Aline Orr, Ph.D. **Publication 16.10 December 2016**



English Language Learners' Academic Performance Across Four Years, 2012-2013 through 2015-2016

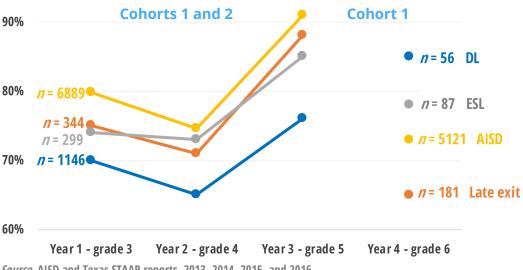
Austin Independent School District

AISD English Language Learners (ELLs) are assessed annually in academic subject areas using the State of Texas Assessments of Academic Readiness (STAAR) at elementary and middle school levels, and STAAR end-of-course (EOC) at high school levels. The current document describes AISD ELLs' performance on STAAR reading and math by program, from 2012-2013 through 2015-2016. For more ELL 2016 STAAR and EOC results, see the annual report at https://www.austinisd.org/sites/default/files/dre-surveys/ R15.71 Bilingual and English as a Second Language Programs Summary 2015-2016.pdf.

STAAR Reading

As shown in Figure 1, ELLs in DL, ESL, and late exit followed a similar performance pattern on STAAR reading from years 1 to 3. ELLs' STAAR reading passing rate showed a small dip from year 1 to year 2, and an overall increase from year 1 to year 3. However, in year 4, passing rates for ELLs in the DL program were higher than passing rates for ELLs in the late exit or the ESL program*. It should be noted that year 4 analysis included only the first cohort of DL students (see page 3 for a description of the 2 cohorts included in this report), which consists of a small sample of students who have performed consistently better than students in the other groups for all four years. When cohort 2 reaches it's fourth year of STAAR data, should their upward trend continue it will be consistent with research that indicates DL program benefits are gradual and become

Figure 1. ELLs' STAAR Reading Passing Rates Across 4 Years, 2013–2016



Source. AISD and Texas STAAR reports, 2013, 2014, 2015, and 2016

^{*}See Texas Education Agency for STAAR passing standard information at http://tea.texas.gov/ student.assessment/staar/

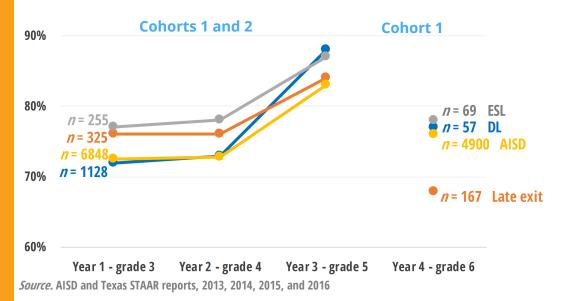
Longitudinal analysis of AISD ELLs' STAAR reading and math performance

evident beyond 5th grade (Thomas & Collier, 1997). In addition, the pattern displayed by ELLs in the late exit and ESL programs mirrored the pattern displayed by all AISD students in the same grade levels taking STAAR reading in the period of 2013 through 2016.

A predictive analysis of STAAR reading data suggested that in years 2 and 3 (corresponding to grades 4 and 5), ELLs in late exit and ESL had a higher probability of passing STAAR reading than did ELLs in DL. In year 4 (corresponding to 6th grade), this was reversed, and participation in DL, compared with participation in other programs, was associated with a higher probability of passing STAAR reading. However, as mentioned earlier, the analysis for year 4 included cohort 1 (the only group of students with 4 years of data) and the analysis accounted for very little of the variance in results (less than 3%), which may be related to the small number of subjects in some of the groups. This indicates that other factors may have contributed to students' academic outcomes. These observations are supported by earlier analyses of ELLs' academic outcomes that indicated that BE/ESL program type, classroom student composition, administrators' ratings of teachers' instruction, and student characteristics also had mixed or no effects on ELLs' STAAR reading performance (Orr, 2016).

STAAR Math

Figure 2. ELLs' STAAR Math Passing Rates Across 4 Years, 2013–2016



Similar to what was observed for STAAR reading, ELLs in all three programs followed an analogous performance pattern on STAAR math from year 1 to year 4 (Figure 2). ELLs' STAAR math passing rates gradually increased from year 1 to year 3, but were lower in year 4. This pattern mirrored that for all AISD students taking STAAR math in the same grade levels from 2013 through 2016.

Predictive analyses of STAAR math results indicated that in year 4 (corresponding to grade 6), ELLs in DL and ESL had a higher probability of passing STAAR math than did ELLs in late exit. However, similar to what was observed for STAAR reading, the analysis for year 4 included only cohort 1 and accounted for very little of the variance in results (less than 2%), which may be related to the small number of subjects in some of the groups (specially in year 4). In addition, this indicates that other factors may have contributed to students' academic outcomes.

Summary

In summary, the general pattern displayed by ELLs on STAAR reading and math mirrored the pattern displayed by all AISD students in the same grade levels. The only exception to this general pattern was observed in 6th grade, at which point, participation in the DL program seemed to have beneficial effects on STAAR reading results. Because these effects were observed for a small group of ELLs (corresponding to cohort 1), who had consistently performed well on STAAR tests, AISD staff will conduct the same analysis with data from cohort 2 after this group has taken the STAAR assessments in 6th grade during 2017. In addition, results should be investigated further to understand what aspects of the DL program and other factors may have influenced ELLs' performance. Furthermore, the effect of BE and ESL programs on other aspects of ELLs' academic development and success (e.g., social and emotional well-being, engagement in school, and participation in advanced coursework) should be investigated.

Student Cohorts

AISD STAAR data were available for a maximum of 4 years for all three programs (late exit, DL, and ESL). In 2010–2011, the AISD DL program enrolled ELLs in kindergarten or in 1st grade. Because STAAR assessments are administered from 3rd grade on, STAAR data were available for 4 years for students who joined DL in 1st grade in 2010–2011 (cohort 1) and for 3 years for students who, in 2011–2012, were promoted from kindergarten to 1st grade or who joined DL in 1st grade during that year (cohort 2).

To maximize the number of students included in the analysis, STAAR reading and math scores for both cohorts of students were combined into one group for years 1 through 3, corresponding to grades 3 through 5 for both cohorts (Table 1). In addition, because cohort 1 was enrolled in 6th grade during 2015–2016, a 4th year of STAAR data were available for cohort 1. It is important to note that because only cohort 1 had STAAR data in year 4, the number of ELLs included in the analysis was much smaller in year 4 than in year 1. Cohorts 1 and 2 together had 1,789 ELLs, whereas cohort 1 alone had 324 ELLs. Due to the small numbers of ELLs available for analysis in year 4, results may not represent the whole AISD ELL population and must be interpreted with caution.

ELL Cohorts Included in Longitudinal Analysis

		School year									
		2010-2011	2011-2012	2012-2013	2013-2014	2014-2015	2015-2016				
Cohort 1	Grade level	1 st grade	2 nd grade	3 rd grade	4 th grade	5 th grade	6 th grade				
	Analysis year			Year 1	Year 2	Year 3	Year 4				
Cohort 2	Grade level		1 st grade	2 nd grade	3 rd grade	4 th grade	5 th grade				
	Analysis year				Year 1	Year 2	Year 3				

Lastly, some of the ELLs included in the analysis were reclassified as former ELL in year 3 or year 4. These monitored students were included in the analysis as part of the program they were in before being reclassified. Tables 1 and 2 in the appendix show the numbers of ELLs and the number of 1^{st} and 2^{nd} —year monitored students included in the analysis for each program.

References

Thomas, W., & Collier, V. (1997). *School effectiveness for language minority students*. Washington, DC: National Clearinghouse for Bilingual Students, George Washington University.

Orr, A. (2016). Bilingual and English as a Second Language Programs Summary, 2015–2016 (DRE publication No. 15.71). Austin, TX: Austin Independent School District.

Appendix

Table 1.

ELLs Cohorts 1 and 2, *n* Count and STAAR Reading Passing Rate, by Program

		D	L		Late exit				ESL				AISD	
	% pass	n	Reclassified		% pass	n	Reclassified		% pass	n	Reclassified		% pass	n
			F	S			F	S			F	S		
Year 1 (grade 3)	70%	1146	0	0	75%	344	0	0	74%	299	0	0	80%	6889
Year 2 (grade 4)	65%	1146	0	0	71%	344	0	0	73%	299	0	0	75%	6463
Year 3 (grade 5)	76%	1146	72	0	88%	344	23	0	85%	299	54	0	91%	5881
Year 4 (grade 6)	85%	56	0	3	65%	181	19	17	78%	87	22	18	73%	5121

Source. AISD and Texas STAAR reports, 2013 through 2016

Note. Reclassified represents ELLs who exited program services and were being monitored, F is 1st-Year monitored and S is 2nd-Year monitored. STAAR results include scored tests and test version S.

Table 2.

ELLs Cohort 1 and 2, *n* Count and STAAR Math Passing Rate, by Program

		D	L		Late exit				ESL				AISD	
	% pass	n	Reclassified		% pass	n	Reclassified		% pass	n	Reclassified		% pass	n
			F	S			F	S			F	S		
Year 1 (grade 3)	72%	1128	0	0	76%	325	0	0	77%	255	0	0	73%	6848
Year 2 (grade 4)	73%	1128	0	0	76%	325	0	0	78%	255	0	0	73%	6457
Year 3 (grade 5)	88%	1128	72	0	84%	325	23	0	87%	255	53	0	83%	5719
Year 4 (grade 6)	77%	57	0	3	68%	167	19	17	78%	69	16	18	76%	4900

Source. AISD and Texas STAAR reports, 2013 through 2016

Note. Reclassified represents ELLs who exited program services and were being monitored, F is 1st-Year monitored and S is 2nd-Year monitored. STAAR results include scored tests and test version S.

AUSTIN INDEPENDENT SCHOOL DISTRICT

Aline Orr, Ph.D.

Department of Research and Evaluation

