

Alaska School Performance Index (ASPI)

Worksheet Explanation

This document describes the Alaska School Performance Index (ASPI) worksheet used to provide data for each public school in the State of Alaska. This document is designed to help describe the components on the ASPI worksheet that can be found online at the Department of Education & Early Development website.

ASPI Rating: Located in the upper left side of the worksheet. This is a star representation of the overall ASPI rating for the school. The ratings go from 1 to 5 with 5 being the highest rating.

Name of District/School: The School District name is located on the left side above the chart and the School name is located in the center above the chart.

School Grade Span: Located in the upper right side of the worksheet, just above the chart. This indicates the official grade span served by the school regardless as to whether the school has students in each grade level this year.

Note: The worksheet chart is broken into three sections: Participation Rate, K-8 Performance and 9-12 Performance. Each section is bordered by a thick, black line to help identify one section from another. The following fields are all located in the chart sections.

Participation Rate: The Participation Rate is calculated at the school level only and it drives the calculation used for the Achievement score. If the school meets or exceeds 95% participation in the standardized tests, only the students who assessed are included in the calculation for the Achievement score. If the school does not meet 95% participation, any students who were not assessed but were enrolled will be counted as not proficient in the Achievement score calculation. If a school has 40 or fewer students enrolled in the assessed grades (3-10), the requirements for participation are satisfied if two or fewer students do not participate in the state assessments.

Number Enrolled: Reports the number of students who were enrolled in the tested grades (3-10) on the first day of testing as reported in the Participation Rate file submitted to the department by each district.

Number Tested: Reports the number of students who tested in at least one content area (Reading, Writing, or Math).

Participation Rate: Calculated by dividing the number of students tested by the number of students enrolled.

Met Participation Rate: Indicates if the school met 95% participation based on the number of students enrolled and tested. This also takes into consideration the accommodation for schools with 40 or fewer students enrolled in the tested grades.

Factors for K–8 Performance:

Academic Achievement:

Count Proficient: Reports the number of students who were proficient in this content area (Reading, Writing, or Math).

Percent Proficient: Reports percent of proficient students calculated by dividing the number of proficient students in this content area by the number of students who tested in this content area (Reading, Writing, or Math).

Achievement Score: If the school has “Yes” in the “Met Participation Rate” cell, this field is calculated by dividing the count of students who were proficient in reading, plus those proficient in writing, plus those proficient in math divided by the number of student

who tested in reading, plus those who tested in writing, plus those who tested in math. If the school has “No” in the “Met Participation Rate” cell, the denominator is increased by the number of students who were enrolled on the first day of testing, but did not test in reading, plus the number who did not test in writing, plus the number who did not test in math.

School Progress: This element looks at student test scores over two consecutive years to see if there is improvement (growth) in their scores. It is calculated for all students in this grade span and is also calculated separately for the following four subgroups: Alaska Native, Economically Disadvantaged, Students with Disabilities, and LEP (Limited English Proficient) in this grade span. A subgroup must have at least five eligible students assessed in one or more subjects in order to be considered. See *Appendix A* for a more detailed description of the school progress indicator.

Attendance Rate: Calculated by taking the combined Aggregate Days of Attendance for all students in grades K-8 divided by the combined Aggregate Days of membership for all students in grades K-8 as reported in the Summer OASIS file submitted to the department by each district.

Points: Represents the raw score out of 100 based on the school’s performance on the element.

Weighting: Reflects the degree of weight assigned to the element (*e.g.*, the multiplier for Academic Achievement is 0.35; therefore, in most schools that serve grades K-8, Academic Achievement will be worth 35% of the total score).

ASPI Points: Reports the final ASPI points earned in this area. This is calculated by multiplying the Points by the Weighting.

Total K-8 Points: Calculated by taking the sum of ASPI points, and dividing by the sum of the multipliers times 100. *Formula: sum of ASPI Points / (sum of multipliers * 100)*

Factors for 9-12 Performance:

Academic Achievement:

Count Proficient: Reports the number of students who were proficient in this content area (Reading, Writing or Math).

Percent Proficient: Reports percent of proficient students calculated by dividing the number of proficient students in this content area by the number of students who tested in this content area (Reading, Writing, or Math).

Achievement Score: If the school has “Yes” in the “Met Participation Rate” cell, this field is calculated by dividing the count of students who were proficient in reading, plus those proficient in writing, plus those proficient in math divided by the number of student who tested in reading, plus those who tested in writing, plus those who tested in math. If the school has “No” in the “Met Participation Rate” cell, the denominator is increased by the number of students who were enrolled on the first day of testing, but did not test in reading, plus the number who did not test in writing, plus the number who did not test in math.

School Progress: This element looks at student test scores over two consecutive years to see if there is improvement (growth) in their scores. It is calculated for all students in this grade span and is also calculated separately for the following four subgroups: Alaska Native, Economically Disadvantaged, Students with Disabilities, and LEP (Limited English Proficient) in this grade span. A subgroup must have at least five eligible students assessed in one or more subjects in order to be considered. See *Appendix A* for a more detailed description of the school progress indicator.

Attendance Rate: Calculated by taking the combined Aggregate Days of Attendance for all students in grades 9-12 divided by the combined Aggregate Days of membership for all students in grades 9-12 as reported in the Summer OASIS file submitted to the department by each district.

Graduation Rate: The score may be based on either the 4- or 5-year cohort rate, depending on which rate yields the higher ASPI score.

4 Year: Calculated by dividing the number of graduates in the 4-year cohort group by the number of students in the 4-year cohort group.

5 Year: Calculated by dividing the number of graduates in the 5-year cohort group by the number of students in the 5-year cohort group.

If either the 4- or 5-year cohort group contains 0, 1, or 2 students then the graduation rate of the other cohort group will automatically yield the ASPI score. If both cohort groups contain 0, 1, or 2 students then Graduation Rate will not be considered as part of the school's overall ASPI score.

College Career Readiness: Calculated by dividing the combined value of all grade 12 student college and career readiness scores divided by the combined count of grade 12 students who attempted any qualifying test.

- Qualifying tests are WorkKeys, ACT, and SAT. WorkKeys certificates may be earned through multiple test administrations. ACT and SAT scores are based on the highest composite score from a single test administration.
- School roster includes all 12th grade students enrolled at the school on October 1 of the given school year as reported in the Fall OASIS file submitted to the department by each district.
- If a student attempts multiple different tests, the test score leading to the highest number of ASPI points will be used.
- If no 12th grade students attempted a qualifying test, the school will be assigned a null value for College Career Readiness.

WorkKeys Participation: Calculated by dividing the number of 11th grade students enrolled on October 1 of the given year who attempted the WorkKeys assessment by the number of 11th grade students enrolled on October 1 of the given year. October 1 counts are obtained from the Fall OASIS file submitted to the department by each district.

Points: Represents the raw score out of 100 based on the school's performance on the element.

Weighting: Reflects the degree of weight assigned to the element (*e.g.*, the multiplier for Academic Achievement is 0.20; therefore, in most schools that serve grades 9-12, Academic Achievement will be worth 20% of the total score).

ASPI Points: Reports the final ASPI points earned in this area. This is calculated by multiplying the Points by the Weighting.

Total 9-12 Points: Calculated by taking the sum of ASPI points, and dividing by the sum of the multipliers times 100. *Formula: sum of ASPI Points / (sum of Weightings * 100)*

The following fields are located below the final chart section on the lower right corner.

K-8 Enrollment Ratio: Represents the percentage of students enrolled in grades K-8. This is calculated by dividing the number of students enrolled in grades K-8 by the total number of students enrolled in K-12.

9-12 Enrollment Ratio: Represents the percentage of students enrolled in grades 9-12. This is calculated by dividing the number of students enrolled in grades 9-12 by the total number of students enrolled in K-12.

ASPI Score: The ASPI score is calculated by multiplying the K-8 ASPI score by the percent of the school enrollment that is represented by students in grades K-8 plus the 9-12 ASPI score multiplied by the percent of the school enrollment that is represented by students in grades 9-12.

Appendix A: School Progress

The school progress indicator utilizes the index score methodology (formerly “AKSPIP”), with the modified score tables, later developed for the Moore Settlement.

An index score is developed for the all students group and up to four subgroups: Alaska Native/American Indian, Economically Disadvantage, Students with Disabilities, and Limited English Proficient (LEP). A subgroup must have at least five eligible students assessed in one or more subjects in order to be considered.

The index scores for the All Students group and the subgroups are individually capped at 100, then the scores weighted as follows:

- Each eligible subgroup is weighted at 10% of the assigned score
- The All Students group is weighted in accordance with the number of eligible subgroups
 - No eligible subgroups: All Students = 100% of score
 - One eligible subgroup: All Students = 90% of score
 - Two eligible subgroups: All Students = 80% of score
 - Three eligible subgroups: All Students = 70% of score
 - Four eligible subgroups: All Students = 60% of score

A sample of how school progress points are calculated:

Group	Index	Weight	Points
All Students	96.42	70%	67.49
AN/AI	103.13	10%	10.00
Econ Dis	98.85	10%	9.89
LEP	64.17	10%	6.42
Total			93.80

In this sample, there are three eligible subgroups, so the all students group is weighted at 70%. The Alaska Native/American Indian group has a score exceeding 100, so that score is capped at 100 points *prior to weighting*. After all the weights are applied, this school would have a score in the ASPI School Progress indicator of 93.80 points.

Index Score Methodology

Index scores are assigned by subject at the student level if the following conditions are met:

- The student received a valid subject score on the SBA in both the current year and the prior year
- The student has progressed one grade from the previous year
 - *e.g.*, a student who was administered the grade six test in the current year must have been administered the grade five test in the previous year to be included in the growth calculation
- The student was enrolled in the same school for the full academic year
 - Full academic year is defined as October 1 until the first day of the Statewide testing period.

Student performance is divided into seven proficiency level categories, ranging from **Far Below Proficient Minus** to **Advanced**. Point values are assigned by subject at the student level as follows:

Prior Year Level	Current Year Level						
	FBP-	FBP+	BP-	BP+	Pro	Pro+	Adv
FBP-	60	90	120	150	180	205	230
FBP+	40	70	100	130	160	185	210
BP-	20	50	80	110	140	165	190
BP+	0	30	60	90	120	145	170
Pro	0	10	40	70	100	125	150
Pro+	0	0	20	50	80	105	130
Adv	0	0	0	30	60	85	110

Proficiency levels are dependent on the subject area, student scale score, and grade level.

Reading	Grade Level							
Proficiency Level	03	04	05	06	07	08	09	10
Advanced	392-600	415-600	418-600	394-600	406-600	402-600	382-600	400-600
Proficient Plus	346-391	358-414	358-417	347-393	353-405	351-401	341-381	350-399
Proficient	300-345	300-357	300-357	300-346	300-352	300-350	300-340	300-349
Below Proficient Plus	281-299	280-299	276-299	267-299	273-299	272-299	265-299	261-299
Below Proficient Minus	261-280	260-279	251-275	234-266	246-272	243-271	229-264	222-260
Far Below Proficient Plus	241-260	240-259	226-250	201-233	219-245	214-242	197-228	183-221
Far Below Proficient Minus	100-240	100-239	100-225	100-200	100-218	100-213	100-196	100-182

Writing	Grade Level							
Proficiency Level	03	04	05	06	07	08	09	10
Advanced	402-600	420-600	406-600	396-600	423-600	460-600	470-600	485-600
Proficient Plus	351-401	360-419	353-405	348-395	362-422	380-459	385-469	393-484
Proficient	300-350	300-359	300-352	300-347	300-361	300-379	300-384	300-392
Below Proficient Plus	259-299	252-299	244-299	257-299	267-299	266-299	269-299	267-299
Below Proficient Minus	218-258	204-251	187-243	215-256	234-266	232-265	238-268	233-266
Far Below Proficient Plus	177-217	156-203	130-186	173-214	201-233	198-231	207-237	199-232
Far Below Proficient Minus	100-176	100-155	100-129	100-172	100-200	100-197	100-206	100-198

Math	Grade Level							
Proficiency Level	03	04	05	06	07	08	09	10
Advanced	390-600	383-600	373-600	376-600	383-600	379-600	370-600	392-600
Proficient Plus	345-389	342-382	336-372	338-375	342-382	339-378	335-369	346-391
Proficient	300-344	300-341	300-335	300-337	300-341	300-338	300-334	300-345
Below Proficient Plus	282-299	280-299	276-299	279-299	274-299	279-299	279-299	276-299
Below Proficient Minus	263-281	260-279	252-275	258-278	248-273	258-278	258-278	252-275
Far Below Proficient Plus	235-262	230-259	216-251	227-257	209-247	227-257	227-257	216-251
Far Below Proficient Minus	100-234	100-229	100-215	100-226	100-208	100-226	100-226	100-215

Sample Population

Sample School is calculating its K-8 Economically Disadvantaged growth score based on the following student data:

Reading	Grade Yr 1	RSS Yr 1	R Prof Yr 1	Grade Yr 2	RSS Yr 2	R Prof Yr 2	Score
Student 1	6	318	Pro	7	363	Pro+	125
Student 2	4	302	Pro	5	248	FBP+	10
Student 3	7	297	BP+	8	303	Pro	120
Student 4	7	413	Adv	8	380	Pro+	85
Student 5	3	165	FBP-	3	265	BP-	n/a
Student 6	3	315	Pro	4	322	Pro	100
Student 7	5	360	Pro+	6	336	Pro	80

Writing	Grade Yr 1	WSS Yr 1	W Prof Yr 1	Grade Yr 2	WSS Yr 2	W Prof Yr 2	Score
Student 1	6	343	Pro	7	326	Pro	100
Student 2	4	302	Pro	5	316	Pro	100
Student 3	7	302	Pro	8	292	BP+	70
Student 4	7	376	Pro+	8	376	Pro	80
Student 5	3	198	FBP+	3	202	FBP+	n/a
Student 6	3	278	BP+	4	250	BP-	80
Student 7	5	440	Adv	6	absent	n/a	n/a

Math	Grade Yr 1	MSS Yr 1	M Prof Yr 1	Grade Yr 2	MSS Yr 2	M Prof Yr 2	Score
Student 1	6	306	Pro	7	270	BP-	40
Student 2	4	invalid	n/a	5	302	Pro	n/a
Student 3	7	296	BP+	8	290	BP+	90
Student 4	7	440	Adv	8	468	Adv	110
Student 5	3	220	FBP-	3	244	FBP+	n/a
Student 6	3	248	FBP+	4	280	BP+	130
Student 7	5	348	Pro+	6	360	Pro+	105

**RSS, WSS, and MSS represent the subject level scale scores.*

Student 5 repeated 3rd grade and does not receive any subject score in any subject area. Student 2's math assessment was invalidated in the prior year, so a subject score is only calculated in reading and writing for this student. Student 7 was absent during the current year's writing assessment, so a subject score is only calculated in reading and math for this student.

In total:

- Six students received a combined 520 points in reading
- Five students received a combined 430 points in writing
- Five students received a combined 475 points in math

The growth score for this subgroup is equal to the total sum of valid subject scores divided by the combined count of subject scores.

$$(520 + 430 + 475) / (6 + 5 + 5) = 1425 / 16 = \mathbf{89.06}$$

The raw index value for the K-8 Economically Disadvantaged subgroup is **89.06**.