WIDA Consortium
Report on 2016-2018 Boxplot Analyses Results

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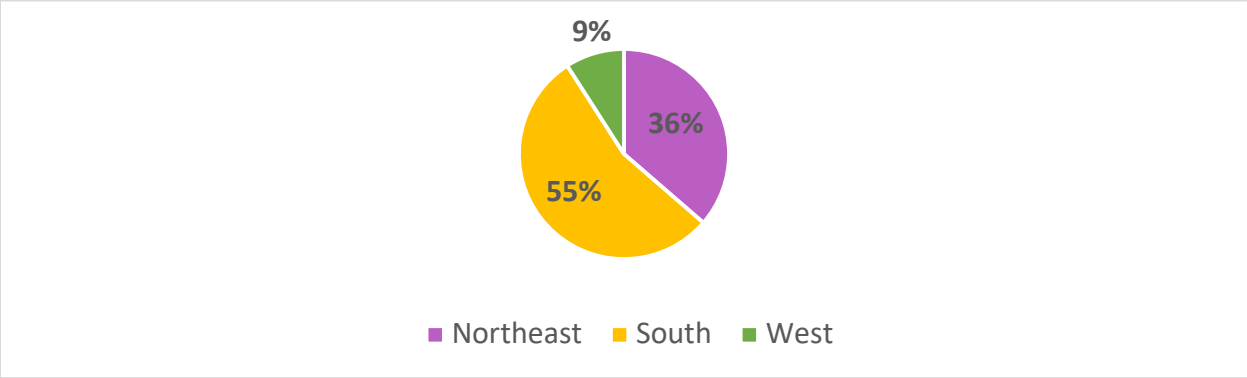
Introduction

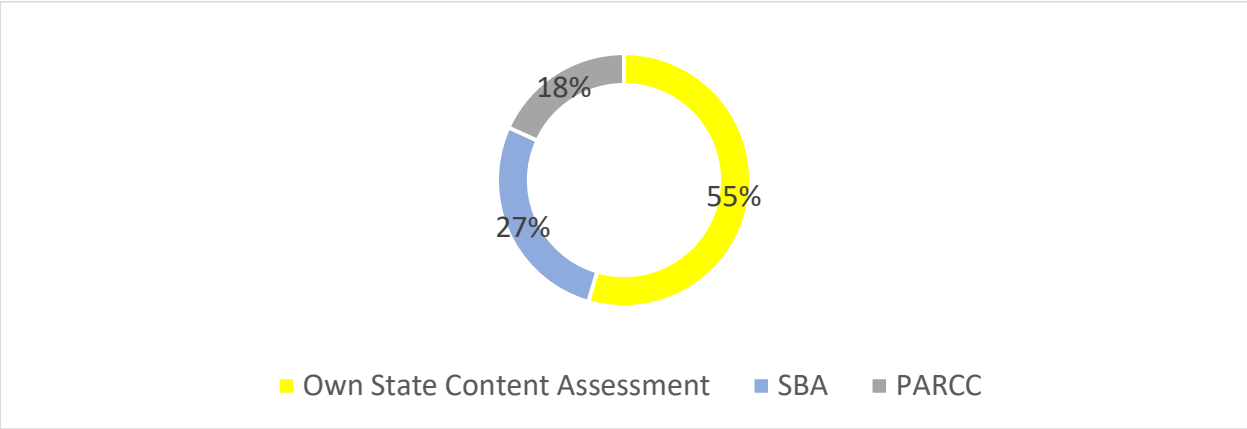
The purpose of this report is to communicate results of analyses from selected states' English language proficiency (ELP) assessment and state content assessments to support establishing exit criteria for attaining English language proficiency. Figure 1 presents the number and percentage of state Technical Assistance (TA) requests for ELP and state content analyses by geographic region[1] during the 2016-2018 academic school years. Eleven states requested ELP and state content analyses during this period, with the majority of the TA requests originating from the South region.

Figure 1: Number and Percent of ELP and State Content Assessment TA Requests



Analyses herein use data from the states' content assessments, which include the Partnership for Assessment of Readiness for College and Careers ® (PARCC), Smarter Balanced ® (SBA), and the individual states' respective content assessments for the 2016-18 academic school years and the WIDA Consortium's ACCESS for ELLs (ACCESS) ELP assessment for the 2016-18 academic school years. Figure 2 shows the distribution of the state content assessments for the selected states.

Figure 2: Distribution of State Content Assessments



[1] Geographic region is assigned through representation by WIDA State Relations Specialist. Regions include the Northeast, South, and West. Midwest states are divided among the State Relations Specialists.

Five of the selected states are members of either the PARCC or SBA consortium while the remaining six states administer a specialized state content assessment designed for each state.

Federal guidance under the *Every Student Succeeds Act (ESSA) of 2015, Title VIII, Section 8101* defines the term "English Learner" (EL) as an individual whose difficulties in speaking, reading, writing, or understanding the English language may be sufficient to deny the individual the ability to meet the challenging State academic standards; the ability to successfully achieve in classrooms where the language of instruction is English; or the opportunity to participate fully in society (ESSA Title VIII, Part A, Section 8101(20)(D)). This report presents results from analyses of student attainment of English proficiency between states' content assessments and ACCESS. The goal of these analyses is to support the WIDA Consortium states in establishing new exit criteria for English language proficiency.

State Statistical Analysis of Attaining English Language Proficiency

In order to establish exit criteria and targets for attaining English language proficiency, the goal is to determine a language proficiency level range such that students have the English language skills to do the following:

- Meet challenging academic standards in English,
- Successfully achieve in classrooms where the language of instruction is English, and
- Participate fully in society in English.

These goals require two key assumptions:

1. A meaningful relationship exists between ELP and academic content assessments, and
2. The signal of English proficiency is at the point at which a majority of ELs perform on the state academic content assessment at or above the proficient cut or achieve similar performance to their non-EL peers.

The states administer either PARCC, SBA, or their own respective content assessments to measure academic content proficiency in English Language Arts (ELA) and Math for grades 3-8[2]. The states report performance on ACCESS to determine attainment in ELP for their ELs. ACCESS provides proficiency level scores in integer (i.e., whole number) and decimal values. ACCESS decimal scores range from 1.0 to 6.0 in 0.1 increments. In WIDA states, decimal scores have been integral in examining the attainment of English language proficiency and for measuring growth.

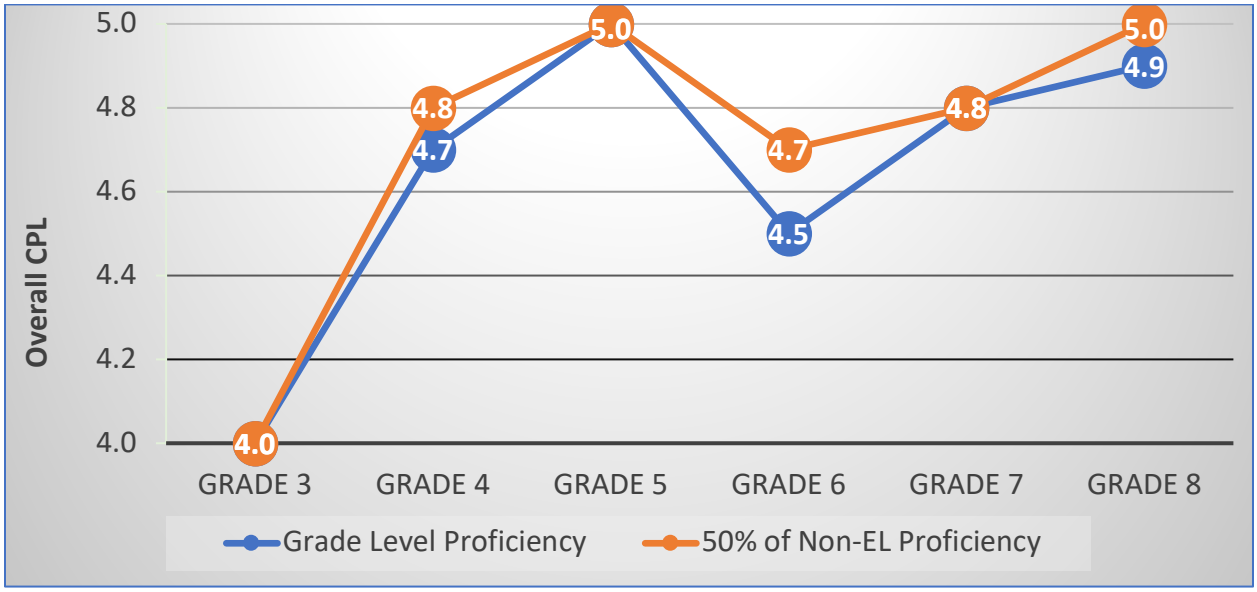
Boxplot analyses were used to present the distribution of EL and non-EL[3] students' performance in ELA and Math for grades 3-8 and to identify both grade-level proficiency

[2] While two states measure academic content proficiency in ELA and Math beyond Grade 8, the sample size is too small to make generalizable statements regarding attainment in English language proficiency.
[3] Non-ELs include students who have never taken ACCESS and students who were formerly designated as ELs and have exited English language programs.

results and outcomes in which more than 50% of ELs would be at or above the proficiency line established for non-EL students in these such subjects for each grade.

Figure 3 provides the ELA boxplot results using rough interpolated values, which were created by examining the proportional relationship between the observed boxplot Composite Proficiency Level (CPL) and the subject scale scores at both the content proficient line and the point at which more than 50% of the ELs would be at or above the proficiency line established for non-EL students. The figure displays the CPLs by grade.

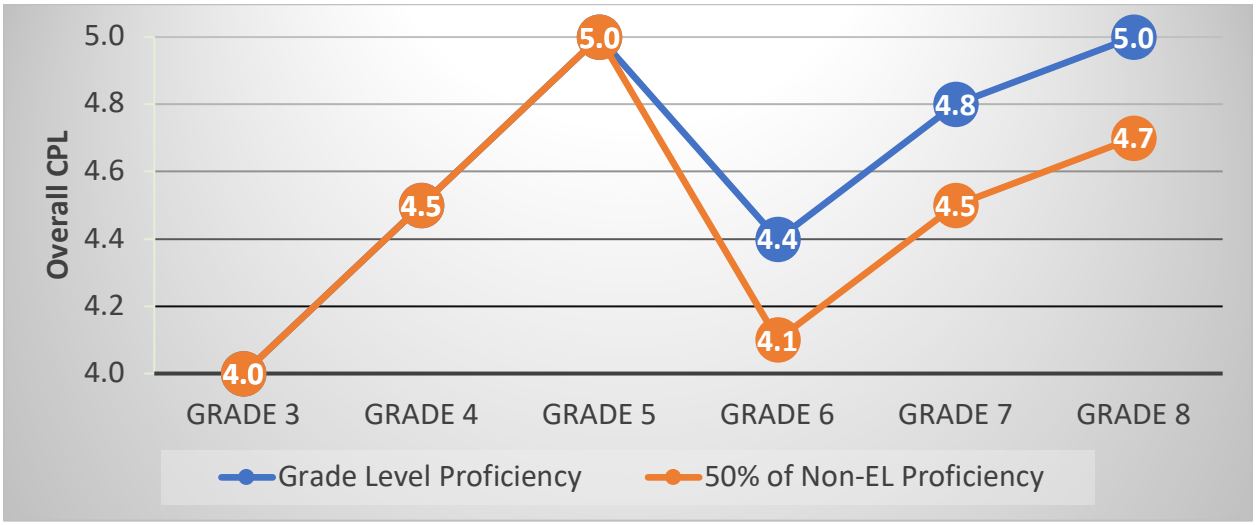
Figure 3: Interpolated Overall CPL Boxplot Values and CPL Boxplot Values in ELA in which More than 50% of ELs are At or Above Non-EL Proficiency for Grades 3-8



For each grade, the median CPL is presented. In Grade 3, the CPL at which both grade level proficiency in ELA and 50% of ELs are at or above the proficiency line is about 4.0. To contrast, in Grade 5 the CPL at which grade level proficiency and 50% of EL proficiency converges is around 5.0. Across the grades, the median CPL at which both 50% of ELs are at or above the proficiency line as well as grade level proficiency is approximately 4.8.

Figure 4 provides the boxplot results in Math also using rough interpolated values. The values were created by examining the proportional relationship between the observed boxplot CPL and the Math scale scores at both the content proficient line and the point at which more than 50% of the ELs would be at or above the proficiency line established for non-EL students. The figure displays the CPLs by grade.

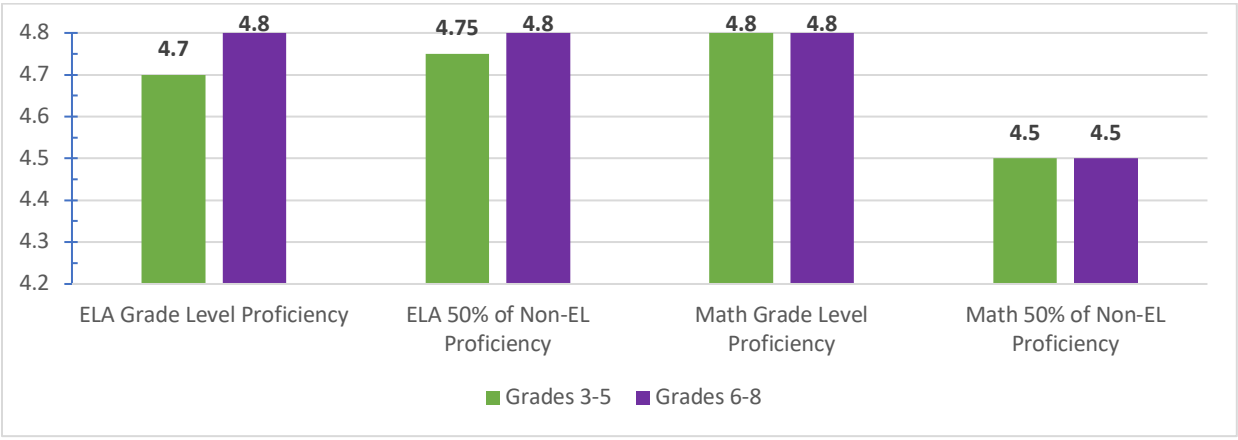
Figure 4: Interpolated Overall CPL Boxplot Values and CPL Boxplot Values in Math in which More than 50% of ELs are At or Above Non-EL Proficiency for Grades 3-8



The median CPL for each grade is presented. Similar to the results presented for ELA, in Grade 3, the CPL at which both grade level proficiency in Math and 50% of ELs are at or above the proficiency line is about 4.0. In contrast, in Grade 5 the CPL at which grade level proficiency and 50% of EL proficiency in Math converges is around 5.0. Across the grades, the median for the Overall CPL is 4.7 whereas the median CPL at which both 50% of ELs are at or above the proficiency line as well as grade level proficiency is approximately 4.8.

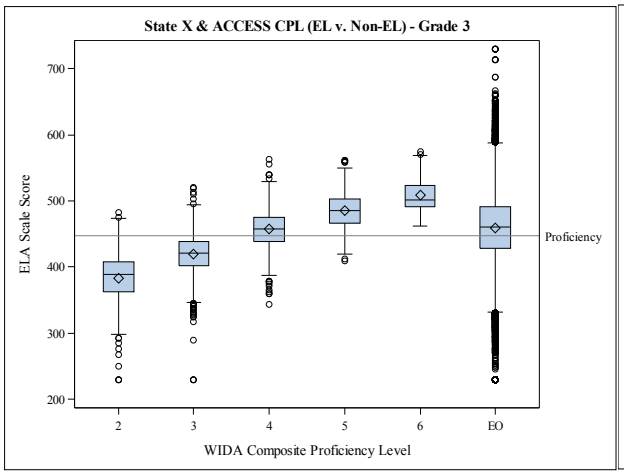
Table 1 provides the median interpolated boxplot values in ELA and Math at the content proficiency line and the point at which more than 50% of the ELs would be at or above non-EL proficiency for the elementary school cluster (Grades 3-5) and the middle school cluster (Grades 6-8).

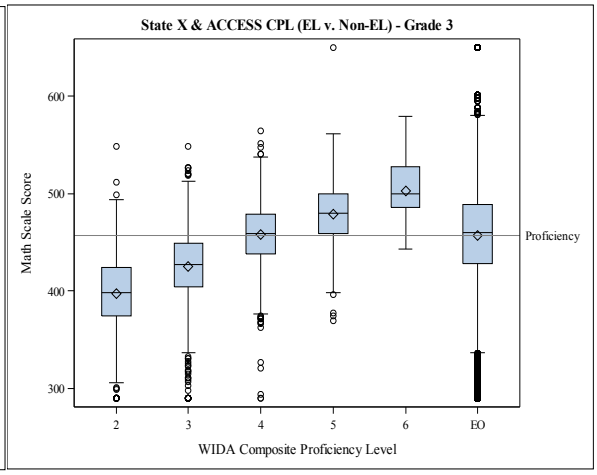
Table 1: Median Interpolated Boxplot Values by Grade Level Proficiency and 50% of Non-EL Proficiency by Grade Cluster

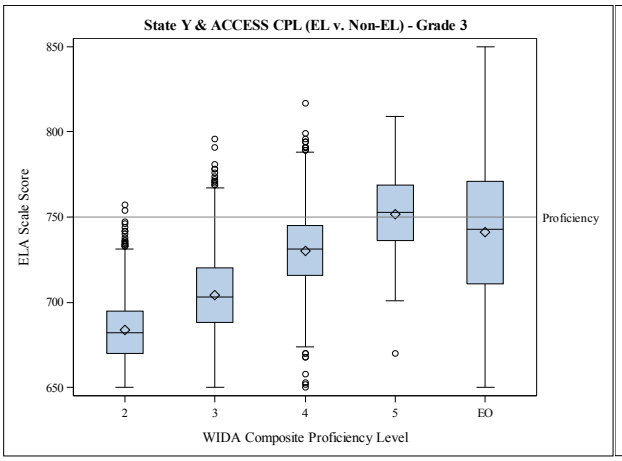


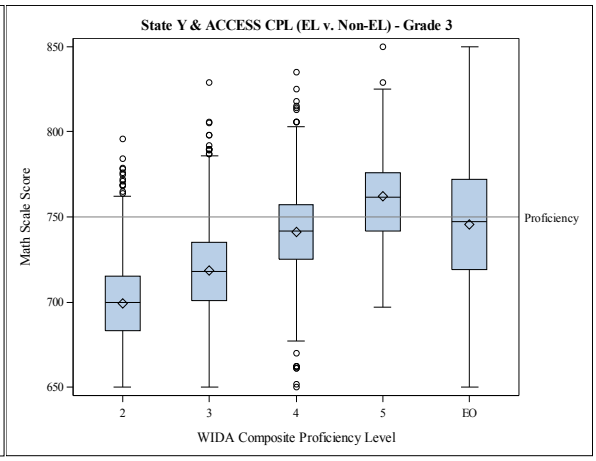
The median CPL for each grade cluster is presented. In the elementary school cluster, Grades 3-5, the CPL at which grade level proficiency in ELA is attained is around 4.7, whereas the median CPL at which 50% of ELs are at or above the proficiency line is about 4.75. Also for the elementary cluster, the median CPL at grade level proficiency and 50% of Non-EL Proficiency is approximately 4.8 and 4.5, respectively. There is a little less variability in the median CPL for the middle school cluster. The median CPL in ELA Grade Level Proficiency, 50% of Non-EL Proficiency in ELA, and in Math Grade Level Proficiency is near 4.8 for Grades 6-8. In contrast, the median CPL in Math for the middle school cluster at which grade level proficiency and 50% of EL proficiency in Math converges is around 4.5.

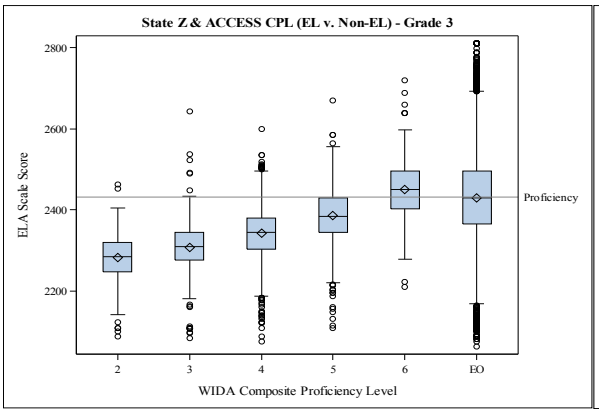
Appendix A: Selected Grade 3 Boxplot Results
State-Specific Content Assessment (State X), PARCC (State Y), and SBA (State Z)

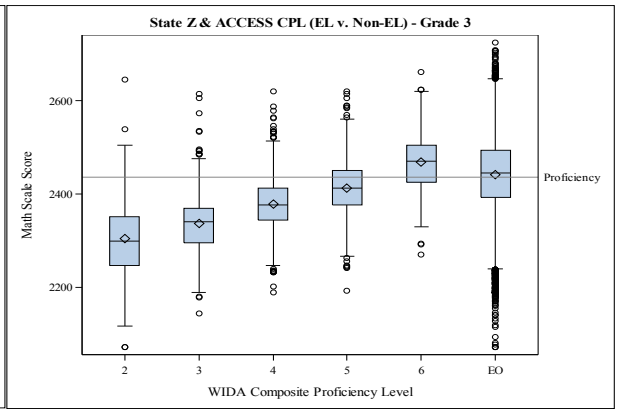












Appendix B: Selected Grade 7 Boxplot Results
State-Specific Content Assessment (State X), PARCC (State Y), and SBA (State Z)