



MONTANA

AMERICAN INDIAN STUDENT ACHIEVEMENT DATA REPORT

FALL 2013

Artwork by Karley Lane, Butte High School



Denise Juneau, Superintendent
Office of Public Instruction

PO Box 202501 Helena, MT
59620-2501 www.opi.mt.gov

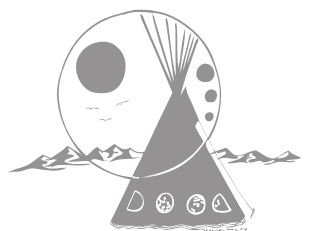
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Montana

American Indian Student Achievement

Data Report Fall 2013

Schools and communities across Montana are working hard to ensure that students receive the best education and graduate ready for college and careers. One of the most important components in this effort involves understanding where students are and how we can best help them achieve at the highest levels. Data is an invaluable tool and its use is necessary in ensuring student success. This report is intended to support that effort and to ensure that the work of closing the achievement gap for American Indian students in Montana continues. Understanding this information can assist us all as we strive to engage students in learning environments that are both rigorous and meaningful to their lives and their futures. Our collaborative efforts will make a difference and only continue the work of quality education in Montana.

Mandy Smoker Broaddus, Director of Indian Education

2007 MCA 20-9-330

In 2007, the Montana State Legislature passed Montana Code Annotated 20-9-330, appropriating \$200 per American Indian child, totaling over \$3 million dollars per year, to provide funding to school districts for the purpose of closing the educational achievement gap that exists between American Indian students and non-Indian students. According to MCA 20-9-330 (2) (a), funds were to be determined by "...using the number of American Indian students enrolled in the district based on the count of regularly enrolled students on the first Monday in October of the prior school year as reported to the Office of Public Instruction" and deposited into the district's general fund.

This report is provided to track the American Indian achievement gap and provide data on the Montana American Indian student population.

2011-2012 Population Data

- 6.5 percent of Montana’s total population is American Indian (2010 Census), comprised mostly of the twelve tribal nations of Montana: Assiniboine, Blackfeet, Chippewa, Cree, Crow, Gros Ventre, Kootenai, Little Shell Tribe of Chippewa, Northern Cheyenne, Pend d’Oreille, Salish, Sioux
- For the 2012-2013 school year there were 19,226 American Indian/Alaska Native students in Montana out of a total of 142,908 students enrolled in Montana’s K-12 public schools. 13.5 percent of Montana’s students are American Indian.
- Out of 826 Public Schools in Montana:
 - 58 public schools report 75 – 100% American Indian students within their school population.
 - 17 public schools report 50 – 75% American Indian students within their school population.
 - 37 public schools report 25 – 50% American Indian students within their school population.

Criterion Reference Test (CRT)

Under Title 1 of the Elementary and Secondary Education Act (ESEA) of 1994, P.L. 103-382 and the No Child Left Behind Act (NCLB) of 2001, all states were required to develop statewide assessments for reading, mathematics, and

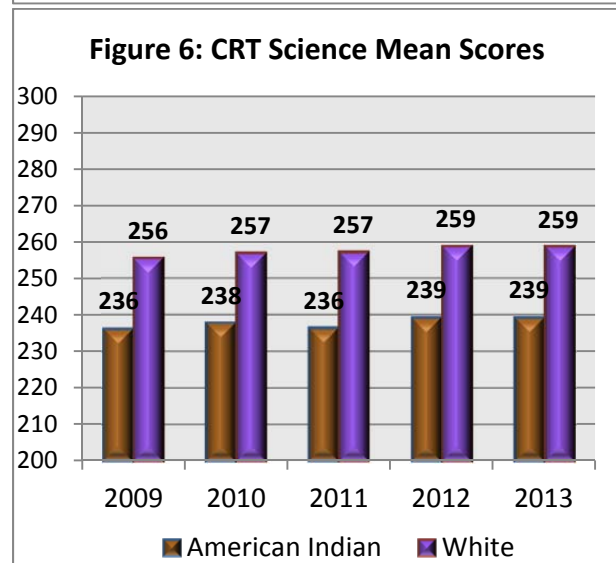
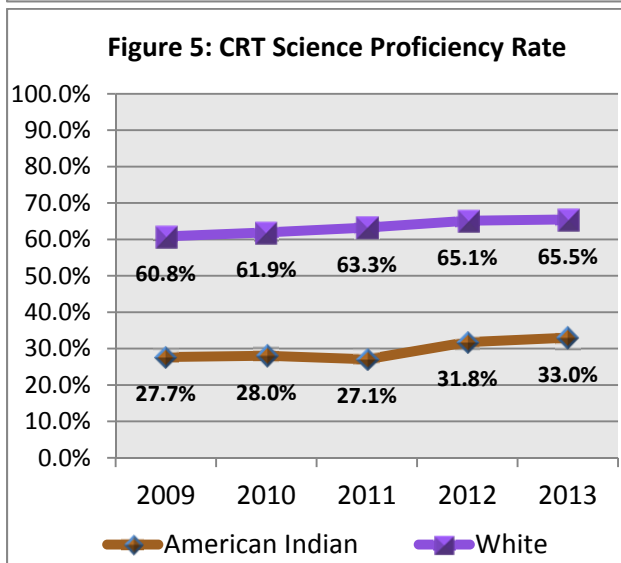
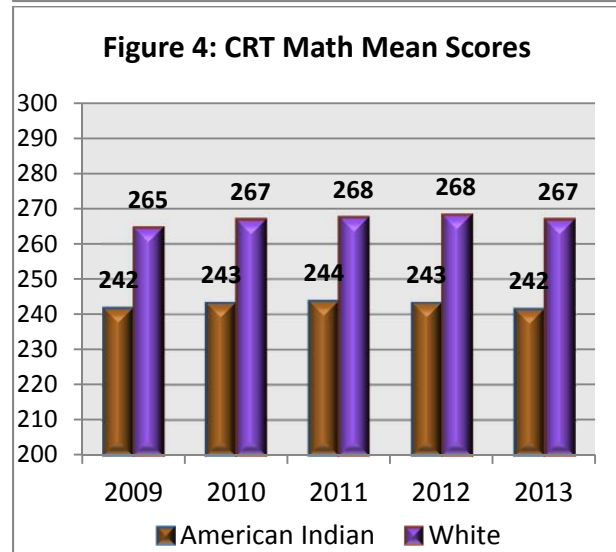
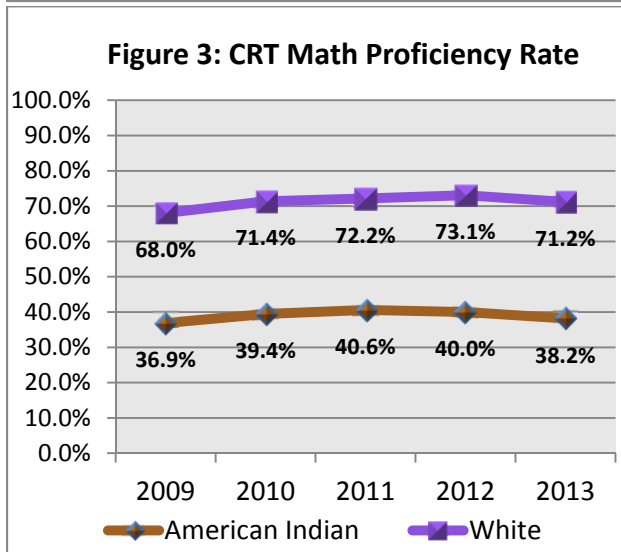
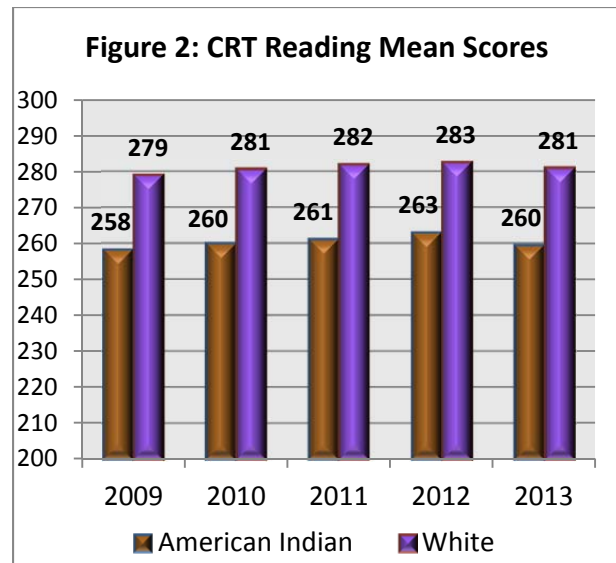
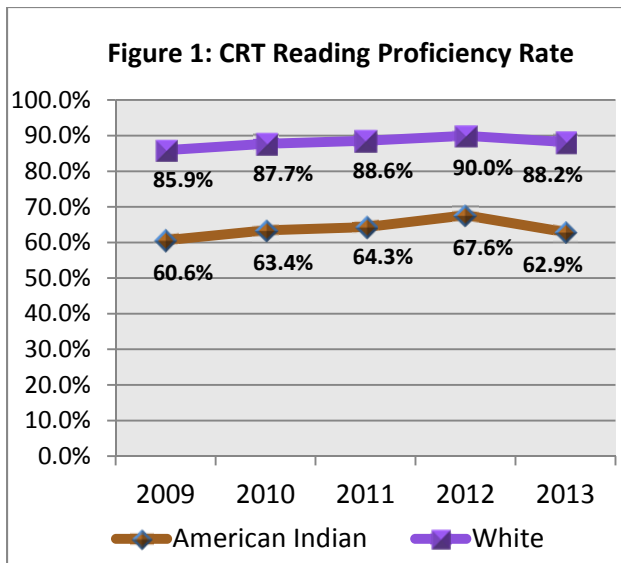
science. The criterion-referenced test (CRT) is given every spring in compliance with federal law.

The CRT is based on, and aligned to, Montana’s Content Standards in reading, mathematics, and science. Montana educators worked with OPI in the development and review (content and bias) of these tests to assess how well students have learned the Montana content standards for their grade. Since the 2007-2008 school year the test has been issued in the content areas of reading, math and science. Only 4th, 8th and 10th grade students take the science portion of the tests while 3rd-8th and 10th grade students take the reading and math portions of the test.

Math, science, and reading scores on the CRT are scored on a scale from 200 to 300 with 200 being the low score. The proficiency levels are broken down as (there is some variability in the cut-off between Proficient and Advanced scores based on the grade the student is in):

- | | |
|-------------------|-----------|
| • Novice | 200 – 224 |
| • Near Proficient | 225 – 249 |
| • Proficient | 250 – 275 |
| • Advanced | 276 – 300 |

A student that scores 250 or above in a subject is considered to be proficient in that subject and meets the requirements set forth by the NCLB Act. The CRT results are modeled such that if a student scores 250 in a subject during one school year and makes the appropriate progress in skill level for the next school year, the score for that subject will remain relatively unchanged.



Mean scores are "averages" found by adding up all test results and dividing by the number of test takers

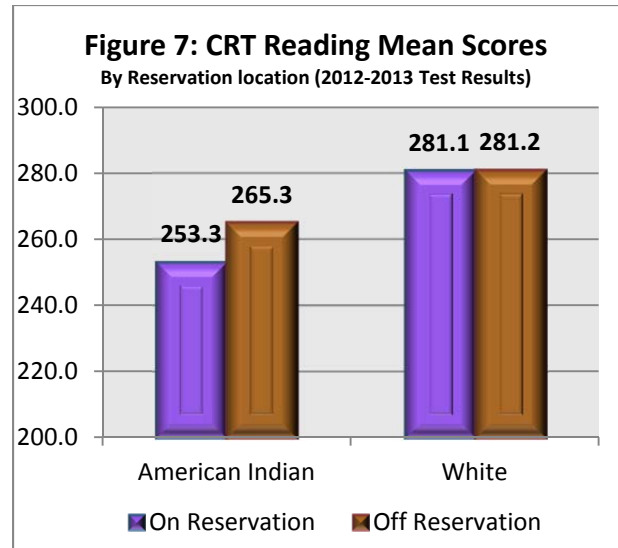
CRT Results

For the 2013 school year, CRT results were generally lower across the board. After increasing for each of the past four years, Figure 1 shows that during the 2013 school year 62.9% of American Indians scored proficient on the reading assessment. This was a significant decrease compared to the 67.6% that were proficient in 2012.

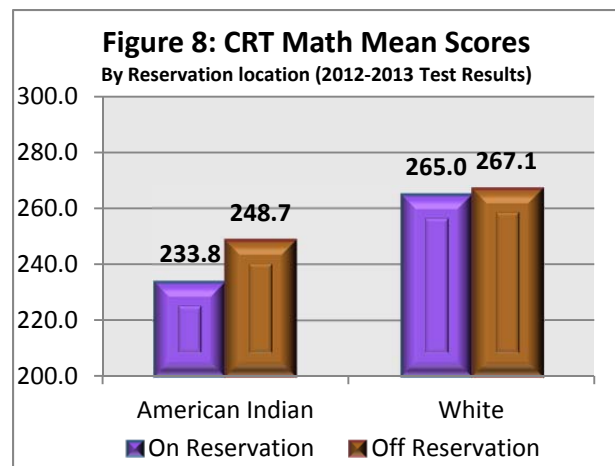
Figure 2 shows the mean reading scores on the CRT. The results here reflect much of what is seen in Figure 1, with a decrease occurring. Decreases occurred for both American Indian and White student groups, but the decrease for American Indian students was larger and was down to the level seen in 2010.

The same decreasing trend occurs in Figure 3, Math CRT proficiency rates. For the second year in a row the American Indian math proficiency rates have decreased. The math proficiency level is now at a level not seen since before the 2010 school year.

Science CRT scores, shown in Figures 5 and 6, were one of the few bright spots of the CRT test during the 2013 school year. Since a low of 27.1% of students testing proficient in 2011, American Indian science proficiency has increased each of the last two years and is up to 33.0%. The proficiency rate for White students in science also increased in 2013 to 65.5%, so there is still a large gap between the two student groups. Despite the increases, science has historically been the lowest scoring subject for all student groups.

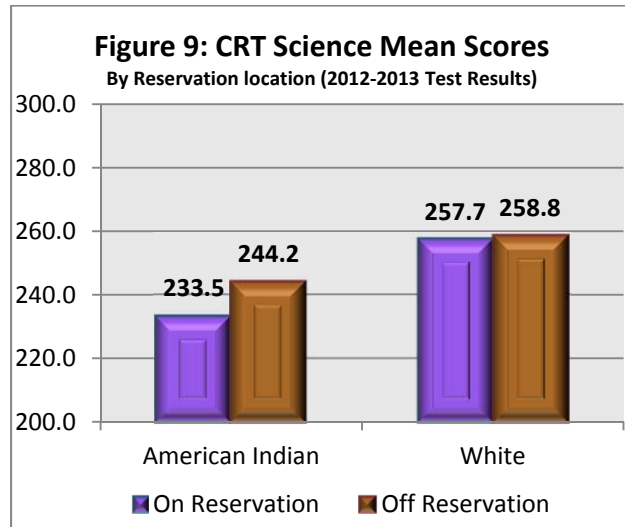


Just like in 2012, in 2013 American Indian students did not score as well on the reading assessment if their school is physically located within a reservation boundary, as shown in Figure 7. Whether or not the school is within the boundaries of a reservation or not does not have much, if any, effect on reading assessment scores for White students. For American Indian students, the mean CRT reading score for a student attending a school outside the reservation boundaries is 12.0 points higher.



As Figure 8 shows, the same trend continues for the math assessment. For the math assessment there is a slight difference in White student's mean scores, but not as large of a difference as

for American Indian students. The mean math CRT score for American Indian students attending a school within a reservation is almost 15 points lower than their counterparts outside the reservation boundaries.



The science assessment reveals a very similar pattern to that of the math assessment. In Figure 9 it is shown that American Indian students off the reservations score significantly better than their counterparts in schools located on the reservation. Meanwhile there is only a slight difference again for the White students.

While only the 2011-2012 school year results are shown here for the difference between schools located on and off of the reservation, the trend is very similar and continues back at least as far as the 2006-2007 school year.

Figures 10-12 show the percentage of American Indian students for 2012-2013 that do not score proficient or higher in the respective subjects. Figures 10-12 are also broken down so that the students are separated into categories based on the percentage of American Indians that make up the demographics of the school they attend.

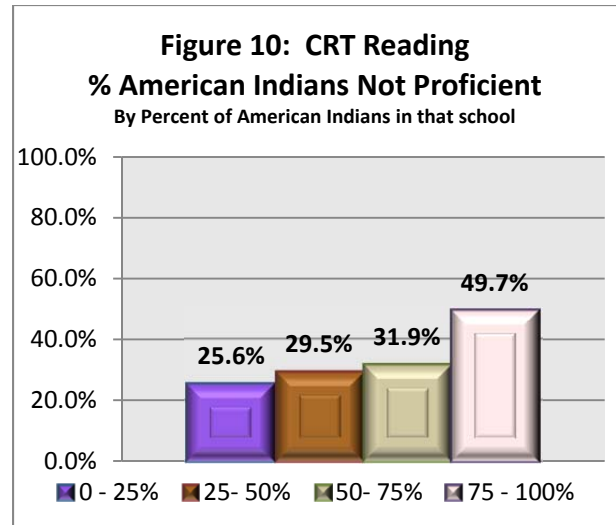
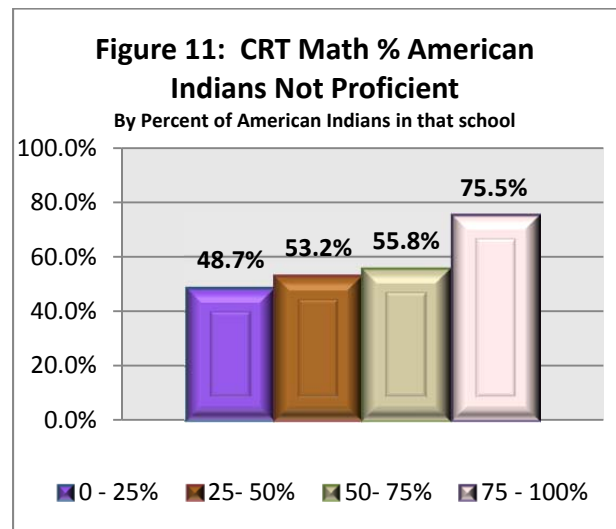
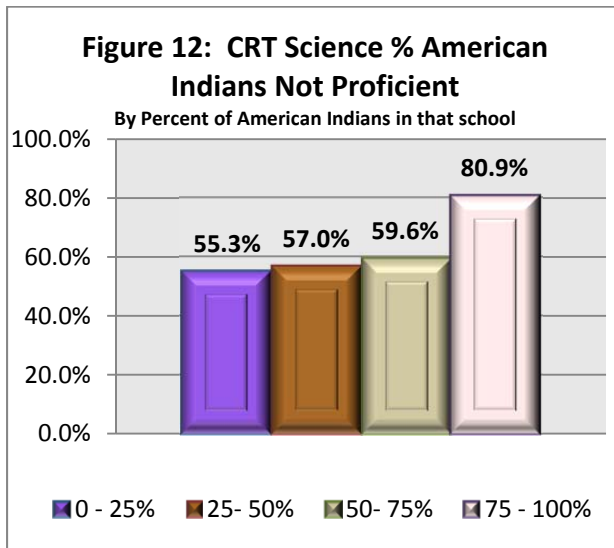


Figure 10 illustrates that for American Indians there is a strong increase in the percentage of students that fail to achieve at least a proficient score in reading when the school they attend has a higher percentage of American Indians. Almost half of American Indians at schools with 75-100% American Indian student population do not achieve proficient or higher score on the CRT reading assessment. This is a significant increase when compared to schools that are made up of less than 75% American Indian students and is also a significant increase compared to the same statistic in 2012 at 43.8%.



Figures 11 and 12 show the same relationship exists for math and science as it does for reading. The biggest difference for math and science is that the percentages are much higher than for reading, for all types of schools. The significant jump in percentage of students not scoring proficient in schools with at least 75% American Indians is also seen in the math and science subjects.



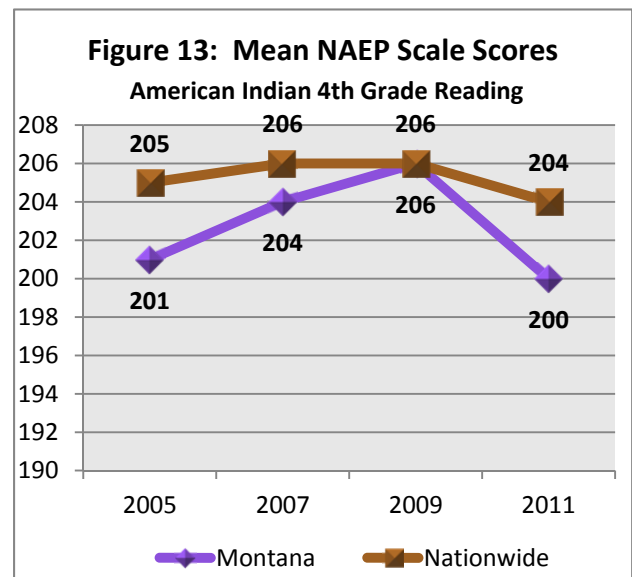
For all subjects the biggest influence is seen at schools with at least 75% American Indian student populations, most of which are located on reservations.

National Assessment of Educational Progress (NAEP)

The NAEP test is a national assessment that is given every two years to randomly selected schools across the nation and Montana. The NAEP test was given during the 2012-2013 school year but the results from that testing were not available as of the printing of this report. The results of the 2010-2011 test will be discussed here. In the past the NAEP test in Montana has only been given to 4th grade and

8th grade students in mathematics and reading. The NAEP scores are on a scale of 0 – 500 with 500 being the highest score. Scores across grades or across subjects can't be compared to each other because they are not scaled the same, i.e. a 4th grade scale score can't be compared to an 8th grade scale score. The NAEP scores and results can't be compared to the CRT, the two tests are designed differently and are essentially testing for different things.

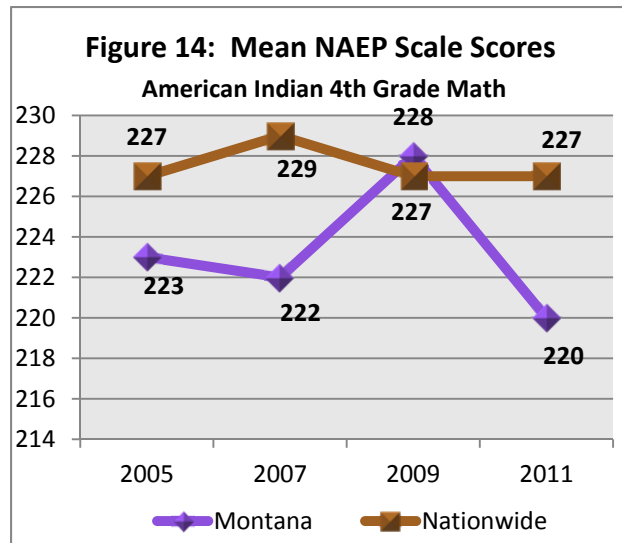
In Figure 13 the 4th grade reading scores of American Indians are shown. The graph shows that while increases in the 4th grade reading scores for American Indians were showing improvement in past years, the last test in 2011 shows a drop in test scores. It can also be seen that the mean Montana scores are below the national average for American Indian students.



There are 12 states (Alaska, Arizona, Minnesota, Montana, New Mexico, North Carolina, North Dakota, Oklahoma, Oregon, South Dakota, Utah, Washington) that have a significant enough American Indian population that the sample sizes are large enough to report. In

2011, of those 12 states, Montana is ranked fifth in 4th grade reading scores for American Indian students.

Fourth grade math scores for American Indians saw a statistically significant drop in the mean score for 2011 when compared to 2009. Most of the significant drop in 2011 is due to the significant increase in the 4th grade math scores from 2007 to 2009. Figure 14 shows the mean math scores for the past four test periods.

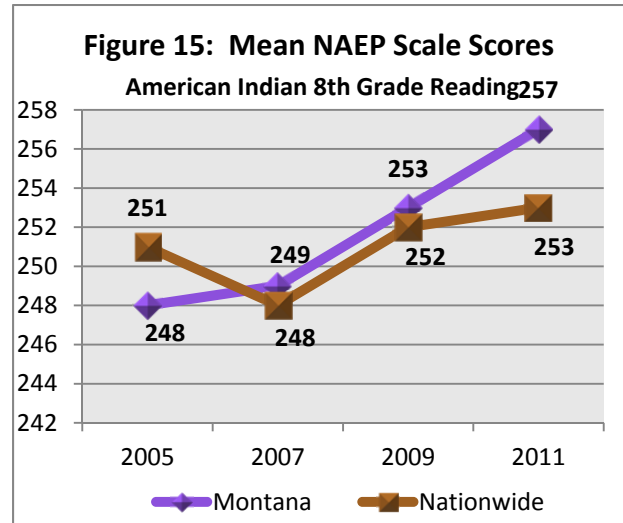


Except for in 2009, the Montana mean scores for American Indians in math have been much lower than the nationwide mean with the 2011 results showing the biggest difference. Of the 12 states with a significant American Indian population, Montana is ranked seventh for mean 4th grade math scores.

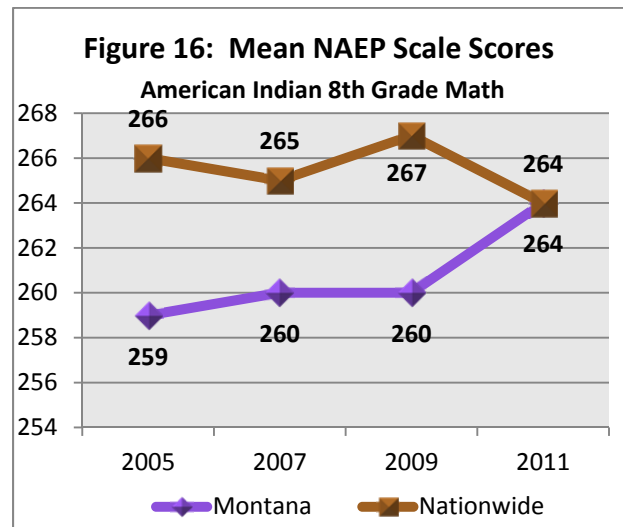
While the 4th grade scores for the NAEP in 2011 and as a general trend since 2005 have seen decreasing scores, the 8th grade scores are much more optimistic.

8th grade reading scores for Montana American Indians have increased every year since 2005, as shown in Figure 15. The increase from 2005 to

2011 is statistically significant and the scores have also gone from being below the national average to well above it. Montana is 4th in 8th grade reading of the 12 states with significant American Indian populations. American Indian



8th grade math scores in Montana have also increased since 2005, as shown in Figure 16. In 2011 the Montana mean score in 8th grade math was the same as the national mean score, when in the past the national score has always been higher than the Montana score. Of the 12 states with a significant American Indian population, Montana ranks as third among 8th grade math scores.



More NAEP data and information is available online at <http://nces.ed.gov/nationsreportcard>, including the 2012-2013 results when they become available.

Limited English Proficiency (LEP) students and English Language Proficiency (ELP) Test

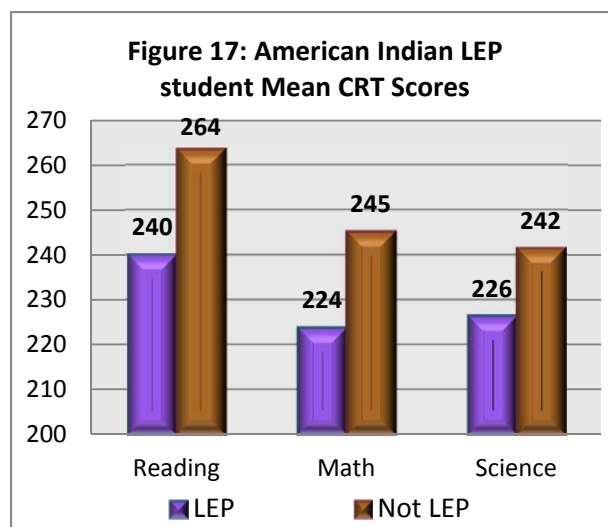
LEP students in Montana are generally students who have impact from a language other than English in their environment. All LEP students in Montana are required to take the ELP test, as a result of NCLB. The students can then test out of LEP status and become Former LEP. Former LEP status is then tracked for at least two years.

In 2013 the number of LEP students and ELP test takers increased for the first time since they have been tracked in 2007. In 2012-2013 there were 3755 LEP students compared to 3321 in 2011-2012. Most LEP students in Montana are American Indian students, at 78.2%. That means that just over 15% of all American Indian students in the state are LEP. The increase in LEP students during the last year is mostly attributed to the LEP population steady after a high amount of students were originally identified.

In 2012-2013 3460 students took the ELP test as compared to 3111 in 2011-2012. Of those students that took the test in 2011-2012, 77.1% were American Indian. The ELP test in 2011-2012 was a new test compared to what was administered from 2007-2011. The new test will better identify students that are proficient and ready to move out of LEP status. In 2011-2012 only 187 students (6.0%) tested as

proficient. In 2013 during the second year of giving the new test, 390 (11.3%) students tested proficient.

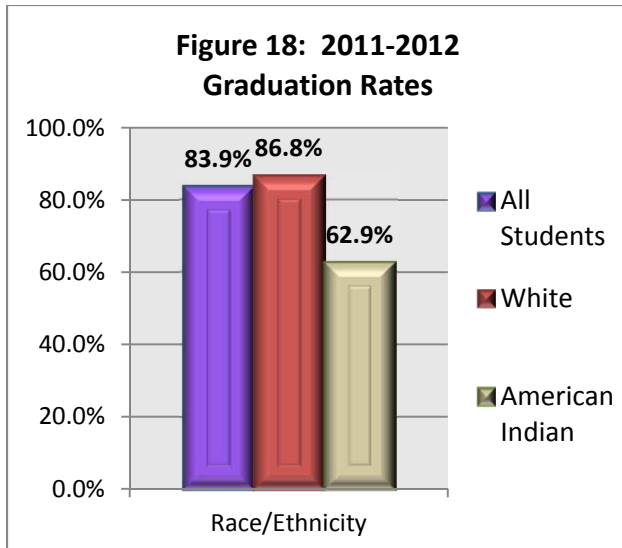
It is well known, both nationally and in the state of Montana, that the lowest scoring demographic of students are the LEP students. This has been shown through many studies. Figure 17 shows the mean scores on the CRT for American Indian LEP students in Montana during 2012-2013.



There is a significant difference between scores of students that are LEP and students that are not. On the reading portion of the CRT, which first year LEP students are not required to take, there is a difference of 24 points in the mean between the two groups.

Graduation Rates

The graduation rates discussed in this report are the federal graduation rates that determine the percentage of students that graduate in four years or less. As shown in Figure 18 the overall graduation rate for Montana in 2011-2012 was 83.9%.



That is an increase in the overall Montana student graduation rate when compared to the 82.2% it was in 2010-2011.

The American Indian graduation rate for the 2011 – 2012 school year was 62.9%, which is only a slight increase from 2010-2011 (62.8%). The graduation rate for American Indians is almost 20 percentage points lower than any other Race/Ethnicity (including Race/Ethnicities not shown in the graph) and is 23.9 percentage points lower than the graduation rate for White students.

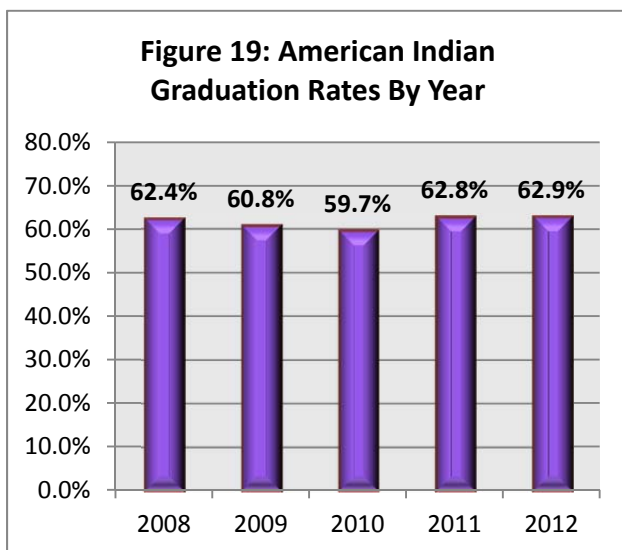
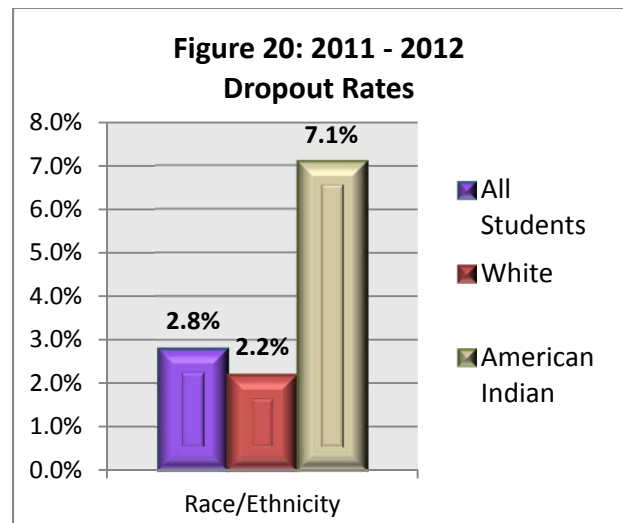


Figure 19 shows the American Indian graduation rate has remained relatively constant since 2008. One thing of note in figure 19 is the highest graduation rate for American Indians was achieved in 2011-2012, the latest year data is currently available.

Dropout Rates

The dropout rates presented here are an event rate, which is the percentage of total students that dropped out during that year. The American Indian student dropout rate for the 2011 – 2012 school year was 7.1%. While the overall and White dropout rate decreased when compared to 2010 – 2011, the American Indian dropout rate increased from 6.9%. Figure 20 shows the comparison of dropout rates by race.



The American Indian 7th – 12th grade student population in Montana makes up 10.3% of the total 7th – 12th student population but American Indians account for 26.6% of the dropouts throughout Montana.

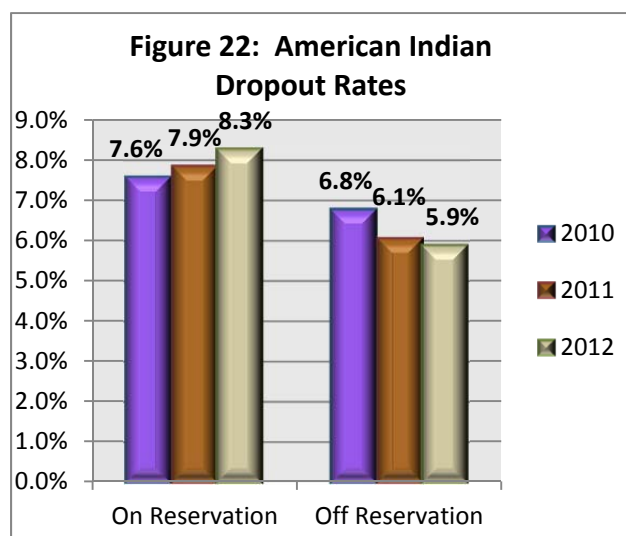
Figure 21 shows the percentage of students that drop out before and during high school. American Indian students drop out in the 7th

and 8th grade levels at a rate that is 15 times that of White students (numbers in table are rounded). Even at the high school level, American Indian students tend to drop out at an earlier grade than White students.

Figure 21: 2011 – 2012 Dropout Rates by Grade

	Grades 7 – 8	Grades 9 – 12	Total
American Indian	1.0%	10.3%	7.0%
White	0.1%	3.3%	2.2%
Overall	0.2%	4.1%	2.8%

Figure 22 presents the differences in dropout rates of American Indian students from schools physically located within a reservation boundary to schools located outside the reservation boundaries. There are many trends that can be seen in Figure 22. First of all the American Indian dropout rate from schools located within reservation boundaries has been increasing since 2010 while the dropout rate of students from schools outside reservation boundaries has been decreasing since 2010. Also it should be noted that the dropout rate is higher for students in schools located within reservation boundaries.



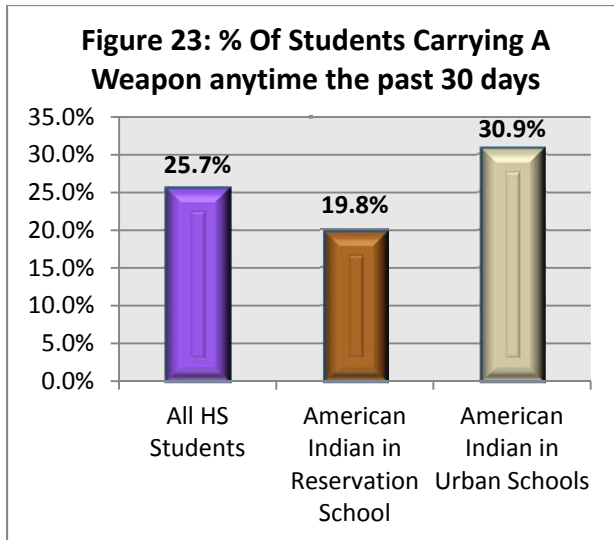
The dropout rate for Non-American Indian students is much lower both on and off the reservation. Non-American Indian dropout rate for on and off the reservation is 2.2% and 2.3%.

Student Surveys

There are two student surveys administered throughout the state of Montana, the Youth Risk Behavior Survey (YRBS) and the My Voice Student Report. Neither survey polls every student and both surveys use sampling procedures to estimate for the entire population. The YRBS survey has been conducted once every two years since 1993, with the last one being during the 2011-2013 school year. Some results are discussed here but you may find the entire YRBS report at <http://www.opi.mt.gov/yrbs>. The My Voice survey has been conducted on an annual basis since the 2010-2011 school year. The full MyVoice report for 2012-2013 can be found at http://opi.mt.gov/Programs/SchoolPrograms/MBI/index.html#gpm1_6.

The 2012-2013 American Indian MyVoice report was not available at the printing of this report, but it will be posted with the full report when it is available. The 2011-2012 results will be discussed here.

There are several ways to break up the YRBS survey. This report focuses on three of them: all High School students, American Indian students on or near reservations, and American Indian students in urban schools. In this case, students in urban schools refers to all students who do not fit in the descriptions of being on or near reservations. All results from the YRBS are from 2012-2013 unless otherwise stated.



One question on the YRBS survey asks if a student has carried a weapon, such as a gun, knife, or club, on one or more of the past 30 days. The results, shown by percentage of “Yes” answers, are shown in Figure 23.

While the percentage of American Indian students from Reservation schools that carried a weapon is lower than the statewide percentage, the percentage of American Indian students from urban schools is higher than the statewide percentage. This is a trend that has

been revealed in the YRBS results for years. However, some good news is the percentage of American Indian students in urban schools carrying a weapon decreased for the first time since the question has been tracked in 2003. Figure 24 shows some related questions and further demonstrates the differences between American Indian students on or near reservations and in urban schools.

Another area the YRBS survey focuses on is the use of drugs, alcohol, and tobacco. Many studies have shown the detrimental effects that drug, alcohol, and tobacco use have on a student’s academic achievements.

Figure 25 shows the results of some selected survey questions on drugs, alcohol, and tobacco use. American Indian students reflect significantly higher percentages in all of these areas over other students. Most of the survey results also show a higher drug, alcohol, and tobacco use from American Indians located on or near the reservation as compared to those in urban schools.

Figure 24: YRBS Results
Injury and Violence
AI denotes American Indian students

	High School Students	AI on or near Reservations	AI in Urban schools
Percentage of students who were in a physical fight one or more times during the past 12 months.	22.8%	34.9%	37.7%
Percentage of students who had ever been bullied on school property during the past 12 months.	26.3%	21.1%	31.8%
Percentage of students who had been threatened or injured with a weapon such as a gun, knife, or club on school property one or more times during the past 12 months	6.3%	6.4%	12.0%
Percentage of students who felt so sad or hopeless almost every day for two weeks or more in a row that they stopped doing some usual activities during the past 12 months	26.4%	33.2%	38.3%
Percentage of students who actually attempted suicide one or more times during the past 12 months	7.9%	15.1%	20.6%

While cigarette smoking is still high among American Indian students in Montana, it has decreased steadily since 1999. For American Indian students on or near a reservation, the percentage of students that had tried cigarette smoking was 86.9% and is down to 65.6% in 2011-2013. For urban American Indian students the percentage is down to 56.2% from 79.5%. All questions regarding smoking cigarettes have seen a steady decrease since 1999.

While the percentages for chewing tobacco have remained relatively constant since 1999, the percentages for alcohol consumption have also decreased significantly since 1999 and especially since 2007. In 2007 the percentage of American Indian students on or near the reservation who had more than a few sips of alcohol before turning 13 years old was 31.1% and was 24.0% in 2012-2013. For Urban schools in 2007 it was 40.6% and in 2010-2011 it was down to 29.0%.

Most of the percentages in drug, alcohol, and

tobacco use are seeing a downward trend, but there is still room for improvement. Figure 24 shows drug, alcohol, and tobacco use is still much higher for American Indian students than it is for the rest of the state.

The My Voice survey asks different types of questions than the YRBS survey. Examples are questions relating to the students belonging in school, sense of accomplishment, curiosity, and leadership. There are also several ways the My Voice survey may be broken up. There are three groups that will be focused on for this report: All Students, American Indians in schools where the majority of students are American Indian, and American Indians in schools where the majority of students are not American Indian.

Figure 26 shows some questions that were selected from the My Voice survey. The first five questions in Figure 26 are questions that differ significantly between the percentage for All Students and the percentage for both sub-categories of American Indians. The last three

Figure 25: YRBS Results			
Drug, Alcohol, and Tobacco Use			
AI denotes American Indian students			
	High School Students	AI on or near Reservations	AI in Urban schools
Percentage of students who ever tried cigarette smoking, even one or two puffs.	41.1%	65.6%	56.2%
Percentage of students who have taken a prescription drug (such as OxyContin, Percocet, Vicodin, codeine, Adderall, Ritalin, or Xanax) without a doctor's prescription.	16.2%	19.7%	25.2%
Percentage of students who used chewing tobacco, snuff, or dip on one or more of the past 30 days.	13.4%	19.6%	17.7%
Percentage of students who had at least one drink of alcohol other than a few sips before age 13 years.	19.9%	24.0%	29.0%
Percentage of students who used marijuana one or more times during their life.	37.6%	65.3%	49.4%
Percentage of students who sniffed glue, breathed the contents of aerosol spray cans, or inhaled any paints or sprays to get high one or more times during their life.	9.9%	19.0%	18.5%

Figure 26: Selected My Voice Survey results

AI denotes American Indian students

Percentages are the percentage of students that responded "Yes"	All Students	AI in schools where they are the majority	AI in schools where they are not the majority
I am a valued member of my school community.	44%	39%	38%
I have a teacher who is a positive role model for me.	72%	57%	66%
I am a good decision maker.	68%	56%	56%
I am afraid to try something if I think I may fail.	26%	33%	34%
I feel comfortable asking questions in class.	63%	55%	56%
I put forth my best effort at school.	73%	73%	66%
School Inspires me to learn.	61%	70%	60%
I like challenging assignments.	37%	40%	32%

questions differ significantly in one of the two sub-categories of American Indian students when compared to All Students. More questions and results are available in the full MyVoice report which may found at http://www.opi.mt.gov/pdf/MBI/12MyVoiceReport_Gr6_12.pdf.

Advanced Placement (AP)

1,913 students that graduated in Montana during the 2011 – 2012 school year took at least one AP exam during high school. Out of those 1,913 students, 62 were American Indian. Only 3.2% of the AP test takers were American Indian, which is significantly lower than the 7.7% of the graduating student population that are American Indian. Not all schools offer AP courses, but the percentage of American Indian students taking AP courses is still low. However, the number of American Indian students taking AP tests has increased over the past few years.

In 2007, only 28 American Indian students took the AP tests and in 2011 it was 52.

On an AP test taken for any subject, a passing test is scored as a 3 or higher. From the graduating class of 2011, 13 American Indian students, out of a total of 62 (about 21%), earned a 3 or higher on at least one AP exam during high school. When looking at all students in Montana that took an AP test, 63% of them were passing.

Special Education Students

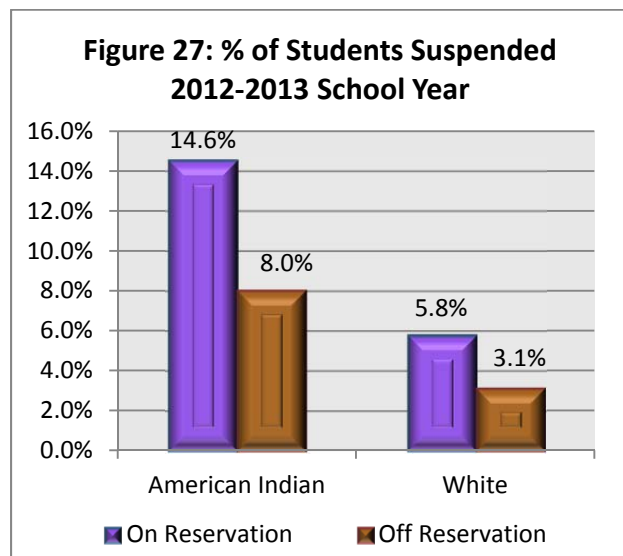
During the 2012-2013 school year there were 15,196 students in Montana who were designated as Special Education. 2,818 (18.5%) of all designated Special Education students were American Indian students. When looking at all American Indian students in the state, 14.7% of them were designated as Special Education. This compares to 10.8% of all White

students that were designated as Special Education.

Suspension/Expulsion Data

Statewide 11.4% of all American Indian students were given at least one out of school suspension during the 2012 – 2013 school year. That compares to 2.9% of White students that were given an out of school suspension during the same time frame.

As shown in Figure 27, regardless of race, students located in school within reservation boundaries were almost twice as likely to be suspended compared to those located outside the reservation boundaries. About 14.6% of American Indian students in schools on the reservation had to serve at least one out of school suspension during the 2012 – 2013 school year. This compares to 5.8% of White students on the reservation.



Students expelled from school for any time frame also show similar trends to that of suspension. Expulsion numbers for the state

are relatively small, which makes them hard to compare. However, 28 American Indian students were expelled last year compared to 68 White students. This occurred even though the White student population is about seven times larger than that of the American Indian student population.

Summary

American Indian students in Montana are not scoring as well on the CRT as other races/ethnicities. During the 2012-2013 school year most all test scores decreased across the state. However, since 2008 the general trend in American Indian student scores have been improvements in all CRT test scores. The next year or two will be important to see which trend prevails. Obviously there is room for more improvement in all areas, such as dropout rates, test scores, and graduation rates. Vast improvements in these areas will not happen all at once, but over a time of several years.

Most data presented throughout this report, along with other educational and school related data, is also available on the state GEMS data warehouse at <http://gems.opi.mt.gov>. This document is also located electronically on the OPI webpage at <http://www.opi.mt.gov>.

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*For information or to file a complaint, contact Tom Antonick,
OPI Title IX/EEO Coordinator
at (406) 444-3161 or tantonick@mt.gov*

