

ALASKA STATE LEGISLATURE  
JOINT MEETING  
SENATE EDUCATION STANDING COMMITTEE  
HOUSE EDUCATION STANDING COMMITTEE

April 29, 2019

8:32 a.m.

**MEMBERS PRESENT**

SENATE EDUCATION STANDING COMMITTEE

Senator Shelley Hughes, Vice Chair  
Senator Tom Begich

HOUSE EDUCATION STANDING COMMITTEE

Representative Harriet Drummond, Co-Chair  
Representative Andi Story, Co-Chair  
Representative Grier Hopkins  
Representative Chris Tuck  
Representative Tiffany Zulkosky  
Representative Josh Revak

**MEMBERS ABSENT**

SENATE EDUCATION STANDING COMMITTEE

Senator Gary Stevens, Chair  
Senator Chris Birch  
Senator Mia Costello

HOUSE EDUCATION STANDING COMMITTEE

Representative DeLena Johnson

**COMMITTEE CALENDAR**

PRESENTATION: CONTINUATION OF K-12 FUNDING CONSIDERATIONS BY  
MARK FOSTER~ FINANCIAL PERFORMANCE ANALYST

- HEARD

**PREVIOUS COMMITTEE ACTION**

See Education minutes from 4/24/2019.

## WITNESS REGISTER

MARK FOSTER, Financial Performance Analyst  
Anchorage, Alaska

**POSITION STATEMENT:** Continued his presentation on K-12 in Alaska: Investing in Effective Measures to Ensure Student Success in Life.

## ACTION NARRATIVE

[8:32:05 AM](#)

**CO-CHAIR STORY** called the joint meeting of the Senate and House Education Standing Committees to order at 8:32 a.m. Present at the call to order were Senators Begich and Representatives Revak, Hopkins, Tuck and Co-Chairs Drummond and Story. Senator Hughes and Representative Zulkosky arrived as the meeting was in progress.

**Presentation: Continuation of K-12 Funding Considerations by Mark Foster, Financial Performance Analyst**

[8:33:25 AM](#)

CO-CHAIR STORY announced the continuation of the presentation K-12 Funding Considerations by Mark Foster by teleconference. She noted they did not have a chance to review the appendices at the last meeting and they would be starting on page 31 of K-12 in Alaska: Investing in Effective Measures to Ensure Student Success in Life and would follow-up with Frequently Asked Questions.

[8:34:36 AM](#)

MARK FOSTER, Financial Performance Analyst, Anchorage, Alaska, said he had been invited to appear to follow up on testimony he provided to Senate Finance. He was retained by Senator von Imhof to do research into K-12 investment levels and performance. This is a follow on to that work and the subsequent questions on that presentation.

MR. FOSTER turned to page 31, Investment Levels, Return on Investment. He wanted to compare how Alaska stacks up to the other states on the level of investment by category and the return on investment on those cost-of-living adjusted costs, specifically looking at how well the state is doing at getting growth in student assessment based on the level of investment. They will look at questions he received in Senate Finance on spending levels by Alaska districts by category and talk about

what he found with his conversations with district superintendents with respect to those investment levels. Finally, they will look at revealing work done in Anchorage to look at growth and proficiency.

[8:37:09 AM](#)

REPRESENTATIVE ZULKOSKY joined the committee.

MR. FOSTER said, moving on to page 32, that the U.S. Census conducts a survey that asks districts across the country to report on expenditure levels. For the most recent survey available, FY 16, he will look at Table 8, Per Pupil Amounts for Current Spending of Public Elementary-Secondary School Systems. This is all the public school districts that report. He has adjusted the raw data by state average cost of living using the state average cost of living index that has been used by the Alaska Department of Labor in its Alaska economic trends report. Alaska is about 30 percent above the national average for a statewide cost of living index. Wyoming is five percent below the national average. The table shows total spending by state. Wyoming is number one at \$17,199 per pupil basis. Alaska is at \$13,333. Over time, Alaska began to decline relative to other states after peaking about five years ago. As the states in the lower 48 have recovered from the 2008 recession, Alaska has been holding even and fighting against inflation. Alaska began to fall in terms of its purchasing power on a per student basis. This shows the results by FY 2016.

MR. FOSTER said page 33 shows the salaries and wages per pupil amount, adjusted for cost of living. Alaska has fallen below the median value and the average value in the United States. Alaska is about 63 percent of Wyoming. The salaries and wage per pupil amount for the United States is \$6,866. When adjusted for cost of living, Alaska is at \$6,343. The salary and wages Alaska offers on a per pupil basis are low relative to the U.S. and creates challenges in attracting and retaining teachers.

MR. FOSTER said page 34 shows instructional investment on a per pupil basis. Alaska has fallen to number 31, about 63 percent of Wyoming. New York has the highest levels of investing in instructional salary and wages and Alaska is about 58 percent of that value.

MR. FOSTER said that for page 35, they take the current cost-of-living adjusted spend, the total amount, and divide that by the scale score growth from the fourth to the eighth grade in reading on the NAEP [National Assessment of Educational Progress

scores to assess what is the return on for the dollars they are investing for student growth. On a cost-of-living adjusted basis, Alaska is just outside of the high-value, high-growth quadrant for reading on the NAEP scores on reading for the 2013-2017 scale. Alaska is doing fairly well in terms of return on investment for reading growth from fourth grade to eighth grade.

MR. FOSTER said that page 36 shows the math scale score growth is below the median. Alaska is in the low-value, low-growth quadrant with room to improve. Nonetheless, based on the dispersion, Alaska is not far from the middle of the pack. West Virginia, Missouri, Vermont, Connecticut, Pennsylvania, Delaware, and North Dakota are around Alaska and not significantly far off from where Alaska is.

MR. FOSTER said page 37 addresses a Finance Committee question about how Alaska would stack up based on the governor's proposed February budget. Using the FY 16 U.S. census data and projected growth for the lower 48, instructional salary and wages under the governor's proposed budget would likely land Alaska at the very bottom of the chart against the other states on a cost-of-living adjusted basis. He would caution against anyone thinking that the proposed budget will do anything other than create serious and significant challenges for Alaska's ability to attract and retain highly qualified and effective teachers.

[8:45:02 AM](#)

MR. FOSTER said they did touch briefly on the material on page 38, but he wanted to reiterate an important finding from some of the large, longitudinal data bases being developed and analyzed. The data on page 38 from Raj Chetty looks at the long-term impact on student success, in this case, in terms of average earnings for students aged 25 to 27 and the extent to which test scores reflect their success in life. In the kindergarten test score analysis, the kindergarten scores only relate to about five percent of the differential in average earnings. Those numbers tend to increase over time, over the grade progression, but not significantly. It is important to remember that when they are looking at the early elementary grades, those test scores are weakly correlated with student success in life. They don't want to overemphasize their importance in assessing how students well are doing. Other factors tend to be much important. One example of that is on page 39.

MR. FOSTER said that slide 39 contains information from "The Full Measure of a Teacher" published in Education Next in winter 2019. The author, Kirabo Jackson, used a rich data set from

North Carolina that allowed him to look at the extent that test scores or other factors drive success in student graduation and adult outcomes. It is the noncognitive skills, adaptability, motivation, and self-restraint, that are picked up across the grade span. Good teachers help contribute to those factors and those factors in turn are extremely important at driving student success and creating opportunities. Mr. Jackson's conclusion is that teachers' impact on "noncognitive skills is ten times more predictive of students' longer-term success in high school and their graduation rate than their impact on test scores." The value-add that they find in this data looking at teacher impact on students is on those soft skills, adaptability, motivation, and self-restraint. It is a reminder that while test scores are helpful in assessing how students are progressing, they don't ultimately become a major factor in success in life. They are only weakly correlated, so they do not want to overemphasize test scores if their goal and mission is student success.

CO-CHAIR STORY said that Mr. Foster's role with the Anchorage School District and being on the board probably correlates to hearing a lot from business partners that part of what they want is these soft skills. That is one of the most critical things they are looking for in students. She asked if he would agree.

MR. FOSTER answered certainly. They have ongoing conversations with that as a central feature.

[8:49:38 AM](#)

REPRESENTATIVE HOPKINS asked what the specific soft skills are and whether he has seen anyplace in Alaska with examples of good programs for those soft skills.

MR. FOSTER answered they cluster around those in bold on page 39, the adaptability, the motivation, the self-restraint. Within that cluster is teamwork, learning to work with other students. A critical piece that people sometimes forget about it is working with other students from a wide range of backgrounds. That is much more reflective of ongoing life experiences because people interact with a variety of people in various endeavors in a team setting. Anchorage started investing in social and emotional learning over a decade ago. They have tried to infuse that, especially in the early grades, in a lot of the work that they do. From time to time, Anchorage will report out data indicating that has been successful. Some correlation with test scores exists, but ultimately efforts are focused on soft skills. He is certain there are other adaptations across the

state, but he has not explicitly analyzed the nature and extent of the programs across Alaska that are focused on soft skills.

REPRESENTATIVE HOPKINS asked if he could recommend anyone who has worked on that.

MR. FOSTER replied that there are certainly people who have been involved in the development and implementation of the programs. He will get those names to him. They will have an idea about the evolution of those programs and what worked best in the Alaska context.

[8:52:54 AM](#)

SENATOR HUGHES joined the committee.

CO-CHAIR STORY said their educational partners, the Association of Alaska School Boards, the Superintendents Association, and others, are also working on those, so they should consult them.

MR. FOSTER said that page 40 is a follow up to discussions about the percentage of program expenditures by functional category. He has separated out, under the state chart of accounts, instruction, support services, administrative services, and operations and maintenance. On the bottom x axis, he has grouped the Big Five [urban districts] and rural districts. Each district gets a dot on the dot plot. For the Big Five, the dots roughly show that 60 percent of total program expenditures are for instruction. The rural dispersion goes from the mid-60s into the sub-40s. Looking at support services shows the Big Five dots are clustered and the rural dots are dispersed. For administrative services, the Big Five percentages are around 12, 14 percent and rural areas have a fairly large dispersion. For operations and maintenance, the Big Five percentages are around ten to 15 percent and for rural districts, from ten to about 23. At first blush, the question is what is happening in rural districts. In the conversations they have had with superintendents about rural success, one of things they ran into around rural challenges was the continuing conversation about the ability to attract and retain qualified and effective teachers. In many cases, the rural districts cannot fill positions with qualified and effective teachers, so they have filled some of the positions in other areas with folks so they can get people into the mix to help support students as best they can with the budgets they have. That is one of the features of the dispersion. The other feature of the dispersion that many people may be aware of is the high cost of facilities in rural

environments, particularly for energy costs. That is one of the drivers in the operations and maintenance dispersion.

MR. FOSTER said at first blush there may be concern about spending outside of the classroom, but when they drill down, they are tending to find that it reflects the challenge of attracting and retaining teachers and the high cost of rural facilities. Those are the primary drivers behind those dispersions. Each district has its set of challenges, but those appear to be the two primary drivers in the dispersion they see in that data.

SENATOR BEGICH clarified that if they had the ability to recruit teachers for rural Alaska, they would see the second bar from the left tighten up. Effectively, school districts are back filling because they can't recruit and that is reflected in the stretched out fourth bar.

MR. FOSTER answered yes.

[8:58:24 AM](#)

CO-CHAIR STORY asked what instructional expenditures include. She asked if it includes paraeducators, librarians, principals, special ed teachers, etc., or if it only classroom teachers.

MR. FOSTER replied that instruction in the state chart of accounts for Alaska is drawn slightly larger than the census category. It includes teachers and people who are providing services to students in classrooms, for example, teaching assistants in the classroom. Principals and some of those support services will be in admin. The state chart of accounts is available on the Department of Education and Early Development (DEED) website.

MR. FOSTER said pages 41-44 are expanded treatment for each of the categories on the summary graph on page 40. Page 41 shows the dispersion is great for instruction as percentage of total state program expenditures. Similarly on pages 42, 43, and 44, which give a better sense of dispersion by size of the program.

CO-CHAIR STORY said they received some information from the Alaska Association of School Business Officials (ALASBO). They had included principals in instructional costs. Their calculation was 6.1 percent for superintendents and their staff and school boards. They will get that to him.

MR. FOSTER said that when he was at the Anchorage School District, they did not adopt that chart of accounts for purposes of reporting to the school board and the public. When they look at the national chart of accounts to benchmark against other districts across the country, they adopted the U.S. census definitions because they are more generally applicable. They appreciate the state and that historic perspective, but that puts them on an island in the ability to compare nationally. For internal comparisons, he agrees with the information she has on the state chart of accounts in terms of how they stack that up.

9:02:55 AM

SENATOR HUGHES clarified that page 41 shows that about a fifth of districts are spending 60 percent or more on administration instead of instruction. She understands they do not have economies of scale and heating costs more, but she wonders if there has been a deep look into how their funds break out and could there be an adjustment. The Education Transformation Act that the Senate is hoping the House will look at during the interim has a piece about cooperative grants. It expands the definition to allow partnerships between districts and other entities, such as nonprofits and local governments, to look for efficiencies. The bill requires that a cooperative grant would always include one rural district to help move dollars into the classroom. That could be a helpful tool. She asked him if she is reading the graph correctly, that ten or more districts are spending more than 60 percent on administration, is that appropriate and could things be moved around in those budgets to get more money in the classroom.

MR. FOSTER replied he has not done an independent analysis of the administrative services as a percentage of the total state program to look at the outliers, to be able to assess where that spend is at and what the particular circumstances are. He can report back the information they received from superintendents when they asked them about the challenges. The basically reported their key challenges were attracting and retaining and higher operations and maintenance costs for facilities. The combination of those two represented the majority of these differentials, but he has not independently audited any particular case.

SENATOR HUGHES asked if she were reading page 41 correctly, that ten or 11 districts are spending less than 40 percent on instruction.

MR. FOSTER said that on page 41, several districts are below 40 percent on instruction, but that presentation does not indicate whether the balance is for admin, operations and maintenance, or support services. It just shows instruction as a percentage of the state program expenditures.

[9:06:51 AM](#)

SENATOR BEGICH said that page 43 does deal with admin services and no district appears to be above 24 percent. Senator Hughes brings up a good point about 11 districts having less than 40 percent going into the classroom. Earlier he asked if that was because they cannot hire teachers in rural Alaska and consequently there was backfill to other support services sections, which are line 4 on the graph on page 40. The point is that while there is less classroom instruction in the rural districts, the cause of that appears to be, number one, they cannot recruit teachers so they end up backfilling by bringing in support services to provide some support and two, because operations and maintenance costs are higher. No one is exceeding 25 percent for admin. What is happening is they cannot recruit teachers into these districts because the state is not competitive anymore. That is how he reads this.

MR. FOSTER replied that is consistent with the feedback they have received from rural district representatives.

[9:08:49 AM](#)

CO-CHAIR DRUMMOND asked if the low percentage of funds spent on instruction in rural Alaska be because those districts have newer teachers at lower salaries. She asked where the cost of recruiting and retaining teachers is shown on page 43.

MR. FOSTER said those HR costs would be in administrative services. As far as the question about whether this reflects lower teacher salaries and higher salaries in some of the other support services and admin services sectors, that is certainly possible. He would caution against that being too big a factor in this particular set of numbers. He is pulling the Big Five out and treating the balance of districts as rural. That would include Ketchikan, Sitka, Kodiak, etc., and teachers there are clustered at the end of the salary schedule rather than at the beginning. Given the larger, regional hubs within this data set, he is not sure it is true in aggregate, but it certainly is true in the smaller, rural districts.

SENATOR HUGHES said that to clarify, when she referred to instruction vs administration, she was lumping operations and

maintenance in with that. She asked if paraprofessionals or teacher aides are counted as instruction or support services.

MR. FOSTER replied that if they are in the classroom, they will be counted as instruction.

9:12:23 AM

REPRESENTATIVE HOPKINS said an Alaska statute limits how much credit teachers from outside the state can be given on a salary schedule. It is limited to six steps on a salary schedule for a bachelor's degree and eight steps for a master's degree. They have late career teachers come to the state who have been teaching ten, 12, 15 years and can only get credit for eight of those years. That limits experienced teachers coming into Alaska. Mr. Foster had talked about how Alaska is in a national market for teacher recruitment. In recent years, other states that Alaska recruited from have had substantial jumps in their salaries. Alaska recruits heavily from Washington and used to be competitive against Washington, but after a Washington court case was finally resolved, it has seen increases of 12 and 20 percent in teacher salary ranges. That will substantially impact Alaska's ability to recruit experienced teachers.

CO-CHAIR STORY asked Mr. Foster to explain what is included in support services.

MR. FOSTER said he would call up the state chart of accounts at the end of the presentation.

MR. FOSTER said pages 45 and 46 have an Anchorage-specific perspective. Now they are diving into a set of questions regarding Anchorage. A frequent question was how well Anchorage is doing compared to other large districts who have similar challenges with diversity, mobility, and transitions. One question was how well Anchorage compared to Miami-Dade, Florida, which has a third grade retention policy if students are not proficient. This has raised their fourth grade NAEP reading scores at or above proficiency to around 42 percent. But subsequent research into how they do in the eighth grade shows that Miami has a significant fall off and had about a 32 percent proficiency rate in 2017 for eighth grade reading. Austin, Texas, is often the leading district in the Council of Great City Schools in growing their students. The 2018 Key Academic Performance Indicators Report shows that it goes from about 33 or 34 percent to 36 percent in NAEP reading proficiency from fourth grade to eighth grade. The national public average is steady at about 35 percent. The national large city schools'

numbers go from the 27, 28 percent range and slow drop down to about 26 percent.

MR. FOSTER said Anchorage does not report on the NAEP scale, so they had to go to a 2015 NAEP publication that allowed them to map and project their state performance standards on to the NAEP scale so they could look at how Anchorage does from the fourth to the eighth grade on the percentage proficient. Anchorage on reading proficiency improvement from fourth to the eighth grade exceeds the top district in the change in proficiency and the proficiency level among the top 100 districts by attendance. Anchorage is performing ahead of Austin, Texas, in that measure. He wanted to give kudos to the Anchorage teachers, principals, and teams at the schools. They are doing quite well in reading growth from the fourth to the eighth grade compared to other districts facing similar demographic challenges. It was a very interesting study to see how well Anchorage stacked up.

SENATOR BEGICH asked why they don't talk about this story. They talk about failing schools in this state all the time. There are successful schools. This data alone ought to be a press release. He asked Mr. Foster, who has worked in the district administration and been on the school board, what accounts for the level of success in Anchorage between fourth and eighth grade. It is quite marked to the other districts on the graph. He asked if there were similar data with the MAP [Measures of Academic Progress] scores.

[9:20:06 AM](#)

MR. FOSTER replied that he has not dived into the MAP scores. In terms of what might be driving that, he would turn to page 46. He also was curious after he got those results to decompose each of the grade level jumps and then try to research what was making the difference. He looked at PEAKS [Performance Evaluation for Alaska's Schools] scores to look at the progression by each grade in the growth of the percentage proficient for reading from 2016 to 2017 and 2017 to 2018. The chart on page 46 shows growth and proficiency. From third to fourth grade, fourth to fifth, and fifth to sixth it looks good in terms of the percentage proficient. Then there is jump from sixth to seventh, seventh to eighth, and eighth to ninth. There is some evidence of acceleration in proficiency. There may be something there they are doing differently from the rest of the U.S. that helps to contribute to significant improvement in proficiency and growth in the NAEP mapping. When he tries to interview folks who have been in the district for many years, what often comes up is the middle school model in Anchorage.

That involves enabling teachers to have more time to track and collaborate on where students are and how they are doing to ensure that the students are continuing to grow. At least in interviews that is cited. The MAP scores show some evidence that they are getting a good bump in scores from the sixth grade to seventh grade. Anchorage seems to be doing well in orienting kids from elementary school to middle school. He suspects there are other factors, but that is the preliminary assessment.

CO-CHAIR DRUMMOND asked if they are looking at fourth and eighth graders in the same test year on page 45.

MR. FOSTER replied that looks only at the NAEP scale in 2017. It doesn't look at cohorts because he didn't have the cohort data for prior periods.

CO-CHAIR DRUMMOND clarified that that means that the fourth graders for this chart will be eighth graders in 2021.

MR. FOSTER answered correct.

CO-HAIR DRUMMOND asked if there is a way to look at fourth graders in 2013 to compare them to these eighth grades in 2017.

MR. FOSTER responded that they don't have PEAK scores for that prior period. He would have to analyze the prior AMP [Alaska Measures of Progress] scores. That might be an analytic exercise. The other challenge is that he doesn't have the complete NAEP national and large city data sets.

[9:25:12 AM](#)

REPRESENTATIVE TUCK clarified that these are NAEP scores for 2017, but Mr. Foster had to do an adjusted factor for the Anchorage School District for 2015 because they didn't have NAEP scores for 2017.

MR. FOSTER replied that there was a NAEP report from 2015 that shows how their test standards stack up to NAEP, so that gives them way of translating Alaska state standards over to the NAEP scale. Then, based on changes in the Alaska test from 2015 to 2017, they made further adjustments. It is a two-step process to get them to the NAEP scale in 2017.

CO-CHAIR STORY asked if it was a good time to define support services.

MR. FOSTER said he would go online to find the state chart of accounts.

[9:26:57 AM](#)

At ease

[9:27:03 AM](#)

CO-CHAIR STORY reconvened the meeting.

MR. FOSTER said they would be looking at page 26 in the DEED chart of accounts, the 2018 edition, which begins the descriptions of the functional codes within the state chart of accounts. Instruction includes the educational activities directly involving the interaction between teachers and students. It includes certificated classroom teachers or other certificated personnel, classroom assistants who directly assist in the instructional process. Examples of the types of expenditures to include are salaries, employee benefits, teaching supplies, textbooks, equipment, etc.

CO-CHAIR STORY asked if other certificated staff includes special education teachers, ESL teachers, and gifted and talented teachers.

MR. FOSTER said he thought those would be classified as 200 but they would roll up to the instruction category. That is page 27, special education instruction.

MR. FOSTER said there had been a question about administration, which was on page 30. Administration includes principals while not in the classroom. It is possible that a principal provides teaching services in a small district and that activity would be classified elsewhere, but principals in a large district not providing classroom services would be in school administration.

CO-CHAIR STORY asked if the data on pages 40-44 is based on the census data or the Alaska chart of accounts data.

MR. FOSTER answered that pages 40-44 were based on the Alaska chart of accounts.

[9:32:03 AM](#)

MR. FOSTER moved to the handout on Frequently Asked Questions and said one question was about whether they could use the cohort-matched fourth to eighth grade test scores to measure student growth. The short answer is yes. When the Educational Testing Service (ETS) put together the NAEP scale score in

reading and math in one of the rewrites in the 1980s, they specifically delineated the test period and the test scale to enable them to compare fourth to eighth grade cohorts over time. The detail around that design and pictorial maps are available in the 1998 and 2003 ETS reports describing how they measure gains from the fourth to the eighth grade in the NAEP scores. They measure it not just by states. They looked at subgroups of students, whether eligible for free or reduced lunch, and other subgroups. The test is designed to allow changes over time to be estimated among those cohorts. Those cohorts will change, but NAEP samples the group and produces an estimate for the population of students. They are looking at an estimate of how the population is changing over time. For those purposes, NAEP can be used. It is not following individual students. It is following a group.

MR. FOSTER said that in some of appendices from governance meetings, they use a rough rule of thumb that 12 points for NAEP reading and math scores is equivalent to one year of schooling. A 48-point scale score growth would be a benchmark for growth between fourth grade and eighth grade. He did that for NAEP reading and math growth between fourth and eighth grade for 2003-2013, 2011-2015, and 2013-2017. Alaska is above that standard for reading but below it in math.

CO-CHAIR STORY noted that they are on page 2 of the Frequently Asked Questions.

MR. FOSTER said another question was what is the basis for offering that roughly half of the variation in test scores is attributable to poverty. He points to the work he did as the chief financial officer of the Anchorage School District and subsequent work looking at PEAKS data and running regressions against that data for free and reduced lunch or economically disadvantaged, English language learners, mobility, and other regression factors trying to identify the key variance drivers across those data sets. He ran about six years of AMP data when he was at the school district and then more recently two years of the PEAKS data. His experience working through that data leads him to suggest that somewhere on the order of half of the variance can be contributed to poverty and poverty-related factors.

MR. FOSTER said he offers up a few other places where they have tried to estimate the prominent factors looking at student achievement across the U.S. The Northwest Evaluation Association that sponsors the MAP has an October 2018 report looking at the

relationships between poverty and school performance. This looks at how well schools are doing on tests, not individual students. That found something comparable to what he found, which is that about half of school achievement can be accounted for by the percentage of low-income students. That is a fairly robust estimate going back to studies across time. The more recent data in the last two or three years indicates the poverty cluster as being responsible for roughly half. The Alaska data appears to be comparable to the national data. Other reports suggesting that gap may be on a growth trendline come from Sean Reardon at Stanford, who published the "The Widening Income Achievement Gap" in 2013. The Miami-Dade literature review is a comprehensive look at the effects of poverty on student achievement for a general audience. The discussion in that 2009 report is quite good.

MR. FOSTER said that he wanted to remind the committee that they were looking at school performance and grades within schools. They are clustering students when reporting out these scores. They are taking some of the dispersion out of the data because they are clustering students into schools. Individual student achievement data within schools typically exceeds the dispersion of the data between schools. Within a school, the variation in individual student achievement is typically larger than the variation between the schools. Each school and each teacher face a wide variety of students each day. That is where they want to focus their analytic and policy analysis on helping the teachers with growing all of those students. It is a reminder that school scores are instructive, but that is not where they are making a difference in student lives. It is at the student level. They want to provide tools to the folks on the front lines to measure progress and make improvements on the standard academic achievement and also build up the soft skills of adaptability, motivation, and self-restraint.

9:41:24 AM

SENATOR HUGHES asked about the assertion on page 39 that teachers' impact on non-cognitive skills is ten times more predictive of student success. She asked if they are doing anything to measure that in Alaska, is there anything that can measure that, and is there anything in teacher college training to help teachers learn to develop good methods to help students with adaptability, motivation, and self-restraint.

MR. FOSTER replied that there is a lot of activity in this area across Alaska. Some of it has been going on for over a decade and includes some measurement of how they are doing in that

area. It is always an opportunity to take a fresh look at whether those who are successful in this area are sharing that. He doesn't have a good feel for whether that is occurring. Others can opine on that, but it is occurring across Alaska.

SENATOR HUGHES said those skill sets are developed in the Alaska Military Youth Academy. They see those kids start to soar. They focus on teaching the students self-discipline and motivation. They put them in team activities. The development of those skills is fascinating to her.

MR. FOSTER said page four of the Frequently Asked Questions has the question does poverty cause lower test scores. He would answer that by stating that student achievement on standards-based tests frequently reflect a host of challenges associated with poverty. Poverty is shorthand for low household income and limited social and household support resources. In the last few years, there has been additional research about what is it about poverty that is the driver that creates the challenges for students in the early grades and into the high school grades, where it reemerges as a factor and a head wind. It is not directly causal, so much as it is the factors around poverty that may be the driver of the differences. There is now a rich literature examining what is it about poverty and Adverse Childhood Experiences and parental and household support.

MR. FOSTER said another question is what other factors besides poverty influence student achievement. That is a long list. The work of John Hattie is an introduction to that long list. Hattie's work tries to estimate not only what factors but what the relative influence of those factors is on student achievement. Mr. Foster said he would also include class size on that list. The most recent research shows the more important effect of the synergy between class size and effective teachers.

MR. FOSTER said another question is what factors should they consider when they assess policy options aimed at improving student success in life. It is important to emphasize that they want to confer and consult with local subject matter experts who are successful over time not only with affluent students but with helping to grow a wide variety of students over their grade span. There is a lot of rich, local knowledge that helps them understand what drives student success, what sustains it, and then validate that local expert judgement against local and national data sets and case sets to make sure that they can understand what is driving it. The flip of that is to take the evidence and see how it translates into the local community.

Frequently they assume a national study will fit, but local factors and circumstances may make it not applicable. That knowledge exchange runs in both directions. They should use both local and outside knowledge to give them a richer base to design and aggregate their collective judgement about what works and what doesn't and where to go to next.

MR. FOSTER said a question was whether teacher content knowledge and competency of reading instruction matter. It clearly does. There is an ongoing debate about what the critical elements are of early literacy. Rather than relitigate that debate, he will leave it to another study.

MR. FOSTER said that concluded his presentation.

CO-CHAIR STORY thanked him for his work.

9:52:20 AM

There being no further business to come before the committee, Co-Chair Story adjourned the Senate Education Standing Committee at 9:52 a.m.