

MAIL OUT

Tanana Chiefs Conference

There is an inverse relationship between attendance and graduation in Alaska schools for the four and five year graduation rates for the Alaska Native subgroup.

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An analysis conducted on behalf of the Tribes of the interior of Alaska analyzing the impact of attendance on academic attainment and graduation in particular.

Overview

Annually the State of Alaska's Department of Education releases a quantitative report on the various subgroups within the educational system and whether or not they are meeting attendance requirements (95% of students that meet the ~N size) and graduation requirements, which have a few more qualifiers for measurement. The 2015-2016 State of Alaska DEED Report, is what we are sampling for our conclusions here. A copy of this report is included in the appendices here, but is also available digitally by clicking the link here: <https://education.alaska.gov/akaccountability/#c3gtabs-1516account>

Thesis

There is an inverse relationship between attendance and graduation rates among Alaska Native students that warrants further quantitative and qualitative study. The prevailing wisdom, common sense, would tell us that students need to be in attendance at a school more to academically achieve, but in interior Alaska the opposite is true when considering the graduation rates with the Alaska Native subgroup. The reasoning behind why this statistically significant finding is true warrants greater study.

Study

By comparatively analyzing the State of Alaska's report on attendance rates and graduation rates with attention only given to one subgroup, American Indian/Alaska Native students within the Tanana Chiefs Conference service area, we can determine and definitively measure the effect that attendance has on graduation. While this measurement isn't necessarily causative, or correlative, it should be noted for further study. We will demonstrate here that there is an inverse relationship between attendance and graduation rates among Alaska Native students. These measurements can then inform the policy that is being pursued at the District and State level to improve these measures, particularly increasing the four year graduation rate of the Alaska Native subgroup. This information becomes particularly important to our Tribes in the graduation rates attained and whether or not those graduates can perform entry level college work, and to the State in whether its subdivisions are meeting the federal requirements under the Every Student Succeeds Act with particular attention to the requirements therein on mandated graduation rates.

The State of Alaska's 2015-2016 Attendance and Graduation Report has three fields for attendance rate: Met target, District %, and State %. Additionally attendance and graduation have nine subgroups that are analyzed, those subgroups are: All Students, African American, Alaska Native/American Indian, Asian/Pacific Islander, Hispanic, Two or More Races, White, Economically Disadvantaged, Students with Disabilities, and finally English Learners.

In practice Alaska Native students may be classified under multiple categories here, for example: all students, Alaska Native/American Indian, Two or More Races, Economically Disadvantaged, Students with Disabilities, and English Learners. The n~ size of a group, in this case 5 students for Alaska, helps tease out the differences between individual characteristics and the group as a whole while protecting student identity.

Graduation Rates are collected using five fields across the same subgroups, those fields are: met target, Four Year District Graduation Rate, Four Year State Graduation Rate, Five Year District Graduation Rate, Five Year State Graduation Rate. The target graduation rate is 90%, however "A district or subgroup with 10 or fewer students satisfies the graduation rate requirement if all but one of those students graduate." So, if there are 3 students in a district only 66% of the students, two in this case, need to graduate in order to meet the current State of Alaska requirement. This will change under the Every Student Succeeds Act which mandates that a minimum of 67% of students graduate before the State must intervene.

The Report can be synthesized into a simple spreadsheet that looks like the following regarding the Alaska Native/American Indian findings.

Figure 1. Comparison of attendance and graduation among the Alaska Native Subgroup, statewide.

District Attendance Rate Met /#of districts	District Graduation Rate Met /# of districts	Met Both/# of districts	Differential that met 4 year graduation rate but not attendance/#of districts
7/54	23/54	2/54	21/54

This simple graph shows that there were only 2 districts that met both Attendance and Graduation rate out of the 54 School Districts in the State for Alaska Natives. Those Districts are: Aleutian Region School District which graduated 100% of Alaska Native students in four years, and Mount Edgecumbe High School which graduated 98% of Alaska Native students in four years. There were 21 school districts labeled here under "differential" which met the graduation rate but not the attendance rate. There were 33 school districts that met neither measure in regards to the Alaska Native subgroup.

There were five school districts that have the dubious distinction of meeting attendance rates but not graduation rates, they are: Chugach School District, Craig School District, Denali School District, Skagway School District (though their graduation rate was below the ~n size), and the Galena City School District. Denali Borough School District had over a 98% attendance rate by its Alaska Native students but only 25% graduated within four years. The correlation between attendance and graduation can be

shown here to be definitively infirm, and the most inverted examples found.

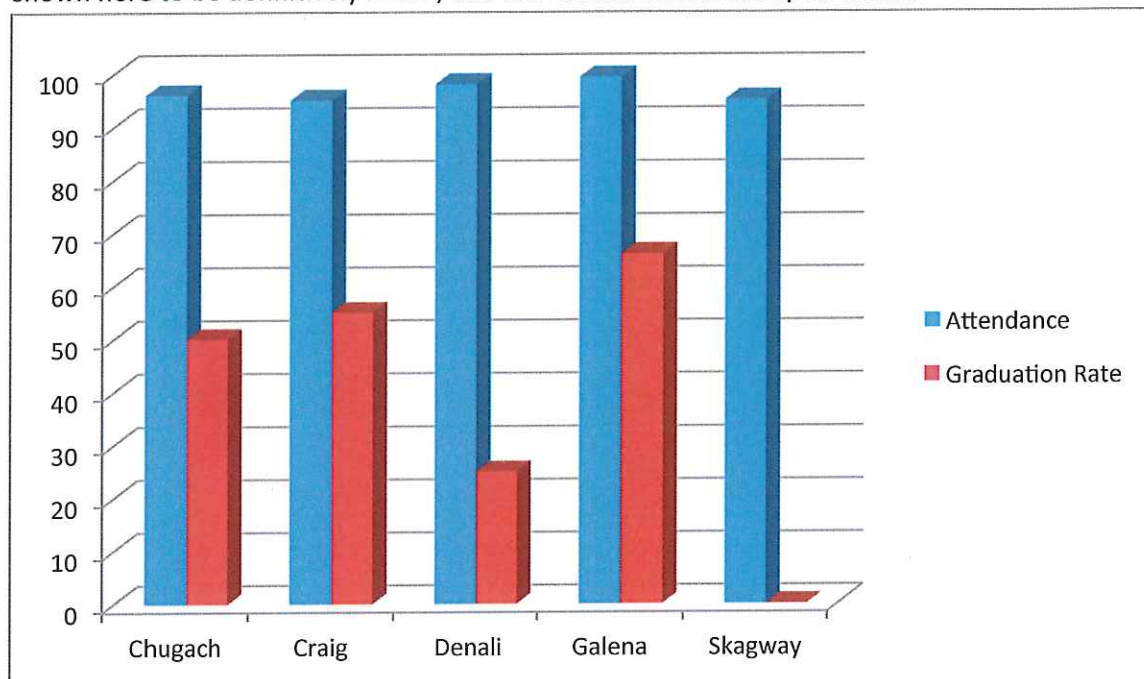


Figure 2. Showing 71% of the School Districts in Alaska that met the attendance rate of 95%, note that Skagway still qualifies Alaska Natives for Attendance but not Graduation Rate, presumably the Graduation rate may even be lower than the Denali Borough School District and there are so few graduates in Skagway that it is less than the ~N size. 47 other school districts across Alaska didn't meet these attendance requirements, 21 of which met the graduation requirements.

For our purposes here it is central to note that a full 21 out of the 54 School Districts in Alaska that met the Alaska Native subgroup for four year graduation rate, didn't meet the attendance requirements. Framed another way, 91% of the School Districts in the State of Alaska that met the graduation rate required by the State of Alaska for Alaska Native students didn't meet the required attendance rate.

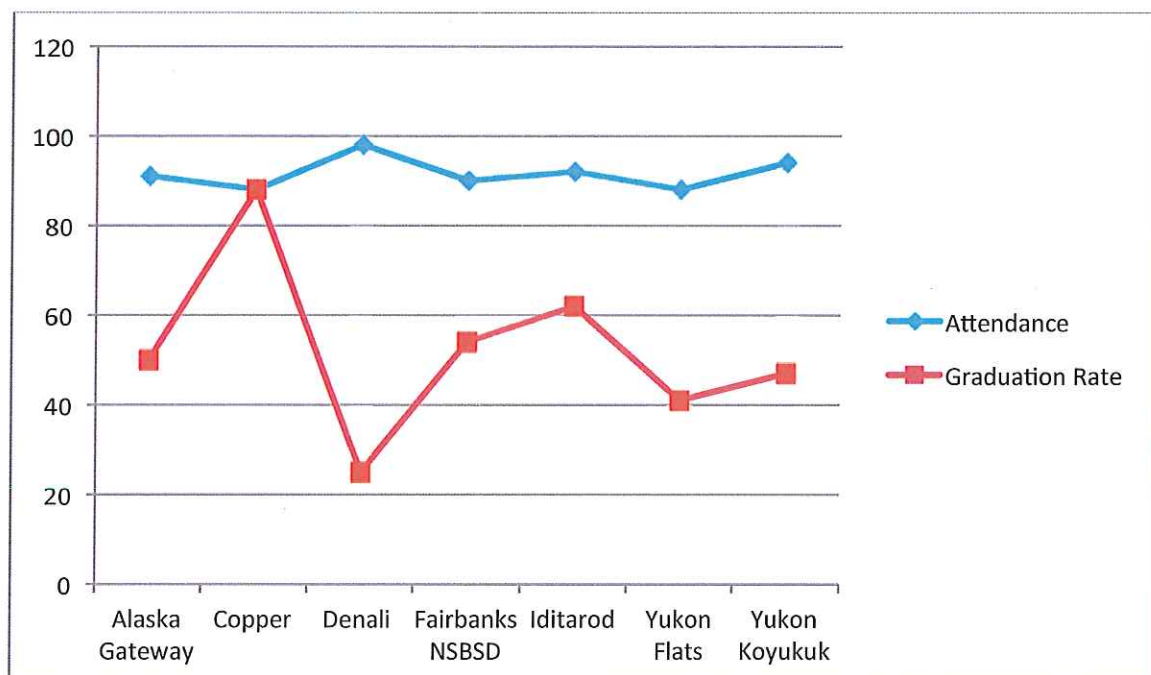
Additionally, of the 7 school districts in the State that met the attendance rate, only 28% met the graduation rate. Further of note the other four School Districts that met the attendance rate but not the graduation rate (Note, Skagway fell below the ~n size so their graduation rate is listed as n/a) average a woeful 49% graduation rate over four years. Let me repeat that, on average less than half of the Alaska Native students are graduating from the schools that are actually meeting their attendance requirements. One of these School Districts, Denali Borough School District only graduates one in four Alaska Native students despite those students meeting the attendance standard of being at the school over 95% of the time.

Interesting to note is that the 21 districts which met the four year graduation rate but not the attendance rate did have an average attendance rate of roughly 91%. This rate of attendance is lower than the Tanana Chiefs Conference region's attendance mark of 92.31%, and yet they graduated on

average 86% of their Alaska Native students. They had less attendance and almost doubled the amount of graduates. These findings help to illustrate that there appears to be an inverse relationship between school attendance and academic achievement among Alaska Native Students. The Denali Borough School District has the largest inversion with a 25% graduation rate over four years despite having an attendance rate of 98.73%. Essentially, it appears that our Alaska Native students have a higher probability of graduating if they are in a District where they attend school more infrequently than when they attend with greater frequency.

One school district, Galena, reported that despite a 99.28% attendance rate, only 66.67% graduated. This study is not to point out the flaws in any one district or area, but rather to note that the inverse relationship of attendance to graduation to policy makers. Additionally Galena's mark of 66.67% graduating over four years is also the highest out of the eight school districts in the Tanana Chiefs Conference region for Alaska Native graduates, despite fully 1/3 of the students not graduating in four years. So, while it has a higher graduation rate, it still is largely inverted like the rest of the school districts in the Tanana Chiefs Conference Region.

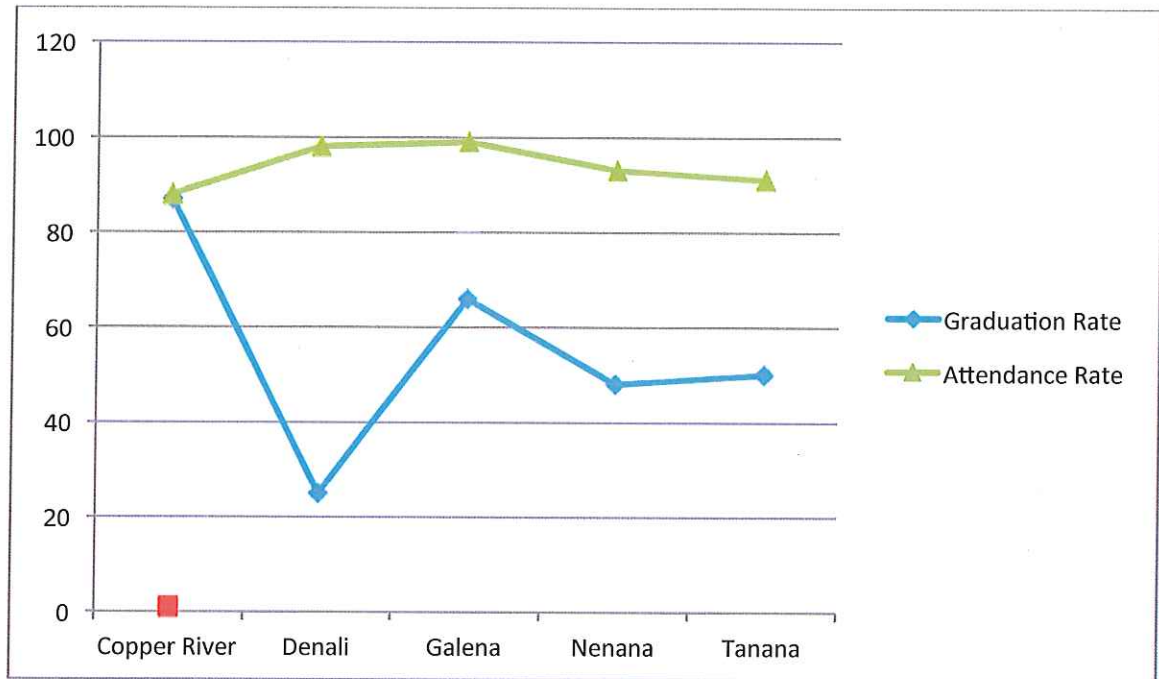
Figure 3. Inverted attendance and graduation rates among multiple site school districts in the Tanana Chiefs Conference Region, showing graduation rates averaging roughly half of what the 21 school districts that met the graduation rate for the 2015-2016 school year. One school district from that group is included here to differentiate, Copper River, which is in an adjacent area and similar population, note that Copper River's attendance rate and graduation rate are nearly identical. Copper River is also geographically adjacent to the Alaska Gateway School District and the Denali Borough School District.



Note in this chart above that the Denali BSD, the district with the highest attendance rate is inverted with the lowest graduation rate, and the Fairbanks NSBSD which has one of the lowest attendance rates is actually the holder of one of the higher graduation rates. This chart is only indicative of the Alaska Native subgroup. Copper River is added here as one

of the 21 Districts that met the Alaska Native graduation rate but not the attendance rate, interesting to note is that Copper River has one of the lowest attendance rates of any District labeled here

Figure 4. Single Site School Districts in the TCC Region again compared to one of the most inverted school districts, Denali, and a representative school district Copper River.



This still begs the question at how these counter-intuitive results were gathered over a culturally diverse, geographically large area like Alaska. There should be additional studies, perhaps qualitative in nature to determine how many of these graduates from these schools are on grade level, maybe the students are reaching the graduation rate by being at a “diploma mill,” or perhaps should those test scores reflect an accurate grade level for graduation, the question may then become how are these students spending their time, when not in school, which enables them to achieve more resilience or ability for the classroom. Additionally there may be other variables at play, perhaps students are attending school for food, due to food insecurity in the home and community, and are focused on meeting that objective not any academic objectives. Maybe the quality of the schools Alaska Native students are attending are just poor quality schools, so much so that attending them more frequently may actually hurt a student’s prospects for graduation. Questions like that, understanding the root cause of what is occurring, are certainly speculative and maybe even inflammatory, but they help frame further research to end these long standing problems.

Research questions that are more targeted can help us to better understand the attendance-graduation matrix which is inversed in Alaska for Alaska Native students, and which may help policy makers to guide the goals and performance of these schools for better results. One intervention,

speculatively, that the State of Alaska could make is reviewing with school districts tribal consultation efforts to determine if the tribes were adequately consulted with.

Appendix 1- Additional TCC specific data

Of note for the Tribes of Tanana Chiefs Conference are the eight school districts within the service area and which have the most impact on our tribal members. I will list them here in a simple spreadsheet which illuminates their academic performance and attendance. You will note the consistently high attendance rate, but the low graduation rate.

Figure 5. Tanana Chiefs Conference Region attendance-graduation rate comparison

School District	4 year graduation rate	5 year graduation rate	Attendance rate
Alaska Gateway	50%	28.57%	91.2%
Galena City School Dist.	66.67%	83.56%	99.28%
Iditarod School District	62%	58%	92%
Fairbanks North Star	54.17%	64.29%	89.64%
Nenana	48%	41%	93%
Tanana	50%	66.67%	90.81%
Yukon Flats School Dist.	41%	63%	88.75%
Yukon Koyukuk SD	47.76%	56.86%	93.8%
AVERAGES	52.41%	57.74%	92.31%

Additionally our Tribes should note that the average four year graduation rate for our 8 school districts in the region for Alaska Natives is only 52.41%. Barely one out of two of our students in the region as a whole will graduate in four years despite having an average attendance rate of 92.31%. That percentage is equivalent to missing only 7 days of school per each semester, and attending roughly 171 school days per year. That roughly 7% lower attainment in attendance should have little bearing on the graduation rate being so low for our region, at only 52%. Again, as noted in the main article, it is interesting to note that the 21 districts which met the four year graduation rate but not the attendance rate did have an average attendance rate of roughly 91% which is lower than the average attendance in the TCC region. The group of 21 schools which met the graduation rate had less attendance and almost doubled the amount of graduates for the Alaska Native subgroup.

The average Galena student only misses two days of school for the entire year, and the graduation rate there is only 14% higher than the average for the region as a whole. It is interesting to note though that the Yukon Flats School District not only has the lowest attendance rate at 88.75% but is also the lowest in the region for graduation rate at a mere 41%.

Lastly our tribes of the interior should note that every single school district in the TCC region fails to meet the graduation rate requirements of the Every Student Succeeds Act at 67% which triggers automatic State intervention.

Appendix 2- State of Alaska Department of Education and Early Development Data

https://education.alaska.gov/aspi/2016/district_air_worksheets.pdf