
Fairbanks North Star Borough School District

Student Assessment Results
for the Fairbanks North Star Borough
School District

2017-18 School Year

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EXECUTIVE SUMMARY

This report presents district level results of the Performance Evaluation of Alaska's Schools (PEAKS), Alaska Science Assessment, and Measures of Academic Progress (MAP) taken by Fairbanks North Star Borough School District students during the 2017-18 and 2016-17 school years. Further disaggregated results will be available at the district's Data Dashboard:

<https://public.tableau.com/profile/k12northstar#!/>

Notable General Facts:

- On average, students in the district outperform students in the state on standardized assessments.
- District results were higher than the Big 4 for Math, but not for ELA and Science.
- Secondary students showed above national average performance on MAP, with Elementary showing below the national average.
- MAP growth between Fall 2017 and Spring 2018 close to national average.
- Achievement gaps for the MAP and PEAKS showed similar results.
- Growth gaps on the MAP were substantially smaller than achievement gaps on the MAP and PEAKS.
- Poor attendance (<80%) students showed either medium or large achievement gaps vs students with strong attendance (95% or higher)

INTRODUCTION

The PEAKS is a summative online assessment that measures the content and skills outlined in Alaska's challenging academic standards that were adopted in 2012. The PEAKS was administered in Spring 2018 to students in grades 3-9 in the subjects of English Language Arts (ELA) and Math. Overall scores fall into one of four performance levels: Far Below Proficient, Below Proficient, Proficient, and Advanced. These performance levels are not comparable to the proficiency levels of the previous state assessment, the SBA. The results for the PEAKS is reported in terms of proficiency rates (% of scores that are Proficient or Advanced).

The Alaska science summative assessment measures the Alaska Science Grade Level Expectations (GLEs) adopted in 2006 for students in grades 4, 8, and 10. The science assessment was administered in Spring 2018 along with the PEAKS.

The Measures of Academic Progress are computer adaptive achievement tests in Mathematics and Reading administered in the Fall, Winter, and Spring of each school year for students in grades 3-10. Thus, both status measures and growth measures (within the school year) are available. Status results are reported in terms of Normal Curve Equivalent scores (NCEs fit on a normal bell-shaped curve centered at 50, with a standard deviation of 21.06). An NCE converts a national percentile rank (NPR) to a more statistically sound measure that can be averaged and compared over time. Scores above 50 indicate above average performance and scores below 50 indicate below average performance. Growth measurement between the Fall and Spring of 2017-18 will also be reported in terms of NCEs (based on Spring performance relative to Fall performance and typical national growth).

More information and results from Alaska's assessment system are available from the State of Alaska's Department of Education and Early Development at: <http://www.eed.state.ak.us>.

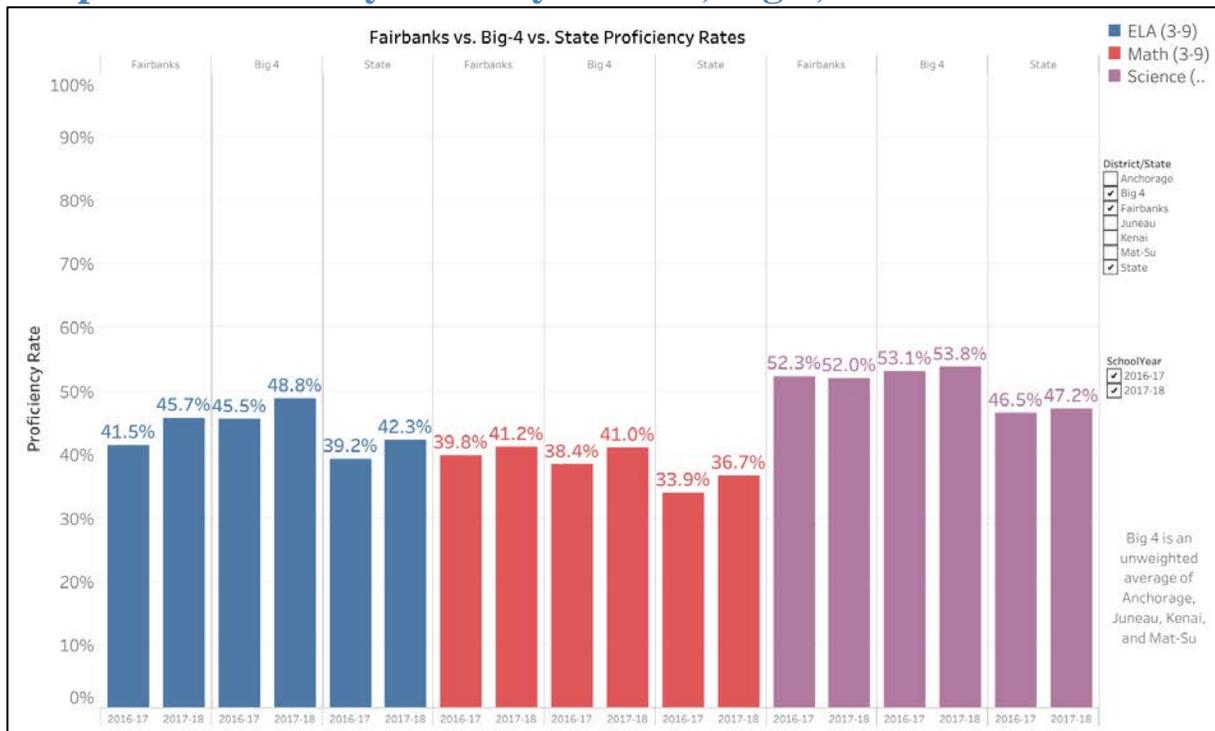
PEAKS AND ALASKA SCIENCE RESULTS

- Spring 2018 PEAKS: 45.7%, and 41.2% of students were proficient in ELA and Math, respectively (grades 3-10)
- Spring 2018 AK Science: 52.0% of students were proficient in Science for Spring 2018 (grades 4, 8, and 10)

RESULTS FROM 2016-17 TO 2017-18

Graph 1 provides summaries of the proficiency rates for the school district from Spring 2017 to Spring 2018, including results for the big 4, and statewide on the PEAKS and AK Science assessment.

Graph 1: Proficiency Rates by District, Big 4, State

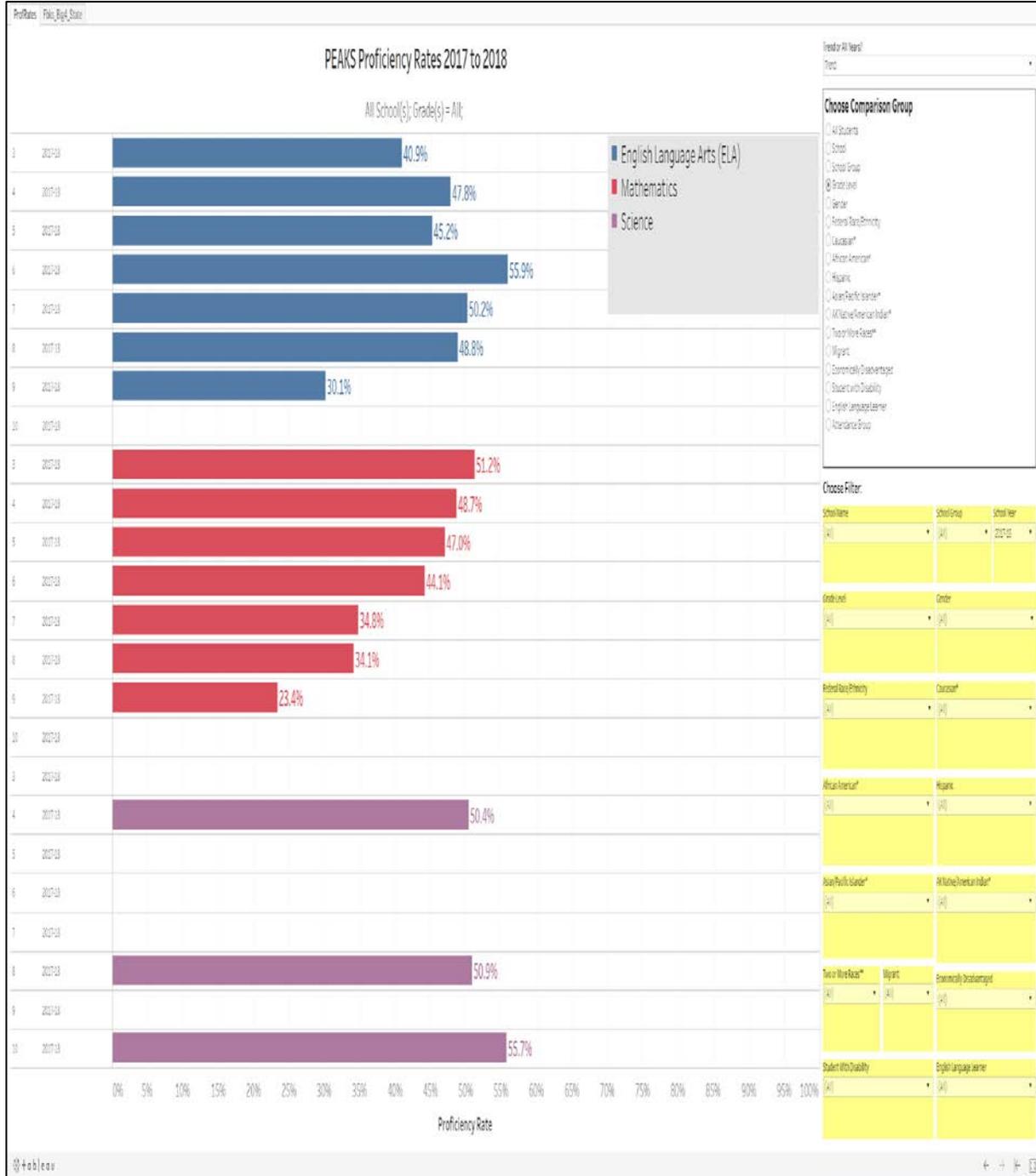


* Big 4 includes the 4 other largest districts in Alaska: Anchorage, Juneau, Kenai, and Mat-Su

RESULTS BY GRADELEVEL

Graphs 2 provides summaries of the proficiency rates by grade level for the school district.

Graph 2: Proficiency Rates by grade level



RESULTS BY DEMOGRAPHICS

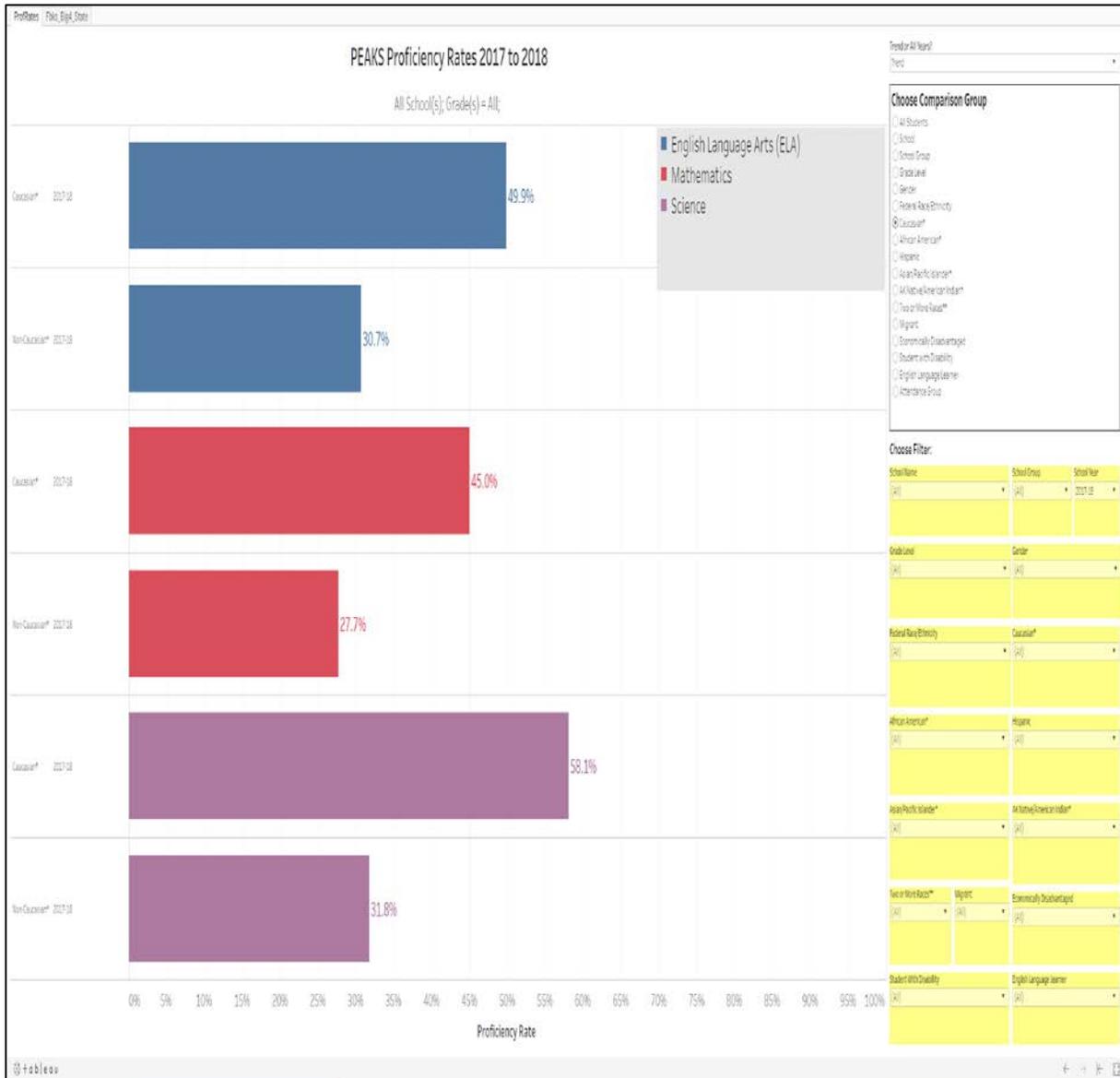
Proficiency rates for ELA, Math, and Science vary by attendance, ethnicity, gender, migrant, economic status, disability, and English learner status (grades 3-9 for ELA/Math and 4, 8, and 10 for Science). An example comparison group of Caucasian* is shown in graph 3, and additional comparison groups can be reviewed at the district's data dashboard:

<https://public.tableau.com/profile/k12northstar#!/>

The effect size of proficiency rate gaps can be described as small, medium, or large (percentage point differences of around 10, 20, and 30, respectively):

- “Less than small” gaps were shown for Two or More Races, Asian/Pacific Islander, and Female (Math and Science)
- Small gaps were shown with the groups of Females (ELA), Migrant (Math), Hispanic, AK Native/American Indian (Math), and African American (ELA and Math).
- Medium gaps were shown with the groups of Economic Disadvantage, Migrant (ELA and Science), Caucasian, African American (Science), Alaska Native/American Indian (ELA and Science), and poor attendance (ELA and Science).
- Large gaps were shown with the groups of English Language Learners, Students with Disabilities, and poor attendance (Math).

Graph 3: Proficiency Rates by Caucasian* vs Non-Caucasian*

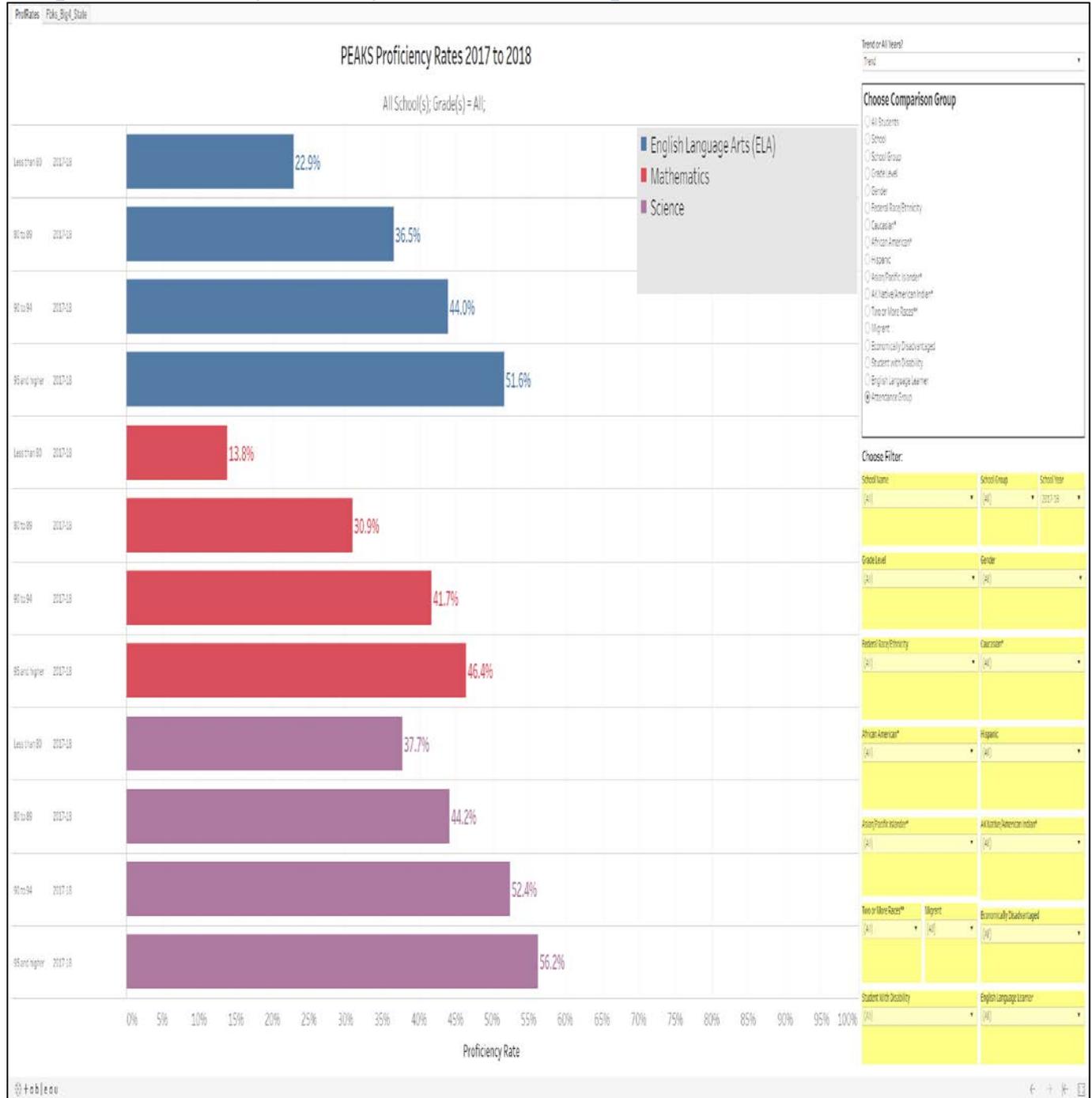


* Includes students that identified an additional race(s) and/or as Hispanic

RESULTS BY ATTENDANCE

Graph 4 provides proficiency rates by attendance groups (less than 80% attendance, 80%-89%, 90%-94%, and more than 95%).

Graph 4: Proficiency Rates by Attendance Group



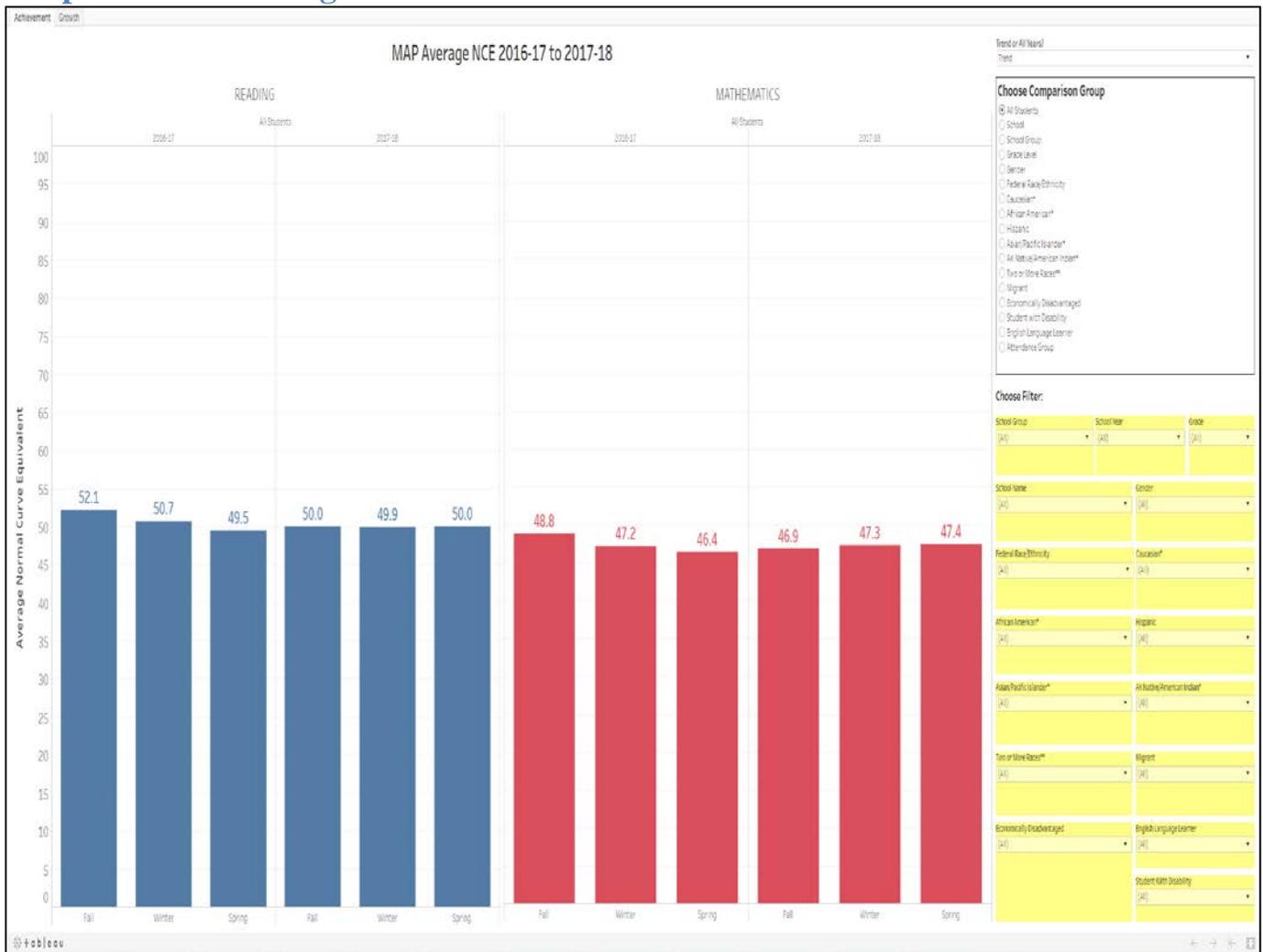
MEASURES OF ACADEMIC PROGRESS RESULTS

Students in grades 3-10 took the Measures of Academic Progress in the Fall, Winter, and Spring of 2016-17 and 2017-18 and received scores in Reading and Math. The scores are used for instructional decision-making as well as comparing the skill levels of district students with students across the nation.

RESULTS FROM 2016-17 TO 2017-18

Results shown in graph 5 are reported in terms of Normal Curve Equivalent (NCE) values in the Fall, Winter, and Spring of 2016-17 and 2017-18 for Reading and Math.

Graph 5: MAP Average NCE 2016-17 to 2017-18



GROWTH RESULTS FALL TO SPRING

Results shown in graph 6 below show NCE values for growth (Fall to Spring) in Reading and Math in both the 2016-17 and 2017-18 school years. These NCE values are conversions of the Student Growth Percentiles. Each student's Growth Percentile is based on their Spring score relative to other students with the same grade level, Fall score, and test subject (Reading or Math) in the national norming sample (referred to as academic peers). A MAP growth NCE of 50 means that the student's Spring score is the same as the median of their academic peers. Since relative performance declined in 2016-17 but stayed stable in 2017-18, note that the Growth NCE values are less than 50 in 2016-17 and close to 50 in 2017-18.

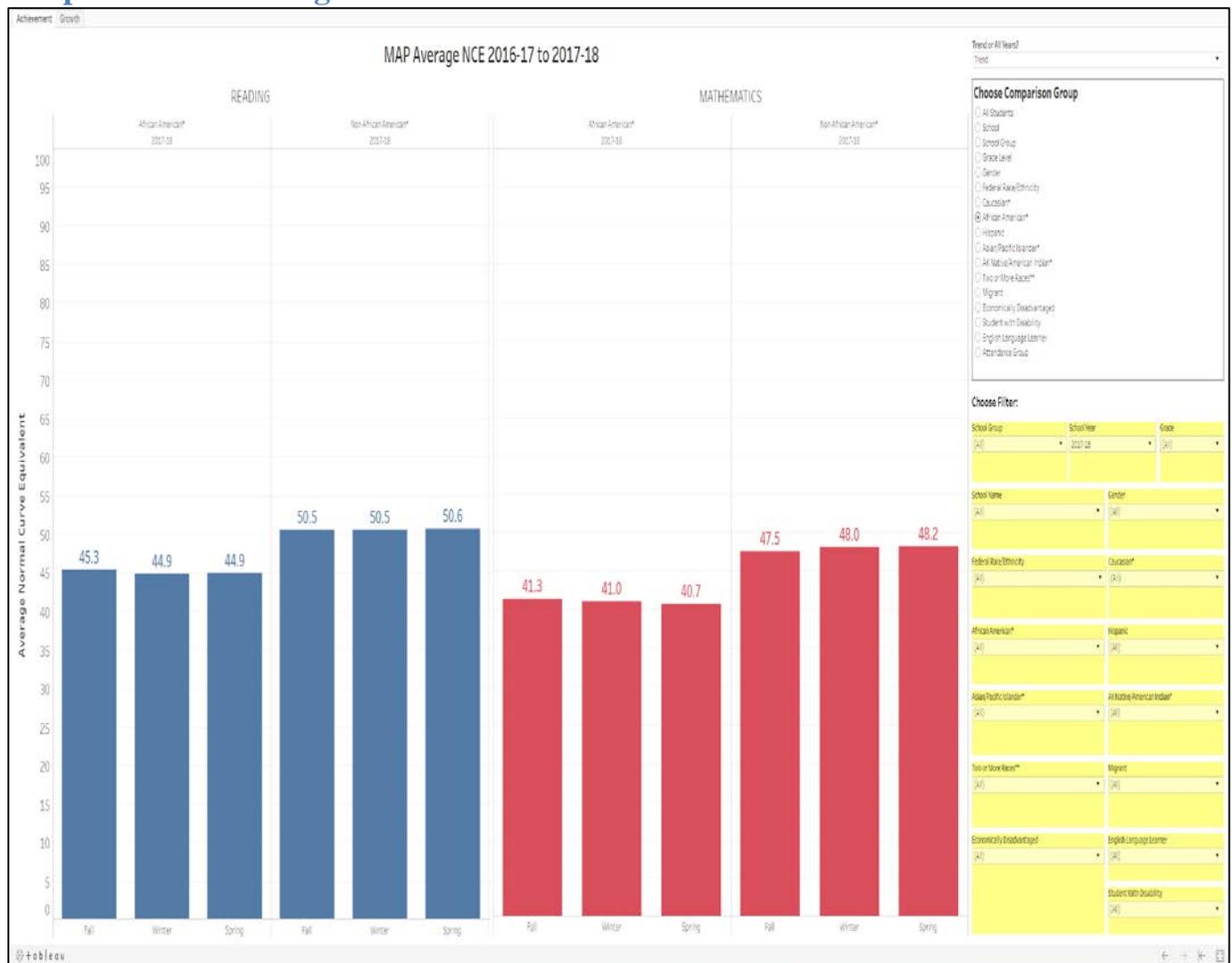
Graph 6: MAP Growth (Fall to Spring) 2016-17 to 2017-18



RESULTS BY DEMOGRAPHICS

Reading and Math average NCEs vary by attendance, race/ethnicity, gender, migrant, economic status, disability, and English learner status (grades 3-10). Effect sizes were similar to the PEAKS, with a few groups showing smaller effect sizes (AK Native and Migrant Reading, and Caucasian* showing small gaps instead of medium; poor attendance showing medium gap instead of large in Math). An example comparison group of African American* is shown in graph 7, and additional comparison groups can be reviewed at the district's data dashboard.

Graph 7: MAP Average NCE African American* vs Non-African American*



* Includes students that identified an additional race(s) and/or as Hispanic

GROWTH RESULTS BY DEMOGRAPHICS

Reading and Math average growth NCEs also vary by demographic groups. Graph 8 provides an example of growth results for African American*. Effect sizes based on growth gaps by demographics were consistently and substantially smaller than achievement gaps for MAP and PEAKS assessments. All growth gaps were “less than small” with small gaps shown only with Students with Disabilities and English Language Learners.

Graph 8: MAP Growth 2017-18 African American* vs Non-African American*



* Includes students that identified an additional race(s) and/or as Hispanic

CONCLUSION

To summarize the findings of this report, consider the following questions:

1. **How does the district perform relative to the state, nation, and “Big Four” (Anchorage, Juneau, Kenai, Mat-Su)?**

For most assessments, district students outperform state students, and are competitive with “Big Four” and national students. For the PEAKS, district results are better than for the state in every subject and grade level, and below the average performance for the “Big 4” with the exception of Math. For the MAP, district results are at the national average in Reading, and below the national average in Math, with the exception of Secondary Math (grades 7-10).

2. **How does the district perform over time?**

For the PEAKS, proficiency rates increased in both ELA and Math in 2017-18, while there was a small decrease in Science (52.0% in 17-18 vs 52.3% in 16-17). Also, MAP performance improved in Fall 2017-18 vs Spring 2016-17 and was either stable in Winter and Spring 2017-18 or improved further.

3. **How does the district perform with growth?**

Growth can be reviewed with the MAP in 2016-17 and 2017-18. Results indicate that districts students showed below average growth in 2016-17, but close to average growth in 2017-18 (these are corollary to decreasing performance between Fall and Spring of 2016-17 and either increasing or stable performance between Fall and Spring of 2017-18). Growth for groups that tend to show achievement gaps were generally below average.

4. How does the district perform relative to achievement gaps?

Achievement gaps vary by attendance, race/ethnicity, gender, migrant, economic status, disability, and English Language learner status across the PEAKS and MAP. Achievement gaps for the MAP tended to be similar to the PEAKS, with some groups showing small gaps instead of medium gaps (Caucasian* for example).

5. How does the district perform relative to growth gaps?

Growth gaps vary by race/ethnicity, gender, migrant, economic status, disability, and English Language learner status for the MAP. Growth gaps on the MAP were shown to be consistently and substantially smaller than achievement gaps on the MAP and PEAKS.

In summary, the district consistently performs well versus the state and is competitive with the “Big Four” and nation. Achievement gaps range from “less than small” to “large” in size and are similar in the PEAKS and MAP assessment with a few exceptions with smaller effect sizes for the MAP. Growth results show close to average growth in 2017-18, an improvement from 2016-17. Growth gaps on the MAP were shown to be significantly smaller than achievement gaps, but the demographics groups were showing growth that was below the national average.