

American Indian Student Achievement in Montana Public Schools: Features of the Achievement Gap and Policy Prescriptions

Christopher D. Lohse, *Research Analyst, Office of Research and Policy Analysis, Montana Legislative Services Division*; and Susan Ockert, *Economist, Census and Economic Information Center, Montana Department of Commerce*

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At the request of the Quality Schools Interim Committee, the Office of Research and Policy Analysis (ORPA) for the Montana Legislature, in conjunction with the Census and Economic Information Center (CEIC) of the Montana Department of Commerce, undertook an analysis of the performance of American Indian students in Montana schools relative to their White peers. Our results demonstrate a strong achievement gap between the two subgroups, with White students demonstrating higher levels of proficiency on norm-referenced and criterion referenced tests; higher graduation rates and attendance rates; and fewer instances of suspension or expulsion from schools. In identifying these characteristics, we noted strong intra-state variability in performance, with American Indian students in urban areas and economically and racially integrated schools significantly outperforming their peers who attend school in rurally isolated Indian Country. We further noted that despite significant variability among a host of socio-economic indicators between urban areas and reservations, American Indian students located in urban settings were not socio-economically identifiable from American Indian students attending school in Indian Country. In a companion report, intra-school variability in performance was also identified. From our findings, a number of policy responses are explored and analyzed.

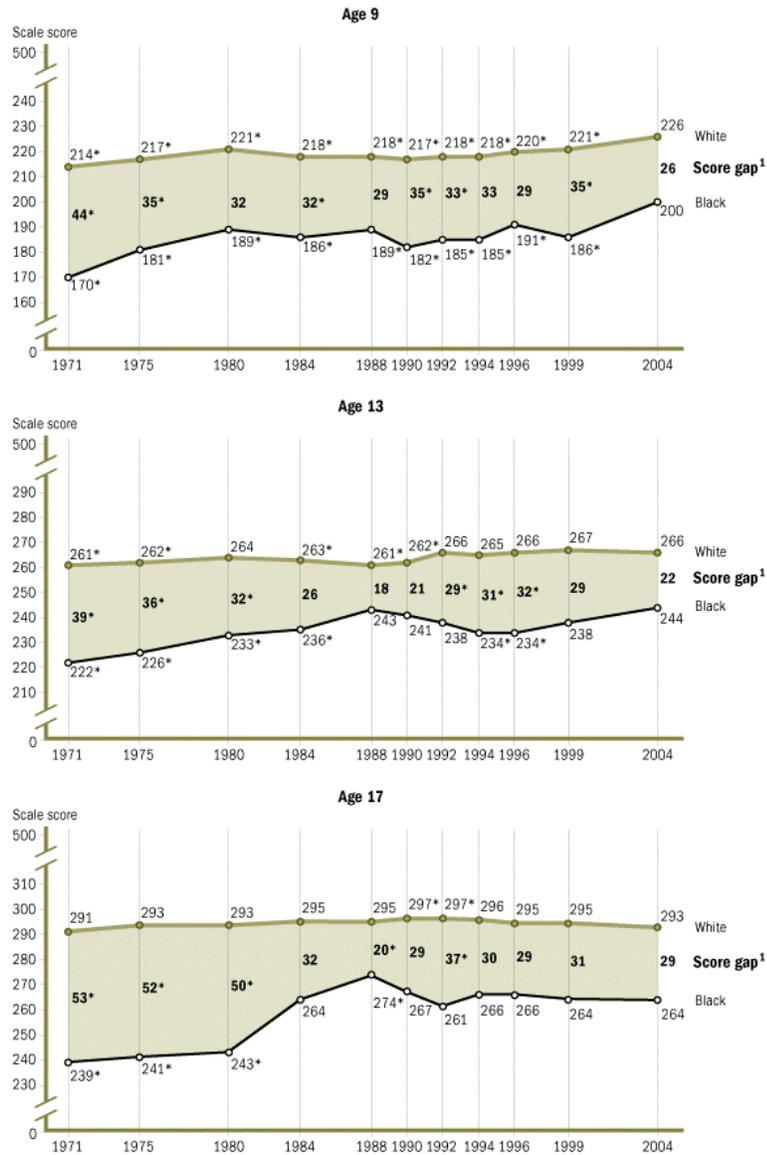
Introduction

The disparity in performance outcomes between racial minority and White students dominates discussions of educational reform. Glaring underperformance by Black and Latino students, in particular, has focused the attention of educators and policy makers on the equity of educational outcomes, and the need for effective pedagogies, programs, and policies to meet the unique needs of minority student populations.

Perhaps because of their low overall enrollment numbers in schools nationally, American Indian students are largely ignored in national discussions of the achievement gap. Nevertheless, the performance of American Indian students lags significantly behind the performance of White students – both at the national level, and in Montana. Figures 1-3 represent the temporal trends in achievement between Black and White students on the National Assessment of Educational

Progress (NAEP) at ages 9, 13, and 17. Score gaps in 2004 were 26, 22, and 29 points, respectively.

Figures 1-3. Results by Racial Subgroup on the National Assessment of Educational Progress (NAEP), 1971-2004. *The Nation's Report Card.* The National Center for Education Statistics, 2004.



American Indian students in Montana demonstrate similar gaps in achievement when compared with White students. Figures 4 and 5 represent historic grade four performance in Montana on the NAEP in reading and

mathematics. The magnitude of the score gaps mirror those seen at the national level between Black and White students.

Figure 4. Results by racial subgroup on the NAEP by Montana grade four students in reading. Common Core of Data. The National Center for Education Statistics, 2004.

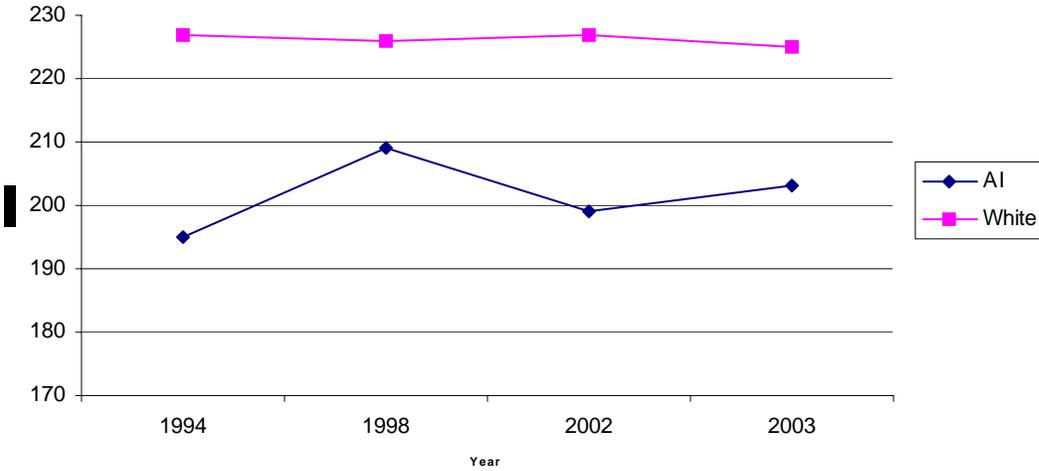
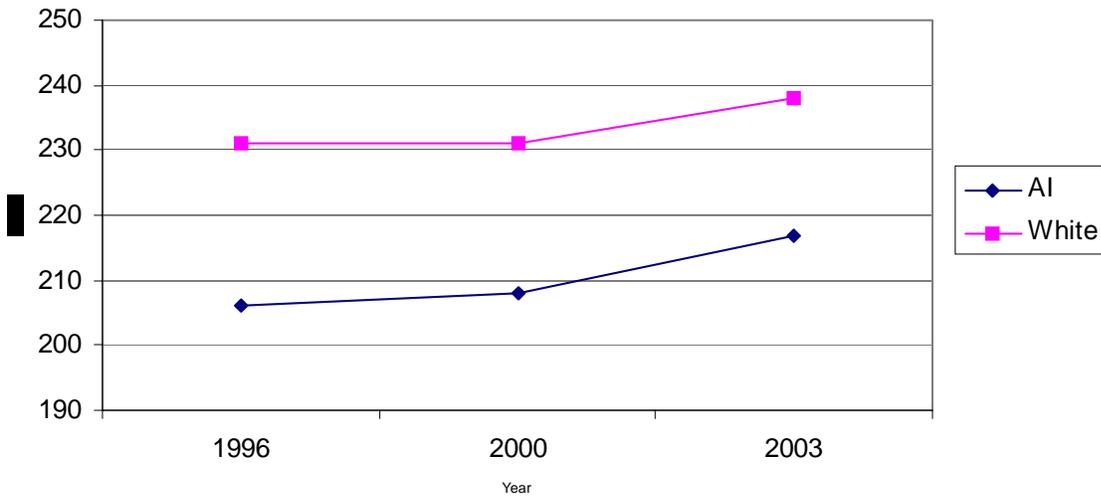


Figure 5. Results by racial subgroup on the NAEP by Montana grade four students in mathematics. Common Core of Data. The National Center for Education Statistics, 2004.



Similar performance gaps exist at the grade 8 level in reading and mathematics, as evidenced by Figures 6 and 7.

Figure 6. Results by racial subgroup on the NAEP by Montana grade eight students in reading. Common Core of Data. The National Center for Education Statistics, 2004.

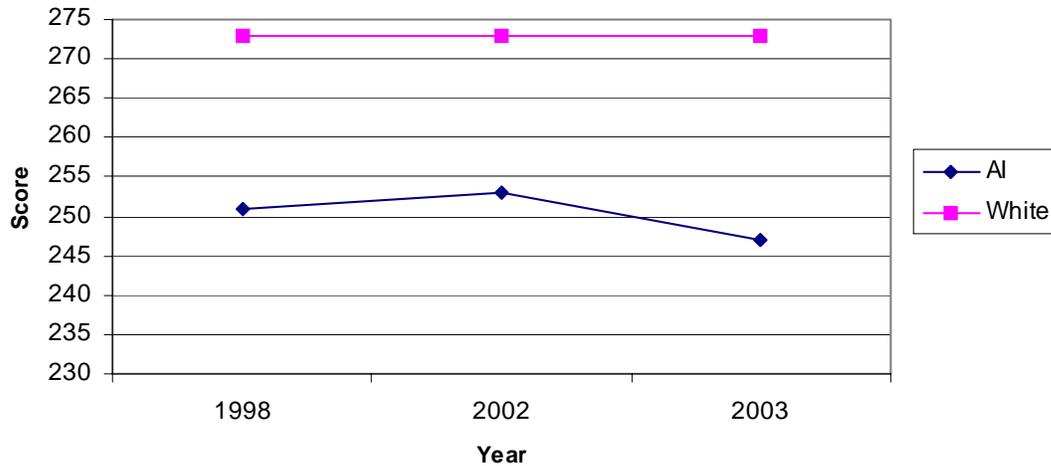
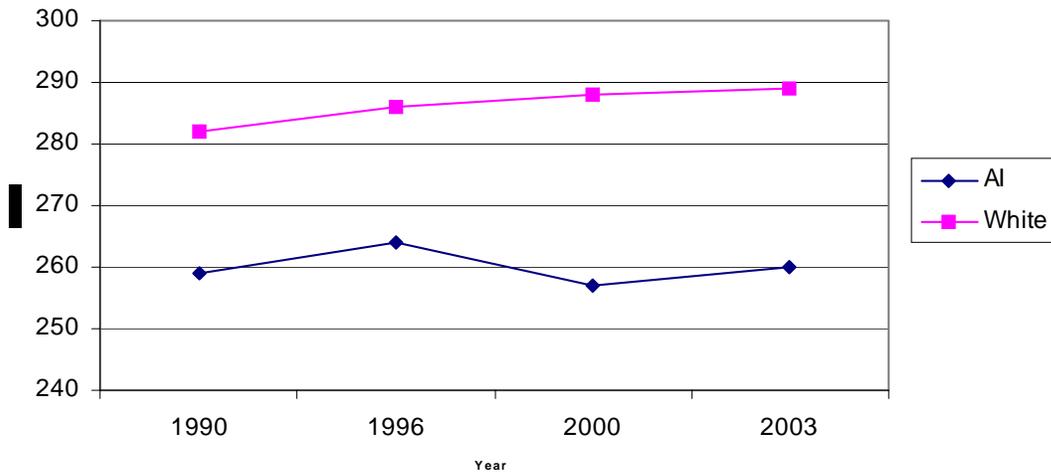


Figure 7. Results by racial subgroup on the NAEP by Montana grade eight students in mathematics. Common Core of Data. The National Center for Education Statistics, 2004.



In 2004, Montana adopted the Montana Comprehensive Assessment System (MontCAS) exam in response to federal legislation requiring demonstrable achievement on criterion-based reference examinations aligned to state-designed curricular standards. Actually a reauthorization of Title I provisions in the 1965 Elementary and Secondary Education Act (ESEA), the so-called No Child Left Behind (NCLB) act imposes strict sanctions on schools failing to make annual improvement targets designed to bring 100 percent of students to state-mandated proficiency levels by 2014. Tables 1 and 2 demonstrate the achievement gap between American Indian students and White students on the 2004 and 2005 MontCAS examinations.

Table 1. Results by Racial Subgroup on the 2004 MontCAS examination. Montana Office of Public Instruction, 2004. *The percentage reported for American Indians and Whites represents the percentage of the total subgroup population scoring at or above the proficient level.*

Subject	American Indian	White	Gap
<i>Math</i>	25%	66%	41%
<i>Reading</i>	32%	61%	29%

Table 2. Results by Racial Subgroup on the 2005 MontCAS examination. Montana Office of Public Instruction, 2005. *The percentage reported for American Indians and Whites represents the percentage of the total subgroup population scoring at or above the proficient level.*

Subject	American Indian	White	Gap
<i>Math</i>	38%	63%	25%
<i>Reading</i>	28%	72%	44%

Indeed, disparities on any number of testing instruments are evident – American Indian students show lower scores on the Scholastic Aptitude Test (SAT) and the American College Test (ACT), both used in guiding college admissions; the Iowa Tests of Basic Skills, a norm-referenced examination designed to allow for cross-state comparisons of student performance; professional tests; and tests like the MontCAS, which are directly linked to a school’s funding level.

Differences in performance, however, cut across all indicators of school success, not just assessments. For instance, while American Indian students comprise just 10.4% of the school age population, they are responsible for 26% of the expulsions and suspensions in the state. White students, by comparison, make up 86% of the school age population, but are responsible for only 70% of the expulsions and suspensions. Said another way, suspensions and expulsions are statistically over-prescribed for American Indian students, and under-prescribed for White students. Similarly, the historic drop-out rate for American Indian students is more than 3 times higher than it is for White students.

Against this backdrop of discouraging results for American Indian students, the Office of Research and Policy Analysis, in conjunction with the Census and Economic Information Center, sought to find features of the achievement gap in Montana that may help policy-makers craft effective instruments for closing the gap. To that end, we examined all schools in the state with statistically identifiable American Indian populations to find those schools that were most effective in producing high performance results for their American Indian students across a number of measures. We then completed a factor analysis to determine the most essential features of successful schools. The methodology and results are summarized below.

Methods

Data were obtained from the websites of the Montana Office of Public Instruction, and the National Center for Education Statistics relative to each school's performance in the following areas:

1. 2004-2005 MontCAS performance
2. 2000-2005 Iowa Tests of Basic Skills performance
3. 2004 Attendance data

4. 2004 Drop-out data
5. 2003 Expulsion and Suspension data

To ensure statistical anonymity, the Office of Public Instruction and the National Center for Education Statistics do not report sub-group testing information when schools have fewer than 10 test-takers in the given sub-group. This limitation of the data should be noted upfront. It limited our ability to enroll schools with small student subgroups, artificially excluding many of Montana's very small rural schools.

Schools were rank-sorted in each category and assigned a numerical value by rank, with 1 indicating the most favorable performance. Each school's score in a category was then added to its score in all other categories. A low overall final score indicated that a school was performing well, while high final scores were taken as an indication of poor performance across the selected benchmarks.

We enrolled ten high performing elementary, middle and high schools across the state, and ten low performing elementary, middle, and high schools for further study. We compared the socio-economic status (as measured by educational attainment, home ownership rates, migration status, per capita income, household income, persons per household, and poverty status) of the districts housing the high performing schools, and the socio-economic status of the districts supporting the low performing schools.

Under separate cover, we conducted a gap analysis in schools with White and American Indian subgroup populations greater than ten to determine if the achievement gap persisted within the same school environment. In doing so, we elucidated other features of the achievement gap that shed further insight on possible response mechanisms.

Results

ELEMENTARY SCHOOLS

Table 3. Elementary Schools – Highest Performing

School Code	School Name	School Location
1495	Linderman Elementary	Polson
0642	St Ignatius Elementary	Polson
0632	Cherry Valley Elementary	Polson
1504	Malta K-6	Malta
1265	Orchard School	Billings
0545	Cut Bank Elementary	Cut Bank
0572	Sunnyside Elementary	Havre
0639	K William Harvey Elementary	Ronan
0143	Longfellow Elementary	Great Falls
0628	Arlee Elementary	Arlee

Table 4. Elementary Schools – Lowest performing

School Code	School Name	School Location
0539	Napi School	Browning
0032	Hardin	Hardin
1022	Northside School	Wolf Point
1015	Poplar School	Poplar
0041	Wyola School	Wyola
0039	Lodge Grass Elementary	Lodge Grass
0033	Crow Agency	Crow Agency
9369	Northern Cheyenne	Northern Cheyenne
1035	Lame Deer	Lame Deer
0072	Lodge Pole	Lodge Pole

Table 5. Educational Attainment Among Native Americans in the School Districts of high performing and low performing elementary schools

	Percentage of American Indian Population with some college or higher
School Districts with high-performing schools	43.1
School Districts with low-performing	44.0

schools	
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Source: National Center for Educational Statistics, School District Demographics Profiles, Census 2000 sample data, various tables. Web site: <http://nces.ed.gov/surveys/sdds/index.asp>

Table 6. *Home Ownership Rates Among Native Americans in the School Districts of high performing and low performing elementary schools*

	Percentage of American Indian Owner Occupied Homes
School Districts with high-performing schools	48.6
School Districts with low-performing schools	57.0

Source: National Center for Educational Statistics, School District Demographics Profiles, Census 2000 sample data, various tables. Web site: <http://nces.ed.gov/surveys/sdds/index.asp>

Table 7. *Migration Stability Rates Among Native Americans in the School Districts of high performing and low performing elementary schools*

	Percentage of American Indians in same house from 1995-2000
School Districts with high-performing schools	55.2
School Districts with low-performing schools	66.6

Source: National Center for Educational Statistics, School District Demographics Profiles, Census 2000 sample data, various tables. Web site: <http://nces.ed.gov/surveys/sdds/index.asp>

Table 8. *Per Capita Income Among Native Americans in the School Districts of high performing and low performing elementary schools*

	Per Capita Income of American Indians	Percentage of average income in area
School Districts with high-performing schools	9766.25	62.3%
School Districts with low-performing schools	7148.50	81.6%

Source: National Center for Educational Statistics, School District Demographics Profiles, Census 2000 sample data, various tables. Web site: <http://nces.ed.gov/surveys/sdds/index.asp>

Table 9. *Percentage Native Americans Students in high performing and low performing elementary schools*

	Percentage of American Indians in school
High-performing schools	20.1
Low-performing schools	75.1

Source: National Center for Educational Statistics, School District Demographics Profiles, Census 2000 sample data, various tables. Web site: <http://nces.ed.gov/surveys/sdds/index.asp>

MIDDLE SCHOOLS

Table 10. *Middle Schools – Highest performing*

School Code	School Name	School Location
1615	C R Anderson Middle School	Helena Elementary
1614	Helena Middle School	Helena Elementary
0136	Paris Gibson Middle School	Great Falls Elementary
1634	North Middle School	Great Falls Elementary

1451	Havre Middle School	Havre
1486	Porter Middle School	Missoula
1710	Box Elder 7-8	Box Elder
1609	Frank Brattle Middle School	Rosebud / Colstrip
1643	Harlem 7-8	Harlem
1498	Polson 7-8	Polson

Table 11. *Middle Schools – Lowest performing*

School Code	School Name	School Location
0036	Hardin Middle School	Hardin
1669	Lodge Grass Elementary	Lodge Grass
1759	Barbara Gilligan	Brockton
9946	Northern Cheyenne	Lame Deer
1626	Lame Deer	Lame Deer
1632	Lewis and Clark	Cascade
1659	Hays-Lodge Pole	Hays-Lodge Pole, Fort Belknap
1550	Poplar 7-8	Poplar
1711	Rocky Boy	Box Elder
1613	Browning	Browning

Table 12. *Educational Attainment Among Native Americans in the School Districts of high performing and low performing middle schools*

	Percentage of American Indian Population with some college or higher
School Districts with high-performing schools	51.13
School Districts with low-performing schools	45.44

Source: National Center for Educational Statistics, School District Demographics Profiles, Census 2000 sample data, various tables. Web site:

<http://nces.ed.gov/surveys/sdds/index.asp>

Table 13. *Home Ownership Rates Among Native Americans in the School Districts of high performing and low performing middle schools*

	Percentage of American Indian Owner Occupied Homes
School Districts with high-performing schools	35.5
School Districts with low-performing schools	54.4

Source: National Center for Educational Statistics, School District Demographics Profiles, Census 2000 sample data, various tables. Web site: <http://nces.ed.gov/surveys/sdds/index.asp>

Table 14. *Migration Stability Rates Among Native Americans in the School Districts of high performing and low performing middle schools*

	Percentage of American Indians in same house from 1995-2000
School Districts with high-performing schools	53.8
School Districts with low-performing schools	65.0

Source: National Center for Educational Statistics, School District Demographics Profiles, Census 2000 sample data, various tables. Web site: <http://nces.ed.gov/surveys/sdds/index.asp>

Table 15. *Per Capita Income Among Native Americans in the School Districts of high performing and low performing middle schools*

	Per Capita Income of American Indians	Percentage of average income in area
School Districts with high-performing schools	8936.88	57.6%
School Districts with low-performing schools	7375.78	81.3%

Source: National Center for Educational Statistics, School District Demographics Profiles, Census 2000 sample data, various tables. Web site: <http://nces.ed.gov/surveys/sdds/index.asp>

Table 16. *Percentage Native Americans Students in high performing and low performing elementary schools*

	Percentage of American Indians in school
High-performing schools	21.0
Low-performing schools	75.2

Source: National Center for Educational Statistics, School District Demographics Profiles, Census 2000 sample data, various tables. Web site: <http://nces.ed.gov/surveys/sdds/index.asp>

HIGH SCHOOLS

Table 17. *High Schools – Highest performing*

School Code	School Name	School Location
0661	Helena High	Helena
0640	Ronan High	Ronan
0629	Arlee High	Arlee
1432	Hellgate High	Missoula
0633	Polson High	Polson

1547	Capital High	Helena
1040	Colstrip High	Colstrip
1464	C M Russell High	Great Falls
1251	Billings West	Billings
0049	Harlem High	Harlem

Table 18. *High Schools – Lowest performing*

School Code	School Name	School Location
1807	Rocky Boy	Box Elder
1023	Wolf Point	Wolf Point
1026	Brockton	Brockton
0571	Box Elder	Box Elder
0543	Browning HS	Browning
0037	Hardin High School	Hardin
9405	Two Eagle High School	Pablo (private)
1656	Heart Butte High School	Heart Butte
1816	Lame Deer High School	Lame Deer
0040	Lodge Grass High School	Lodge Grass
1551	Hays-Lodge Pole High School	Hays-Lodge Pole, Fort Belknap

Table 19. *Educational Attainment Among Native Americans in the School Districts of high performing and low performing high schools*

	Percentage of American Indian Population with some college or higher
School Districts with high-performing schools	50.5
School Districts with low-performing schools	46.1

Source: National Center for Educational Statistics, School District Demographics Profiles, Census 2000 sample data, various tables. Web site: <http://nces.ed.gov/surveys/sdds/index.asp>

Table 20. *Home Ownership Rates Among Native Americans in the School Districts of high performing and low performing high schools*

	Percentage of American Indian Owner Occupied Homes
School Districts with high-performing schools	49.2
School Districts with low-performing schools	53.8

Source: National Center for Educational Statistics, School District Demographics Profiles, Census 2000 sample data, various tables. Web site: <http://nces.ed.gov/surveys/sdds/index.asp>

Table 21. *Migration Stability Rates Among Native Americans in the School Districts of high performing and low performing high schools*

	Percentage of American Indians in same house from 1995-2000
School Districts with high-performing schools	53.3
School Districts with low-performing schools	69.1

Source: National Center for Educational Statistics, School District Demographics Profiles, Census 2000 sample data, various tables. Web site: <http://nces.ed.gov/surveys/sdds/index.asp>

Table 22. *Per Capita Income Among Native Americans in the School Districts of high performing and low performing high schools*

	Per Capita Income of American Indians	Percentage of average income in area
School Districts with high-performing schools	9651.40	60.6%
School Districts with low-performing schools	7221.00	83.0%

Source: National Center for Educational Statistics, School District Demographics Profiles, Census 2000 sample data, various tables. Web site: <http://nces.ed.gov/surveys/sdds/index.asp>

Table 23. *Percentage Native Americans Students in high performing and low performing elementary schools*

	Percentage of American Indians in school
High-performing schools	21.7
Low-performing schools	80.7

Source: National Center for Educational Statistics, School District Demographics Profiles, Census 2000 sample data, various tables. Web site: <http://nces.ed.gov/surveys/sdds/index.asp>

Discussion and Conclusions

From an analysis of the results returned by our study, two factors appear to be most predictive of student performance: *racial* and *economic* isolation. Because these appear to be the two singularly most important predictors of student and school performance, it is necessary to define both racial and economic isolation. School settings that exhibit high numbers of racially segregated minority students are appropriately characterized as *racially isolated*. Similarly, to characterize a school as *economically isolated* is to infer that it exhibits high concentrations of poverty, with little opportunity for students to associate with non-poor students. Schools in Indian Country, with the exception of those in Lake County¹, experience both.

How do the data point to the predictive nature of economic and racial isolation? At all levels – elementary, middle, and high school – the most important predictors of student performance were income and the percentage of American Indian students in the district. Poverty and race are powerful predictors of student performance across the research literature, but our data suggest that concentration of poverty (economic isolation) and racial *isolation* are more predictive than poverty or race, alone. This claim flows from an examination of the per-capita income of American Indian students in high performing versus low-performing schools. While incomes are higher in high-performing schools, they are much lower relative to the prevailing wage in the community. Low per-capita incomes in Indian Country are the norm;

¹ Lake County schools, on the Flathead Indian reservation in Western Montana, are much more racially integrated than the rest of Montana Indian Country. This is a direct result of more integrated communities and housing patterns on the Flathead reservation. The reservation became home for many white settlers following a 1908 survey and allotment that allowed non-allotted land to be sold to non-Indians. Because of the tremendous natural beauty, soil fertility, and access to water afforded by the land, much of it was quickly converted to fee land through sale to non-Indians.

they are the exception in non-Indian Country. The correlation coefficient between per-capita income and achievement is .37. The correlation coefficient between regions of concentrated poverty and achievement is .72. Results are seldom clearer.²

Race is also powerfully related to student outcomes. The correlation coefficient between American Indian status and student achievement is .52. Again, however, racial *isolation* is still more predictive at the district level. The correlation coefficient overall school performance and school demographics (percent of students in school who are American Indian) is .83. The results are illustrated graphically in Figure 8.

Figure 8. *Performance on 2004 MontCAS Reading Examination v. Percentage of American Indian Students in School.* The data below have a correlation coefficient of -.83, meaning that as the percentage of American Indian students in the school increases, the performance of the school decreases.

² An interesting note that is the topic of another paper by these authors is the grade level variation we saw in correlation. At the elementary school level, the correlation coefficient is .65; at middle school, .68; and at high school, .85. In other words, per capita income becomes more predictive with grade level. It is possible that high school students place a much higher premium on material goods, making income linked to social popularity, a factor that may also conflate with school performance.

The predictive power of racial and economic isolation is confirmed by an analysis of

	American Indian or Alaska Native Population Only										socioecon
	Montana	White non-Hispanic	AI & AN State	Blackfeet	Crow	Flathead	Fort Belknap	Fort Peck	Northern Cheyenne	Rocky Boy's	omic
Population	902,195	807,823	36,459	8,507	5,165	6,999	2,790	6,391	4,029	2578	characteri
Median household income	33,024	33,821	22,520	23,557	28,125	26,449	21,302	18,449	21,667	22,240	stics of
Average Household size	2.44	2.39	3.34	3.57	4.18	3.04	3.61	3.49	3.96	4.23	Indians
Households below poverty	15%	13%	38%	35%	35%	34%	39%	49%	50%	41%	
25 years and older with at least a bachelor's degree	24%	25%	11%	9%	10%	11%	10%	8%	8%	10%	
Home ownership	69%	71%	50%	55%	71%	59%	54%	51%	52%	41%	

and non-Indians in Montana.

Table 24. *Selected Socio-economic characteristics: United States Decennial Census, 2000*

Significant differences exist between White, non-Hispanic residents of the state and American Indian and Alaskan Native residents. When examining the socio-economic character of the high-performing and low-performing schools, it would be easy to dismiss the results as precisely what would be expected: wealthy urban areas (with their attendant wealthier students) perform better than poor rural areas (with their attendant poor students). Such a statement is true, but obscures an important finding – the *American Indian students attending integrated schools are **not** significantly better off than their peers on the reservations.* As a function of attending schools with middle-class and non-Indian students, poor Indian students perform better. Schools

shaped by pre-collegiate expectations and competition, preferentially situated in more integrated communities, help to produce higher student outcomes.

The county with the most high-performing schools was Lake County, in Western Montana, while the county with the most low-performing schools was Big Horn County, in Southeastern Montana. County economic profiles for both Lake and Big Horn County are included in the appendices of this report, and an analysis of their socio-economic character confirms our findings.

Racial and economic isolation are common features of the educational landscape for minorities. In large, metropolitan districts in our ailing U.S. central cities, poor Black and Latino students are subject to similar environments – environments where they seldom have contact with White, middle-class students. Research literature on the education and life chances of central city students suggests that the failure to integrate poor minorities with often wealthier white students excludes minorities from schools shaped by the expectations of middle-class, pre-collegiate competition and the resources marshaled and organized by parents with much greater social capital and connections to power. Those resources often include a more capable teaching force, better school facilities, and a school culture that supports safety, order, and academic rigor.

Following the US Supreme Court’s landmark decision in *Brown v. Board of Education* (347 U.S. 483 (1954)), and subsequent decisions by the Court providing additional clarity and stronger enforcement language (e.g. *Green v. New Kent County*, 391 U.S. 430 (1968)), many schools in the *de jure* segregated South were forced to racially and economically integrate.¹

¹ The unanimous decision of the Supreme Court was delivered by Justice Earl Warren in May of 1954 and overturned the Court’s previous “separate but equal” doctrine, first established in *Plessy v. Ferguson* (163 U.S. 537 (1896)), in the realm of public education. Nevertheless, few school districts complied with the

Though racially segregated housing patterns in the South have allowed segregation in public schools to persist, there are several examples of Southern communities that, now free from Court order, have persisted with transportation and school assignment policies that promote racially and economically integrated schools because of the strong performance ameliorations such policies have achieved for poor, minority students.²

Montana Indian Country, and indeed Indian Country in general, often provides a stark example of both racial and economic isolation. But because of political, cultural, historical, geographic, and economic reasons, it makes no sense to promote the integration of reservation communities. In places where Indian Country has become more economically well-integrated, however, results have improved. Infusions of capital resources in Eastern tribes (most often through Indian gaming) correlate with improvements in educational outcomes for students. Such findings were consistent with other research done by one of this report's authors in central city Los Angeles schools. In those findings, schools in the central city that showed similar levels of racial isolation, but differed in patterns of economic isolation, produced different educational outcomes, with the better economically integrated school significantly outperforming other schools in the community.³

order until the Court's decision was delivered in *Green v. New Kent County*, when the ambiguous language of the *Brown II* (349 U.S. 294 (1955)) ruling requiring districts to desegregate with "all deliberate speed" was set aside. The *Green* decision instructed *de jure* segregated districts to remove segregation "root and branch" from the public school enterprise and to complete such removal immediately. *De jure* segregation refers to segregation "in law" and differs from *de facto* segregation. *De facto* segregation (segregation "in fact") may result from other, non-law related factors, such as neighborhood housing patterns. The Court famously refused to interfere in *de facto* segregated schools in its 1973 *Milliken v. Bradley* decision (418 U.S. 717 (1974)).

² Finder, Alan. As Test Scores Jump, Raleigh Credits Integration by Income. *New York Times*. 25 Sept. 2005.

³ Lohse, Christopher D. *Let Them Go, But Give Them a Reason to Stay: An Analysis of the Los Angeles Unified School District Plan for Integration*. Presented to the Harvard University Research Colloquium, January 2004. Available upon request of the author.

How then, can economic development be brought to Indian Country? Other reports by these authors attempt to provide insight on this question. Suffice to say that challenges are significant, but that significant opportunities also exist. Policy responses are reservation and community specific, but include natural resource development, agriculture, and the extension of private enterprise.

Our report would be remiss if it perpetuated the misconception that the failure of students to perform well in segregated schools of concentrated poverty depended solely on social and external factors, and that there is little that schools can do to help close troubling achievement gaps. Indeed, in a meta-analysis of research studies designed to elucidate best practices for struggling schools, we found programs and school reforms that significantly bolstered school and student performance on a variety of indicators, including standardized test scores. The meta-analysis will be presented under separate cover. As with economic development, responses are necessarily site and context-specific, and there are significant challenges to implementation. But it is clear that there are policy responses that increase performance for American Indian and other minority students. Often, these reforms are costly, requiring disparate economic resources. But given the high economic returns on education, particularly in areas that have experienced historically inadequate educational opportunity,⁴ it is sensible governmental investment.

One of the most basic findings of our work merits special attention because of its importance in the realm of policy-making. Our results demonstrate that learning outcomes are significantly ameliorated by positive community effects and significantly limited by deleterious community effects. Said another way, student learning outcomes are highly dependent upon

⁴ Ockert, Susan. "The Four Asian Tigers: Education of Women as an Economic Engine." *Available upon request of the author.*

opportunity to learn. Many policy-makers new to the inequities of educational performance wonder if genetic or cultural factors limit the life chances of students. Since these factors are not easily manipulated by changes to public policy, policy-makers wonder whether *anything* can be done to improve outcomes and – paralyzed by doubt – fail to take action. Though study after study has debunked research products asserting a strong genetic component to race-based differences in performance (though, in fairness, genetic factors at the individual level do help explain differences among individuals), and there is no evidence for (and mounting evidence against) cultural attributions, those outside of the education community are often unfamiliar with such studies. The present study adds to the body of evidence suggesting that students are very much the product of the social, political, historical, and family contexts that birth them. Many student failures are, indeed, social failures. Policy-makers have a major role to play in correcting social structures that serve as the genesis for inequality.

Additionally, our discussions with educators and administrators in schools of all performance levels qualitatively (if informally) confirmed our quantitative results. This, too, is important. In the past, researchers, practitioners, and policy-makers viewed the results of standardized exams with a wary eye – they were often seen to produce results that were merely a function of cultural bias in the exams. Since the tests did not describe any relevant difference in outcomes, or so the argument went, the results could be dismissed out of hand as a result of racist assessments. Our research appears to refute such claims, arguing that while some cultural bias may exist, it is simply not enough to explain the differences in outcomes. Additionally, because disparities in outcomes hold across all measures – not just test scores but drop-out and behavior measures – it appears that exam performance does point to relevant outcome

differences.

Taken together, the dynamics associated with the performance of American Indian students present a policy challenge that is far-reaching in scope, requiring not just attention, but new resources, diligent watchfulness, compassion, and a willingness to look for new, context-specific solutions. Given its small population size and its isolated educational challenges, Montana is in a unique position to do what other states have not – to close its demonstrable achievement gap between poor minority students and middle class white students. The challenges inherent in such a proposition are great, but the rewards offered are far greater.