


# **End Result (ER) 2: Science**

Board Monitoring Report  
March 4, 2019

# Table of Contents

	<b>Page</b>
Data Overview Sheet and Business Rules.....	3
High Level Ends: Science.....	4
Part 1: Achievement in Elementary Science .....	5
CEO's Ends Policy Interpretation .....	5
Monitoring Results: Select Student Groups and Programs .....	7
Part 2: Achievement in Middle School Science.....	12
CEO's Ends Policy Interpretation.....	12
Monitoring Results: Select Student Groups and Programs.....	14
Part 3: Achievement in High School Science.....	19
CEO's Ends Policy Interpretation.....	19
Monitoring Results: Select Student Groups .....	21
Conclusion .....	27
Strategies to Achieve Ends.....	27
Appendix: Disability Categories.....	29

## Data Overview Sheet

<b>Student Performance Targets:</b> 95% of students meet all established indicators Student performance is comparable to student performance in comparable WA state districts Student performance is improving									<b>Key:</b>  Reasonable Progress Limited Progress	
	All	Female	Male	Special Education	ELL	Low Income	Asian	Black/African American	Latino/Hispanic	White
<b>5</b> <b>Science</b> <b>WCAS</b> <i>Spring 2018</i>	81.9% Rank 1 n/a baseline	81.7% Rank 1 n/a baseline	82.1% Rank 1 n/a baseline	47.0% Rank 1 n/a baseline	44.5% Rank 2 n/a baseline	45.7% Rank 17 n/a baseline	90.8% Rank 2 n/a baseline	55.5% Rank n/a n/a baseline	55.4% Rank 9 n/a baseline	82.8% Rank 1 n/a baseline
<b>8</b> <b>Science</b> <b>WCAS</b> <i>Spring 2018</i>	78.4% Rank 3 n/a baseline	79.1% Rank 3 n/a baseline	77.8% Rank 4 n/a baseline	36.0% Rank 3 n/a baseline	18.8% Rank 5 n/a baseline	40.4% Rank 21 n/a baseline	87.9% Rank 2 n/a baseline	52.6% Rank n/a n/a baseline	56.8% Rank 7 n/a baseline	79.3% Rank 4 n/a baseline
<b>9</b> <b>Full</b> <b>Science</b> <b>Credit</b> <i>2017-18</i> <i>Class of 2021</i>	92.7% n/a ↑3.7 (5 yr)	96.5% n/a ↑2.4 (5 yr)	96.3% n/a ↑5.0 (5 yr)	87.2% n/a ↑16.1 (5 yr)	85.5% n/a ↑7.7 (5 yr)	84.4% n/a ↑6.6 (5 yr)	98.5% n/a ↑1.2 (5 yr)	87.9% n/a ↑2.2 (5 yr)	88.4% n/a ↑8.8 (5 yr)	97.5% n/a ↑4.2 (5 yr)
<b>11</b> <b>Science</b> <b>WCAS</b> <i>Spring 2018</i>	31.3% / 79.5%* Rank 1* n/a baseline	31.5% / 80.2%* Rank 1* n/a baseline	31.1% / 78.8%* Rank 2* n/a baseline	9.3% / 44.8%* Rank 1* n/a baseline	15.5% / 43.7%* Rank 3* n/a baseline	20.9% / 54.8%* Rank 2* n/a baseline	35.8% / 85.7%* Rank 5* n/a baseline	33.3% / 75.0%* Rank n/a n/a baseline	20.9% / 56.9%* Rank 2* n/a baseline	32.1% / 82.7%* Rank 1* n/a baseline

\*Of those that took the test. 39.4% of 11<sup>th</sup> grade students took the test in Spring, 2018. Ranking is compared to those that took tests in comparative districts.

<p><b>Data Business Rules:</b></p> <ul style="list-style-type: none"> <li>Rankings are out of Washington School Districts with 6500 or more students. In 2017-18, this was 49 school districts.</li> <li>Gr 5-8, 11 Science: Washington State Report Card business rules, Spring 2018.</li> <li>9 Full Science Credit: % of students who earned 1.0 credits of Science in 9<sup>th</sup> grade. Students included were enrolled on May 1 and had attempted at least 1.0 credits of Science during the year. Rank not available for this indicator.</li> <li>Other: Specific percentages for American Indian/Alaskan Native and Native Hawaiian/Other Pacific Islander not provided due to low n.</li> <li>Other: Rank for Black/African American n/a due to several district's percentages suppressed.</li> </ul>	<p><b>Color Coding Business Rules:</b></p> <p><b>Dark Green</b>                      If 85% or higher, then dark green                      If negative progress of two (2) or more points, move to light green                      Or, if rank is &gt; 11, move to light green (rank 11 is the 80<sup>th</sup> percentile of 49 school districts)</p> <p><b>Yellow</b>                      If 71-84%, then Yellow                      If rank is &lt;5, move to light green (rank 4 is the 94<sup>th</sup> percentile of 49 school districts)</p> <p><b>Dark Red</b>                      If 70% or less, then dark red                      If rank is &lt; 12, move to light red                      Or, if progress is three (3) or more points, move to light red</p>
---	--

**Monitoring Description, Established Indicators,  
Targets for Student Achievement, and Established Data Sets/Displays**

**High Level Ends:**

Each student will demonstrate his or her highest level of achievement and application of knowledge within a well-rounded, interdisciplinary program of study.

Accordingly, for science students will:

- Understand and apply scientific principles and concepts
- Solve problems, reason, and communicate scientifically

## Part 1: Achievement in Elementary Science

### **CEO's Ends Policy Interpretation**

*Reasonable Interpretation: Policy criteria, observable conditions, alignment to Ends, targets and rationale*

Achievement in Elementary Science is interpreted as the demonstrated skills of grade 5 students. The elementary science program is founded on the Washington State K-12 Learning Standards/Next Generation Science Standards. These standards define what students should understand and be able to do in their study of science for kindergarten-grade 12. The district has adopted curriculum to support core and intervention instruction.

**Therefore, I interpret that student demonstration of achievement on the Washington Comprehensive Assessment of Science in grade 5 to provide evidence of preparing students for future academic success in science.**

As such, observable conditions and targets for End Results (ER) 2 Elementary Science include:

- 95% of 5th graders meeting or exceeding state standards in science

**Our commitment and aspirational goal is for 95% of students to demonstrate elementary science skills. I interpret that there is sufficient evidence toward accomplishment of the End for each student group when:**

- **85% or more students demonstrate above or at standard performance on the Washington Comprehensive Assessment of Science and a positive trend or no more than a 2% decline of the trend.**<sup>1</sup>

**Note: Evidence of sufficient evidence toward achievement of the End by student group is displayed in the color-coded Data Overview Sheet (see page 3). Green and light green shaded cells denote areas of sufficient evidence toward achievement of the End; yellow and red-shaded cells denote areas of partial achievement.**

### **Rationale**

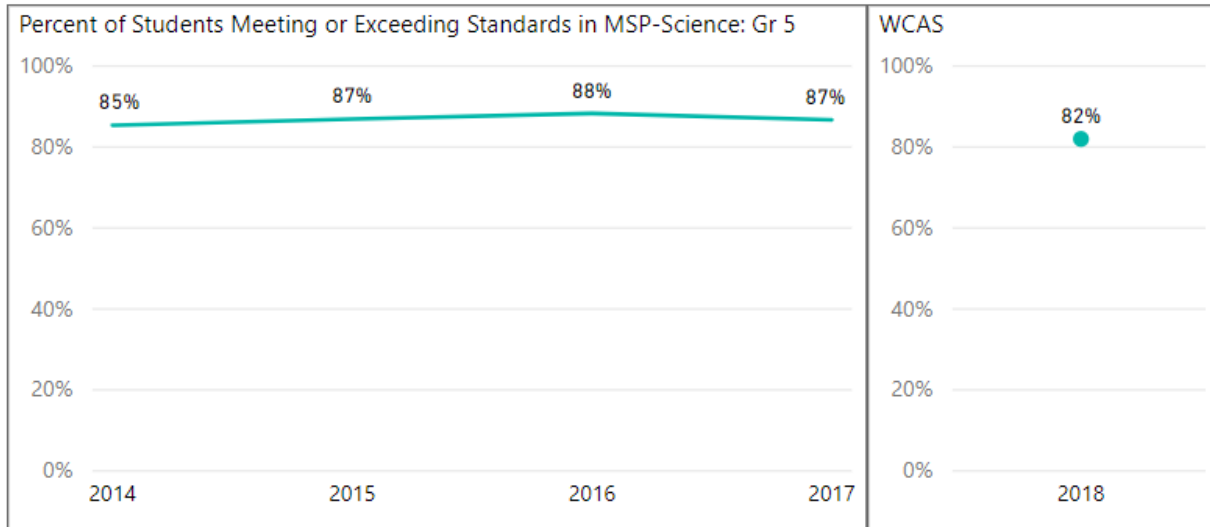
Given the high aspirational goal of 95% of students to demonstrate achievement in elementary science, reasonable progress toward accomplishment of this End is a multi-year effort. Therefore, establishing a minimum threshold of 85% by student group, together with criteria of comparable performance and year-to-year improvement provides sufficient evidence of reasonable progress toward accomplishment of the End. Any student group not meeting established criteria provides evidence that full achievement of the End has not been accomplished.

### **Monitoring Results: All Student Group**

Overall, 81.9% of students met standard on the new Washington Comprehensive Assessment of Science. The "all students" group in grade 5 ranks 1<sup>st</sup> among Washington State districts with 6500 students or more (the largest 49 districts). This assessment was administered for the first time in the spring of 2018 and measures the level of proficiency that students have achieved based on the Washington State Science Learning Standards which were adopted in 2013.

1. Because this assessment measured student performance in relation to a different set of standards than prior years, it serves as a baseline and there is not yet a performance trend.

**Data Displays: All Students Group**



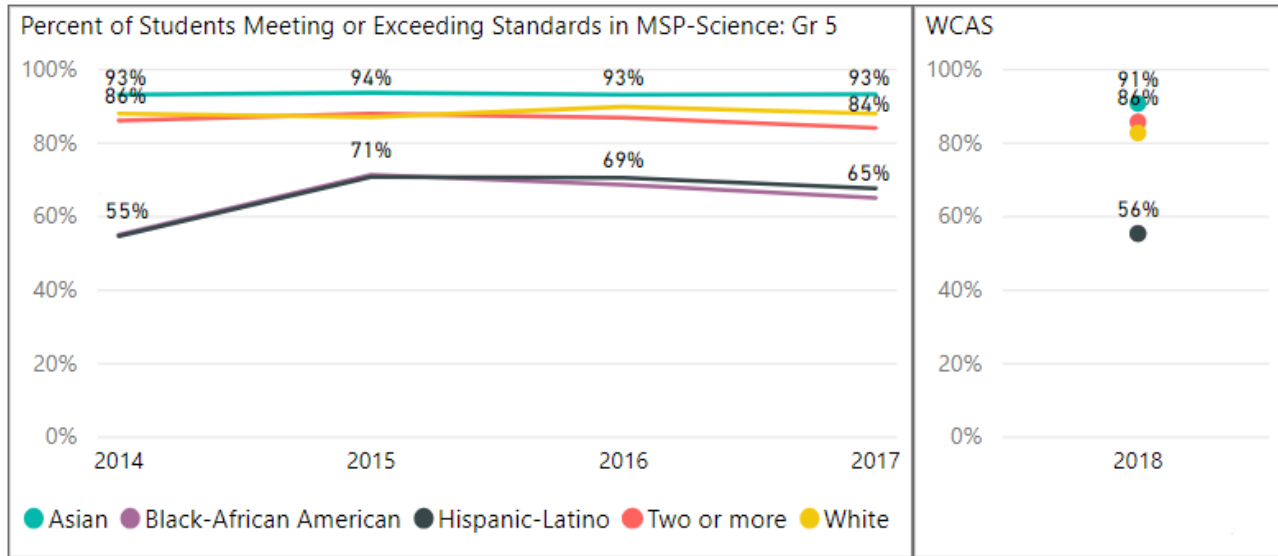
% of 5 <sup>th</sup> Graders Meeting or Exceeding State Standards in Science			
School Year	Assessment	% Met	Total N
2013-14	MSP	85.3	1752
2014-15	MSP	86.9	2209
2015-16	MSP	88.2	2263
2016-17	MSP	86.7	2323
<b>2017-18</b>	<b>WCAS</b>	<b>81.9</b>	<b>2439</b>

## Monitoring Results: Select Student Groups and Programs

Monitoring results show relatively high performance for students in the Asian, Two or More Races, and White groups. Achievement gaps are present for students in the Hispanic/Latino and Black/African American groups. Gaps are also present other student groups including students receiving special education or ELL services, and for students from low-income households.

- Asian students perform higher than other race/ethnicity groups with 90.8% of students meeting standard
  - Significant gaps are present for Black/African American and Hispanic/Latino students with 55.5% and 55.4% of students meeting standards respectively
  - Hispanic/Latino grade 5 students rank 9<sup>th</sup> among the 49 largest districts in the state in science
  - Female and male grade 5 students rank 1<sup>st</sup> among the 49 largest districts in the state in science
  - Students receiving special education services have a 40-percentage point gap in grade 5 when compared to students who are not receiving special education services
  - Although students receiving special education services are not performing at similar levels as non-disabled peers, grade 5 LWSD students receiving special education services rank 1<sup>st</sup> among the 49 largest districts in the state
  - Students that have exited ELL services outperform current and never ELL students
  - Although students receiving ELL services are not performing at similar levels as exited or never ELL peers, grade 5 LWSD students receiving ELL services rank 2<sup>nd</sup> among the 49 largest districts in the state
  - Students from low-income households have 41-percentage point gap when compared from non-low-income households, and this group ranks 17<sup>th</sup> among the largest 49 districts in the state (2017-18 district Free and Reduced eligibility was 11.1%)
-

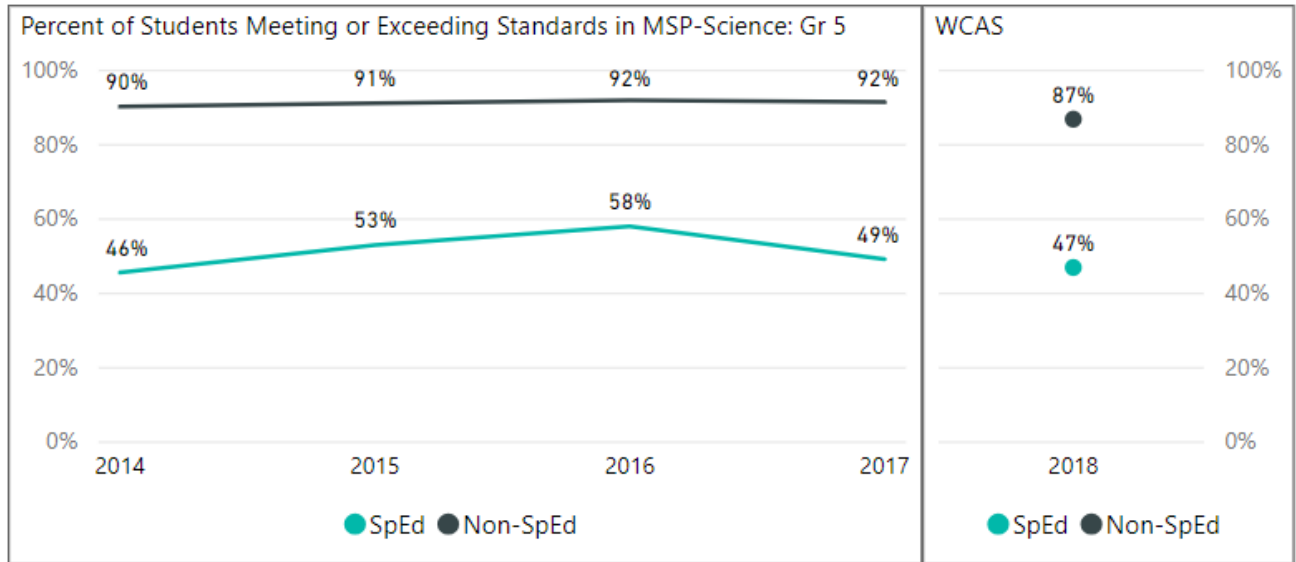
**Data Displays: Race/Ethnicity Student Groups:**



Percent of Students Meeting or Exceeding State Standards in Science – Grade 5: Race/Ethnicity											
School Year	Assessment	Asian		Black/African American		Hispanic/ Latino		Two or More Races		White	
		% Met	Total N	% Met	Total N	% Met	Total N	% Met	Total N	% Met	Total N
2013-14	MSP	93.2	402	55.1	29	54.7	170	86.2	87	88.1	1053
2014-15	MSP	93.7	515	71.4	28	70.8	216	88.0	151	87.1	1284
2015-16	MSP	93.2	575	68.7	32	70.6	225	86.9	161	89.9	1259
2016-17	MSP	93.3	633	65.1	43	67.7	239	84.1	189	88.1	1213
2017-18	WCAS	90.8	719	55.5	45	55.4	258	85.8	191	82.8	1217



**Data Displays: Students receiving Special Education Services:**



**Percent of Students Meeting or Exceeding State Standards in Science – Grade 5: Special Education**

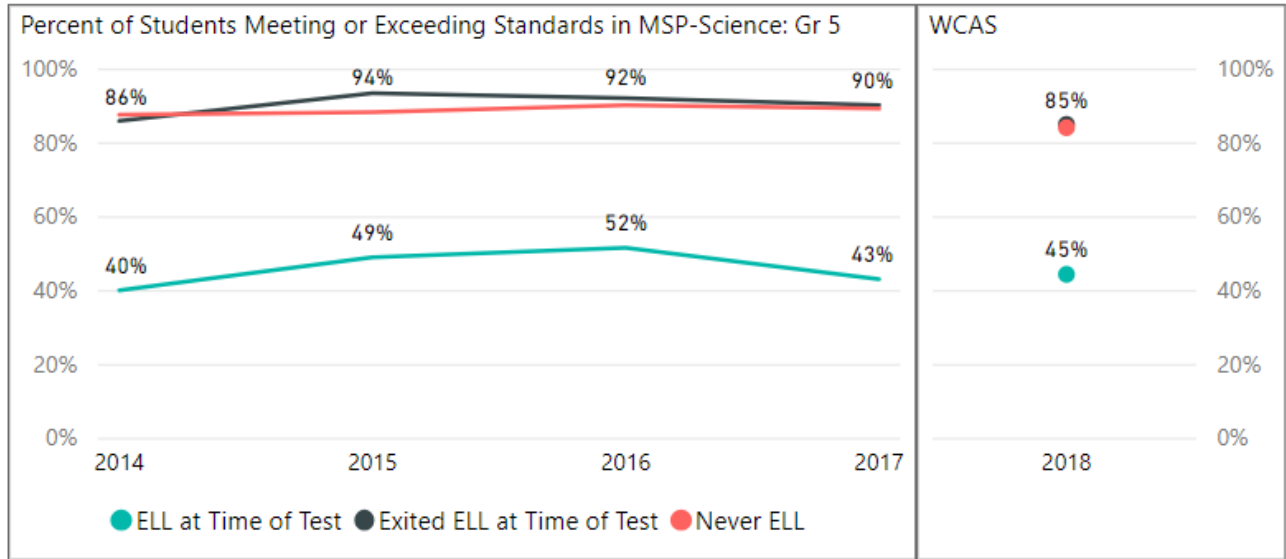
School Year	Assessment	Non-SpEd		SpEd	
		% Met	Total N	% Met	Total N
2013-14	MSP	90.3	1557	45.6	195
2014-15	MSP	91.2	1960	53.0	249
2015-16	MSP	92.0	2005	58.1	258
2016-17	MSP	91.5	2059	49.2	264
2017-18	WCAS	86.9	2135	47.0	304

**Percent of Students Meeting or Exceeding State Standards in Science - Grade 5 Special Education by Disability Category\* - 2018**

Disability Category	% Met	Total N
Emotional/Behavioral	75%	17
Communication Disorder	68%	19
Autism	66%	35
Health Impairment	59%	86
Specific Learning Disability	24%	116
Deafness	n/a	N<p10
Developmental Delays	n/a	N<10
Hearing Impairment	n/a	N<10
Intellectual Disability	n/a	N<10
Multiple Disabilities	n/a	N<10
Orthopedic Impairment	n/a	N<10
Traumatic Brain Injury	n/a	N<10
Visual Impairment	n/a	N<10

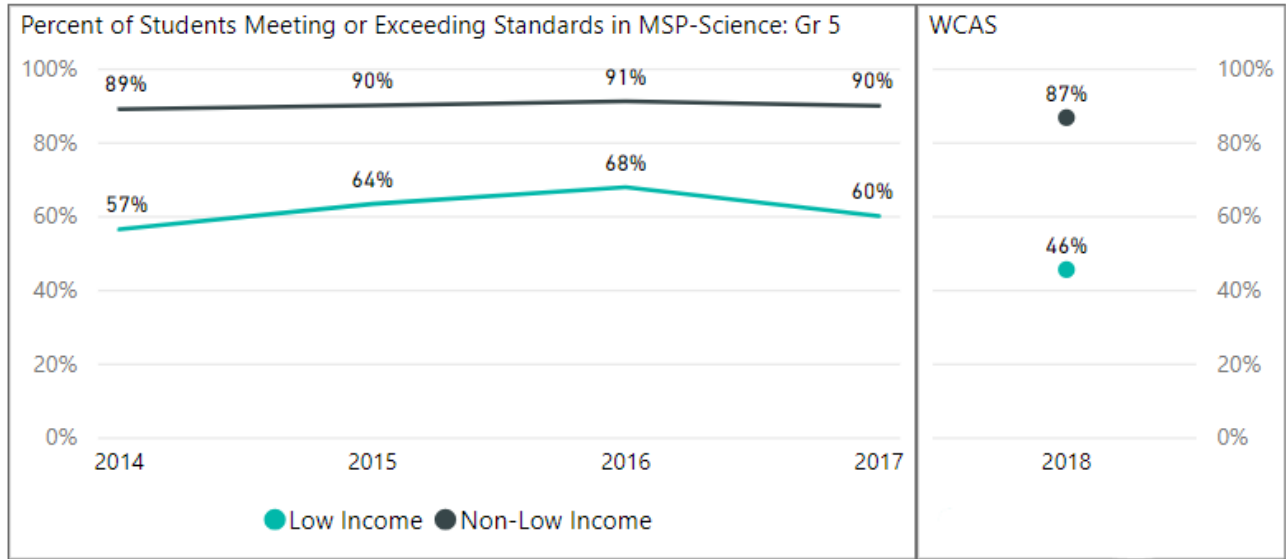
\*Categories defined in Appendix

**Data Displays: Students receiving ELL Services:**



Percent of Students Meeting or Exceeding State Standards in Science – Grade 5: ELL							
School Year	Assessment	Never ELL		Exited ELL		ELL at Time of Test	
		% Met	Total N	% Met	Total N	% Met	Total N
2013-14	MSP	87.7	1425	86.0	250	40.2	77
2014-15	MSP	88.4	1826	93.55	263	49.1	120
2015-16	MSP	90.3	1797	92.2	323	51.7	143
2016-17	MSP	89.4	1862	90.3	320	43.2	141
2017-18	WCAS	84.2	1880	85.1	411	44.5	148

**Data Displays: Students living in Low Income households**



Percent of Students Meeting or Exceeding State Standards in Science – Grade 5: Low Income					
School Year	Assessment	Non-Low Income		Low Income	
		% Met	Total N	% Met	Total N
2013-14	MSP	89.2	1542	56.6	210
2014-15	MSP	90.2	1932	63.5	277
2015-16	MSP	91.3	1953	68.0	310
2016-17	MSP	90.1	2059	60.2	264
2017-18	WCAS	86.9	2142	45.7	297

## Part 2: Achievement in Middle School Science

### **CEO's Ends Policy Interpretation**

*Reasonable Interpretation: Policy criteria, observable conditions, alignment to Ends, targets and rationale*

Achievement in Middle School Science is interpreted as the demonstrated skills of grade 8 students. The middle school science program is founded on the Washington State K-12 Learning Standards/Next Generation Science Standards. These standards define what students should understand and be able to do in their study of science for kindergarten-grade 12. The district has adopted curriculum to support core and intervention instruction. Achievement in middle school science prepares students for courses and content in high school.

**Therefore, I interpret that student demonstration of achievement on the Washington Comprehensive Assessment of Science in grade 8 provides evidence of preparing students for future academic in science.**

As such, observable conditions and targets for End Results (ER) 2 Middle School Science includes:

- 95% of 8th graders meeting or exceeding state standards in science

**Our commitment and aspirational goal is for 95% of students to demonstrate science skills. I interpret that there is sufficient evidence toward accomplishment of the End for each student group when:**

- **85% or more students demonstrate above or at standard performance on the Washington Comprehensive Assessment of Science and a positive trend or no more than a 2% decline of the trend.**<sup>1</sup>

**Note: Evidence of sufficient evidence toward achievement of the End by student group is displayed in the color-coded Data Overview Sheet (see page 3). Green and light green shaded cells denote areas of sufficient evidence toward achievement of the End; Yellow and red-shaded cells denote areas of partial achievement.**

### **Rationale**

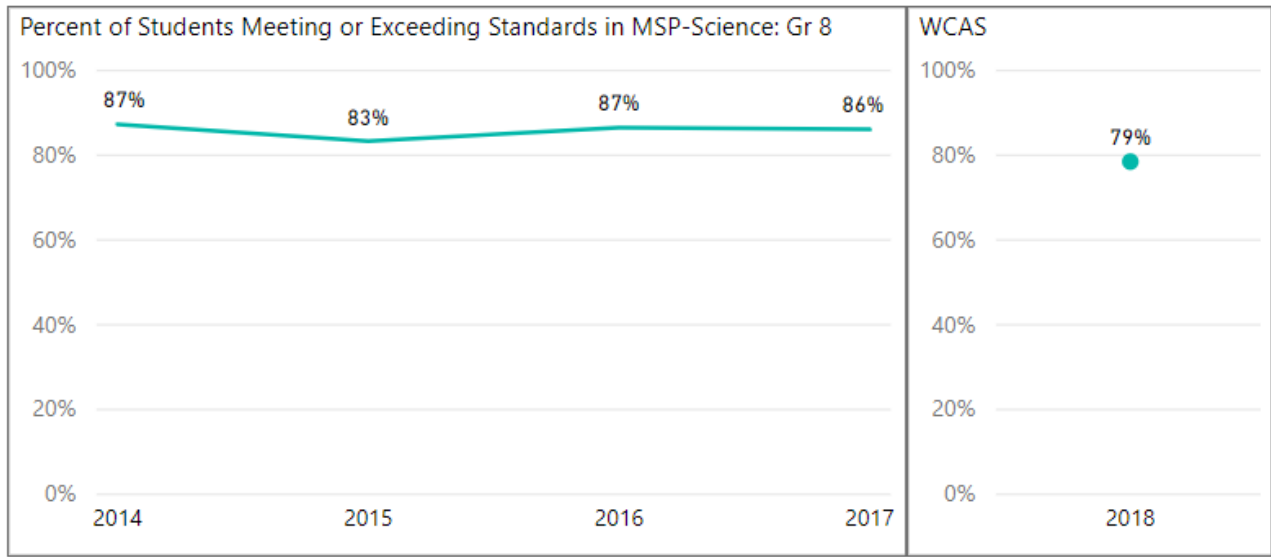
Given the high aspirational goal of 95% of students to demonstrate achievement in Middle School Science, reasonable progress toward accomplishment of this End is a multi-year effort. Therefore, establishing a minimum threshold of 85% by student group, together with criteria of comparable performance and year-to-year improvement provides sufficient evidence of reasonable progress toward accomplishment of the End. Any student group not meeting established criteria provides evidence that full achievement of the End has not been accomplished.

**Monitoring Results: All Student Group**

Overall, students in grade 8 demonstrated relatively high achievement in science with 78.4% of students meeting standard. The “all students” group ranks 3<sup>rd</sup> among Washington State districts with 6500 students or more (the largest 49 districts).

1. Because this assessment measured student performance in relation to a different set of standards than prior years, it serves as a baseline and there is not yet a performance trend.

**Data Displays: All Students Group**



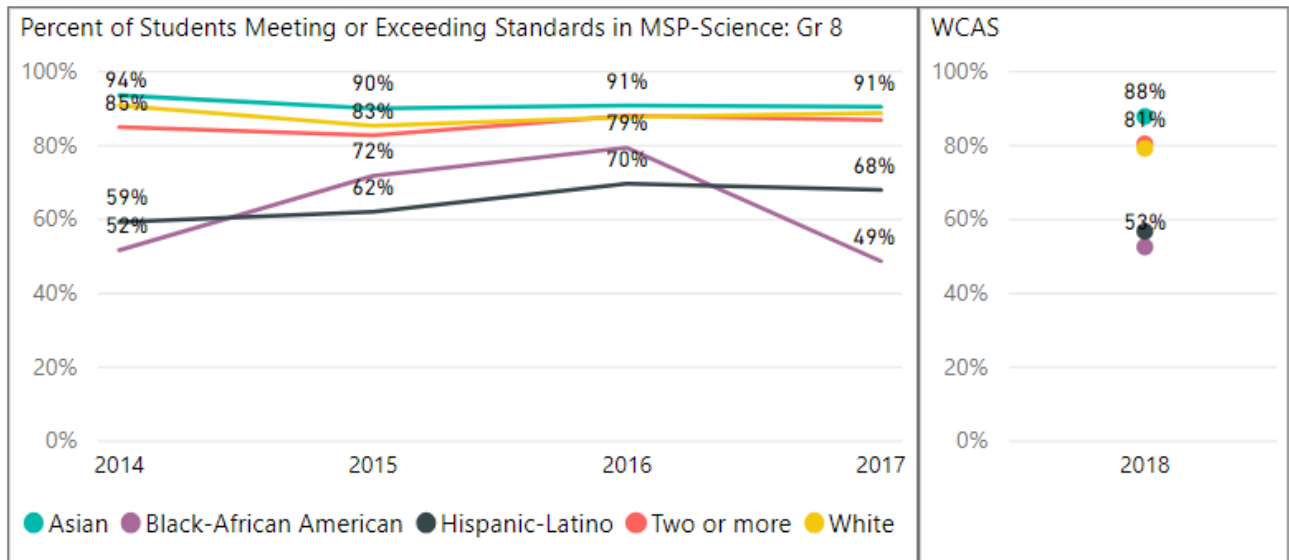
% of 8 <sup>th</sup> Graders Meeting or Exceeding State Standards in Science			
School Year	Assessment	% Met	Total N
2013-14	MSP	86.9	1885
2014-15	MSP	83.3	2016
2015-16	MSP	86.4	1970
2016-17	MSP	86.0	2099
2017-18	WCAS	78.4	2184

### **Monitoring Results: Select Student Groups and Programs**

Monitoring results show relatively high performance for students in the Asian, Two or More Races, and White groups. Achievement gaps are present for Hispanic/Latino and Black/African American students in middle school science. Gaps are also present for other student groups including students receiving special education or ELL services, and for students from low income households.

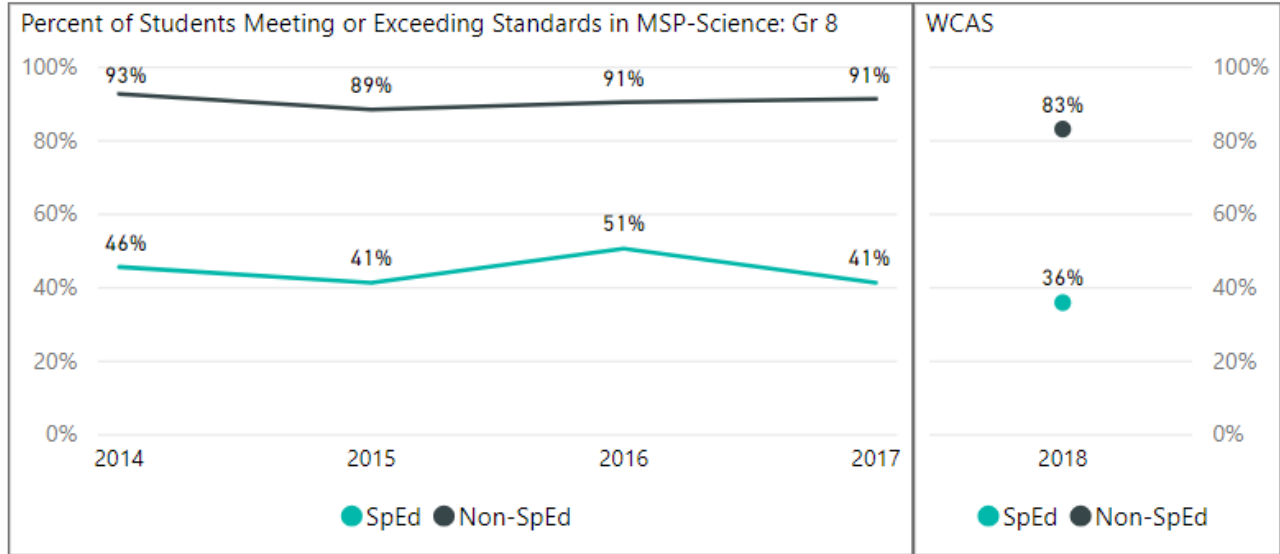
- Asian students perform significantly higher than all other race/ethnicity groups in middle school science with 87.9% of students meeting standard
- Hispanic/Latino grade 8 students rank 7<sup>th</sup> among the 49 largest districts in the state in science
- Female and male grade 8 students rank 3 and 4 respectively among the 49 largest districts in the state in science
- Students receiving special education services have a 47 percentage-point gap when compared to students who are not receiving special education services
- Although students receiving special education services are not performing at similar levels as non-disabled peers, grade 8 LWSD students receiving special education services rank 3<sup>rd</sup> among the 49 largest districts in the state
- There is a small gap between exited ELL students and never ELL students
- Although students receiving ELL services are not performing at similar levels as exited or never ELL peers, grade 8 LWSD students receiving ELL services rank 5<sup>th</sup> among the 49 largest districts in the state
- Students from low income households are underperforming compared to LWSD peers with grade 8 students ranking 21<sup>st</sup> among the largest 49 districts in the state

**Data Displays: Race/Ethnicity Student Groups:**



Percent of Students Meeting or Exceeding State Standards in Science – Grade 8: Race/Ethnicity											
School Year	Assessment	Asian		Black/African American		Hispanic/ Latino		Two or More Races		White	
		% Met	Total N	% Met	Total N	% Met	Total N	% Met	Total N	% Met	Total N
2013-14	MSP	93.6	298	51.7	29	59.3	182	85.0	114	90.9	1245
2014-15	MSP	90.1	376	71.8	32	62.1	219	82.8	152	85.4	1226
2015-16	MSP	90.9	410	79.4	34	69.7	185	88.1	152	87.7	1179
2016-17	MSP	90.5	474	48.7	41	68.0	219	86.9	138	88.8	1209
2017-18	WCAS	87.9	521	52.6	38	56.8	241	80.5	159	79.3	1216

**Data Displays: Students Receiving Special Education Services:**



**Percent of Students Meeting or Exceeding State Standards in Science – Grade 8: Special Education**

School Year	Assessment	Non-SpEd		SpEd	
		% Met	Total N	% Met	Total N
2013-14	MSP	82.8	1647	45.7	238
2014-15	MSP	88.5	1794	41.4	222
2015-16	MSP	90.5	1769	50.7	201
2016-17	MSP	91.4	1870	41.4	229
2017-18	WCAS	83.2	1962	36.0	222

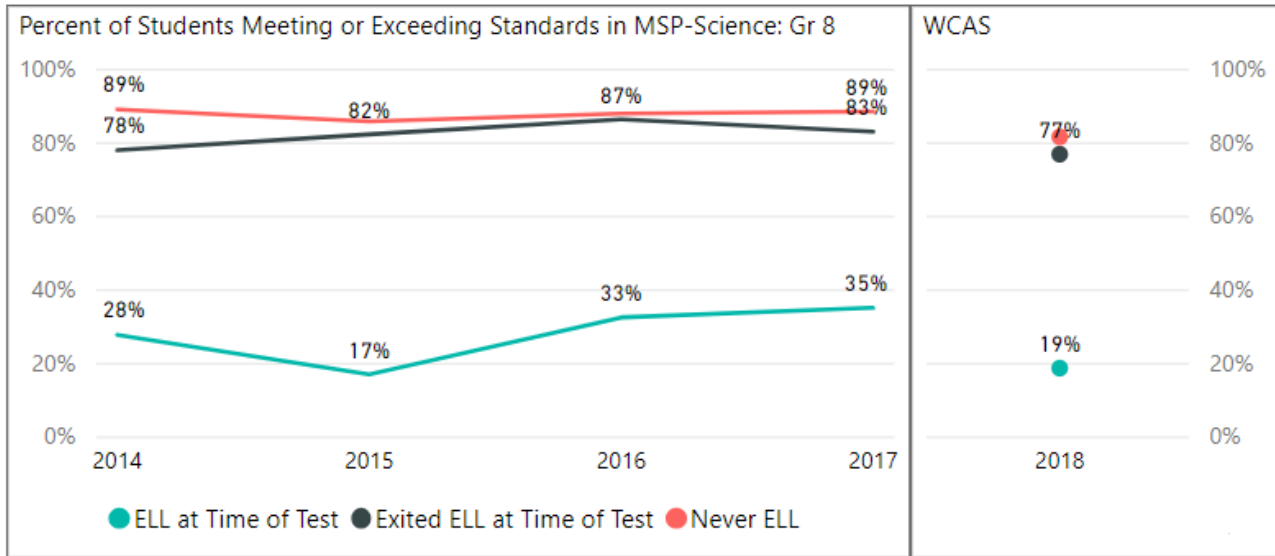
**Percent of Students Meeting or Exceeding State Standards in Science - Grade 8 Special Education by Disability Category\* - 2018**

Disability Category	% Met	Total N
Autism	46%	28
Health Impairment	42%	78
Specific Learning Disability	14%	70
Communication Disorder	n/a	N<10
Deafness	n/a	N<10
Developmental Delays	n/a	N<10
Emotional/Behavioral	n/a	N<10
Hearing Impairment	n/a	N<10
Intellectual Disability	n/a	N<10
Multiple Disabilities	n/a	N<10
Orthopedic Impairment	n/a	N<10
Traumatic Brain Injury	n/a	N<10
Visual Impairment	n/a	N<10

\*Categories defined in Appendix

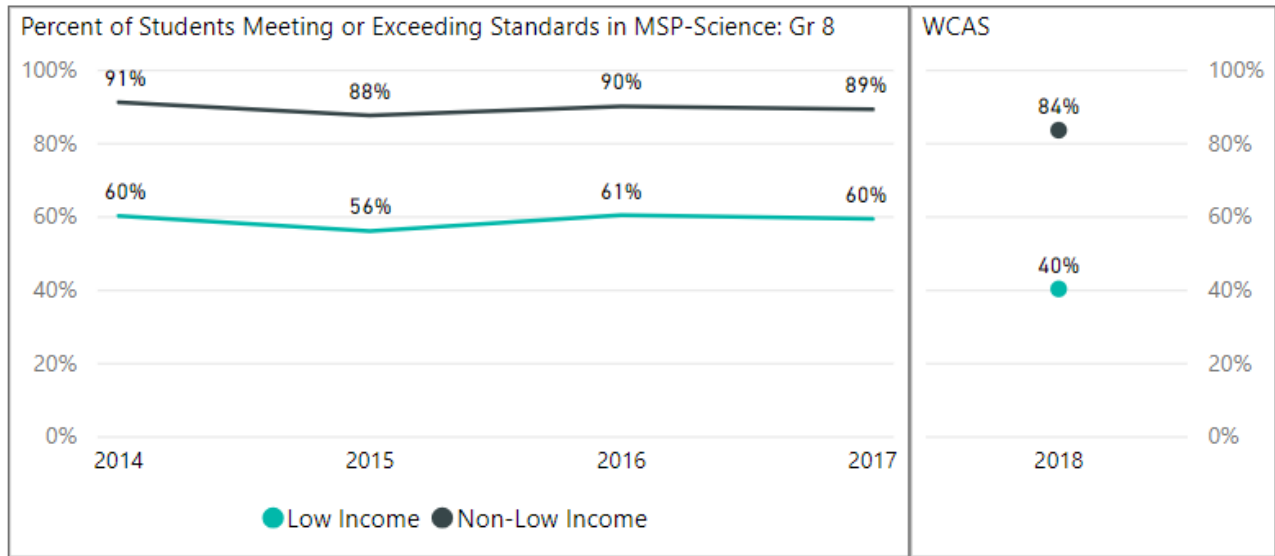


**Data Displays: Students Receiving ELL Services:**



Percent of Students Meeting or Exceeding State Standards in Science – Grade 8: ELL							
School Year	Assessment	Never ELL		Exited ELL		ELL at Time of Test	
		% Met	Total N	% Met	Total N	% Met	Total N
2013-14	MSP	89.2	1691	78.1	151	27.9	43
2014-15	MSP	85.9	1696	82.4	256	17.1	64
2015-16	MSP	88.1	1620	86.5	298	32.6	52
2016-17	MSP	88.6	1693	83.1	338	35.2	68
2017-18	WCAS	81.7	1789	77.0	305	18.8	90

**Data Displays: Students Living in Low Income Households**



**Percent of Students Meeting or Exceeding State Standards in Science – Grade 8:  
Low Income**

School Year	Assessment	Non-Low Income		Low Income	
		% Met	Total N	% Met	Total N
2013-14	MSP	91.3	1615	60.3	270
2014-15	MSP	87.7	1735	56.2	281
2015-16	MSP	90.2	1719	60.5	251
2016-17	MSP	89.4	1859	59.5	240
2017-18	WCAS	83.7	1917	40.4	267

### Part 3: Achievement in High School Science

#### **CEO's Ends Policy Interpretation**

*Reasonable Interpretation: Policy criteria, observable conditions, alignment to Ends, targets and rationale*

Achievement in High School Science is interpreted as the demonstrated skills of high school students. The high school science program is founded on the Washington State K-12 Learning Standards/Next Generation Science Standards. These standards define what students should understand and be able to do in their study of science for kindergarten-grade 12. The district has adopted curriculum to support core and intervention instruction. Achievement in high school science prepares students post-secondary pathways. Three science credits are required for high school graduation, at least two of which must be in laboratory science. A student may choose the content of the third credit of science, based on the student's interests and high school and beyond plan. Students earning credit in grade 9 science are on track to graduate.

**Therefore, I interpret that earning full science credit in grade 9 and demonstration of achievement on Washington Comprehensive Assessment of Science in grade 11 provide evidence of preparing students for future academic in science.**

As such, observable conditions and targets for End Results (ER) 2 High School Science include:

- 95% of 9<sup>th</sup> graders earning full credit in science
- 95% of 11<sup>th</sup> graders meeting or exceeding state standards in science

**Our commitment and aspirational goal is for 95% of students to demonstrate High School Science skills. I interpret that there is sufficient evidence toward accomplishment of the End for each student group when:**

- **85% or more of Grade 9 students earn science credit and if a three-year positive trend or no more than a 2% decline three-year trend.**
- **85% or more students demonstrate above or at standard performance on the grade 11 Washington Comprehensive Assessment of Science and if a three-year positive trend or no more than a 2% decline three-year trend.**<sup>1</sup>

**Note: Evidence of sufficient evidence toward achievement of the End by student group is displayed in the color-coded Data Overview Sheet (see page 3). Green and light green shaded cells denote areas of sufficient evidence toward achievement of the End; yellow and red-shaded cells denote areas of partial achievement.**

#### **Rationale**

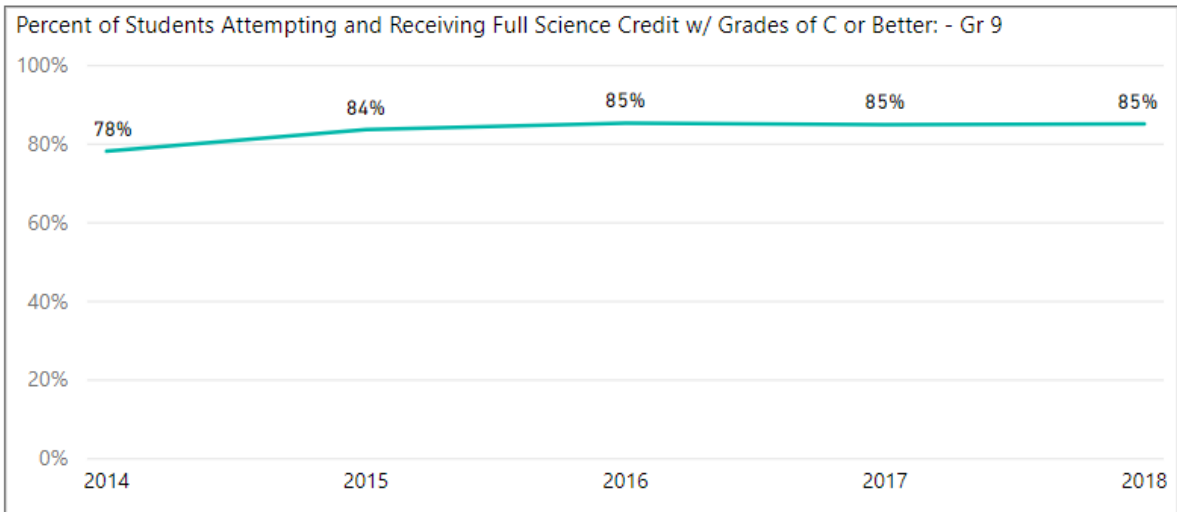
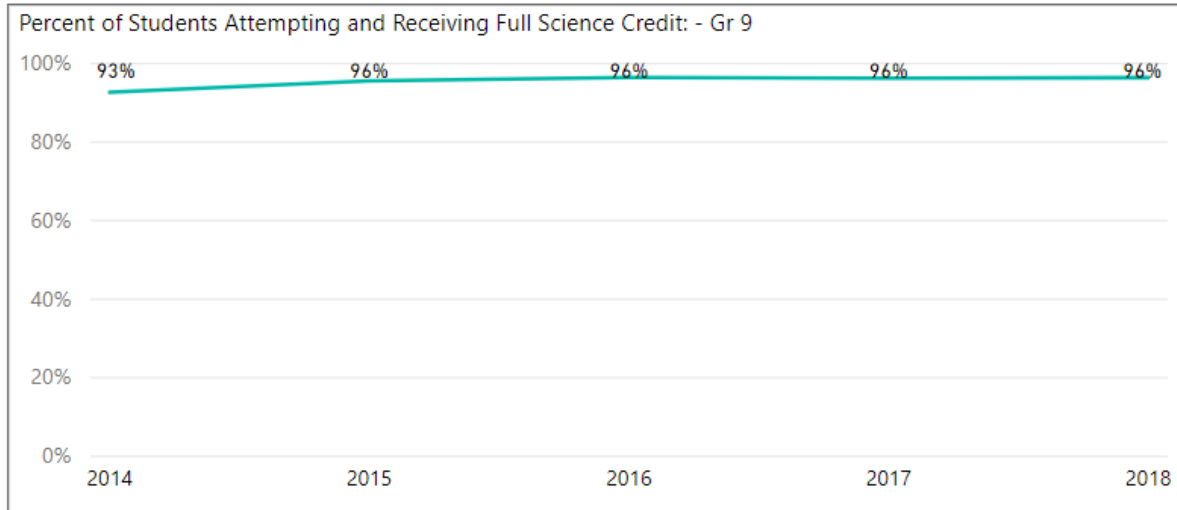
Given the high aspirational goal of 95% of students to demonstrate achievement in High School Science, reasonable progress toward accomplishment of this End is a multi-year effort. Therefore, establishing a minimum threshold of 85% by student group, together with criteria of comparable performance and year-to-year improvement provides sufficient evidence of reasonable progress toward accomplishment of the End. Any student group not meeting established criteria provides evidence that full achievement of the End has not been accomplished.

1. Because this assessment measured student performance in relation to a different set of standards than prior years, it serves as a baseline and there is not yet a performance trend. Low WCAS scores reflect the small number of students (39.4%) who took the assessment in the spring of 2018. The percent of students taking the assessment should increase in the spring of 2020 for the class of 2021 when it will be a graduation requirement.

**Monitoring Results: All Student Groups**

A high percentage of grade 9 students continue to attain full science credit with 95% of students receiving science credit. The percentage drops when considering only students who earned a C or better. The percent of grade 11 students meeting standards on the WCAS reflects the low number of students who took the assessment (39.4% of total students).

**Data Displays: All Students Group**



% of 9 <sup>th</sup> Graders Earning Full credit in Science		
School Year	% Met	Total N
2013-14	92.7	1721
2014-15	95.6	1761
2015-16	96.5	1907
2016-17	96.2	1919
2017-18	96.4	1976

% of 11 <sup>th</sup> Graders Meeting or Exceeding State Standards in Science		
School Year	% Met	Total N
2017-18	31.3	1937
	79.5*	763*

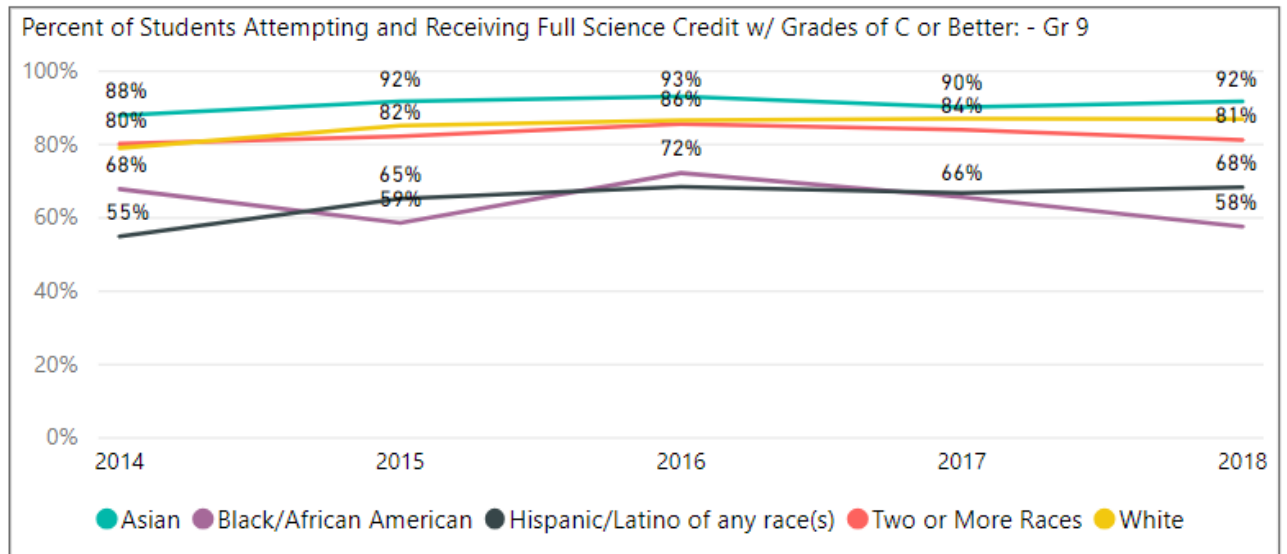
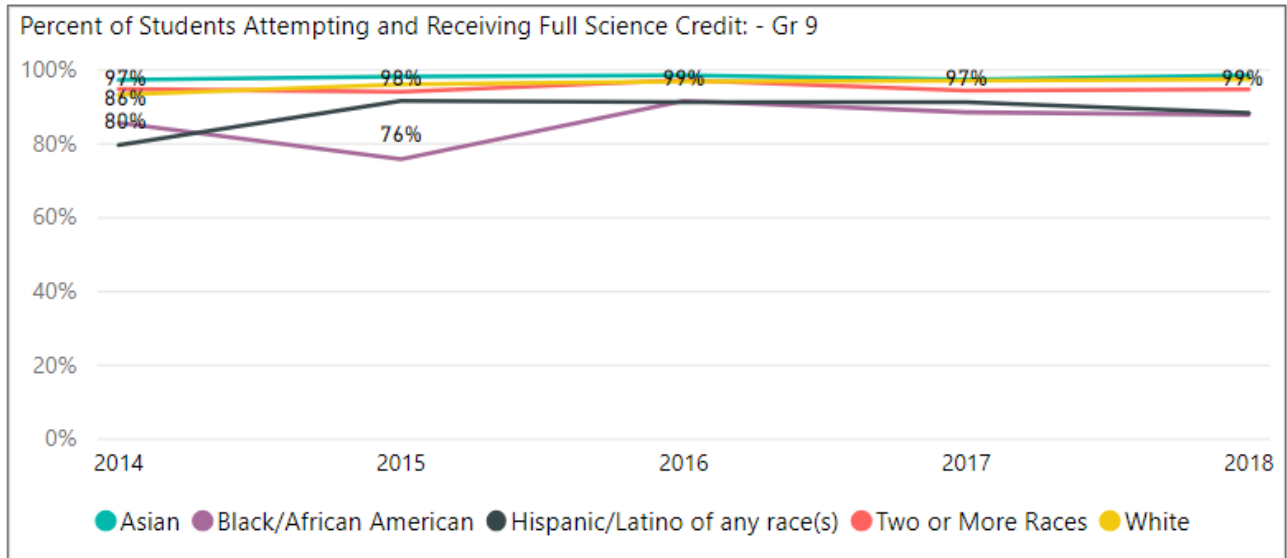
\*Those taking the test

**Monitoring Results: Select Student Groups**

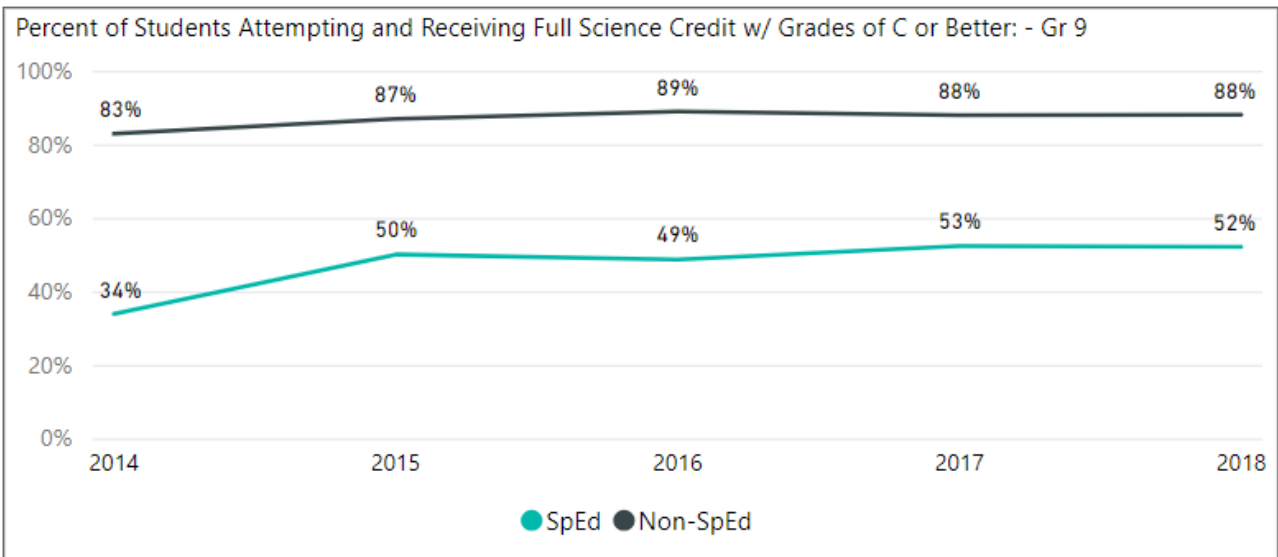
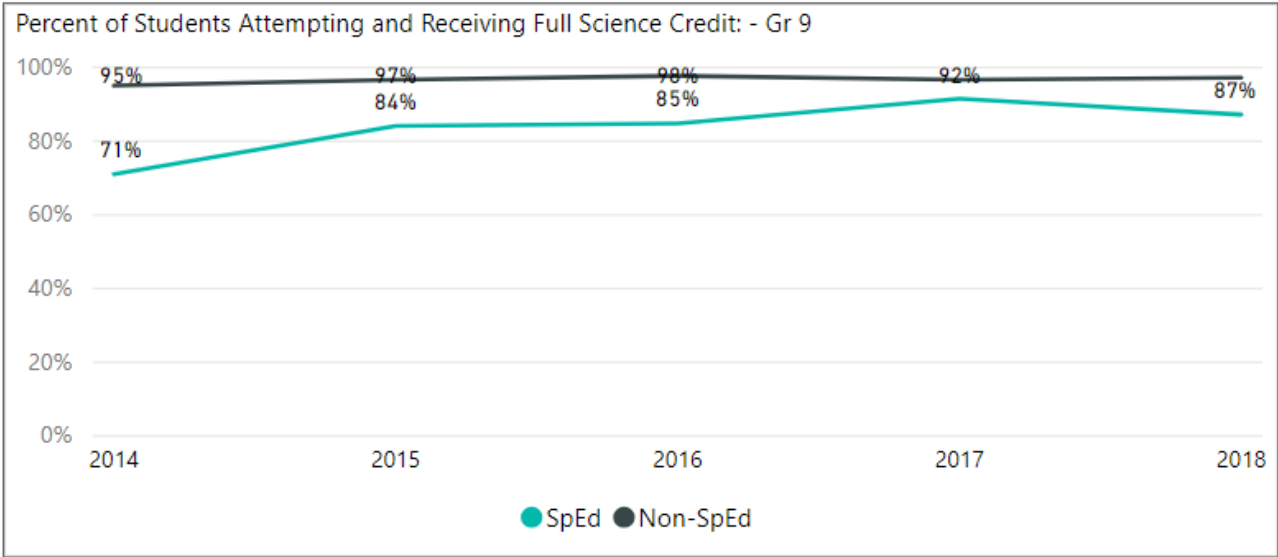
The percent of students earning full grade 9 science has been stable for 5 years for the All Student, Asian, White and low income and ELL groups, there has been a small decline for students receiving special education services and for students in the Latino and Black/African American groups.

- The percent of students earning full science credit remains high for all student groups. However, significant gaps emerge for subgroups when students earning a C or higher are considered.
- Monitoring results for the Washington Comprehensive Assessment of Science should be viewed cautiously given that this is the first year of the test and the low participation rates. For this reason, summary statements about the data are not made in this report.

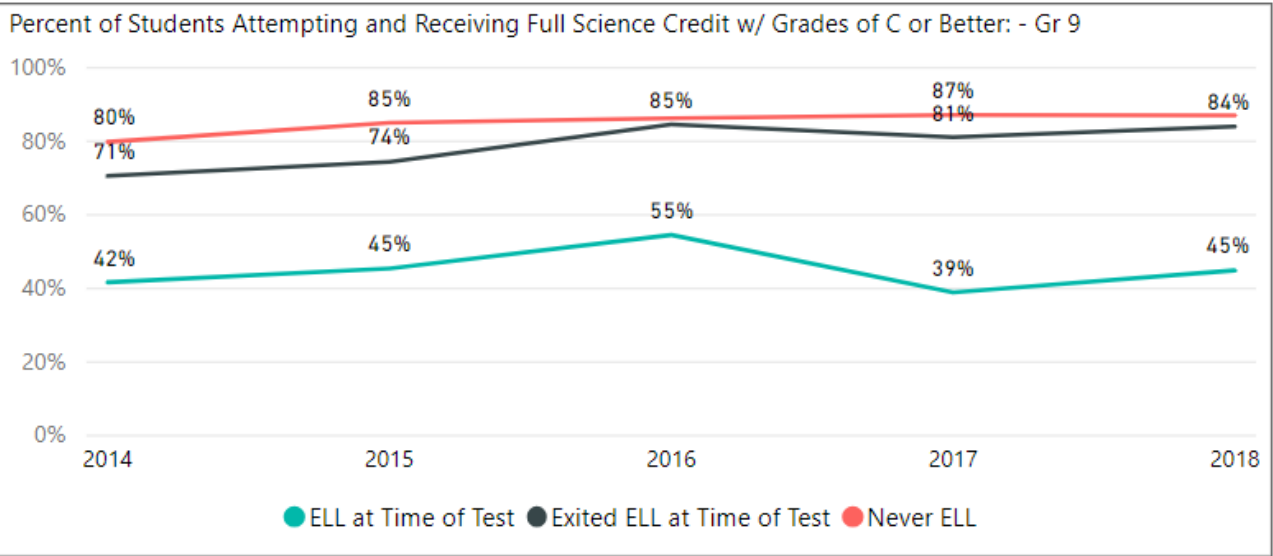
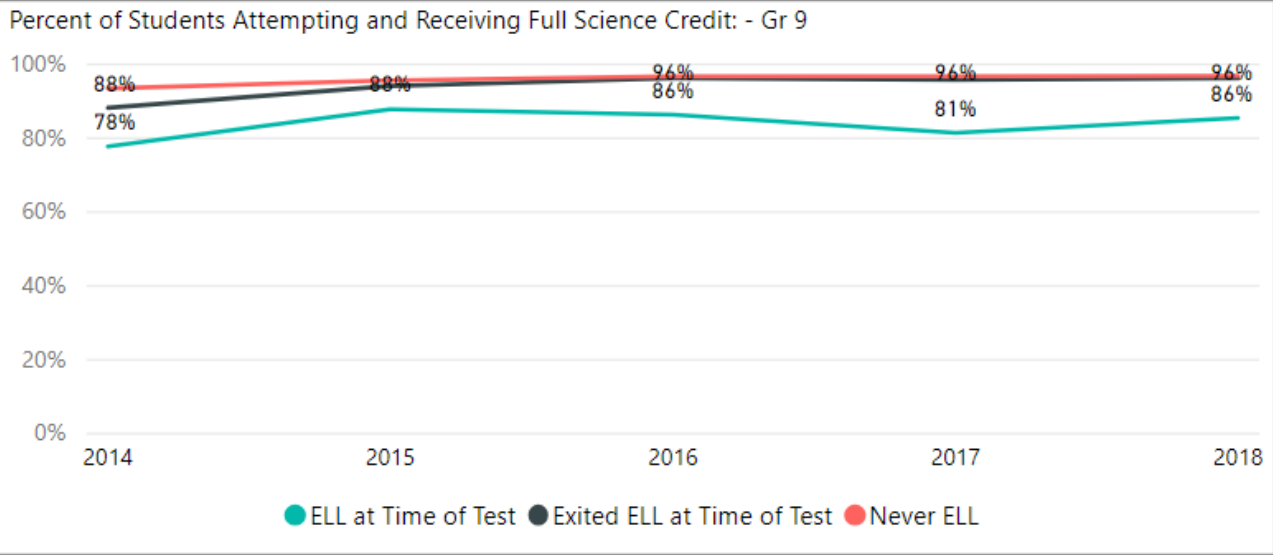
**Data Displays: Grade 9 Receiving Full Science Credit for Select Student Groups**



% of 9 <sup>th</sup> Graders Earning Full credit in Science: Race/Ethnicity										
School Year	Asian		Black/African American		Hispanic/ Latino		Two or More Races		White	
	% Met	Total N	% Met	Total N	% Met	Total N	% Met	Total N	% Met	Total N
2013-14	97.3	298	85.7	28	79.6	162	94.8	116	93.3	1117
2014-15	98.2	279	75.9	29	91.6	167	94.1	118	96.1	1168
2015-16	98.6	347	91.7	36	91.3	219	97.3	146	96.9	1159
2016-17	97.5	396	88.6	35	91.3	196	94.5	163	97.2	1129
2017-18	98.5	473	87.9	33	88.4	215	94.7	133	97.5	1122

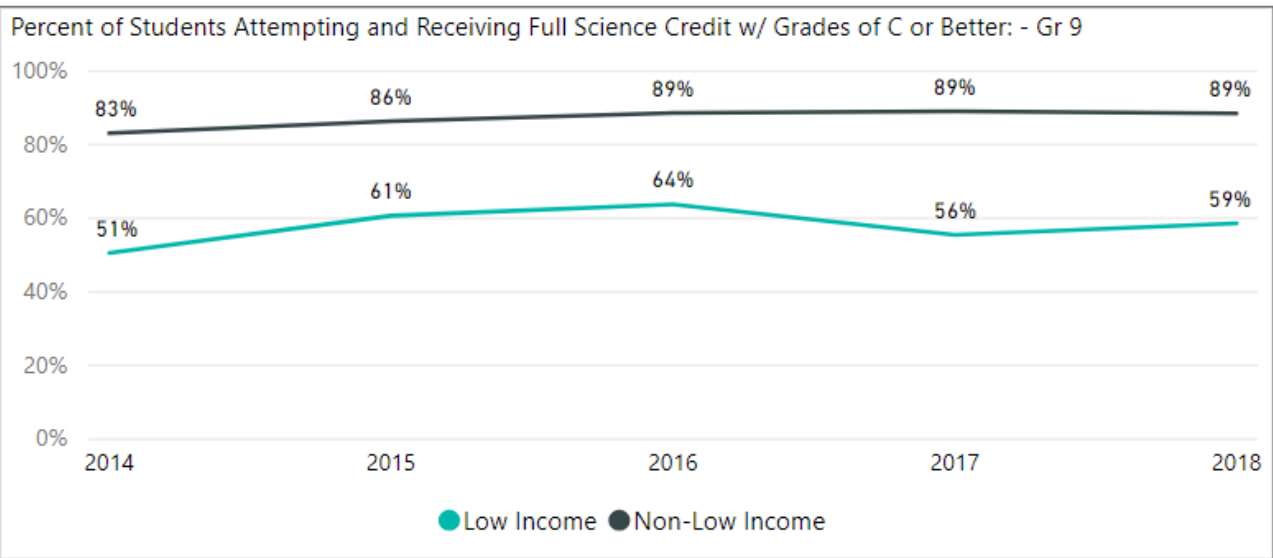
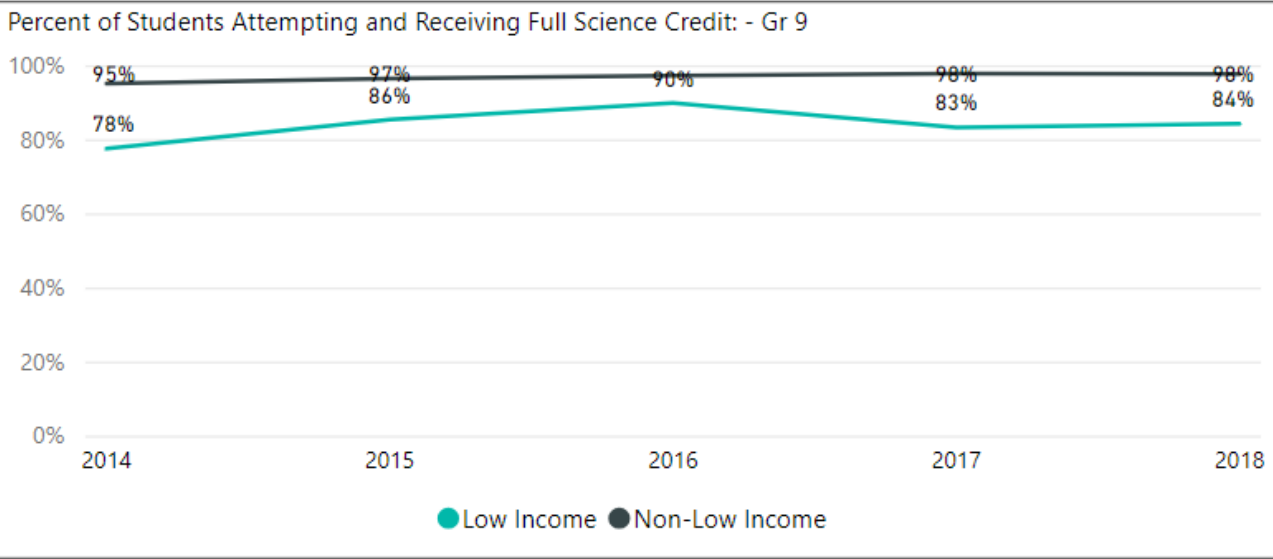


% of 9 <sup>th</sup> Graders Earning Full credit in Science: Special Education				
School Year	Non-SpEd		SpEd	
	% Met	Total N	% Met	Total N
2013-14	95.1	1549	71.1	173
2014-15	96.7	1599	84.2	177
2015-16	97.7	1730	84.8	184
2016-17	96.7	1747	91.5	177
2017-18	97.2	1813	87.2	172



% of 9 <sup>th</sup> Graders Earning Full credit in Science: ELL						
School Year	Never ELL		Exited ELL		Current ELL	
	% Met	Total N	% Met	Total N	% Met	Total N
2013-14	93.5	1533	88.2	153	77.8	36
2014-15	95.7	1606	94.2	137	87.9	33
2015-16	96.8	1604	96.2	266	86.4	44
2016-17	96.8	1584	95.8	286	81.5	54
2017-18	96.9	1596	96.3	320	85.5	69





% of 9 <sup>th</sup> Graders Earning Full credit in Science: Low Income				
School Year	Non-Low Income		Low Income	
	% Met	Total N	% Met	Total N
2013-14	95.3	1461	77.8	261
2014-15	96.7	1575	85.6	201
2015-16	97.5	1663	90.0	251
2016-17	98.0	1688	83.5	236
2017-18	97.9	1760	84.4	225

**Data Displays: Grade 11 WCAS for Select Student Groups**

% of 11 <sup>th</sup> Graders Meeting or Exceeding State Standards in Science: Race/Ethnicity										
School Year	Asian		Black/African American		Hispanic/ Latino		Two or More Races		White	
	% Met	Total N	% Met	Total N	% Met	Total N	% Met	Total N	% Met	Total N
2017-18	35.8	368	33.3	45	20.9	215	29.2	140	32.1	1160
	85.7*	154*	75.0*	20*	56.9*	79*	71.9*	57*	82.7*	451*

*\*Those taking test*

% of 11 <sup>th</sup> Graders Meeting or Exceeding State Standards in Science: Special Education				
School Year	Non-SpEd		SpEd	
	% Met	Total N	% Met	Total N
2017-18	34.3	1701	9.3	236
	81.9*	714*	44.8*	49*

*\*Those taking test*

% of 11 <sup>th</sup> Graders Meeting or Exceeding State Standards in Science: Low Income				
School Year	Non-Low Income		Low Income	
	% Met	Total N	% Met	Total N
2017-18	32.8	1694	20.9	243
	82.9*	670*	54.8*	93*

*\*Those taking test*

% of 11 <sup>th</sup> Graders Meeting or Exceeding State Standards in Science: ELL						
School Year	Never ELL		Exited ELL		ELL at Time of Test	
	% Met	Total N	% Met	Total N	% Met	Total N
2017-18	31.4	1643	33.3	249	15.5	45
	80.7*	640*	77.5*	107*	43.7*	16*

*\*Those taking test*

## **Conclusion**

Reasonable interpretation includes observable conditions, targets, and rationale that aligns with Ends Policy and represents appropriate targets for outcomes. Evidence exists to demonstrate that Part 1, 2 and 3 of the Ends Policy has been partially achieved.

## **Strategies to Achieve Ends**

Many efforts are being continued or expanded, initiated, and/or evaluated to close achievement gaps.

### Strategies being continued or expanded

*Strategies that have shown evidence of success in closing achievement gaps and will be continued or expanded.*

- **Building Continuous Improvement Process (CIP) Plans**  
Each school sets school-level goals by groups. School-level goals and strategies to close gaps are incorporated into each school's CIP, and monitored by Directors, School Support and the Intervention and Special Services teams.
- **Access to core curriculum aligned with standards.** Our goal for all students is to have them access and engage with core curriculum. Secondary science curriculum adopted in 2015 and 2016 is aligned with Next Generation Science Standards. The curriculum materials include strategies for differentiation. Secondary teachers are receiving training to deeply understand science ideas, participate in the activities of the discipline, and solve authentic problems that are all reflected in the new standards.
- **Provide training for teachers in SIOP.** To close the persistent gaps that remain for EL students in grades 3-11, we are implementing Sheltered Instruction Observation Protocol (SIOP) training for all EL and general education teachers in elementary and secondary schools. We are also training EL teachers in elementary and secondary to use strategies to support new and long-term EL students with limited proficiency in English.
- **Preschool for students with risk factors.** Our Head Start Program serves students from low-income households to prepare them for entry into our elementary schools. Preschool curriculum includes science.
- **Supports for homeless students.** A district McKinney-Vento Liaison focusses on identification and coordination of academic and social supports for homeless students and families.

### Strategies being initiated

*Strategies that show promise of success in closing achievement gaps and will be initiated.*

- **New Preschool curriculum aligned with elementary curriculum.** Our youngest learners are introduced to science within our preschool programs. This year, we are implementing a new comprehensive curriculum in all preschool classes. Teachers have engaged in multiple days of training provided by the University of Washington.
- **Elementary teachers are being trained in effective science instruction aligned with the Next Generation Science Standards** through the elementary science curriculum adoption process.
- **Collaboration and professional learning for all secondary science teachers as part of the August LEAP time.** These learning sessions were aligned to our District Mission and Vision and utilized input by teachers to determine specific needs. These sessions were led by teacher leaders, with support from Teaching and Learning Specialists.

- **Implement a District Equity Team.** As part of the Lake Washington’s ongoing strategic improvement efforts, the district formed a District Equity Team in spring 2017. The district selected 39 members to represent staff and parents/community on the District Equity Team. The team represents parents, families, and staff with from diverse racial and cultural backgrounds. The District Equity Team provides advice on district strategic efforts. The Team is now providing input on the district’s development of an equity policy and plan. All district parents will have the opportunity to provide feedback and comment on the policies and plan.
- **Equity efforts span all departments.** We are beginning district-wide equity efforts focused on culturally responsive policy, curriculum, teaching and learning, discipline, attendance, and human resources improvements. This also included equity training for our adoption teams and Instructional Materials Committee.
- **Professional Learning focused on equity.** Efforts are underway to focus professional learning on cultural competency.
- **Staff hired to focus on equity.** The district hired a Director of Opportunity, Equity, and Inclusion in July 2018. This Director has been working with district administrators and staff to support our equity efforts.
- **District training focused on a commitment to equity for all students.** All certificated staff participated in the District Equity Launch in August 2018
- **Building level equity work focused on the needs of the schools.** All schools will develop a building equity team in 2018-19.

Strategies being evaluated

*Strategies under review to evaluate success in closing achievement gaps*

- **Elementary science curriculum is being evaluated this year as part of our adoption cycle.** New curriculum aligned with Next Generation Science Standards will include resources to support all students, including students with disabilities and ELL students. A recommendation for new curriculum will be presented to the Board in the spring and, if approved, would be implemented started in the fall of 2019.

## **Appendix: Disability Categories**

**Developmentally Delayed** - Children birth through age eight who are delayed in cognitive development, communication development, physical development, social/emotional development, adaptive skills or qualify for one of the other eligibility categories specified below and need specially designed instruction and related services.

**Emotionally/Behaviorally Disabled** – Students who exhibit one or more of the following characteristics over a long period of time and to a marked degree: inability to build or maintain satisfactory interpersonal relationships with peers and teachers; inappropriate types of behavior or feelings under normal circumstances; general pervasive mood of unhappiness or depression; physical symptoms or fears associated with personal or school problems.

**Communication Disorder**– Students who have a documented communication disorder such as stuttering, voice disorder, language impairment, and/or impaired articulation, which adversely affects a student’s educational performance and requires specially designed instruction.

**Orthopedically Impaired** – Students who lack normal function of muscles, joints, or bones due to congenital anomaly, disease, or permanent injury and such conditions adversely affect educational performance and require specially designed instruction.

**Health Impaired** – Students who have limited strength, vitality or alertness, including a heightened alertness to environmental stimuli, that result in limited alertness with respect to the educational environment due to chronic or acute health problems, such as a heart condition, rheumatic fever, nephritis, asthma, attention deficit disorder or attention deficit hyperactivity disorder, sickle cell anemia, hemophilia, lead poisoning, leukemia, or diabetes, that adversely affect their educational performance and require specially designed instruction.

**Specific Learning Disability** – Students who have a disorder in one or more of the basic psychological processes involved in understanding or using spoken or written language. This may include problems in listening, thinking, speaking, or communicating clearly; reading with comprehension; writing legibly and with meaning, spelling, and accurately performing mathematical calculations, including conditions such as perceptual disabilities, brain injury, minimal brain dysfunction, dyslexia, and developmental aphasia. A learning disability is indicated by a severe discrepancy between the student’s intellectual ability and academic achievement, lack of response to interventions or a pattern of strengths and weaknesses.

**Intellectual Disability** – Students demonstrate significantly sub-average general intellectual functioning, existing concurrently with deficits in adaptive behavior and manifested during the developmental period, which adversely affects their educational performance and requires specially designed instruction.

**Multiple Disabilities** – Students who have two or more disabling conditions, which adversely affects the educational performance and requires specially designed instruction, the combination of which causes such severe educational needs that they cannot be accommodated in special education programs solely for one of the impairments. This term does not include deaf/blindness.

**Deafness** – Students who have hearing impairments which is so severe that the student is impaired in processing linguistic information through hearing, with or without amplification, that adversely affects their educational performance and requires specially designed instruction.

**Hearing Impairment** – Students who have a permanent or fluctuating hearing impairment, but is not included under the definition of deafness, which adversely affects their educational performance and requires specially designed instruction. The term includes both partially sighted and blind students.

**Visually Impaired** – Students who have a visual impairment, which even with correction adversely affects the student’s educational performance and requires specially designed instruction. The term includes both partially sighted and blind students.

**Deaf-Blindness** – Students whose Hearing and vision impairments, in combination, cause such severe communication and other developmental and educational problems that they cannot be accommodated in special education programs solely for the students with deafness or blindness. The impairments adversely affect the student’s educational performance and require specially designed instruction.

**Autism** – Students who have a developmental disability significantly affecting verbal and nonverbal communication and social interaction, generally evident before age three that adversely affect a student’s educational performance and requires specially designed instruction. Students in this category have a range of intellectual abilities. Other characteristics often associated with autism are engagement in repetitive activities and stereotyped movements, resistance to environmental change or change in daily routines, and unusual responses to sensory experiences. The category of autism includes students with pervasive developmental disorders if the students meet eligibility criteria.

**Traumatic Brain Injury** – Students who have acquired injury to the brain caused by an external physical force resulting in total or partial functional disability and/or psychosocial impairment that adversely affects educational performance requires specially designed instruction.