



THE SCHOOL DISTRICT OF
PHILADELPHIA

ADDENDUM: English Learner Performance on the 2021-22 ACCESS, Star Reading, and Star Math Assessments

The ACCESS assessment is administered to English Learners (ELs) annually each winter to measure their progress toward English proficiency. Star Computer Adaptive Tests (CATs) are a suite of assessments administered 3-4 times during the school year to students in grades K-12 that measure students' reading and math skills, monitor achievement and growth, and track how well students understand skills aligned to state and Common Core standards. Although some ELs are excused from participation in Star, most take Star Reading and Math. This report examines EL performance on the ACCESS and EL performance on Star within the context of ACCESS performance.

*This is an addendum to the **English Learner Performance on the 2021-22 ACCESS, Star Reading, and Star Math Assessments** [report](#) that compares NPR in District Administrative Records (as reported in the QlikBAM dashboard for internal users) and NPR converted from NCE (in the original report). This addendum is supplementary to the original report and is not intended to be read on its own.*

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August 2023

Tables

Table 1. Average Star Reading NPR and NCE-based Average NPR performance by ACCESS level	4
Table 2. Average Star Math NPR and NCE-based Average NPR performance by ACCESS level.....	5
Table 3. Average Star Reading NPR and NCE-based Average NPR converted from NCE performance by grade band.....	6
Table 4. Average Star Math NPR and NCE-based Average NPR performance by grade band	7
Table 5. Average Star Reading NPR and NCE-based Average NPR performance by student race/ethnicity.....	9
Table 6. Average Star Math NPR and NCE-based Average NPR performance by student race/ethnicity.....	10
Table 7. Average Star Reading NPR and NCE-based Average NPR performance by top 14 home languages	11
Table 8. Average Star Math NPR and NCE-based Average NPR performance by home language	13

Background

Every year, English Learners (ELs) nationally take the ACCESS assessment to measure their English proficiency level. In the School District of Philadelphia (SDP), all students¹ take the Star Reading and Star Math assessments multiple times per year² to measure student proficiency and growth in literacy and mathematics skills. Unlike end-of-year standardized assessments that provide a summative description of student performance, within-year assessments like Star provide real-time information about students' knowledge of reading and math skills that teachers and school administrators use to inform instructional decisions and monitor student progress.

The goal of this report is to examine EL performance on the ACCESS, and the relationship between EL performance on the ACCESS assessment and EL performance on Star Reading and Star Math in 2021-22 within the context of ACCESS performance.

Star Normal Curve Equivalent, and National Percentile Rank converted from Normal Curve Equivalent

Normal Curve Equivalent-based National Percentile Rank (NPR) was used as the measure for student performance in this report. This was done because when student assessment scores are normally distributed, which is often the case, traditional NPR is not an interval measure. That is, the range of scores that students receive in the lower and upper ends of the NPR spectrum (around the 1st and 99th percentiles) will be much larger than the range of scores that students receive around the 50th percentile.

NPR is an easily accessible measure; therefore, we chose to use a version of average NPR for different student groups' performance in our cohort analyses without any conversions. We accomplished this by starting with Normal Curve Equivalent (NCE), an interval measure, which is a scale transformed from traditional NPR. After averaging NCE across student groups, we transformed the average NCE for student groups into NCE-based Average NPR values for student groups.

NCE scores are a norm-referenced performance measure, and are one way to address the limitations of NPR. Like percentile ranks, NCE scores describe students' performance among a nationally normed sample. However, unlike percentile ranks, NCEs are interval-scaled so that the intervals between test scores that correspond to each NCE score are the same.³ Therefore, NCEs can be used to calculate an average or to calculate differences between groups. NCEs are scaled with a mean of 50, a standard deviation of 21.06, and range from 1-99.⁴

¹ There are exceptions for English Learners who have been in the United States for one year, and for students with severe cognitive disabilities.

² In 2021-22, Star was administered four times: Fall, Winter 1, Winter 2, and Spring.

³ For example, the interval between NCE scores of 23 and 24 is the same as the interval between NCE scores 50 and 51.

⁴ In this report, they are derived from the percentile ranks using the equation $NCE = 21.06 * z\text{-score} + 50$ (Lipsey et al., 2012), where the z-score comes from the percentile rank value.

An NCE score of 50 indicates performance at the average of the national norming sample, while scores higher or lower than 50 indicate performance above or below the average of the national norming sample, respectively.⁵ A student with an NCE score of 50 or above performed the same or better than 50% of students nationally, and a student with an NCE score below 50 performed worse than 50% of students nationally. For this analysis, we sourced NCE scores converted from traditional NPR scores. It is important to note that despite their similarities, NCE scores and NPRs do not align.⁶ Therefore, NCE scores should not be interpreted in the same way as NPRs.

In this report, changes to the traditional NPR (referred to as Non-NCE-based NPR below) in our sample after undergoing the conversion process from NCE back to NPR (referred to below as NCE-based Average NPR) were rather minimal, changing only a few percentiles. Occasionally, those percentile differences between Non-NCE-based NPR and NCE-based Average NPR moved the average performance of a particular group into a new performance group (e.g., a Non-NCE-based NPR of 39, when transformed from NCE resulted in an NCE-based Average NPR of 41, which moved the group from On Watch to At/Above Benchmark), and those circumstances are noted in the narrative for Appendix C. Those differences can also be found by comparing sections of the tables in Appendix C labeled as *Non-NCE-based NPR* and *NCE-based Average NPR*.⁷

Overall, Non-NCE-based NPR did not differ very much from NCE-based Average NPR.

In spring 2021-22, ELs who scored in ACCESS Levels 1 or 2 performed in the Strategic Intervention range on Star Reading when using Non-NCE-based NPR, but performed in the Intensive Intervention range when using NCE-based Average NPR (Table 1). There was only a 7–8 percentile difference between Non-NCE-based NPR and NCE-based Average NPR, but it was enough to shift the average performance to a lower Star performance group.

Table 1. Average Star Reading NPR and NCE-based Average NPR performance by ACCESS level

ACCESS Level	Non-NCE-based NPR				NCE-based Average NPR			
	Fall	Winter 1	Winter 2	Spring	Fall	Winter 1	Winter 2	Spring
1.0-1.9	6	8	10	12	2	3	4	4
2.0-2.9	6	8	10	12	3	4	5	5
3.0-3.9	12	13	15	16	7	8	9	10
4.0-4.9	24	27	30	31	19	22	25	26
5.0-5.9	39	44	49	50	37	43	49	50
6+	53	61	65	64	54	63	67	67

Source: Qlik Academic Screeners App – Performance Details, data accessed January 3, 2023

⁵ For more information see Lipsey, M. W., Puzio, K, Yun, C., Hebert, M. A., Steinka-Fry, K., Cole, M. W., Roberts, W., Anthony, K. S., Busick, M. D. (2012). Translating the statistical representation of the effects of education interventions into more readily interpretable forms. <https://ies.ed.gov/ncser/pubs/20133000/>

⁶ For more information see Pennsylvania Department of Education. (2021). Making sense of NCEs and standard errors. <https://www.education.pa.gov/Documents/K-12/Assessment%20and%20Accountability/PVAAS/Methodology/MakingSenseOfNCEsAndStandardErrors.pdf>

⁷ For more information on converting NPR to NCE and back to NPR, see www.philasd.org/research/2022/08/18/participation-and-performance-on-the-star-assessments-at-the-school-district-of-philadelphia-2021-22/

In fall 2021-22, ELs who scored in ACCESS Level 6+ performed in the On Watch range on Star Math when using Non-NCE-based NPR, but performed in the At/Above Benchmark range when using NCE-based Average NPR (Table 2). In spring 2021-22, ELs who scored in ACCESS Level 3 performed in the On Watch range on Star Math when using Non-NCE-based NPR, but performed in the Strategic Intervention range when using NCE-based Average NPR. In fall 2021-22, ELs who scored in ACCESS Level 2 performed in the Strategic Intervention range on Star Math when using Non-NCE-based NPR, but performed in the Intensive Intervention range when using NCE-based Average NPR. In both fall and spring 2021-22, ELs who scored in ACCESS Level 1 performed in the Strategic Intervention range on Star Math when using Non-NCE-based NPR, but performed in the Intensive Intervention range when using NCE-based Average NPR.

Table 2. Average Star Math NPR and NCE-based Average NPR performance by ACCESS level

ACCESS Level	Non-NCE-based NPR				NCE-based Average NPR			
	Fall	Winter 1	Winter 2	Spring	Fall	Winter 1	Winter 2	Spring
1.0-1.9	11	13	14	15	5	7	7	7
2.0-2.9	14	17	19	19	8	10	11	11
3.0-3.9	23	26	29	29	17	20	22	22
4.0-4.9	37	44	48	49	34	43	47	47
5.0-5.9	58	65	69	70	60	69	75	75
6+	67	75	81	83	71	81	89	89

Source: Qlik Academic Screeners App – Performance Details, data accessed January 3, 2023

In fall 2021-22, grades 6-8 ELs who scored in ACCESS Level 5 performed in the At/Above Benchmark range on Star Reading when using Non-NCE-based NPR, but performed in the On Watch range when using NCE-based Average NPR (Table 3).

In fall 2021-22, grades K-3 ELs who scored in ACCESS Level 3 performed in the On Watch range on Star Reading when using Non-NCE-based NPR, but performed in the Strategic Intervention range when using NCE-based Average NPR. Additionally, in spring 2021-22, grades K-3 ELs who scored in ACCESS Level 3 performed in the At/Above Benchmark range on Star Reading when using Non-NCE-based NPR, but performed in the On Watch range when using NCE-based Average NPR.

In both fall and spring 2021-22, grades 4-5 ELs who scored in ACCESS Level 3 performed in the Strategic Intervention range on Star Reading when using Non-NCE-based NPR, but performed in the Intensive Intervention range when using NCE-based Average NPR. In spring 2021-22, grades 6-8 ELs who scored in ACCESS Level 3 performed in the Strategic Intervention range on Star Reading when using Non-NCE-based NPR, but performed in the Intensive Intervention range when using NCE-based Average NPR.

In fall 2021-22, grades K-3 ELs who scored in ACCESS Level 2 performed in the Strategic Intervention range on Star Reading when using Non-NCE-based NPR, but performed in the Intensive Intervention range when using NCE-based Average NPR. Finally, in spring 2021-22, grades K-3 ELs who scored in ACCESS Level 1 performed in the Strategic Intervention range on Star Reading when using Non-NCE-based NPR, but performed in the Intensive Intervention range when using NCE-based Average NPR.

Table 3. Average Star Reading NPR and NCE-based Average NPR converted from NCE performance by grade band

Score Groups	Grade Bands	Star Window	ACCESS Levels					
			1.0-1.9	2.0-2.9	3.0-3.9	4.0-4.9	5.0-5.9	6+
Non-NCE-based NPR	K-3	Fall	8	11	25	43	61	Suppressed
		Spring	17	22	40	61	80	Suppressed
	4-5	Fall	2	4	11	22	39	53
		Spring	3	5	14	30	49	65
	6-8	Fall	2	4	8	21	40	Suppressed
		Spring	2	4	10	25	47	Suppressed
	9-10	Fall	2	3	9	19	36	Suppressed
		Spring	2	3	9	20	38	Suppressed
	11-12	Fall	2	4	8	19	26	N/A
		Spring	2	3	7	17	32	N/A
NCE-based Average NPR	K-3	Fall	3	6	19	41	64	Suppressed
		Spring	8	14	36	63	83	Suppressed
	4-5	Fall	1	2	7	17	37	54
		Spring	2	3	9	25	49	68
	6-8	Fall	1	2	5	17	38	Suppressed
		Spring	1	2	6	20	47	Suppressed
	9-10	Fall	1	2	6	15	32	Suppressed
		Spring	1	2	5	15	34	Suppressed
	11-12	Fall	1	2	5	14	22	N/A
		Spring	1	2	4	12	28	N/A

Source: Qlik Academic Screeners App – Performance Details, data accessed January 9, 2023

Note: Cells with *Suppressed* have fewer than 20 students in the group and are excluded from analyses. Cells with N/A have no students in the group and thus no NPR.

In fall 2021-22, grades 4-5 ELs who scored in ACCESS Level 6+ performed in the On Watch range on Star Math when using Non-NCE-based NPR, but performed in the At/Above Benchmark range when using NCE-based Average NPR (Table 4). In fall 2021-22, grades 11-12 ELs who scored in ACCESS Level 5 performed in the On Watch range on Star Math when using Non-NCE-based NPR, but performed in the At/Above Benchmark range when using NCE-based Average NPR. In spring 2021-22, grades K-3 ELs who scored in ACCESS Level 4 performed in the On Watch range on Star Math when using Non-NCE-based NPR, but performed in the At/Above Benchmark range when using NCE-based Average NPR.

In spring 2021-22, grades 4-5, 6-8, and 10-11 ELs who scored in ACCESS Level 3 performed in the On Watch range on Star Math when using Non-NCE-based NPR, but performed in the Strategic Intervention range when using NCE-based Average NPR. Additionally, in both fall and spring 2021-22, grades 11-12 ELs who scored in ACCESS Level 3 performed in the On Watch range on Star Math when using Non-NCE-based NPR, but performed in the Strategic Intervention range when using NCE-based Average NPR.

In spring 2021-22, grades 6-8, 9-10, and 11-12 ELs who scored in ACCESS Level 2 performed in the Strategic Intervention range on Star Math when using Non-NCE-based NPR, but performed in the Intensive Intervention range when using NCE-based Average NPR. In spring 2021-22, grades K-3 ELs who scored in ACCESS Level 2 performed in the On Watch range on Star Math when using Non-NCE-based NPR, but performed in the Strategic Intervention range when using NCE-based Average NPR. In spring 2021-22, grades 4-5 and 9-10 ELs who scored in ACCESS Level 2 performed in the Strategic Intervention range on Star Math when using Non-NCE-based NPR, but performed in the Intensive Intervention range when using NCE-based Average NPR.

In fall 2021-22, grades K-3 and 6-8 ELs who scored in ACCESS Level 1 performed in the Strategic Intervention range on Star Math when using Non-NCE-based NPR, but performed in the Intensive Intervention range when using NCE-based Average NPR. In spring 2021-22, grades 4-5 and 6-8 ELs who scored in ACCESS Level 1 performed in the Strategic Intervention range on Star Math when using Non-NCE-based NPR, but performed in the Intensive Intervention range when using NCE-based Average NPR.

Table 4. Average Star Math NPR and NCE-based Average NPR performance by grade band

Score Groups	Grade Bands	Star Window	ACCESS Levels					
			1.0-1.9	2.0-2.9	3.0-3.9	4.0-4.9	5.0-5.9	6+
Non-NCE-based NPR	K-3	Fall	13	18	37	55	75	Suppressed
		Spring	20	28	48	69	80	Suppressed
	4-5	Fall	7	8	17	30	52	67
		Spring	11	15	25	47	70	83
	6-8	Fall	14	14	20	36	61	Suppressed
		Spring	16	18	25	45	72	Suppressed
	9-10	Fall	9	13	24	41	62	Suppressed
		Spring	9	15	25	43	66	Suppressed
	11-12	Fall	9	16	27	41	69	N/A
		Spring	8	18	31	44	62	N/A
NCE-based Average NPR	K-3	Fall	7	11	33	56	79	Suppressed
		Spring	11	20	48	73	84	Suppressed
	4-5	Fall	3	4	11	25	53	71
		Spring	5	8	17	46	75	89
	6-8	Fall	7	8	14	33	64	Suppressed
		Spring	8	10	18	42	78	Suppressed
	9-10	Fall	5	7	18	39	64	Suppressed
		Spring	5	8	18	41	69	Suppressed
	11-12	Fall	4	9	20	38	73	N/A
		Spring	4	10	23	42	68	N/A

Source: Qlik Academic Screeners App – Performance Details, data accessed January 9, 2023

Note: Cells with *Suppressed* have fewer than 20 students in the group and are excluded from analyses. Cells with N/A have no students in the group and thus no NPR.

In spring 2021-22, Black/African American ELs who scored in ACCESS Level 5 performed in the At/Above Benchmark range on Star Reading when using Non-NCE-based NPR, but performed in the On Watch range when using NCE-based Average NPR (Table 5).

In fall 2021-22, Asian ELs who scored in ACCESS Level 4 performed in the On Watch range on Star Reading when using Non-NCE-based NPR, but performed in the Strategic Intervention range when using NCE-based Average NPR. In spring 2021-22, Black/African American and Hispanic/Latinx ELs who scored in ACCESS Level 4 performed in the On Watch range on Star Reading when using Non-NCE-based NPR, but performed in the Strategic Intervention range when using NCE-based Average NPR.

In fall 2021-22, Asian and White ELs who scored in ACCESS Level 3 performed in the Strategic Intervention range on Star Reading when using Non-NCE-based NPR, but performed in the Intensive Intervention range when using NCE-based Average NPR. In both fall and spring 2021-22, Black/African American, Hispanic/Latinx, and Multi-Racial/Other ELs who scored in ACCESS Level 3 performed in the Strategic Intervention range on Star Reading when using Non-NCE-based NPR, but performed in the Intensive Intervention range when using NCE-based Average NPR.

In fall 2021-22, Asian ELs who scored in ACCESS Level 2 performed in the Strategic Intervention range on Star Reading when using Non-NCE-based NPR, but performed in the Intensive Intervention range when using NCE-based Average NPR. In spring 2021-22, Hispanic/Latinx, Multi-Racial/Other, and White ELs who scored in ACCESS Level 2 performed in the Strategic Intervention range on Star Reading when using Non-NCE-based NPR, but performed in the Intensive Intervention range when using NCE-based Average NPR.

In both fall and spring 2021-22, Asian ELs who scored in ACCESS Level 1 performed in the Strategic Intervention range on Star Reading when using Non-NCE-based NPR, but performed in the Intensive Intervention range when using NCE-based Average NPR. In spring 2021-22, Black/African American, Hispanic/Latinx, and White ELs who scored in ACCESS Level 1 performed in the Strategic Intervention range on Star Reading when using Non-NCE-based NPR, but performed in the Intensive Intervention range when using NCE-based Average NPR.

Table 5. Average Star Reading NPR and NCE-based Average NPR performance by student race/ethnicity

Score Groups	Student Groups	Star Window	ACCESS Levels					
			1.0-1.9	2.0-2.9	3.0-3.9	4.0-4.9	5.0-5.9	6+
Non-NCE-based NPR	Asian	Fall	12	10	14	28	42	57
		Spring	17	19	21	36	51	68
	Black/African American	Fall	7	6	12	22	32	Sup
		Spring	11	9	14	28	40	Sup
	Hispanic/Latinx	Fall	4	5	10	20	39	Sup
		Spring	11	10	13	26	47	Sup
	Multi-Racial/Other	Fall	6	3	10	22	Sup	Sup
		Spring	5	12	10	23	Sup	Sup
	White	Fall	7	7	12	24	36	Sup
		Spring	11	14	20	32	51	Sup
NCE-based Average NPR	Asian	Fall	5	5	9	23	40	58
		Spring	7	10	14	32	51	72
	Black/African American	Fall	3	3	8	17	29	Sup
		Spring	4	4	8	23	38	Sup
	Hispanic/Latinx	Fall	2	3	6	16	36	Sup
		Spring	4	4	8	21	47	Sup
	Multi-Racial/Other	Fall	2	2	7	17	Sup	Sup
		Spring	2	5	6	18	Sup	Sup
	White	Fall	3	3	8	19	33	Sup
		Spring	4	7	13	28	51	Sup

Source: Qlik Academic Screeners App – Performance Details, data accessed January 11, 2023

Note: Cells with *Sup* (suppressed) have fewer than 20 students in the group and are excluded from analyses. Cells with N/A have no students in the group and thus no NPR.

In fall 2021-22, Black/African American and Hispanic/Latinx ELs who scored in ACCESS Level 4 performed in the On Watch range on Star Math when using Non-NCE-based NPR, but performed in the Strategic Intervention range when using NCE-based Average NPR (Table 6).

In fall 2021-22, White ELs who scored in ACCESS Level 3 performed in the On Watch range on Star Math when using Non-NCE-based NPR, but performed in the Strategic Intervention range when using NCE-based Average NPR.

In fall 2021-22, Hispanic/Latinx and Multi-Racial/Other ELs who scored in ACCESS Level 2 performed in the Strategic Intervention range on Star Math when using Non-NCE-based NPR, but performed in the Intensive Intervention range when using NCE-based Average NPR. Additionally, in spring 2021-22, Black/African American and Hispanic/Latinx ELs who scored in ACCESS Level 2 performed in the Strategic Intervention range on Star Math when using Non-NCE-based NPR, but performed in the Intensive Intervention range when using NCE-based Average NPR.

In both fall and spring 2021-22, White ELs who scored in ACCESS Level 1 performed in the Strategic Intervention range on Star Math when using Non-NCE-based NPR, but performed in the Intensive Intervention range when using NCE-based Average NPR. Finally, in spring 2021-22, Black/African American and Hispanic/Latinx ELs who scored in ACCESS Level 1 performed in the Strategic Intervention range on Star Math when using Non-NCE-based NPR, but performed in the Intensive Intervention range when using NCE-based Average NPR.

Table 6. Average Star Math NPR and NCE-based Average NPR performance by student race/ethnicity

Score Groups	Student Groups	Star Window	ACCESS Levels					
			1.0-1.9	2.0-2.9	3.0-3.9	4.0-4.9	5.0-5.9	6+
Non-NCE-based NPR	Asian	Fall	20	23	35	49	65	80
		Spring	25	32	43	61	77	92
	Black/African American	Fall	8	9	19	30	40	Sup
		Spring	11	14	24	37	50	Sup
	Hispanic/Latinx	Fall	9	11	16	27	43	Sup
		Spring	13	14	22	37	58	Sup
	Multi-Racial/Other	Fall	Sup	10	20	35	Sup	Sup
		Spring	Sup	19	24	38	Sup	Sup
	White	Fall	12	18	29	42	58	Sup
		Spring	17	24	36	55	71	Sup
NCE-based Average NPR	Asian	Fall	12	16	31	48	69	84
		Spring	15	25	40	65	83	95
	Black/African American	Fall	4	5	12	24	40	Sup
		Spring	5	7	16	31	52	Sup
	Hispanic/Latinx	Fall	5	6	11	22	41	Sup
		Spring	6	8	15	32	60	Sup
	Multi-Racial/Other	Fall	4	6	15	31	Sup	Sup
		Spring	4	11	16	32	Sup	Sup
	White	Fall	6	11	24	40	60	Sup
		Spring	8	17	31	56	75	Sup

Source: Qlik Academic Screeners App – Performance Details, data accessed January 11, 2023

Note: Cells with *Sup* (suppressed) have fewer than 20 students in the group and are excluded from analyses. Cells with N/A have no students in the group and thus no NPR.

In fall 2021-22, Spanish-speaking ELs who scored in ACCESS Level 5 performed in the At/Above Benchmark range on Star Reading when using Non-NCE-based NPR, but performed in the On Watch range when using NCE-based Average NPR (Table 7).

In fall 2021-22, Arabic- and Russian-speaking ELs who scored in ACCESS Level 3 performed in the Strategic Intervention range on Star Reading when using Non-NCE-based NPR, but performed in the Intensive Intervention range when using NCE-based Average NPR. In fall 2021-22, Portuguese- and Spanish-speaking ELs who scored in ACCESS Level 3 performed in the Strategic Intervention range on Star Reading when using Non-NCE-based NPR, but performed in the Intensive Intervention range when using NCE-based Average NPR.

In fall 2021-22, Chinese-speaking ELs who scored in ACCESS Level 1 or 2 performed in the Strategic Intervention range on Star Reading when using Non-NCE-based NPR, but performed in the Intensive Intervention range when using NCE-based Average NPR. In spring 2021-22, Arabic-, Russian-, and Spanish-speaking ELs who scored in ACCESS Level 1 or 2 performed in the Strategic Intervention range on Star Reading when using Non-NCE-based NPR, but performed in the Intensive Intervention range when using NCE-based Average NPR.

Table 7. Average Star Reading NPR and NCE-based Average NPR performance by top 14 home languages

Score Groups	Student Groups	Star Window	ACCESS Levels					
			1.0-1.9	2.0-2.9	3.0-3.9	4.0-4.9	5.0-5.9	6+
Non-NCE-based NPR	Albanian	Fall	18	11	Sup	33	Sup	Sup
		Spring	30	20	Sup	39	Sup	Sup
	Arabic	Fall	10	7	13	23	31	Sup
		Spring	17	14	19	30	37	Sup
	Chinese (Mandarin)	Fall	17	13	16	29	43	55
		Spring	24	23	25	39	53	67
	Chinese (Yue/Cantonese)	Fall	19	14	Sup	28	Sup	Sup
		Spring	23	27	Sup	36	Sup	Sup
	French	Fall	Sup	2	11	25	Sup	N/A
		Spring	Sup	5	12	23	Sup	N/A
	Haitian Creole	Fall	5	6	14	20	Sup	N/A
		Spring	13	12	20	35	Sup	N/A
	Khmer	Fall	8	9	12	27	Sup	N/A
		Spring	16	16	15	29	Sup	N/A
	Pashto	Fall	7	4	10	22	Sup	N/A
		Spring	12	11	19	28	Sup	N/A
	Portuguese	Fall	4	5	11	22	36	N/A
		Spring	7	8	13	27	47	N/A
	Russian	Fall	7	8	13	26	38	Sup
		Spring	11	17	21	37	54	Sup
Spanish	Fall	4	5	10	20	41	Sup	
	Spring	12	10	13	26	49	Sup	
Tajik	Fall	5	8	Sup	24	Sup	Sup	
	Spring	10	20	Sup	28	Sup	Sup	
Uzbek	Fall	7	7	14	21	Sup	N/A	
	Spring	15	16	20	29	Sup	N/A	
Vietnamese	Fall	11	9	15	26	Sup	N/A	
	Spring	14	15	24	35	Sup	N/A	

Score Groups	Student Groups	Star Window	ACCESS Levels					
			1.0-1.9	2.0-2.9	3.0-3.9	4.0-4.9	5.0-5.9	6+
NCE-based Average NPR	Albanian	Fall	9	5	7	29	Sup	Sup
		Spring	20	10	11	35	Sup	Sup
	Arabic	Fall	5	4	8	17	28	Sup
		Spring	7	6	11	25	36	Sup
	Chinese (Mandarin)	Fall	8	7	10	25	42	57
		Spring	13	13	17	36	54	71
	Chinese (Yue/Cantonese)	Fall	9	7	14	23	Sup	Sup
		Spring	10	15	18	33	Sup	Sup
	French	Fall	Sup	2	7	19	Sup	N/A
		Spring	Sup	2	8	16	Sup	N/A
	Haitian Creole	Fall	2	3	9	14	Sup	N/A
		Spring	4	6	14	32	Sup	N/A
	Khmer	Fall	3	5	7	23	Sup	N/A
		Spring	6	8	9	23	Sup	N/A
	Pashto	Fall	4	3	6	18	Sup	N/A
		Spring	5	5	12	23	Sup	N/A
	Portuguese	Fall	2	2	7	17	32	N/A
		Spring	3	3	8	21	47	N/A
	Russian	Fall	4	4	8	21	36	Sup
		Spring	4	9	14	33	56	Sup
	Spanish	Fall	2	3	6	16	39	Sup
		Spring	4	4	8	21	49	Sup
	Tajik	Fall	2	4	7	20	Sup	Sup
		Spring	4	13	13	25	Sup	Sup
	Uzbek	Fall	4	4	10	16	Sup	N/A
		Spring	7	9	14	25	Sup	N/A
	Vietnamese	Fall	4	4	9	21	Sup	N/A
		Spring	5	8	17	31	Sup	N/A

Source: Qlik Academic Screeners App – Performance Details, data accessed January 11, 2023

Note: Cells with *Sup* (suppressed) have fewer than 20 students in the group and are excluded from analyses. Cells with N/A have no students in the group and thus no NPR.

In spring 2021-22, Chinese (Mandarin)-speaking ELs who scored in ACCESS Level 4 performed in the On Watch range on Star Math when using Non-NCE-based NPR, but performed in the At/Above Benchmark range when using NCE-based Average NPR (Table 8). In spring 2021-22, Arabic-speaking ELs who scored in ACCESS Level 3 performed in the On Watch range on Star Math when using Non-NCE-based NPR, but performed in the Strategic Intervention range when using NCE-based Average NPR.

Table 8. Average Star Math NPR and NCE-based Average NPR performance by home language

Score Groups	Student Groups	Star Window	ACCESS Levels					
			1.0-1.9	2.0-2.9	3.0-3.9	4.0-4.9	5.0-5.9	6+
Non-NCE-based NPR	Albanian	Fall	Sup	Sup	Sup	50	Sup	Sup
		Spring	Sup	Sup	Sup	60	Sup	Sup
	Arabic	Fall	13	14	24	36	47	Sup
		Spring	19	21	26	48	56	Sup
	Chinese (Mandarin)	Fall	33	32	48	55	69	80
		Spring	46	44	55	69	82	92
	Chinese (Yue/Cantonese)	Fall	Sup	Sup	Sup	55	Sup	Sup
		Spring	Sup	Sup	Sup	72	Sup	Sup
	French	Fall	8	12	24	33	Sup	N/A
		Spring	6	25	38	34	Sup	N/A
	Haitian Creole	Fall	7	8	22	31	Sup	N/A
		Spring	16	11	26	39	Sup	N/A
	Khmer	Fall	7	14	22	41	Sup	N/A
		Spring	12	18	26	48	Sup	N/A
	Pashto	Fall	7	13	25	32	Sup	N/A
		Spring	12	24	36	47	Sup	N/A
	Portuguese	Fall	8	12	19	30	43	N/A
		Spring	10	16	21	40	56	N/A
	Russian	Fall	27	25	35	47	63	Sup
		Spring	27	36	47	60	77	Sup
	Spanish	Fall	9	11	16	27	44	Sup
		Spring	14	14	22	37	60	Sup
	Tajik	Fall	Sup	10	Sup	36	Sup	Sup
		Spring	Sup	28	Sup	43	Sup	Sup
Uzbek	Fall	26	19	36	45	Sup	N/A	
	Spring	29	34	45	56	Sup	N/A	
Vietnamese	Fall	17	23	38	50	Sup	N/A	
	Spring	24	29	44	61	Sup	N/A	

Score Groups	Student Groups	Star Window	ACCESS Levels					
			1.0-1.9	2.0-2.9	3.0-3.9	4.0-4.9	5.0-5.9	6+
NCE-based Average NPR	Albanian	Fall	4	30	29	50	Sup	Sup
		Spring	27	18	25	61	Sup	Sup
	Arabic	Fall	7	8	19	33	46	Sup
		Spring	10	14	19	47	56	Sup
	Chinese (Mandarin)	Fall	27	27	47	57	73	85
		Spring	43	41	56	73	87	95
	Chinese (Yue/Cantonese)	Fall	19	38	32	56	Sup	Sup
		Spring	34	53	53	77	Sup	Sup
	French	Fall	Sup	7	18	29	Sup	N/A
		Spring	Sup	16	30	25	Sup	N/A
	Haitian Creole	Fall	3	4	16	25	Sup	N/A
		Spring	8	6	17	34	Sup	N/A
	Khmer	Fall	4	8	18	38	Sup	N/A
		Spring	6	10	20	47	Sup	N/A
	Pashto	Fall	3	8	19	27	Sup	N/A
		Spring	5	17	34	46	Sup	N/A
	Portuguese	Fall	4	7	14	26	42	N/A
		Spring	5	9	15	37	58	N/A
	Russian	Fall	21	17	32	45	67	Sup
		Spring	20	29	46	63	81	Sup
	Spanish	Fall	5	6	11	22	42	Sup
		Spring	7	8	15	32	62	Sup
	Tajik	Fall	7	7	29	33	Sup	Sup
		Spring	12	21	50	41	Sup	Sup
Uzbek	Fall	19	14	31	44	Sup	N/A	
	Spring	18	26	42	59	Sup	N/A	
Vietnamese	Fall	10	17	35	51	Sup	N/A	
	Spring	14	22	40	65	Sup	N/A	

Source: Qlik Academic Screeners App – Performance Details, data accessed January 11, 2023

Note: Cells with *Sup* (suppressed) have fewer than 20 students in the group and are excluded from analyses. Cells with N/A have no students in the group and thus no NPR.