reconfigure the accountability equation by asking how policy can be made accountable to the learners, schools, and communities it ostensibly serves.

Question 1: *Whom does the policy target?* High-stakes accountability policies such as NCLB are intended to meet the educational needs of low-achieving students in the nation’s highest poverty schools. By design, the policies do *not* target White, middle-class, mainstream students or children of the power elite.

Question 2: *What kinds of instructional approaches does the target population receive?* As previous sections show, the approaches called for by NCLB emphasize low-level skill-and-drill. Further, policy sanctions induce a constellation of detrimental programmatic spin-offs: excessive retention in grade, heightened special education placements, teaching to the test (often to the exclusion of English language development crucial for English language learners), and curtailment of culturally-based practices shown to be highly beneficial for Indigenous/minority learners.

Question 3: *What are the consequences of these approaches for the learners and schools the policy targets?* At best, high-stakes accountability policies show no consistent gap-closing, with considerable evidence that achievement disparities are on the rise.

Holding schools accountable for providing a high-quality, healthy, and uplifting education to all students is unquestionably a worthy goal. Yet it is necessary to ask, “Accountable to what or to whom?” Indigenous parents and communities must be at the

center of education reforms intended to serve their children. This entails a commitment to Indigenous self-determination and the right of choice – not choice in the narrow sense of NCLB-style “school choice,” a policy that masks operations of race, social class, language, and power – but choice rooted in the linked domains of individual and communal self-determination.⁶⁹

From this premise flow other principles to guide policy formation. James Crawford, director of the Institute for Language and Education Policy, an international organization of language professionals for research-based policy advocacy, refers to this as *authentic accountability*.⁷⁰ Authentic accountability is coordinated plan that is —

1. *Flexible and inclusive*, leaving day-to-day instructional decisions to local educators, in consultation with parents and other stakeholders, based on local expertise and needs.
2. *Constructive*, helping schools improve through technical assistance rather than public shaming, and providing incentives rather than penalties to recruit and retain good teachers in schools that are trying hard to improve.
3. *Accurate and valid*, using multiple measures and alternative assessments, including locally developed indicators.
4. *Reasonable*, evaluating schools based on academic growth rather than arbitrary (e.g., “100%”) proficiency levels, and over sufficient time to achieve long-range goals.
5. *Balanced*, considering not only “outputs” (test scores) but also the quality of “inputs” (“real” teaching and learning).
6. *Equitable*, tailoring accountability to the unique characteristics and needs of diverse learners.
7. *Broadly informed*, basing education reform on a wide array of sound research, including qualitative as well as quantitative designs.⁷¹

In addition to these recommendations, there is a need for *specific, enforceable policy provisions to support the teaching of Indigenous languages and cultural content*, as illustrated by the promising practices profiled here. It is essential that such provisions not be muted or circumvented by other policy emphases or sanctions. There is also a need for equitable school funding to address persistent (and growing) resource inequities. Finally, we must continue to challenge the standardization juggernaut – a policy that history shows to be not only detrimental to Indigenous learners, but to undermine equality of educational opportunity for all.

About the Author

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⁶¹ William H. Wilson, personal communication, January 6, 2007.

⁶² The section on Tséhootsooidí Diné Bi’ólta’ derives from:

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⁶³ Cummins, J. (2000). The Nature of Language Proficiency. In J. Cummins, *Language, Power and Pedagogy: Bilingual Children in the Crossfire* (pp. 53-167). Clevedon, UK: Multilingual Matters.

⁶⁴ Holm, W. (2006). The “Goodness” of Bilingual Education for Native American Children. In T.L. McCarty & O. Zepeda (eds.), with V.H. Begay, S. Charging Eagle S.C. Moore, L. Warhol, & T.M.K. Williams, *One Voice, Many Voices – Recreating Indigenous Language Communities* (pp. 1-46). Tempe: Arizona State University Center for Indian Education (p. 33).

⁶⁵ The section on Puente de Hozho School derives from Fillerup (2005).

⁶⁶ Fillerup (2005), p. 15.

⁶⁷ Fillerup (2005), p. 16.

⁶⁸ Parts of this section are adapted from McCarty, T.L. (2008). American Indian, Alaska Native, and Native Hawaiian Education in the Era of Standardization and NCLB – An Introduction. *Journal of American Indian Education*, 47 (1), 1-9.

⁶⁹ Lomawaima & McCarty (2006), p. 9.

⁷⁰ Crawford, J. (2007). *No Child Left Behind: Blessing or Curse for English Language Learners?* Presentation at the NCLB Mini Conference, Arizona State University, Tempe (retrieved June 23, 2008 from <http://www.elladvocates.org/documents/nclb/ASU07.ppt>).

⁷¹ Crawford (2007).

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