

Characteristics of Circle of Schools Teachers and Students

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Consortiums of education institutions develop based on shared challenges and common mission. The Circle of Schools was convened on the Northern Cheyenne Indian Reservation in 2009 to bring together regional community, school, and tribal leadership for the purpose of working together to support student success. The common challenges faced by participants include rural locations and being low income communities. Also common amongst participants, however, is a shared culture and desire to educate all students to their greatest potential.

Dr. Richard Littlebear (president, Chief Dull Knife College) convened the group of schools which are located on or adjacent to the Northern Cheyenne Indian Reservation in 2009. Working with Ashland Public Schools, Colstrip Public Schools, Lame Deer Schools, Northern Cheyenne Tribal Schools, and St. Labre Schools; Dr. Littlebear aimed to facilitate connections between local schools under the guidance of Chief Dull Knife College faculty. What resulted was a forum where shared challenges could be discussed, and a spirit of collaboration was fostered. One challenge at the forefront for participants was student mobility between partner schools. Montana student data indicates that student mobility is one of the 4 main factors contributing to student dropout risk. Student mobility is persistent in the Northern Cheyenne Indian Reservation, and moderating mobility became a shared goal for the Circle of Schools. To do this, participating schools began encouraging students to transfer at the end of the term and to be clear in the reasons for transferring.

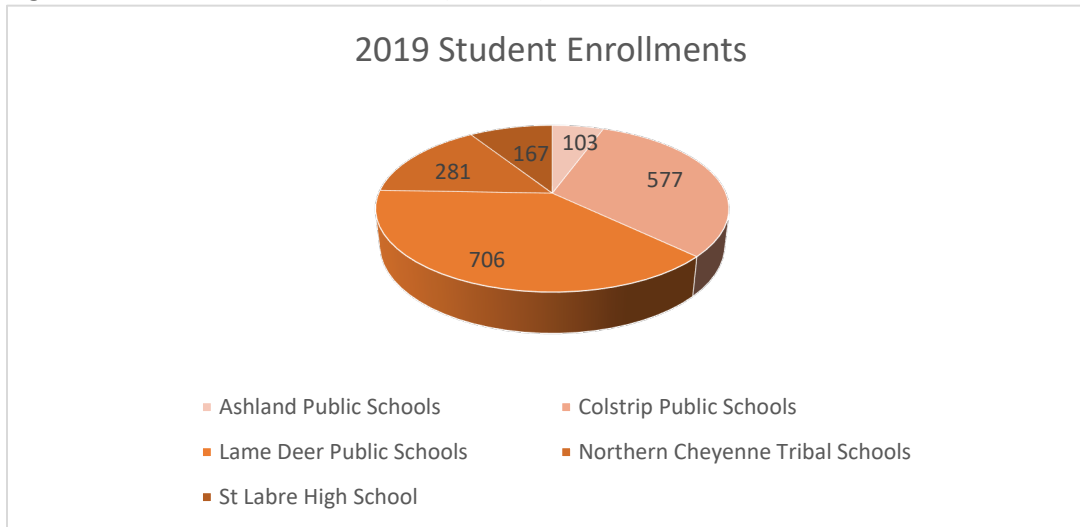
Dr. Littlebear also sought to create linkages between schools and the college. Students and faculty at Chief Dull Knife have the unique opportunity to impact future generations through positive role modeling and providing educational opportunities, such as dual enrollment. Local students take classes at Chief Dull Knife, many of which are culturally relevant to the students and sensitive to young people's needs. These are but two of the successes of the Circle of Schools group and their focus on improving K-12 education on the Northern Cheyenne Indian Reservation and in the surrounding communities.

The purpose of this document is to provide data which can illustrate the context behind the participating K-12 institutions (private, public, and tribal). The data provided in this report is by no means a comprehensive summary of all the relevant data from these institutions. However, it does provide essential student and teacher characteristics- data which can be used to help interpret and address the challenges and opportunities for Northern Cheyenne Indian Reservation students.

Student Enrollments

Student enrollments tell more than the approximate size of a district. 'Average Number Belonging' calculations, similar to student enrollment, determine public funding for these institutions. Moreover, enrollment in these schools puts the proportion of private, public, and tribal schools in context. In 2019, there were 1834 students in Circle of Schools districts. As seen in Figure 1, Lame Deer School District is the largest (706). Ashland is the smallest district (103).

Figure 1: 2019 Student Enrollments (District)



Enrollment varies since the Circle of Schools started convening (2009). Total enrollment for participant school districts ranges between 1750 and 2000 annually during the last decade. The proportion between schools remains consistent. The actual size of the Circle of Schools districts is likely around 150 students larger for each year since St. Labre School does not report its data to OPI. In Table 1, the average enrollment for years 2008-2019 for each school is presented. The largest school is Lamé Deer School (418 students) and the smallest is Ashland 7-8 (15.53 students).

Table 1: 2008 – 2019 Average School Enrollment

District Name	School Name	Average Enrollment 2008 - 2019
Ashland Elem	Ashland 7-8	15.53
Ashland Elem	Ashland School	77.46
Colstrip Elem	Frank Brattin Middle School	153.85
Colstrip Elem	Pine Butte Elementary School	280.62
Colstrip H S	Colstrip High School	217
Lamé Deer Elem	Lamé Deer 7-8	96
Lamé Deer Elem	Lamé Deer School	418
Lamé Deer H S	Lamé Deer High School	199.62
North Cheyenne Tribal Elem	Northern Cheyenne Tribal Elem.	142.75
North Cheyenne Tribal Elem	Northern Cheyenne Tribal 7-8	48.73
Northern Cheyenne Tribal HS	Northern Cheyenne Tribal HS	101.75
St. Labre Catholic H S	St. Labre High School	146.69
Total		1898

One indicator of the quality of an education is the number of students in each classroom. Lower per pupil ratios are opportunities to provide extra attention and care to students. Per pupil ratios are

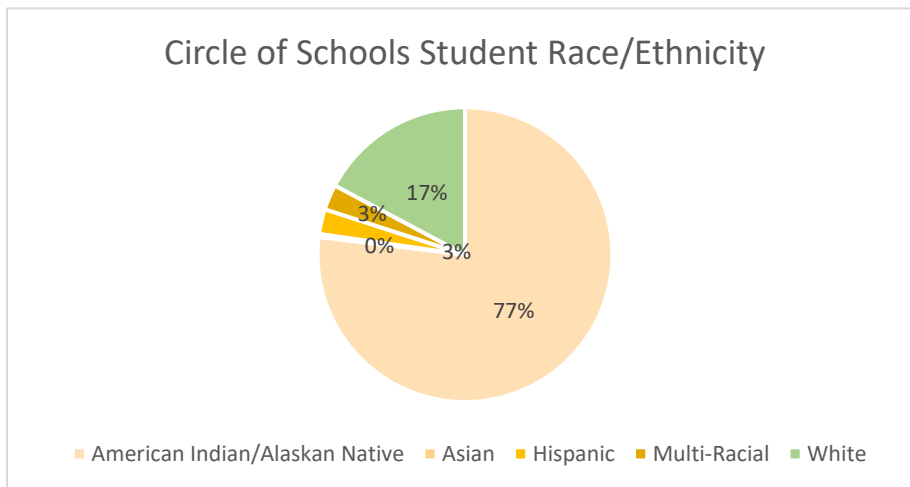
calculated by dividing the total enrollment for a school by the total number of general education teachers. In Circle of Schools districts there are 146 general education teachers in 2019 (some teachers may teach part time). Total enrollment is 1834. For all Circle of Schools districts, the per pupil ratio is 12.56 students per teacher. Ashland 7-8 has the lowest per pupil ratio (4.25). Lame Deer School has the largest per pupil ratio (21.89). Of note, the Northern Cheyenne Tribal Schools has similar per pupil ratios at the elementary level, but very low ratios in the junior high and high school.

Table 2: Per Pupil Ratio

District Name	School Name	2019 Teacher Count	2019 Enrollment	Per Pupil Ratio
Ashland Elem	Ashland 7-8	4	17	4.25
Ashland Elem	Ashland School	7	86	12.29
Colstrip Elem	Frank Brattin Middle School	12	130	10.83
Colstrip Elem	Pine Butte Elementary School	18	277	15.39
Colstrip H S	Colstrip High School	16	170	10.63
Lame Deer Elem	Lame Deer 7-8	13	108	8.31
Lame Deer Elem	Lame Deer School	18	394	21.89
Lame Deer H S	Lame Deer High School	13	204	15.69
North Cheyenne Tribal Elem	Northern Cheyenne Tribal Elem.	8	162	20.25
North Cheyenne Tribal Elem	Northern Cheyenne Tribal 7-8	7	42	6.00
Northern Cheyenne Tribal HS	Northern Cheyenne Tribal HS	9	77	8.56
St. Labre Catholic H S	St. Labre High School	21	167	7.95
Circle of Schools		146	1834	12.56

Student Demographics

Figure 2: Student Race/Ethnicity



One piece of data to consider when exploring the context of a student population are the demographic characteristics of that population. Demographics should also be considered when interpreting other data in this document such as Assessment results. More than 75% of the Circle of Schools students are

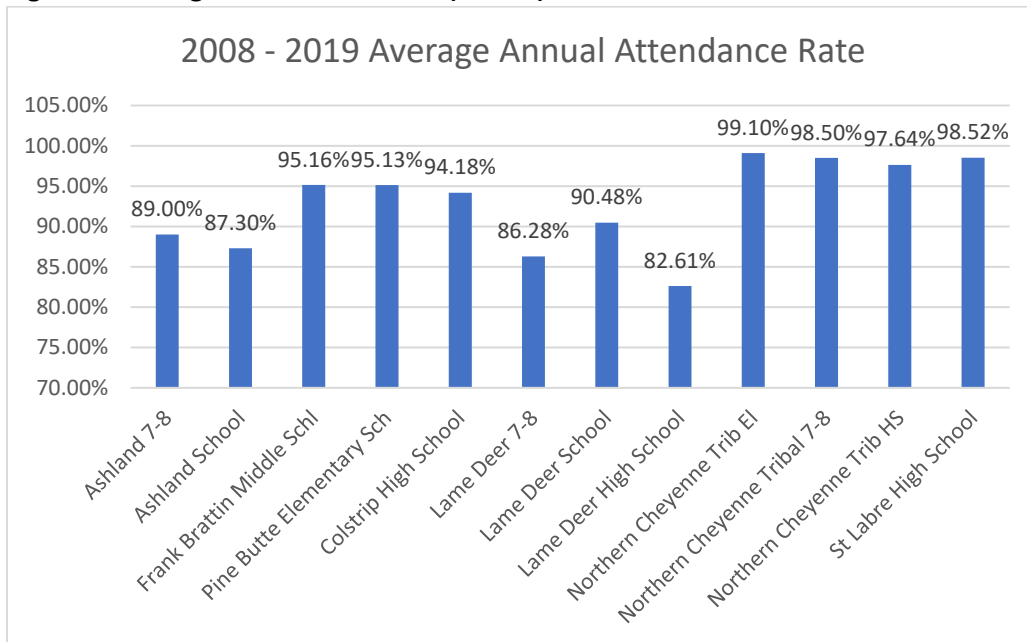
American Indian (1380). 17% of the student population is White with Colstrip Public Schools having the highest percentage of White students. There are sizable populations of Hispanic (3%) and Multi-Racial (3%) as seen in Figure 2.

Most of the Circle of Schools students receive free lunch either from the National School Lunch Program or from their private schools. 81% of student receive either free or reduced lunch. 338 students do not participate in the program, mainly in Colstrip. Special Education students account for 10% of the student population. Much of this population is in Lane Deer Public Schools and Colstrip Public Schools. A similar number of students have an English Language Learner status (186). Most of the ELL students are in Lane Deer Public Schools. 11% of students are classified as homeless, the majority in Lane Deer Public Schools.

Attendance

Attendance is another indicator that can provide insights about the student population and their educational experience. Since 2008, attendance rates for all Circle of Schools Districts average between 89.24% and 96.26%. Figure 4 provides the average attendance rate for all the schools. Northern Cheyenne Tribal Schools and St. Labre High School consistently have the highest attendance rates.

Figure 4: Average Attendance Rates (School)

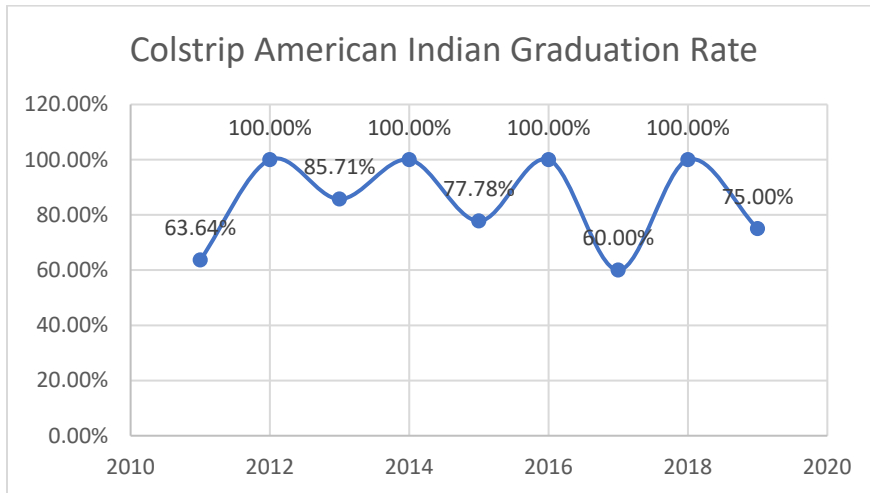


Graduation and Dropout

Graduation rate is a measure that reflects comprehensive student achievement- not a single test, but evidence of success across a range of tasks, and over a sustained period. For high schools in the Circle of Schools, only Lane Deer and Colstrip report graduation rates. The graduation rate provided below is the 4 Year Cohort Graduation Rate. For example, Colstrip has American Indian population of about 12 seniors each year since 2011. This graduation rate considers both the number of students who have dropped out and who have left the cohort for other reasons (e.g. not graduating in 4 years). The cohort number also considers the students that have transferred in (added to the cohort). Colstrip’s American

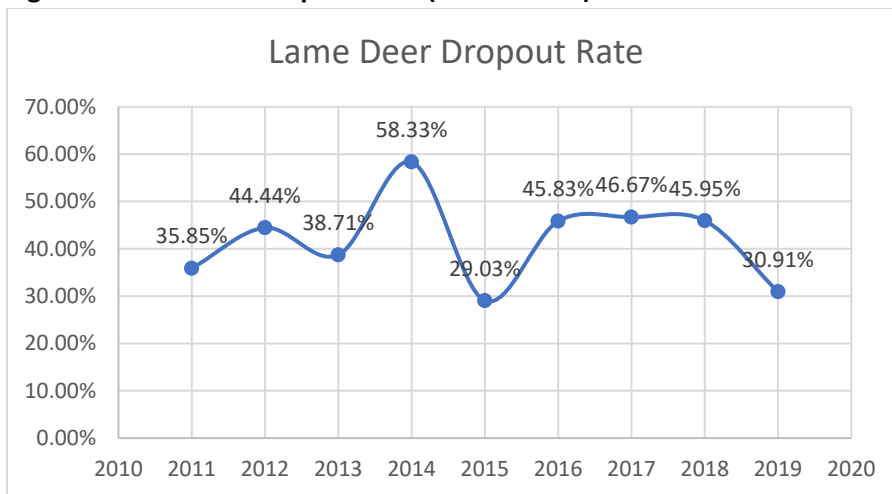
Indian graduation rate ranges from a low of 60% in 2017 to a high of 100% in 2012, 2014, 2016, and 2018.

Figure 5: Colstrip American Indian Graduation Rate (2011 – 2019)



Lame Deer High School also had variation in graduation rates during the period with a low of 38.89% in (insert year) to a high of 52.83% in (insert year). Correspondingly, Lame Deer High Schools experienced similar volatility in dropout rates. The dropout rate is calculated in a similar manner – the number of students identified as drop out divided by the total number of students in the cohort. Dropout rates for Lame Deer High School range from a low of 29.03% in 2015 to a high of 58.33% in 2014.

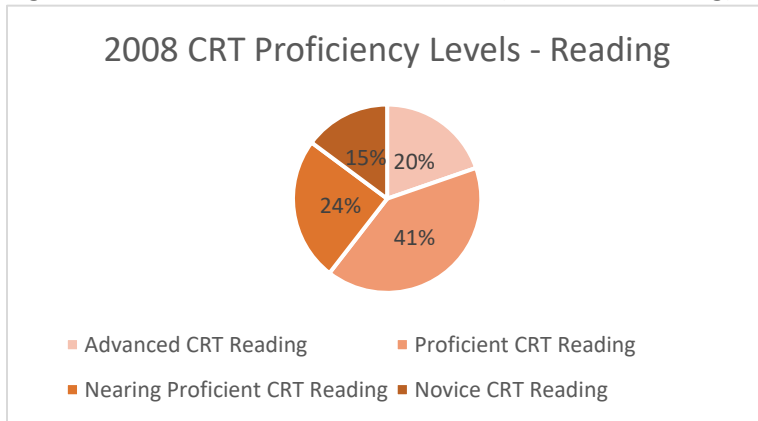
Figure 6: Lame Deer Dropout Rate (2011 – 2019)



Assessment

The number of students scoring at certain proficiency levels remained consistent in the 2007 – 2014 time period (Criterion Referenced Test). The State of Montana transitioned to a new assessment in 2015. The first year of full implementation of the new assessment was in 2015-2016. During the first period, more students scored Advanced and Proficient in Circle of Schools districts. For example, 61% of students scored proficient or advanced in 2008 on the CRT reading assessment.

Figure 7: Student Achievement Baseline (2008 CRT Reading)



During the second period, very few student score advanced or proficient. The two assessments are not comparable, and proficiency levels established by each test are not comparable. The way proficiency levels were constructed changed with the new assessment throughout the state. Thus, it is difficult to say whether test scores have gone up or down since 2015. Nonetheless, this leads to a situation where most Circle of

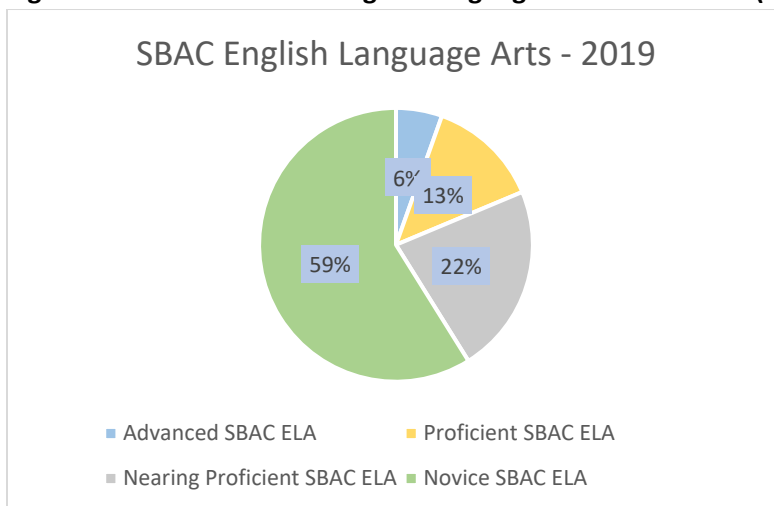
Schools students are now rated at the lower proficiency levels.

Taking the CRT math, students scored on the higher end of the scale in 2008. 39% of Circle of Schools students scored advanced or proficient on the math assessment. 27% of the Circle of Schools students scored advanced or proficient on the Science Assessment. Scores improved over the time period, though by 2013 scores declined in most schools.

SBAC Summative

Test scores on the Smarter Balanced (SBAC) assessment, the statewide assessment that all public schools participate in at the end of the academic year, have remained remarkably consistent year over year. Since 2016 around 60% of Circle of Schools students scored novice on the English Language Arts assessment.

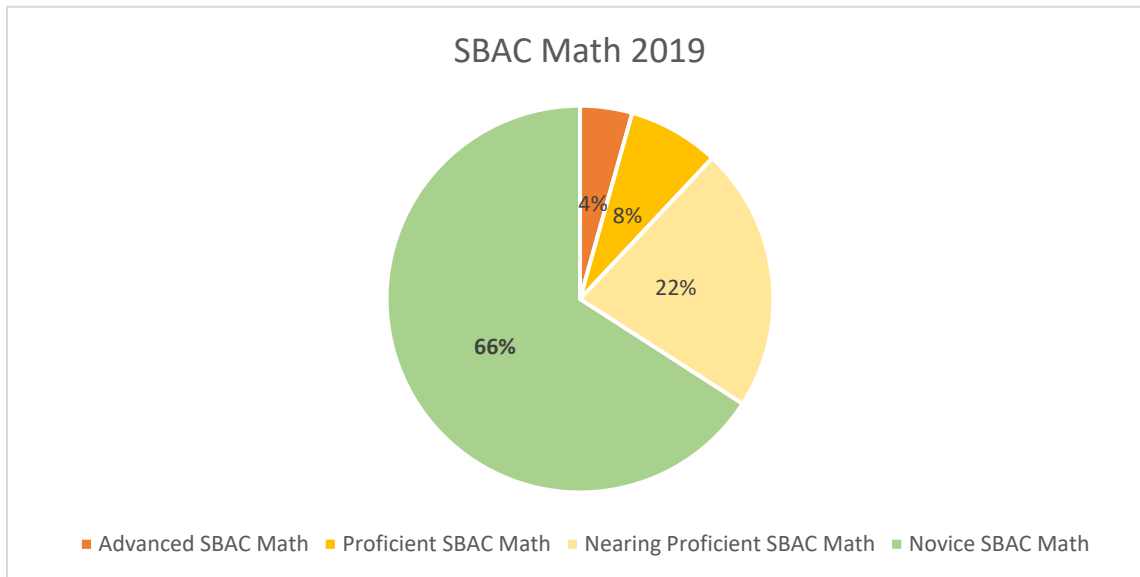
Figure 8: SBAC Summative English Language Arts Assessment (2019)



For example, in 2019 only 35% scored proficient and advanced. Most of these students were in Colstrip Public Schools. Scores remained stable for Ashland Public Schools, Lame Deer Public Schools, and Northern Cheyenne Tribal Schools (St. Labre School did not participate).

Math SBAC scores were lower as well. 66% of Circle of Schools students scored novice. 12% scored advanced or proficient in 2019. To put this into context 58 students scored novice in Northern Cheyenne Tribal Elementary. Less than 5 students scored in the other categories.

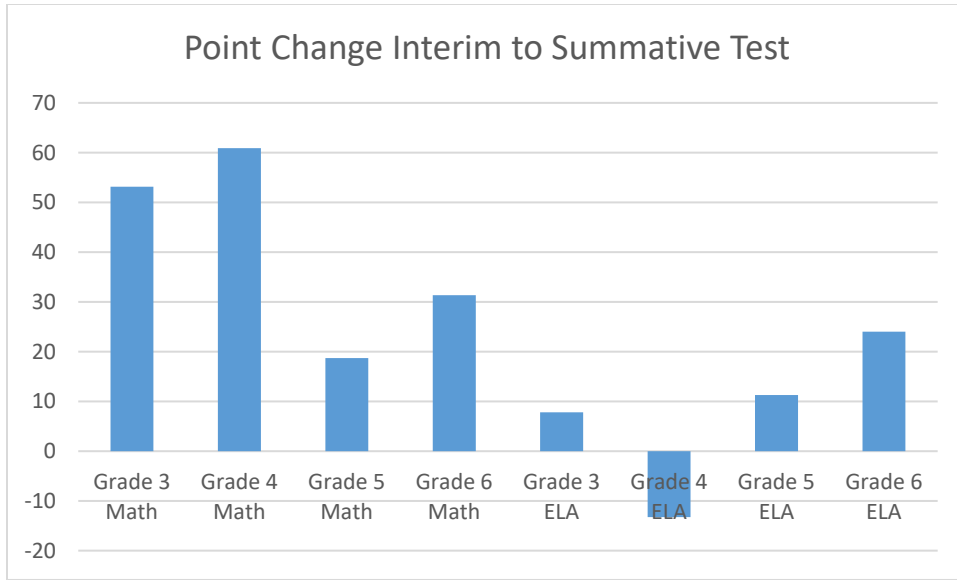
Figure 9: SBAC Summative Math Assessment (2019)



SBAC Interim

There are factors beyond raw scores to consider for Circle of School's students regarding student assessment. At first sight, it could be easy to dismiss the test scores as struggling. Most students in Math and Reading perform at the novice level in their statewide assessment. But this analysis is limited because it doesn't reflect student growth between assessments or during the school year. The State of Montana sponsored an assessment cycle that seeks to measure student progress and achievement within a single school year. This SBAC Interim assessment is comparable to the SBAC Summative Assessment presented above. Lame Deer Public Schools participates in the Interim assessment (Interim Comprehensive Assessment). When looking at grade level differences between the math Interim and math Summative, we see significant average gains of over 30 points in grades 3, 4, and 6. This is double the rate of state growth averages. This means that in those grades, student scores increased enough to surpass half a proficiency band, leading many of these students to score in the nearing proficiency category by the end of the year. Such absolute gains are notable since the growth occurred within just a couple months. These gains speak to the work of the students in improving their performance, and the work of teachers who have a better idea of where their students stand when taking the Summative assessment and can adjust teaching accordingly.

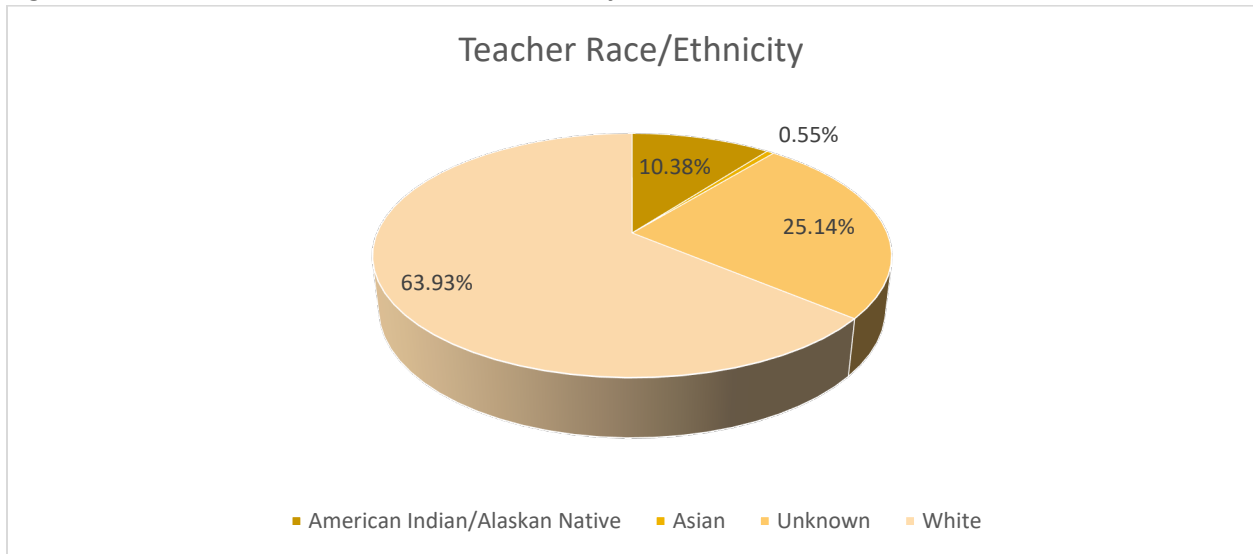
Figure 10: Student Gains on 2019 SBAC Assessments (Lame Deer)



Teacher Characteristics

OPI collects data about teacher race and ethnicity in public schools. In Figure 11 data is presented for Ashland Public Schools, Colstrip Public Schools, and Lame Deer Public Schools for the 2018-2019 school year. Most of the teachers are white or unknown. A teacher can self-select unknown if they don't want to report their race or their race is not reported in other categories (as happens with Hispanic teachers). American Indian teachers make up 10.38% of the known general education teaching population in these schools. Lame Deer has the highest number of American Indian teachers (16). Data on teacher demographics is not reported by the private schools.

Figure 11: Circle of Schools Teacher Race/Ethnicity



OPI also collects data on teacher salaries in public schools. Of the Circle of Schools districts, only Ashland and Colstrip report data from 2014 – 2018. Teachers’ salaries rose in the elementary districts. Ashland reports a rise of 9.96%. Colstrip Elementary reports a rise of 11.44%. Salaries declined in Colstrip High School District (-7.65%).

Table 3: Teacher Salaries Over Time

	2014		2015		2016		2017		2018	
	FTE	Average Salary	FTE	Average Salary	FTE	Average Salary	FTE	Average Salary	FTE	Average Salary
Ashland Elementary	5.5	\$45,762	7.5	\$47,884	6.7	\$49,576	7.25	\$47,650	6.75	\$50,323
Colstrip Elementary	35.88	\$51,200	33	\$49,453	31.45	\$54,547	33.75	\$53,608	32.35	\$57,059
Colstrip High School	18.13	\$56,811	18	\$56,892	18.05	\$53,369	16.25	\$55,296	15.15	\$52,463

Conclusions

There is a need for the Circle of Schools on the Northern Cheyenne Indian Reservation and the important work of participants, mainly school superintendents should be recognized. One potential option for the group is to focus on assessment results and how best to transition students from novice to nearing proficient on the assessment scale. The example of Lame Deer Public Schools provides a compelling example of how this can be done. By using the Interim assessments as a mid-year benchmark and teaching with the results of the interim in mind, Lame Deer was able to improve test scores in a short period of time. The use of the Interim assessment provides indicators of areas where students excel and where more instruction may be necessary before the summative assessment is administered.

An asset of the Circle of Schools districts is the relatively stable student population over the last decade. Challenges of this population are well known and readily addressed in the Circle of Schools forum. The fact that 81.05% of student participate in the National School Lunch Program attests to the challenges faced by these districts.

Another advantage for these schools is the relatively high number of American Indian teachers that are in these schools. Teacher FTE remained stable over the period. Teacher salaries have moderately grown over the last five years, which has an impact on retaining high quality educators.

Finally, the collaborative efforts of school, tribal, and community leaders is notable. Shared efforts to advance student success can only yield positive results and the Statewide Longitudinal Data team at the Montana Office of Public Instruction thanks the Circle of Schools for allowing us to share in your efforts.