The Center for Educational Effectiveness

Performance of Former-ELL Students on Washington High Stakes Assessments

Research into performance of Former-ELL students on Washington's English-only assessments and implications for policy.

Center for Educational Effectiveness

Better Data. Better Decisions. Better Schools.

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Background and Purpose

The development of the revised Washington State Achievement Index (AI) was guided by policy of the Washington State Board of Education and the Washington legislature's call to action to create a single aligned accountability system serving both state and federal accountability needs (RCW 28A.657.110).

One of the critical issues faced by the design team of the revised index was the issues of validity in assessing non-English speaking students on an English only assessment. One out of every ten students in Washington has English language skills low enough to qualify to be served in ELL development programs and the ELL subgroup is the fastest growing subgroup in Washington State (http://reportcard.ospi.k12.wa.us/summary).

Based on strong support from the Accountability and Achievement Workgroup (AAW) (http://www.sbe.wa.gov/aaw.Rs), the design of the revised AI included "Former-ELL" as one of the targeted at-risk subgroups. This subgroup is made up of any student who, at any point in their K-12 educational career was in the English Language Learner (ELL) program and exited that program by achieving language proficiency[1] as measure by the state-wide assessment of English proficiency (footnote details on WLPT/WELPA).

With the inclusion of the Former-ELL subgroup in the revised AI, for the first time the state had a readily accessible data set including detailed educational outcome (performance) information on proficiency, student growth, and graduation rates for Former-ELL students.

This research was initiated by State Board of Education staff to serve three over-arching purposes.

- What are the performance characteristics of the Former-ELL subgroup in proficiency? What do we see in proficiency, student growth, and graduation rates?
- Policy Implications. What are the state and federal policy implications regarding accountability and assessment of ELL and Former-ELL students?
- What are areas indicated for further research? The unit-of-analysis for this project is, at its most granular, the building level. These findings suggest additional research questions which can only be answered by further analysis, particularly through disaggregation of student-level data.

Acronyms and Jargon

Acronyms and jargon are an intimate part of the educational landscape and this type of analysis. CEE takes a common-sense approach to the use of jargon and acronyms based on the needs of the target audience or the research report. Given that this report is designed for educational leaders within the state of Washington, common acronyms and jargon are used within the body of this report, but are also defined in the Glossary at the end of the work.

[1] Proficiency is defined as the percentage of students meeting or exceeding standard on the state's high stakes assessment.

Executive Summary and Policy Implications

We report on the academic performance of the two most rapidly growing subgroups in Washington; English Language Learners (ELLs) and Former ELLs, but the emphasis here is on the latter. These two student groups have some unique qualities that pose some serious challenges to accountability systems.

1. The ELL students are required to be assessed in a language other than their home or primary language. No other subgroup is required to do the same.
2. As ELL students become more fluent in the English language, they tend to perform better on the state assessments and are then reclassified as Former ELLs. In other words, the higher performing students who are just becoming proficient on the assessments are removed from the group.
3. Once reclassified as Former ELLs, students possess the language skills necessary to speak, read, and write in English, but often have not mastered the content-specific vocabulary required to engage in the content area assessments in a meaningful way, especially in the upper grades.
4. After being reclassified as a Former ELL student, it typically takes a couple of years to demonstrate proficiency on the content area assessments and this time period may be considerably longer or shorter depending on the grade level at the time of exiting, the primary language, the type of Bilingual program exited, and other factors.

Examining the academic performance of Former-ELLs through the Achievement Index is complicated by another important factor, that being the number of years as a Former ELL. Evidence exists to show that Former ELL students who have been out of a Bilingual program for five years (for example) are more likely to be proficient than a Former ELL out of a Bilingual program for only one year. In other words, the years out of program are positively correlated with proficiency rate. The work we present here does not take this into account, which certainly is a limiting factor that can only be overcome by examining student-level data with years as a Former ELL as a student variable.

Student Performance Indicators

Even with the data shortcomings and limitations cited above, we can make some important observations about the academic performance of Former ELL students. Generally speaking, the Former ELL subgroup performs at impressive levels, but when you disaggregate by school level and grade levels, different performance levels become evident.

Proficiency

- Former-ELL students are performing higher than the All-Students group, particularly at the Elementary level. That is, the percent of students meeting standard for Former-ELL students is above the All-Students performance.
- The out-performance of the Former-ELL students is largest at Elementary grades. At middle school, the performance of Former-ELL students is almost the same as the All-students group, and at

high school (grade 10) Former-ELL students slightly under-perform the All-students group.

- The differences in performance between the Former ELL students and the All Students group systematically change from the
    - 3rd, 4th, and 5th grades where the Former ELL subgroup outperforms the All Students group to the,
    - 6th and 7th grades where the groups' performance is about the same, and the
    - 8th grade and up where the Former ELL subgroup performs below that of the All Students group.

Student Growth

- Former-ELL students demonstrate higher median student growth percentiles than the All-students group.
- At elementary and middle levels for reading and math, the median SGP of Former-ELLs is approximately 3 percentiles higher than the all-students group. This over-performance by the Former ELLs is not evident at the high school level.
- For both reading and math, the median SGPs systematically decline as the school level increases. The median SGPs for elementary schools are the highest, middle school median SGPs are a little lower, and high school median SGPS are a little lower yet. This is true for the All Students group and the Former ELL subgroup.

Graduation Rate

- Former-ELL students demonstrate approximately the same Graduation Rate as the All-Students group.
- When we subset the view and look at Former-ELLs in high-ELL districts, Former-ELL graduation rates are 5 percentage points above the All-Students group.

Policy Implications

One criticism of Washington's assessments that are used for state and federal accountability is that the assessments are administered in English-only versions. On the reading assessment, ELL students do not have the opportunity to use some of the language accommodations that are available on the math assessment. This means that the reading assessment is measuring a student's ability to read, comprehend, and decode **in English** when their primary language is something other than English. On the other hand, ELL students have translation materials at their disposal, while sitting for the math assessment, which means that the ELL students are being assessed on their math proficiency in a combination of their primary language and English. On this basis, you might expect ELL students to perform at higher levels on the math assessment as compared to the reading assessment, but this is not borne out in the analyses. The performance of the ELL students on the reading assessment is approximately the same or even a little higher than their performance on the math assessment.

Evidence is presented to show that the assessment results used in Federal and State accountability systems is not providing valid and reliable information about the content knowledge of English Language Learners. The new tests being delivered by the Smarter Balanced Assessment Consortia (SBAC) should assess the content knowledge of all students in their primary language as is advocated for in the APA/AERA Standards for Educational Measurement.

Schools with reportable Former ELL populations are demographically distinct from other schools and the All Students performance differs considerably between the two types of schools. State policy makers currently provide an enhanced school funding allocation that takes into account the number and percentage of ELL and Former ELL students. However, the funding enhancement is modest and a more robust infusion of supports might be expected to reap even greater benefits for these student subgroups.

In order to provide an equal opportunity for ELL and Former ELL students to learn at a level commensurate with native English speakers, a better prepared and more highly skilled staff may be necessary. A better prepared staff could be accomplished through incentive funding, targets and individualized professional learning, and strategic staffing policies.

Areas for Further Investigation

Much of this analysis was constrained by the "sample of convenience" from the Achievement Index data set. Specifically, the fact that the data set uses the school building as the unit of analysis.

In reviewing this data with the members of the Accountability and Achievement Workgroup (AAW- see http://www.sbe.wa.gov/aaw.php), many of the questions and "wonderings" raised by this knowledgeable team centered on issues that can only be answered via research with student-level data.

The findings from this work indicate the value of deeper investigation into understanding the performance of Former-ELL students, including:

- Analysis with mutually exclusive comparison groups. Specifically, being able to compare the performance of Former-ELLs to a "Never-ELL" subgroup. This would make the interpretation of demographic, geographic/district views of the performance of these groups more meaningful.
- Performance of Former-ELLs based on language spoken, poverty status, disability status, ethnicity/race, and gender. In this case, performance should include all three indicators—proficiency, student growth, and graduation rate. The interplay of these variables should be understood vis-à-vis the changes in performance we see in the middle and high school grades.
- Impact of dropouts within the ELL, Former-ELL, and Never-ELL populations.

Context of English Language Learners in Washington

The ELL subgroup is the fastest growing ESEA subgroup in Washington State showing 52% growth over the last 12 years. ELL students represent 1 in every 11 students served in Washington's public schools. However, when we consider the transition rate of ELL students to Former ELL students, it is safe to say that the Former ELL subgroup is expanding by greater numbers.

Table 1: 12-year Enrollment data for Washington State

	2002	2013	Change
K-12 Enrollment	1,010,424	1,049,901	39,477
12-Year Change			**3.9%**
ELL Program Enrollment	62,061	94,176	32,115
12-Year Change			**51.7%**
Source: OSPI Report Card			

Methodology

Data Sources

The primary data source for this analysis is the Washington 2013 Achievement Index data file, as published on the OSPI / State Board web at https://eds.ospi.k12.wa.us/WAI. The AI data released in the spring of 2014 used assessment results from 2010-11, 2011-12, and 2012-13 spring testing windows.

The assessments used in the Achievement Index include what is collectively known as the Washington Comprehensive Assessment Program (WCAP): Measure of Student Progress (MSP) for grades 3-8 in reading, writing, mathematics, and science; High School Proficiency Exam (HSPE) for grade 10 reading, and writing; and End-of-Course (EOC) examinations in grade 10 mathematics and science. These are the same assessments used for accountability under the Federal No Child Left Behind Act (NCLB).

The sizes of the three primary groups analyzed in this work are shown below in Figure 2.

Table 2: Group enrollment used in this analysis

3-Year Average Size	Grade 3	Grade 4	Grade 5	Grade 6	Grade 7	Grade 8	Grade 10
Former-ELL Subgroup	5,497	7,069	7,559	7,832	7,730	7,646	6,472
ELL Subgroup	8,578	6,947	6,030	5,026	3,978	3,477	2,875
ALL	61,116	61,481	62,170	62,642	62,654	62,298	59,693
Source: OSPI MSP and HSPE Reading raw data for Achievement Index. Continuously Enrolled Students only.							

It is important to note that the unit of analysis for this report is the school level. The students noted above are served in 295 school districts (Local Educational Agencies or LEAs).

In order for any group to be analyzed (based on the data source) in the Achievement Index, the group must have at least 20 continuously enrolled students in the school by subject area.

For example, at an elementary school which serves grades K-5 will assess students in grades 3, 4, and 5. If that school's ELL group assessed 8 students at 3rd grade, 7 students at 4th grade, and 6 students at 5th grade in reading, the total assessed in reading would be 21 students (8 + 7 + 6 = 21). Thus, the ELL group for this school would be N>=20 and the data would be used in this analysis.

Table 3: Count of schools with subgroups above the minimum threshold of 20 students per content area in both reading and math

Count of Schools	All-Students	ELL	Former-ELL
Elementary	1025	319	373
Middle Schools	346	131	214
High Schools	266	34	97
Totals	**1637**	**484**	**684**

Performance Indicators

There are three performance indicators which are used in the Achievement Index and are thus used in this analysis. The Achievement Index data file contains building-level aggregated data for:

- **Proficiency**: Percent of students meeting or exceeding standard on the WCAP assessments in reading, writing, math, and science.
- **Median Student Growth Percentile** (MSGP). The median student growth percentile for the building in reading and math.
- **Graduation Rate** (Grad Rate). 5-year Adjusted Cohort graduation rate.

Note: to increase the validity of the results and to protect student confidentiality, a minimum of 20 students per school per content area is required for data to be present in this analysis.

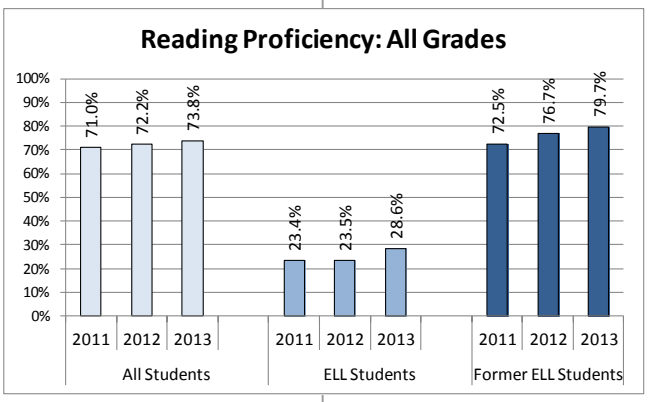
This analysis is bound, and limited by, the data as used to create the Washington Achievement Index. Specifically, the data used in this analysis has the following caveats:

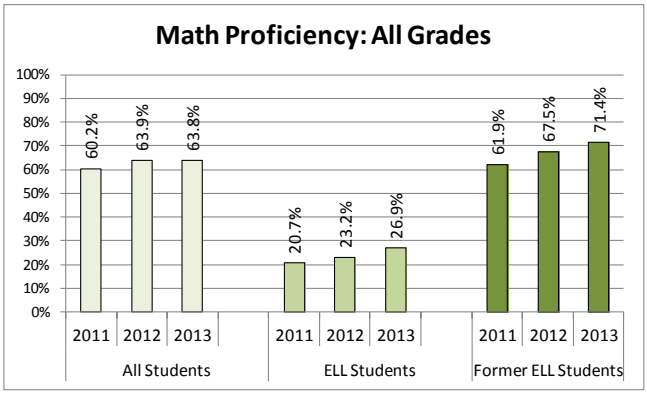
- Proficiency data was provided at the building level for each grade served in that building. Only data for continuously enrolled (CE) students is utilized in the Achievement Index proficiency calculations.
- Median Student Growth Percentile data was provided only at the building level per content area and for the CE students. That is, grade by grade MSGP data was not provided.
- Graduation Rate. Graduation rate data was provided only for the 5-year Adjusted Cohort Method.

Findings

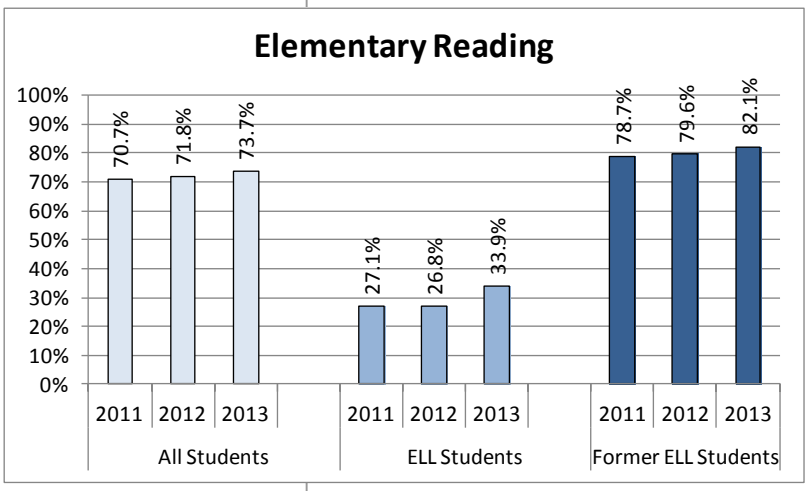
Proficiency

For the state of Washington, at the summary level for grades 3-8 and 10, Former-ELL students outperform the ELL subgroup and the All Students group in both reading and math.



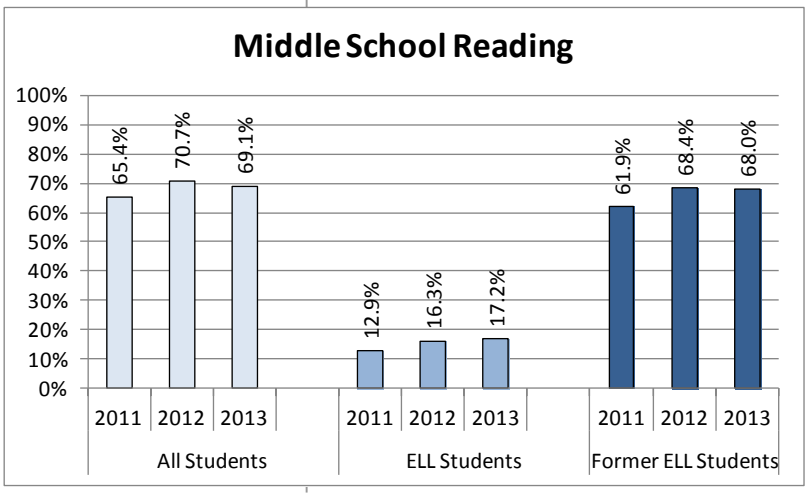


Reading by Grade Level Bands



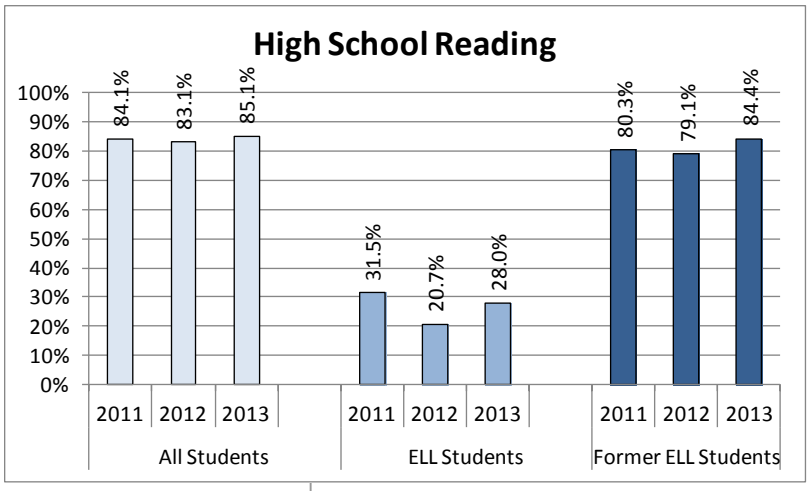
Elementary reading shows the largest area where Former-ELL students outperform the All Students group.

Former-ELLs perform 7 to 9 percentage points above the All Students group.



For grades 6, 7, and 8, the scores show slightly lower performance between Former-ELL students and the All Students group.

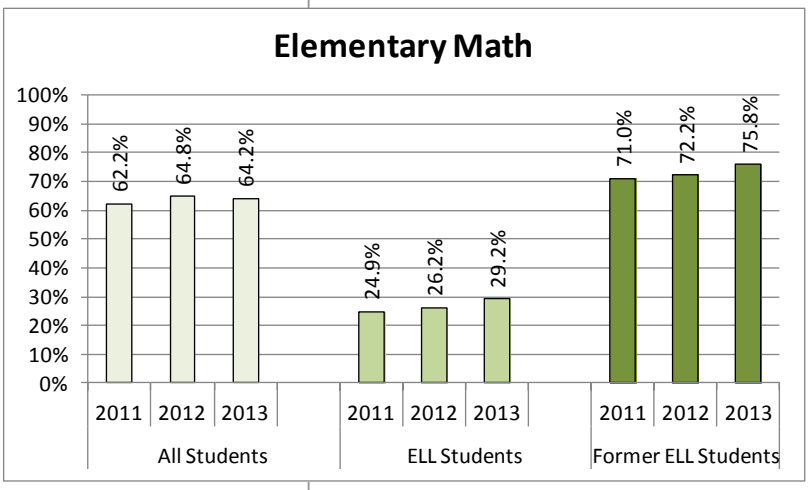
For these three years, the difference ranges from -3.5 to – 1 percentage point.



At grade 10 (the only grade tested in High School), Former-ELL students perform -4 to -1 percentage points below the All Students group.

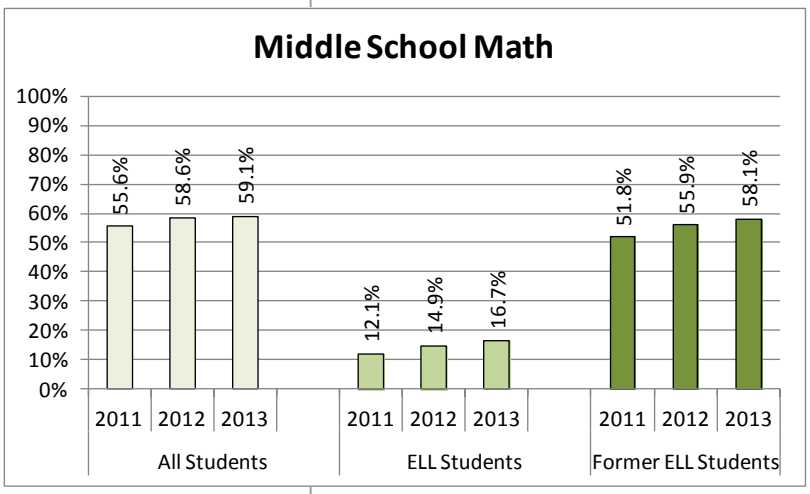
It may be that recently transitioned students have not yet acquired the nuanced language skills necessary to demonstrate proficiency at this higher level.

Mathematics by Grade Level Bands



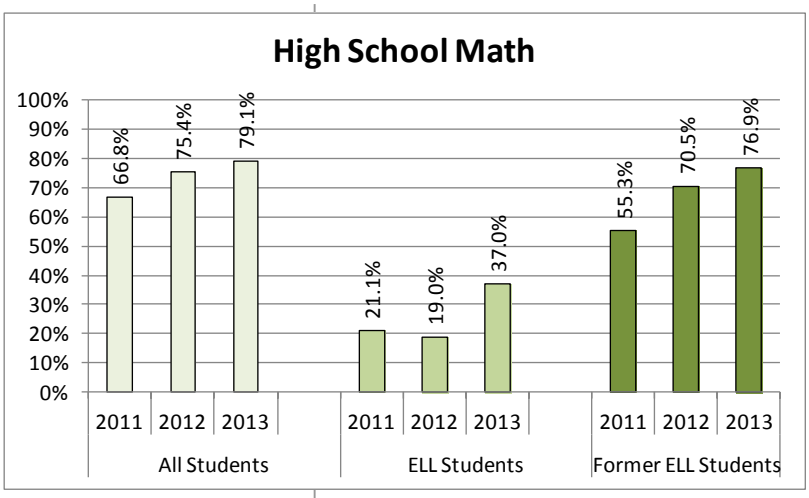
Similar to the findings for reading, the Elementary band for math shows the largest over-performance by Former-ELL students.

Former-ELL students outperform the All Students group by between 8 and 11 percentage points.



Middle level grades show a similar impact as in reading with Former-ELL students performing between -4 and -1 percentage point below the All Students group.

It is also interesting to note that the relative gap between Former-ELL and ELL students is similar to the Elementary grades; the performance of the ELL students is below 20% proficiency.

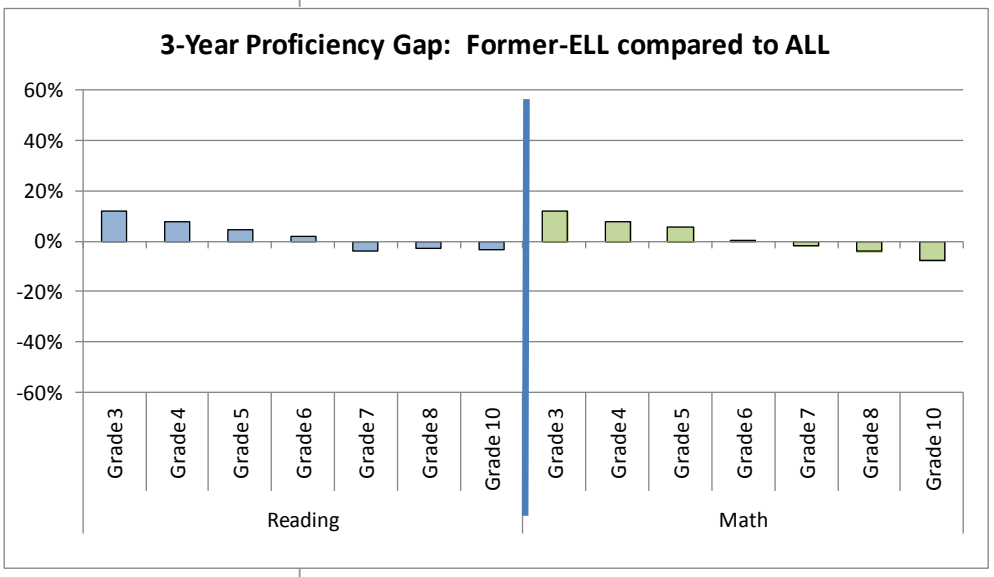


High School math shows a range of -11 to -3 percentage points lower performance for Former-ELL students. It is interesting to note the gap closure over the last 3 years.

An alternative way of looking at the data is to compare the Former-ELL students to the All Students group. In the graph below, a positive value means the Former-ELL students performed ***above*** the All Students group.

This chart summarizes the detailed information found in Appendix A.

As you can see in this chart, the positive effect for Former-ELL students declines consistently as students progress through the grades.

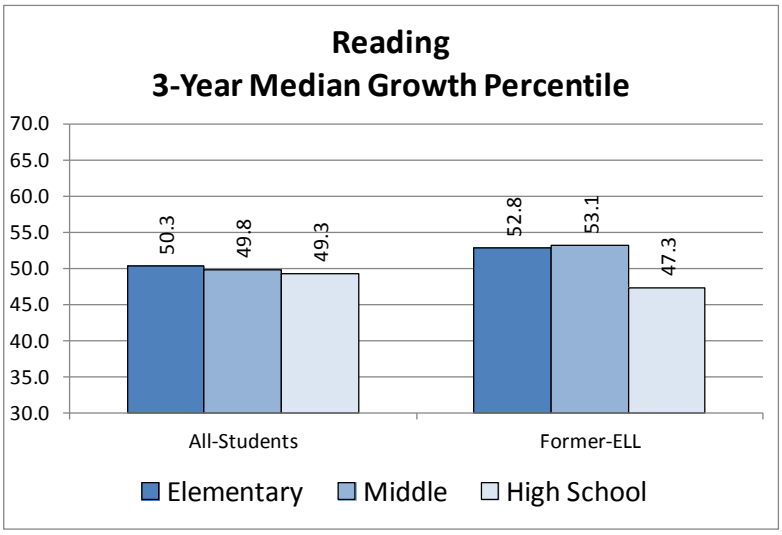


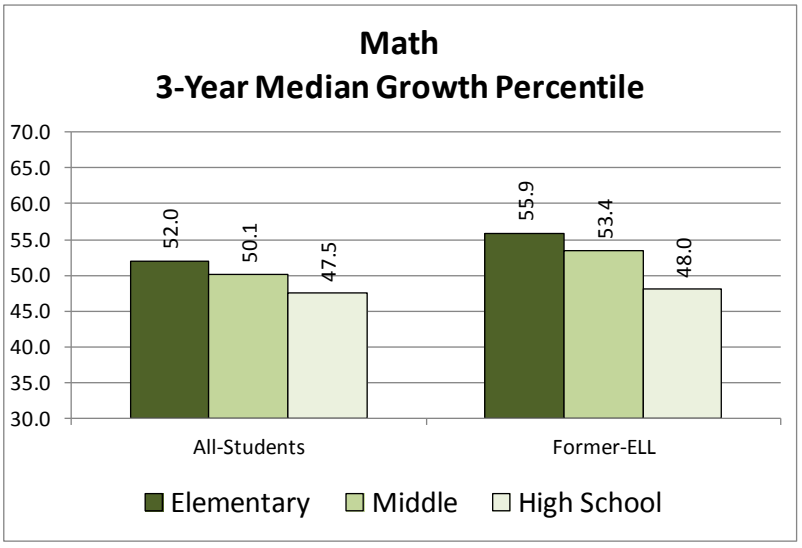
When considered in concert, the proficiency results for the ELL students and the Former ELL students leads one to speculate that the MSP administration in English-only may not be providing valid results. The results provide evidence that, once English language fluency is acquired, the group proficiency rates become comparable to the All-Students group.

One might speculate further that the challenges of increasingly difficult content and complex vocabulary required to meet standards in the middle school and high school grades are difficult to overcome for some Former ELL students who have not fully mastered the English language.

Student Growth

The data set created for the Achievement Index did not include grade by grade median student growth percentiles but rather school-level medians. The result is that, unlike proficiency, the best we can do is to segment the schools into elementary, middle, and high school configurations and view the relative performance based on the school configuration.





It is also important to remember that these growth calculations are normative, rather than absolute growth. In a normative growth calculation, larger groups will tend to "regress toward the mean" which implies that larger groups will tend toward a MSGP of 50 (growth at the 50th percentile).

For the figures above and in a general sense, you will note that growth in the Former-ELL group is greater than the growth of the All Students group in all cases except High School reading.

For the math chart, see how the average growth declines as the school level increases for both the All and Former-ELL groups and that the systematic decline is greater for the Former-ELL group as compared to the All Students group. Without further disaggregation of the data, all we can really say is that by the 10th grade, academic growth for the Former-ELL group is nearly identical to that for the All Students group.

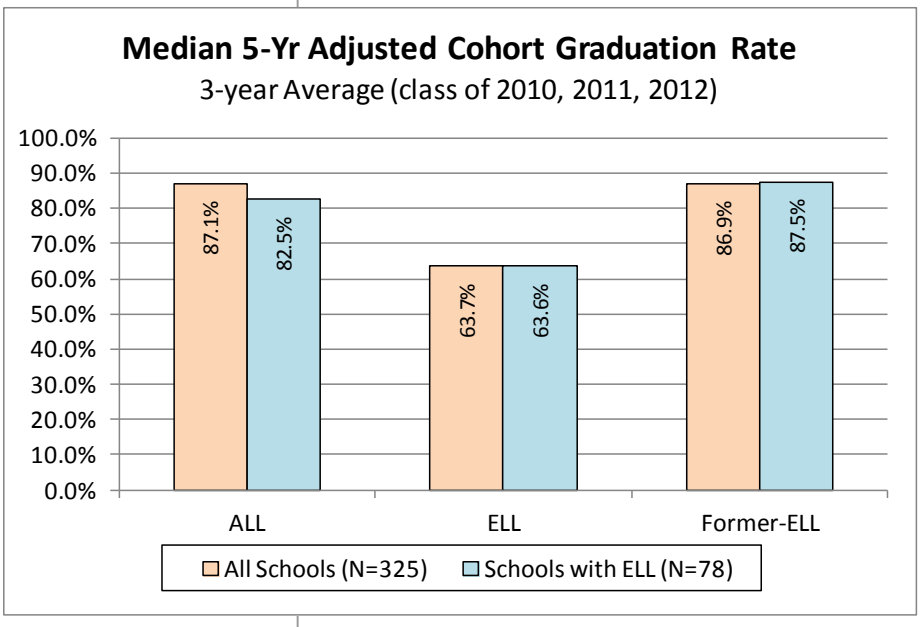
The reading chart differs from the math chart is at least several ways. First, the systemic decline in growth by advancing school level is much more subtle for the All Students group and disrupted for the Former-ELL group. Second, see how the Former-ELL growth for middle schools exceeds that for both elementary and high schools. And finally, see that the Former-ELL reading growth in high school is substantially lower that for the All Students group.

These differences are not readily explainable given the nature of the Achievement Index data set. However, we might speculate that the design or usage intent contributes to the reading differences:

- MSP is a summative grade-level assessment whereas the HSPE is a high school exit exam and the high school math growth is based on end of course assessments.
- The high school HSPE represents a two-year growth measure whereas the elementary and middle school MSP represents one-year growth measures.

Graduation Rate

The Washington Office of the Superintendent of Public Instruction (OSPI) calculates graduation rates using both a 4-year adjusted cohort and 5-year adjusted cohort method.



In both methods, the beginning cohort is the group of 9th graders (freshmen). In both cases, the cohorts are "adjusted" for students who transfer in and out, as well as for dropouts. The difference is that in the 5-year method, students who require a 5th year of high school to graduate are counted in the graduation rate calculation.

This is an important accommodation, particularly for students with disabilities (SWD) and English Language Learners. The primary rationale in using the 5-year adjusted cohort method in the revised Washington State Achievement Index was to obtain a more accurate view of high school attainment for these two student populations.

In the figure above, you will see that graduation rates are depicted for two sets of schools.

As noted in Table 3 above, there are relatively few schools with high ELL populations at the high school level. As such, comparing the Former-ELL performance with this larger group provides a biased view of relative performance.

To augment the view of Former-ELL graduation rates, we chose to also report the data for Former—ELL graduation rates relative to the High Schools which have at least 20 ELL students at 10th grade (those schools with the ELL cell active in the revised AI data set). With reasonable certainty, we can assume that schools which have the ELL cell active at 10th grade are higher-ELL enrollments throughout the K-12 system in their districts.

> *Recall that the Former-ELL subgroup grows as the grade level increases as more students exit after each grade in the system. This causes districts with no reportable ELL at elementary schools to have Former-ELL data as these students aggregate in the middle and high school levels.*

In viewing the "ALL" performance above, as one would expect there to be a gap between the graduation rates for All-students when comparing these two sets of schools (a view of the "opportunity gap"). However, when you view the graduation rates of the Former-ELL students, you will note that the graduation rate in these higher ELL environments is actually higher than when viewing all schools. The implication (worth further investigation) is that higher ELL systems have found ways to increase the graduation rates for Former-ELLs.

Impact of the Former ELL Subgroup on the Index Ratings

The Washington Achievement Index computes an annual school rating based on proficiency rates, median SGPs, and College and Career (CCR) indicators. Schools are rated on a scale from one to ten following the methodology at http://www.sbe.wa.gov/documents/AchievementIndex/IndexMethodology.pdf.

After thoughtful discussion, the AAW and other stakeholder groups supported the idea of including the Former ELL students as a separate subgroup within the Targeted Subgroup. The policy shift to report separately on the academic performance of the Former ELL subgroup was based on the idea that Former ELL students continue to be potentially "at-risk" due to the language barriers from earlier in their academic careers. Stakeholders held that it was important to monitor the progress of this rapidly expanding group through the AI.

As you might expect, as the number and percentage of ELL students increases in Washington, the number and percentage of Former ELL students also increases.

We have the opportunity here to directly quantify the impact of the Former ELL subgroup on the annual AI calculations, the Composite AI, and the individual measures of proficiency, growth, and graduation rate for each of the first three years of AI computations. To assess the impacts of the Former ELL students on the AI, school-level AI calculations were made separately for each of the indicators with Former ELL students included and then excluded. The rating values could then be compared.

The number of schools with a reportable Former ELL population for one or more indicators (defined as a Former ELL school) increased in each of the three most recent years:

- 2010-11 showed 553 Former ELL schools
- 2011-12 showed 753 Former ELL schools
- 2012-13 showed 819 Former ELL schools

In each of the three previous years, approximately 1800 to 1900 schools earned an AI rating, meaning that only 30 to 45 percent of rated schools are potentially impacted by Former ELL. The following paragraphs describe impacts from the Former ELL students to only those schools with a reportable Former ELL population.

Annual Index Ratings

2010-11 AI Ratings

When collectively considered, the inclusion of the Former ELL subgroup in the Targeted Subgroup resulted in an average increase of 0.159 rating points when compared to the same analysis with the Former ELL Subgroup excluded. When the Former ELL subgroup is included in the AI calculation:

- The 2011 rating for 8 schools was unchanged
- The 2011 rating for 32 schools was lowered by an average of 0.043 rating points
- The 2011 rating for the 513 schools increased by an average of 0.175 rating points.

This means that more than 98 percent of all 2011 rated schools are not impacted or are mildly positively impacted by the inclusion of Former ELL students in the Targeted Subgroup.

Nearly 99 percent of all schools earning a Composite AI rating in 2013 were not impacted or were mildly positively impacted by the inclusion of Former ELL students in the Targeted Subgroup.

2011-12 AI Ratings

The inclusion of the Former ELL subgroup resulted in an average increase of 0.163 rating points as compared to the analysis that excluded the Former ELL subgroup. When the Former ELL subgroup is included in the AI calculation:

- The 2012 rating for 6 schools was unchanged
- The 2012 rating for 30 schools was lowered by an average of 0.072 rating points
- The 2012 rating for 717 schools was increased by an average of 0.174 rating points.

This means that over 98 percent of all 2012 rated schools were not impacted or were positively impacted by the inclusion of Former ELL students in the Targeted Subgroup.

2012-13 AI Ratings

When collectively considered, the inclusion of the Former ELL subgroup in the Targeted Subgroup resulted in an average increase of 0.157 rating points when compared to the same analysis with the Former ELL Subgroup excluded. When the Former ELL subgroup is included in the AI calculation:

- The 2013 rating for 9 schools was unchanged
- The 2013 rating for 37 schools was lowered by an average of 0.048 rating points
- The 2013 rating for 770 schools was increased by an average of 0.169 rating points.

Once again, over 98 percent of all 2013 rated schools were not impacted or were positively impacted by the inclusion of Former ELL students in the Targeted Subgroup.

In summary, it is evident that the inclusion of the Former ELL subgroup in the Targeted Subgroup resulted in higher school ratings or no change to over 98 percent of all rated schools. Further, the negative impacts to the other two

percent of schools are average annual rating reductions of 0.04 to 0.07 rating points.

Composite Index Rating

A total of 1801 schools earned a Composite Index rating in 2013 based on the annual index ratings for the previous three years and, of these, 866 schools were identified as Former ELL schools. The percentage of Former ELL schools by school level are close to the state average but the middle schools are somewhat over-represented and the elementary schools mildly under-represented.

As a group, the inclusion of the Former ELL subgroup in the Targeted Subgroup resulted in an average increase of 0.132 rating points when compared to the same analysis with the Former ELL Subgroup excluded. When the Former ELL subgroup is included in the AI calculation:

- The Composite AI rating for 4 schools was unchanged
- The Composite AI rating for 24 schools was lowered by an average of 0.022 rating points
- The Composite AI rating for 826 schools was increased by an average of 0.137 rating points.

The inclusion of the Former ELL subgroup in the Targeted Subgroup resulted in higher school Composite AI ratings or no change to nearly 99 percent of all rated schools and the average increase was small (approximately 0.132 rating points). Further, the negative impacts to the other one percent of schools are an average Composite AI rating reduction of only 0.022 rating points.

Impacts to Indicator Index Ratings from Former ELLs

In addition to the small and positive impact of the Former ELL subgroup on the Achievement Index, stakeholders can readily monitor the academic progress of this expanding subgroup.

The proficiency index rating is derived from the simple average of reading, math, science, and writing. In the 2012-13 AI, 817 schools had a reportable Former ELL population for the proficiency indicator. When the Former ELL subgroup is included in the AI calculation:

- The 2013 proficiency index rating for 44 schools was unchanged
- The 2013 proficiency index rating for 5 schools was lowered by an average of 0.079 rating points
- The 2013 proficiency index rating for 768 schools was increased by an average of 0.228 rating points.

The growth index rating is derived from the simple average of reading and math median SGPs for the school. In the 2012-13 AI, 813 schools had a reportable Former ELL population for the growth indicator. When the Former ELL subgroup is included in the AI calculation:

- The 2013 growth index rating for 127 schools was unchanged
- The 2013 growth index rating for 109 schools was lowered by an average of 0.087 rating points
- The 2013 growth index rating for 577 schools was increased by an average of 0.183 rating points.

The CCR (graduation rate) index rating is derived from the Extended or 5-Year ACGR graduation rate. In the 2012-13 AI, 156 schools had a reportable Former ELL population for the CCR indicator. When the Former ELL subgroup is included in the AI calculation:

- The 2013 CCR index rating for 102 schools was unchanged
- The 2013 CCR index rating for 5 schools was lowered by an average of 0.102 rating points
- The 2013 CCR index rating for 49 schools was increased by an average of 0.278 rating points.

Summary of Impacts to the Index Ratings from Former ELLs

The foregoing measures of central tendency are meant to illustrate several points. The inclusion of the Former ELL subgroup in the Targeted Subgroup calculation:

- potentially impacts less than one-half of schools with a Composite AI but this percentage is expected to increase in future years as the population of Former ELL students increases,
- negatively impacted fewer than two percent of all rated schools and those negative impacts were small, averaging approximately 0.020 rating points, and
- resulted in a small average rating increase (approximately 0.139 rating points) for impacted schools.

We would conclude that the widespread increases brought about by the inclusion of Former ELL students in the Targeted Subgroup outweigh the small negative impacts to a small number of schools. More importantly, is the ability to monitor the academic performance of this potentially "at-risk" subgroup through the Achievement Index.

Policy Implications for this Work

Former ELL Schools are Demographically Different

The statistical analyses found in Appendix B (Table 1) clearly show that schools with reportable Former ELL populations differ from schools lacking reportable Former ELL populations. When schools are collectively considered, schools with reportable Former ELL populations have a:

- higher percentage of Migrant students,
- higher percentage of ELL students,
- lower percentage of students with disabilities,
- higher percentage of students qualifying for the Free and Reduced Price Lunch program, and
- larger school enrollment.

The demography of the Former ELL schools is considerably different from that of the schools that do not have a reportable Former ELL population.

Because of these differences, districts would be ill-advised to provide "one size fits all" professional development for their educator workforce. The district may wish to implement policy that provides for targeted professional learning for educators at Former ELL schools that differs from that for Non-Former ELL schools.

Also due to the school differences, the district may wish to implement policy providing for "strategic staffing" for schools with reportable Former ELL populations. The strategic staffing policy should be flexible enough to allow the building administrator to hire supplemental staff to meet the needs of this different student population.

The Academic Performance at Former ELL Schools is Different

The statistical analyses (Appendix B, Table 5) show that the All Students proficiency rates for reading and math differ for Former ELL schools as compared to Non-Former ELL schools, and that the performance is lower at the Former ELL schools. This is true for all school levels. The analyses also show that the average reading and math growth rates do not differ by school type, that being Former ELL school versus Non-Former ELL school.

Policies that support the ideas of strategic staffing, individualized professional learning should be considered for schools and districts where reportable Former ELL populations are evident.

Under this scenario, a district would seek to accelerate the growth for students at Former ELL schools so that the proficiency rates at the Former ELL schools were at least as high as those rates of the Non-Former ELL schools. To bring about greater student growth at Former ELL schools, the district may wish to implement policy to provide financial incentives to lure the most effective educators to the classrooms where they are needed the most.

Appendix A: Detailed Tabular Results

READING Proficiency	All Students			ELL Students			Former ELL Students		
	2011	2012	2013	2011	2012	2013	2011	2012	2013
3rd Grade	72.7%	68.6%	74.0%	38.3%	28.4%	41.5%	85.6%	77.8%	88.2%
4th Grade	67.2%	70.6%	72.5%	22.8%	28.9%	32.0%	75.0%	79.1%	80.1%
5th Grade	67.7%	71.0%	72.7%	23.0%	25.1%	25.8%	70.3%	76.1%	79.1%
6th Grade	70.1%	70.3%	71.9%	20.1%	22.4%	20.1%	70.1%	73.9%	73.7%
7th Grade	57.1%	70.7%	69.1%	8.2%	15.9%	17.5%	51.2%	67.5%	66.7%
8th Grade	69.4%	68.0%	67.5%	16.7%	12.2%	14.6%	68.2%	64.7%	63.5%
10th Grade	83.0%	81.6%	85.0%	27.1%	21.5%	30.1%	79.6%	77.4%	83.0%

MATH Proficiency	All Students			ELL Students			Former ELL Students		
	2011	2012	2013	2011	2012	2013	2011	2012	2013
3rd Grade	62.2%	66.0%	66.6%	30.4%	33.3%	36.4%	75.7%	74.7%	80.2%
4th Grade	60.4%	60.1%	64.1%	24.3%	22.4%	21.9%	67.2%	67.1%	72.9%
5th Grade	62.4%	65.0%	64.2%	23.9%	24.3%	27.3%	66.0%	70.2%	72.0%
6th Grade	59.7%	62.4%	60.9%	19.9%	21.3%	18.1%	59.3%	63.0%	61.5%
7th Grade	58.1%	60.0%	65.6%	14.0%	17.9%	21.6%	53.8%	59.5%	65.0%
8th Grade	52.1%	57.1%	55.7%	13.2%	16.3%	17.8%	47.4%	53.0%	52.1%
10th Grade	66.6%	74.4%	79.2%	27.1%	30.1%	39.5%	54.6%	67.9%	75.0%

Appendix B:

Group Differences Supported by t-Tests

Andrew Parr, Washington State Board of Education

Reminders about t-tests

A value for $p \leq 0.050$ indicates a significant t-test. A significant result provides evidence that the mean of one group differs from the mean of the other group and we can make that determination with 95 percent confidence. The significant test allows us to say, "We are 95 percent confident that the difference observed in the means of the two groups is real and that the difference is due to something other than chance."

Once the difference meets the significance test, we can begin to make inferences as to the causality but causality can be established only through experimental studies. All the work we do here will be inferential and based on relationships.

Question 1

Are schools with reportable Former ELL populations different from schools without Former ELL populations with respect to student demographics? If so, is the pattern of differences consistent across school levels?

This analysis uses a dichotomous coding for whether or not a school is categorized as a Former ELL school or not based on the following business rules:

- If Grad_2012_FormerELL ≥ 0, then Former_ELL = 1 (yes a Former ELL school)
- If R_MetPcnt_2013_FormELL ≥ 0 and M_MetPcnt_2013_Form ELL≥ 0, then Former_ELL = 1
- If R_MGP_2013_FormerELL ≥ 1 and M_MGP_2013_FormerELL_A ≥ 1 then Former_ELL = 1
- All other schools coded as Former_ELL = 0 (not a Former ELL school)

The business rules specified above would identify Former ELL schools for the 2012-13 school year and identical rules were established to identify Former ELL schools for the 2010-11 and 2011-12 school years.

Table 1 shows that statistically significant differences (with respect to school demographics) are indicated for Former ELL *versus* Non-Former ELL schools. When all schools are collectively considered, schools with reportable Former ELL populations tend to be characterized by:

- a higher percentage of migrant students,
- a higher percentage of ELL students,
- a lower percentage of SWDs
- a higher percentage of FRL students,
- a lower percentage of students in foster care, and
- larger schools.

Table 1. Group statistics for Former ELL and Non-Former ELL schools (all schools in Washington).

School Measure	Former ELL Group	Mean	Standard Deviation	Standard Error of the Mean	t-Test Result
PCT_MIGRANT	0	.69	3.399	.091	*p < 0.001*
	1	3.45	7.175	.256	
PCT_ELL	0	3.68	6.736	.1813	*p < 0.001*
	1	16.71	15.665	.5591	
PCT_SWD	0	15.81	16.409	.44170	*p < 0.001*
	1	12.26	4.035	.14400	
PCT_FRL	0	44.42	23.036	.62011	*p < 0.001*
	1	55.65	25.718	.91790	
PCT_504	0	2.07	3.012	.0813	*p = 0.113*
	1	2.25	2.055	.0733	
PCT_FOSTER	0	.21	.715	.019	*p < 0.001*
	1	.14	.273	.010	
TOTAL_N	0	363.19	313.803	8.447	*p < 0.001*
	1	683.30	292.040	13.993	

Note: 2012-13 data based on 785 schools with a reportable Former ELL subgroup (1) and 1380 schools with a non-reportable Former ELL subgroup (0).

From Table 1, we have evidence that schools are different based on demography and this comes as no surprise because students are not randomly assigned to schools – they attend schools from a zone that is geographically defined and differ by income level and often by language, culture, and race/ethnicity.

Table 2. Group statistics for Former ELL and Non-Former ELL schools (all elementary schools in Washington).

School Measure	Former ELL Group	Mean	Standard Deviation	Standard Error of the Mean	t-Test Result
PCT_MIGRANT	0	.57	2.585	.100	*p < 0.001*
	1	3.74	7.662	.385	
PCT_ELL	0	5.82	7.788	.301	*p < 0.001*
	1	25.23	16.426	.825	
PCT_SWD	0	14.99	7.583	.293	*p < 0.001*
	1	12.82	4.338	.218	
PCT_FRL	0	45.77	22.160	.855	*p < 0.001*
	1	60.48	27.069	1.360	
PCT_504	0	1.40	1.562	.060	*p = 0.002*
	1	1.77	2.040	.103	
PCT_FOSTER	0	.23	.532	.021	*p < 0.001*
	1	.14	.279	.014	
Total_N	0	397.51	163.206	6.300	*p < 0.001*
	1	510.87	123.857	6.224	

Note: 2012-13 data based on 396 elementary schools with a reportable Former ELL subgroup (1) and 671 elementary schools with a non-reportable Former ELL subgroup (0).

Table 3. Group statistics for Former ELL and Non-Former ELL schools (all middle schools in Washington).

School Measure	Former ELL Group	Mean	Standard Deviation	Standard Error of the Mean	t-Test Result

PCT_MIGRANT	0	.38	2.245	.208	*p < 0.001*
	1	2.86	6.434	.416	
PCT_ELL	0	1.24	1.705	.158	*p < 0.001*
	1	7.95	8.493	.549	
PCT_SWD	0	12.15	4.792	.443	*p = 0.634*
	1	12.39	3.260	.211	
PCT_FRL	0	41.73	19.028	1.759	*p < 0.001*
	1	51.30	22.814	1.476	
PCT_504	0	3.25	2.469	.228	*p = 0.056*
	1	2.75	1.917	.124	
PCT_FOSTER	0	.11	.286	.026	*p = 0.423*
	1	.14	.298	.019	
Total_N	0	387.49	240.200	22.206	*p < 0.001*
	1	676.16	228.944	14.809	

Note: 2012-13 data based on 239 middle schools with a reportable Former ELL subgroup (1) and 117 middle schools with a non-reportable Former ELL subgroup (0).

Table 4. Group statistics for Former ELL and Non-Former ELL schools (all high schools in Washington).

School Measure	Former ELL Group	Mean	Standard Deviation	Standard Error of the Mean	t-Test Result
PCT_MIGRANT	0	1.12	4.987	.309	*p < 0.001*
	1	3.88	7.145	.663	
PCT_ELL	0	2.63	6.700	.416	*p < 0.001*
	1	7.42	6.738	.626	
PCT_SWD	0	11.33	6.845	.425	*p = 0.286*
	1	10.78	3.226	.300	
PCT_FRL	0	45.23	21.214	1.316	*p = 0.094*
	1	49.56	23.870	2.216	
PCT_504	0	3.49	4.257	.264	*p = 0.161*
	1	3.03	2.009	.187	
PCT_FOSTER	0	.19	.612	.038	*p = 0.306*
	1	.14	.207	.019	
Total_N	0	537.85	550.704	34.153	*p < 0.001*
	1	1358.37	544.289	50.536	

Note: based on 115 high schools with a reportable Former ELL subgroup (1) and 151 high schools with a non-reportable Former ELL subgroup (0) and composite AI > 1.

The tables show that the Former ELL schools and the Non-Former ELL schools differ across grade span and differ with respect to school demographics that are correlated to student academic achievement. Based on assessment results over time, schools with higher percentages of students considered to be potentially "at risk" for failure (FRLs, SWDs, ELLs, and migrant) would generally be expected to perform lower on assessments.

Question 2

Is the academic performance of the All Students group different at Former ELL schools as compared to Non-Former ELL schools? If so, is the pattern of differences consistent across school levels?

Table 5. Group statistics for Former ELL and Non-Former ELL schools (all schools in Washington).

School Measure	Former ELL Group	N	Mean	Standard Deviation	Standard Error of the Mean	t-Test Result
Reading_3-Yr_Percent_Met	0	1042	72.63	13.611	.422	*p < 0.001*
	1	777	68.64	13.981	.502	
Math_3-Yr_Percent_Met	0	1034	63.11	15.577	.484	*p = 0.001*
	1	776	60.72	15.456	.559	
RandM_3YR_AVG_PRO	0	1034	67.89	14.257	.443	*p < 0.001*
	1	776	64.70	14.408	.517	
Reading_3Yr_MSGP	0	997	49.55	7.402	.234	*p = 0.231*
	1	773	49.96	6.997	.252	
Math_3Yr_MSGP	0	995	50.16	9.370	.297	*p = 0.291*
	1	772	50.64	9.433	.340	
RandM_3YR_AVG_MGP	0	992	49.85	7.470	.237	*p = 0.214*
	1	772	50.29	7.302	.263	

Table 5 provides evidence that proficiency rates (3-year average) at Former ELL schools are different from the proficiency rates at Non-Former ELL schools and that the rates are lower at the Former ELL schools. On the other hand, there are no mean differences for the growth measures between the Former ELL schools and the Non-Former ELL schools

Table 6. Group statistics for Former ELL and Non-Former ELL schools (all elementary schools in Washington).

School Measure	Former ELL Group	N	Mean	Standard Deviation	Standard Error of the Mean	t-Test Result
Reading_3Yr_Pct_Met	0	632	73.02	11.091	.4412	*p < 0.001*
	1	393	66.84	14.292	.7209	
Math_3Yr_Percent_Met	0	632	64.93	12.827	.5102	*p < 0.001*
	1	393	60.31	15.462	.7799	
RandM_3YR_AVG_PRO	0	632	68.97	11.704	.4655	*p < 0.001*
	1	393	63.57	14.640	.7384	
Reading_3Yr_MSGP	0	611	49.73	7.210	.2917	*p = 0.253*
	1	391	50.28	7.452	.3769	
Math_3Yr_MSGP	0	611	50.71	9.371	.3791	*p = 0.034*
	1	391	51.99	9.089	.4597	
RandM_3YR_AVG_MGP	0	611	50.22	7.627	.3085	*p = 0.065*
	1	391	51.13	7.558	.3822	

Table 6 provides evidence that the means differ for four of the six school academic measures at the elementary school level; the 3-Year Average Reading MGP and the Combined Reading and Math MGP did not differ. For the proficiency measures, the Non-Former ELL schools are higher but for growth, the Non-Former ELL schools are lower. Mean differences exist for the proficiency measures but not so much for the growth measures.

Table 7. Group statistics for Former ELL and Non-Former ELL schools (all middle schools in Washington).

School Measure	Former ELL Group	N	Mean	Standard Deviation	Standard Error of the Mean	t-Test Result
Reading_3Yr_Pct_Met	0	108	69.75	12.341	1.188	*p = 0.012*
	1	238	66.15	12.197	.791	
Math_3Yr_Percent_Met	0	108	59.50	14.269	1.373	*p = 0.126*
	1	238	56.94	14.440	.936	
RandM_3YR_AVG_PRO	0	108	64.62	12.981	1.249	*p = 0.042*
	1	238	61.55	13.022	.844	
Reading_3Yr_MSGP	0	108	48.41	7.296	.702	*p = 0.069*
	1	238	49.80	6.206	.402	
Math_3Yr_MSGP	0	108	48.25	8.806	.847	*p = 0.081*
	1	238	50.07	9.084	.589	
RandM_3YR_AVG_MGP	0	108	48.33	6.938	.668	*p = 0.043*
	1	238	49.94	6.768	.439	

Table 7 indicates a difference for the reading proficiency rates of Former ELL and Non-Former ELL middle schools but not for math proficiency. A difference is also indicated for the Combined Reading and Math proficiency rates. Neither the reading growth rates nor the math growth rates differ by school type but the combined reading and math growth rate differs by ELL school type. Where growth differences are noted, the performance of the Former ELL schools is higher than that of the Non-Former ELL schools.

Table 8. Group statistics for Former ELL and Non-Former ELL schools (all high schools in Washington).

School Measure	Former ELL Group	N	Mean	Standard Deviation	Standard Error of the Mean	t-Test Result
Reading_3Yr_Pct_Met	0	155	83.40	8.741	.702	*p = 0.003*
	1	116	80.03	9.482	.880	
Math_3Yr_Percent_Met	0	149	72.81	12.384	1.015	*p = 0.137*
	1	115	70.51	12.513	1.167	
RandM_3YR_AVG_PRO	0	149	78.30	10.028	.822	*p = 0.023*
	1	115	75.45	10.323	.963	
Reading_3Yr_MSGP	0	147	52.01	7.483	.617	*p = 0.003*
	1	115	49.32	7.164	.668	
Math_3Yr_MSGP	0	146	51.52	9.313	.771	*p = 0.001*
	1	114	47.53	10.448	.979	
RandM_3YR_AVG_MGP	0	145	51.74	6.818	.566	*p < 0.001*
	1	114	48.36	7.214	.676	
3Yr Average Grad Rate	0	146	86.09	10.291	.852	*p = 0.046*
	1	114	83.52	10.270	.962	

The t-tests for high schools yielded significant results for seven of the eight tests conducted as only the math proficiency rate did not differ. For the proficiency rates and the growth rates, the Non-Former ELL schools were higher.
The findings thus far are mixed. Significant t-tests mostly result from the comparison of the proficiency rates of the All Students group for the Former ELL schools to the rates of the Non-Former ELL schools and in these cases, the rates for the Non-Former ELL schools are greater. The t-tests comparing the growth rates of the Former ELL schools to those of the Non-Former ELL schools are less predictable:

- for the elementary schools, only the 3-Year Math MGP differed (statistically) and the math MGP average for the Former ELL schools exceeded that of the Non-Former ELL schools,
- for the middle schools, only the only the 3-Year Combined Reading and Math MGP differed and MGP average for the Former ELL schools exceeded that of the Non-Former ELL schools, and
- for the high schools, significant t-tests were reported for all three growth measures but the growth rates for the Non-ELL schools exceeded the rates for the Former ELL schools.

Thus far, it is evident that schools with reportable Former ELL achievement data perform differently than schools without reportable Former ELL data when the All Students group is the unit of analysis. One might infer that the differences are attributable to the presence of the Former ELL population. However, the differences may also be attributed to other demographic subgroups (ELL, SWD, and FRL, for example) which differ significantly between schools.

Question 3

For schools with reportable Former ELL populations, how do the academic measures for the Former ELL students compare to the academic measures for the All Students group? How do the measures vary by content area and by school level?

Table 9. Descriptive statistics for the All Students group at schools with reportable Former ELL populations.

School Measure	N	Minimum	Maximum	Mean	Std. Deviation
Reading_3Yr_Percent_Met	777	8.0	99.4	68.6	13.98
Math_3Yr_Percent_Met	776	5.2	99.7	60.7	15.46
RandM_3YR_AVG_PRO	776	6.6	99.5	64.7	14.41
Reading_3Yr_MSGP	773	29.2	70.7	50.0	7.00
Math_3Yr_MSGP	772	19.5	77.7	50.6	9.43
RandM_3YR_AVG_MGP	772	27.8	71.8	50.3	7.30

Table 10. Descriptive statistics for the Former ELL Students group at schools with reportable Former ELL populations.

School Measure	N	Minimum	Maximum	Mean	Std. Deviation
FELL_R_PRO_3YR_AVG	455	36.2	98.0	74.5	11.70
FELL_M_PRO_3YR_AVG	450	17.1	97.9	65.5	15.45
FELL_RandM_PRO_3YR_AVG	450	27.4	97.0	69.9	13.11
FELL_R_MGP_3YR_AVG	505	28.3	76.8	52.2	8.48
FELL_M_MGP_3YR_AVG	504	26.7	82.0	53.9	10.62
FELL_RandM_GRO_3YR_AVG	503	30.6	77.0	53.1	8.419

The following statements can be made based on Tables 9 and 10.

- For proficiency rates, the Former ELL group outperforms the All Students group.
- The minimum values for the Former ELL students is substantially greater than the minimum values for the ALL Students group
- The maximum values for the Former ELL students is comparable to the maximum values for the ALL Students group

- For growth rates, the Former ELL group outperforms the All Students group.
- The minimum values for the Former ELL students are comparable to the minimum values for the ALL Students group
- The maximum values for the Former ELL students is greater than the maximum values for the ALL Students group

Table 11. Descriptive statistics for the All Students group at elementary schools with reportable Former ELL populations.

School Measure	N	Minimum	Maximum	Mean	Std. Deviation
Reading_3Yr_Percent_Met	393	29.2	99.4	66.8	14.29
Math_3Yr_Percent_Met	393	20.9	99.7	60.3	15.46
RandM_3YR_AVG_PRO	393	25.1	99.5	63.6	14.64
Reading_3Yr_MSGP	391	29.2	70.7	50.3	7.45
Math_3Yr_MSGP	391	29.2	75.7	52.0	9.09
RandM_3YR_AVG_MGP	391	32.6	71.8	51.1	7.56

Table 12. Descriptive statistics for the Former ELL Students group at elementary schools with reportable Former ELL populations.

School Measure	N	Minimum	Maximum	Mean	Std. Deviation
FELL_R_PRO_3YR_AVG	231	36.2	98.0	78.9	9.98
FELL_M_PRO_3YR_AVG	231	31.7	97.9	71.8	13.78
FELL_RandM_PRO_3YR_AVG	231	34.0	97.0	75.3	11.37
FELL_R_MGP_3YR_AVG	229	30.7	76.8	52.8	8.83
FELL_M_MGP_3YR_AVG	230	27.2	79.7	55.9	10.25
FELL_RandM_GRO_3YR_AVG	229	33.5	77.0	54.3	8.51

The following statements (based on Tables 11 and 12) are the same as for those based on the previous two tables.

- For proficiency rates, the Former ELL group outperforms the All Students group.
- The minimum values for the Former ELL students is substantially greater than the minimum values for the ALL Students group
- The maximum values for the Former ELL students is comparable to the maximum values for the ALL Students group
- For growth rates, the Former ELL group outperforms the All Students group.
- The minimum values for the Former ELL students are comparable to the minimum values for the ALL Students group
- The maximum values for the Former ELL students is greater than the maximum values for the ALL Students group

Table 13. Descriptive statistics for the All Students group at middle schools with reportable Former ELL populations.

	N	Minimum	Maximum	Mean	Std. Deviation
Reading_3_Yr_Percent_Met	238	28.7	90.0	66.2	12.20
Math_3_Yr_Percent_Met	238	23.6	87.8	56.9	14.44
RandM_3YR_AVG_PRO	238	26.2	88.4	61.5	13.02
Reading_3_Yr_MSGP	238	36.2	69.5	49.8	6.21
Math_3_Yr_MSGP	238	26.7	75.0	50.1	9.08
RandM_3YR_AVG_MGP	238	32.0	71.7	49.9	6.77

Table 14. Descriptive statistics for the Former ELL Students group at middle schools with reportable Former ELL populations.

	N	Minimum	Maximum	Mean	Std. Deviation
FELL_R_PRO_3YR_AVG	159	37.8	90.6	66.0	10.55
FELL_M_PRO_3YR_AVG	159	17.1	90.7	56.0	14.05
FELL_RandM_PRO_3YR_AVG	159	27.4	90.6	61.0	11.86
FELL_R_MGP_3YR_AVG	200	36.0	74.3	53.1	7.34
FELL_M_MGP_3YR_AVG	200	30.3	76.7	53.4	10.03
FELL_RandM_GRO_3YR_AVG	200	33.7	72.8	53.3	7.59

See that for middle schools, the academic performance of the Former ELL students looks very similar to the performance of the All Students group for proficiency. The mean growth measures for the Former ELL students are greater than for the All Students group.

Table 15. Descriptive statistics for the All Students group at high schools with reportable Former ELL populations.

	N	Minimum	Maximum	Mean	Std. Deviation
Reading_3Yr_Percent_Met	116	37.6	95.9	80.0	9.48
Math_3Yr_Percent_Met	115	34.8	94.5	70.5	12.51
RandM_3YR_AVG_PRO	115	47.8	95.2	75.5	10.32
Reading_3Yr_MSGP	115	32.0	70.2	49.3	7.16
Math_3Yr_MSGP	114	21.7	77.7	47.5	10.45
RandM_3YR_AVG_MGP	114	27.8	63.2	48.4	7.21
3YR Average Grad Rate	115	24.0	97.6	83.0	11.61

Table 16. Descriptive statistics for the Former ELL Students group at high schools with reportable Former ELL populations.

	N	Minimum	Maximum	Mean	Std. Deviation
FELL_R_PRO_3YR_AVG	55	64.8	95.2	80.8	7.40
FELL_M_PRO_3YR_AVG	50	44.7	94.8	66.6	12.08
FELL_RandM_PRO_3YR_AVG	50	56.0	95.0	73.7	9.20
FELL_R_MGP_3YR_AVG	64	28.3	72.8	47.3	9.018
FELL_M_MGP_3YR_AVG	62	26.7	82.0	48.0	11.99
FELL_RandM_GRO_3YR_AVG	62	30.6	66.3	47.7	8.73
FELL_GRAD_3YR_AVG	15	15.8	91.2	76.7	20.68

The following statements can be made for high schools based on Tables 15 and 16.

- For proficiency rates, the performance of the Former ELL subgroup approximates those for the All Students group.
- The minimum values for the Former ELL students are substantially greater than the minimum values for the ALL Students group
- The maximum values for the Former ELL students are comparable to the maximum values for the ALL Students group
- For the average growth rates, the Former ELL group performs at about the same level as the All Students group.
- The minimum values for the Former ELL students are mostly higher than the minimum values for the ALL Students group
- The maximum values for the Former ELL students is greater than the maximum values for the ALL Students group
- The graduation rates are slightly higher for the All Students group as compared to the Former ELL students.

Question 4

For each of the academic performance indicators and school level, which schools have the greatest demonstrable success with their respective Former ELL students?

An analysis was conducted to determine whether the highest performing Former ELL schools differed by demography from lower performing Former ELL schools. Schools (by ES, MS, and HS) that performed at or above the 95th percentile on any measure were coded with a 1 and other schools coded as 0.

Group statistics for high performing (1) and lower performing (0) Former ELL schools.

	FELL_HI_Group	N	Mean	Std. Deviation	Std. Error Mean	t-test Result
PCT_MIGRANT	0	717	3.59	7.283	.272	*p = 0.032*
	1	68	1.96	5.742	.696	
PCT_ELL	0	717	16.982	15.8028	.5902	*p = 0.111*
	1	68	13.815	13.9180	1.6878	
PCT_SWD	0	717	12.3992	4.05859	.15157	*p = 0.002*
	1	68	10.8122	3.48078	.42211	
PCT_FRL	0	717	57.0244	25.08276	.93673	*p < 0.001*
	1	68	41.1322	27.96010	3.39066	
PCT_504	0	717	2.198	2.0497	.0765	*p = 0.031*
	1	68	2.760	2.0521	.2489	
PCT_FOSTER	0	717	.14	.279	.010	*p = 0.043*
	1	68	.09	.193	.023	
TOTAL_N	0	717	674.54	384.862	14.373	*p = 0.042*
	1	68	775.62	454.001	55.056	

Significant t-test results were returned for five of the 6 tests conducted, indicating different school demography. Higher performing Former ELL schools are characterized by:

- lower percentage of migrant students,
- no difference in the percentage of ELLs,
- lower percentage of SWDs,
- lower percentage of FRLs,
- higher percentage of students with 504 accommodations,
- lower percentage of students in foster care, and
- have a larger school enrollment.

Glossary & Acronyms

- AAW: Accountability and Achievement Workgroup. NN member panel comprised of … for the purpose of …
- AMAO / Annual Measurable Achievement Objective. Three Federal accountability measures related to the effectiveness of bilingual programs.
- Basic-level proficiency. State policies allow students with disabilities whose IEPs notes proficiency at WCAP Level-2 to be considered as proficient. Federal accountability and the Achievement Index do not allow this. These students are not considered as proficient.
- ELL: English Language Learner. A student who is actively enrolled in a Transitional Bilingual Instructional Program.
- EOC: End of Course Exam. The 10th grade measures for math and science within the WCAP.
- ESEA. Elementary and Secondary Education Act of 1965.
- Former-ELL: A student who was ELL in the past but has exited from that program by achieving English language proficiency (see WELPA).
- HSPE: High School Proficiency Exam. The 10th grade measure for reading and writing within the WCAP.
- IEP: Individualized Education Plan. The plan for each student with a disability that is created by the school with student and parent/guardian input. This plan defines the serviced provided and the expected outcomes for that student.
- MSGP: Median student growth percentile. Calculated independently for reading and math student growth. This represents the school wide median student growth percentile value.
- MSP: Measure of Student Progress.
- NCLB: No Child Left Behind. The 2001 reauthorization of the Elementary and Secondary Education Act (ESEA)\
- OSPI: Office of the Superintendent of Public Instruction. Oversees the processes for public education in Washington State.
- SBE: State Board of Education. The governing body for K-12 public education in Washington State.
- SGP: Student Growth Percentile. A normative view of student growth based on the performance of students from year to year. For ,more information see: http://www.k12.wa.us/assessment/StudentGrowth.aspx
- SWD: Students with disabilities. Formerly referred to as the SpEd subgroup or Special Education subgroup.
- WCAP: Washington Comprehensive Assessment Program. The umbrella term for state wide assessments used to monitor student achievement. For the Achievement Index, this represents the MSP, HSPE, and EOC assessments.
- WELPA: Washington English Language Proficiency Assessment. The state assessment, given to all ELL students in late February or early March of each year to measure progress toward English proficiency. Scores are reported in 4 performance level. A student scoring a Level-4 exits the ELL program at the end of that academic year.
- WLPT: Washington Language Proficiency Test. Replaced by the WELPA in 2012 as an assessment to measure progress toward language proficiency.

For More Information

Washington State Board of Education (SBE) provides advocacy and strategic oversight of public education in Washington. The SBE is responsible for implementing a standards-based accountability system to improve student academic achievement and promotes achievement of the Basic Education Act goals. The SBE provides leadership in the creation of a system that personalizes education for each student and respects diverse cultures, abilities, and learning styles. See www.sbe.wa.gov.

Center for Educational Effectiveness (CEE) provides data-centric tools, services, consulting, and research and is dedicated to the mission of partnering with K-12 schools, districts, and state agencies to increase student learning by improving the effectiveness of educational institutions. CEE is actively involved in assisting schools and districts in the western United States with research and tools to enhance school improvement efforts. CEE's tools and services are currently being used by over 450 schools and districts in the western U.S. For more information about CEE data-centered solutions for your school or district, see www.effectiveness.org