



FIRST EIGHT MEMPHIS

Success in the **first 8** years.
Success for a lifetime.

Shelby County Pre-K Analysis: For Review and Discussion



National Pre-K Studies

Perry Preschool Project

The impacts of Pre-K were sustained into adulthood for a cohort of students tracked 1962-1967. **Results showed lasting effects on educational attainment, income, criminal activity, and other important life outcomes.**

Abecedarian Project

Students followed in a cohort from 1972-1977 showed similar educational and professional gains. Additionally, the study showed a **\$2.50 savings to taxpayers as a result of higher income, decreased need for educational and governmental services, and reduced healthcare costs.**

Sustaining Environments

The impacts of Pre-K were sustained for students in Pre-K cohorts from 2009-2011 who **attended both Pre-K and experienced high-quality instruction through 3rd grade.** Students showed persistent gains in reading and math; though few students had access to high-quality instruction K-3.

Vanderbilt VPK Study Findings

Phase 1 - 2015

- 2,990 children sample, representative of TN, followed in 2009 and 2010 VPK cohorts
- Immediate, positive effects of Pre-K shown at the end of the Pre-K year on an IQ measure
- By the end of Kindergarten, positive effects of Pre-K were not statistically significant
- VPK students scored lower than non-VPK peers on 3rd grade TCAP

Phase 2 - 2022

- VPK students scored lower than non-VPK peers on 6th grade TNReady
- Attendance rates were lower for VPK students than non-VPK peers (97.1% v. 97.5%)
- Higher rates of recorded disciplinary events for VPK students

Recommendations

2022

- Shift Pre-K instructional focus to “unconstrained skills” like attention and working memory
- Conduct further research on the development of self-control practices in group childcare settings

S2's Shelby County Analysis and Findings

Consider History & Place

- Pre-K has changed significantly since the VPK cohorts of 2009-2010
- K-12 landscape has also experienced significant change in the past 12 years
- The Shelby County community has collaborated to ensure high-quality Pre-K services for MSCS children

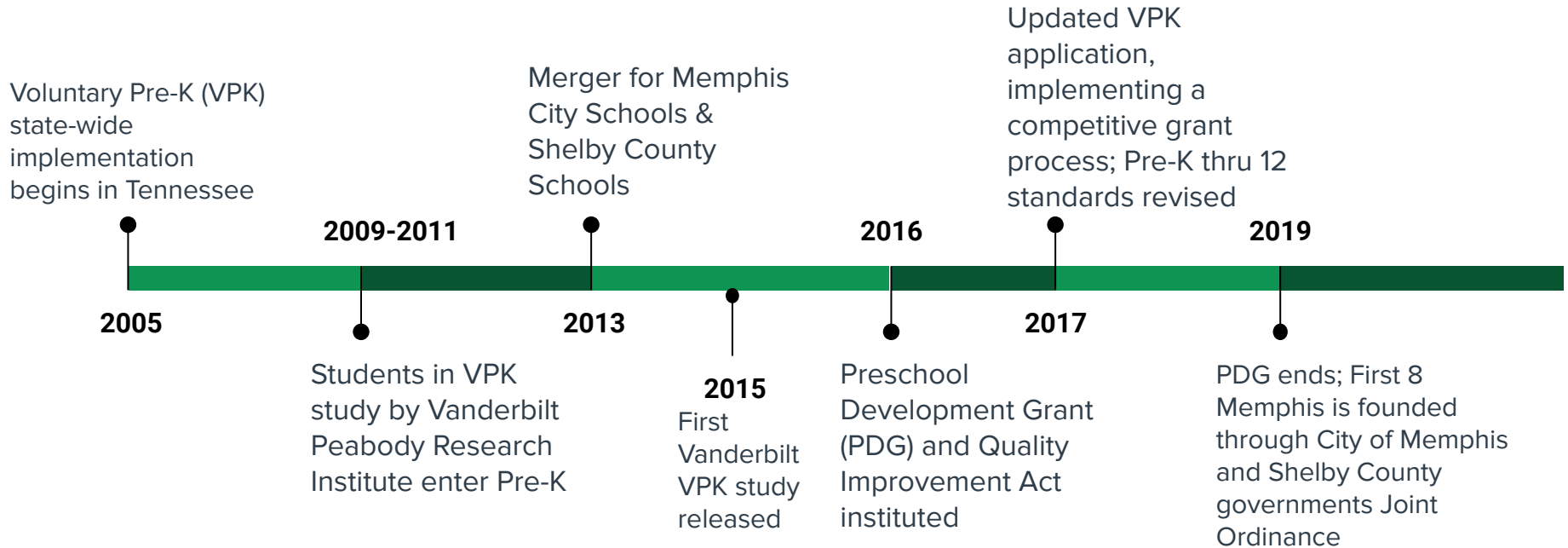
Dataset Differences

- VPK sample: 2,990 students from across TN.** SCS sample: 26,560 students from Shelby County.
- VPK assessment: TCAP (*criterion referenced achievement test, TN only*)
- SCS assessments: iReady, NWEA MAP (*norm referenced formative assessment, national*)
- Both only include students labeled “economically disadvantaged”

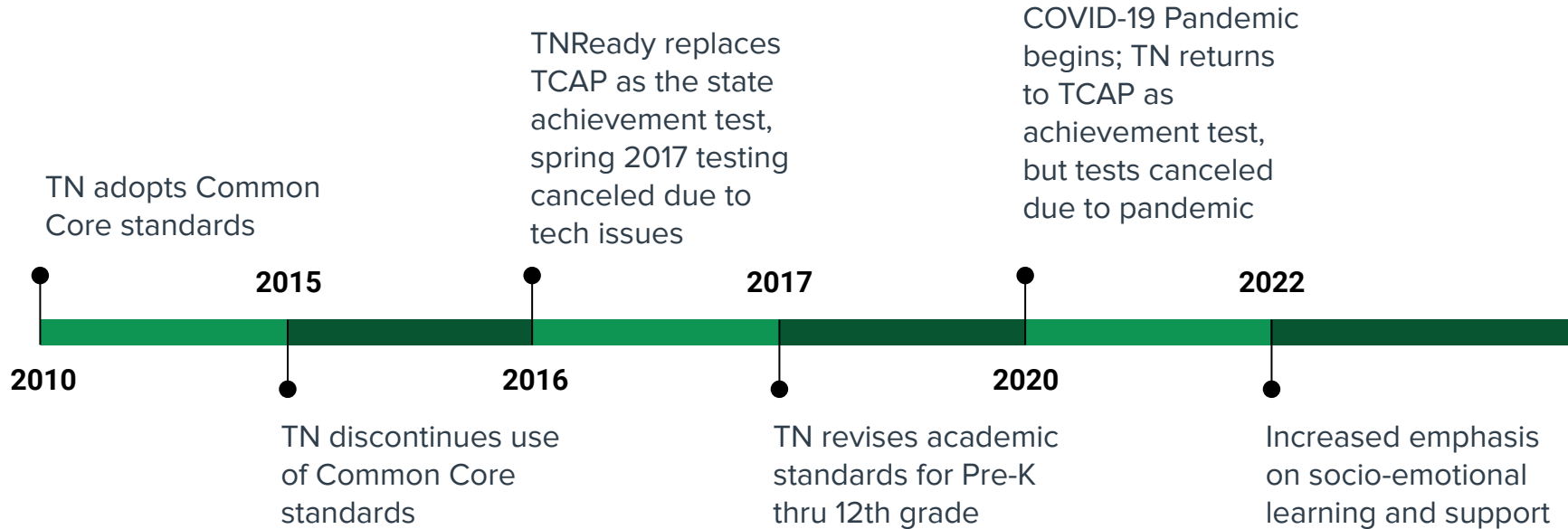
Strong Results

- SCS Pre-K students outperform non-Pre-K peers by 13-15%
- Outperformance persists through 7th grade
- Pre-K continues to be a strong investment for educational attainment of students in Shelby County
- Potential for exploration into urban vs state results, achievement tests vs formative assessment results

Pre-K in TN and Shelby County



K-12 Landscape in TN



SCS Data Variables: Pre-K Status

Since the 2013-14 school year, Seeding Success has stored data on SCS Pre-K enrollment

- Ability to track those students through their K-12 years in SCS, with the first cohort having finished their 7th grade year
- SCS Pre-K includes classrooms funded through VPK, PDG, HeadStart, First 8 Memphis, 619, and Fund 1
- Like the VPK study, no specific data is available for the counterfactual control group, since peers designated “No SCS Pre-K” may have attended other early education programs or no Pre-K at all

SCS Data Variables - Assessments

NWEA MAP

- 2016 through 2019 school years
- Grades K-8

i-Ready

- 2020 through 2022 school years
- Grades K-10

Both

- Nationally norm-referenced formative assessments
- District's mandatory universal diagnostic screeners for Response to Intervention
- Administered 3x/year online

TCAP/TNReady

- State criterion referenced achievement test
- Only 4 performance indicators rather than percentiles
- Not administered until 3rd grade
- Canceled 2016 and 2020, plus additional changes, disruptions, and pilots

SCS Data Variables - Assessments

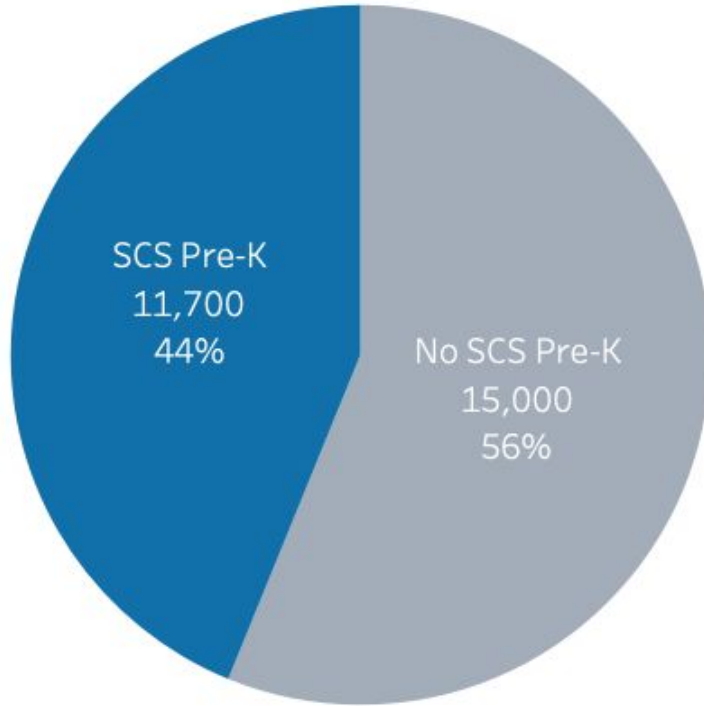
- Overall, MAP/IReady chosen over TCAP/TN Ready because of the continuity of data across years and grade levels and the ability to compare percentiles rather than performance categories or scale scores
- The different findings between our analysis of MAP/IReady vs Vanderbilt's analysis of TCAP/TN Ready does raise questions and hopefully spur further exploration into the differences in performance on formative assessments versus achievement tests

Assmt.	TCAP						No State Assmt	TN Ready				No State Assmt	TN Ready	
							NWEA MAP				IReady			
Year	09-10	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	
Cohort Track	PK 1st Vandy cohort starts	K	1	2	3	4	5	6	7	8	9	10	11	
	PK 2nd Vandy cohort starts	K	1	2	3	4	5	6	7	8	9	10		
					PK 1st SCS/S2 PreK cohort starts	K	1	2	3	4	5	6	7	
					PK	K	1	2	3	4	5	6		
						PK TN Quality Impvt. Act	K	1	2	3	4	5		
						PK	K	1	2	3	4			
							PK	K	1	2	3			
								PK	K	1	2			
								PK	K	1	2			
									PK 1st F8M cohort starts	K	1			
										PK	K			
												PK	K	

Mapping Pre-K Cohorts and K-12 Assessments Over Time

- Years/Grades coded light grey are included in the VPK study results
- Years/Grades coded darker grey are included in the S2/SCS study results

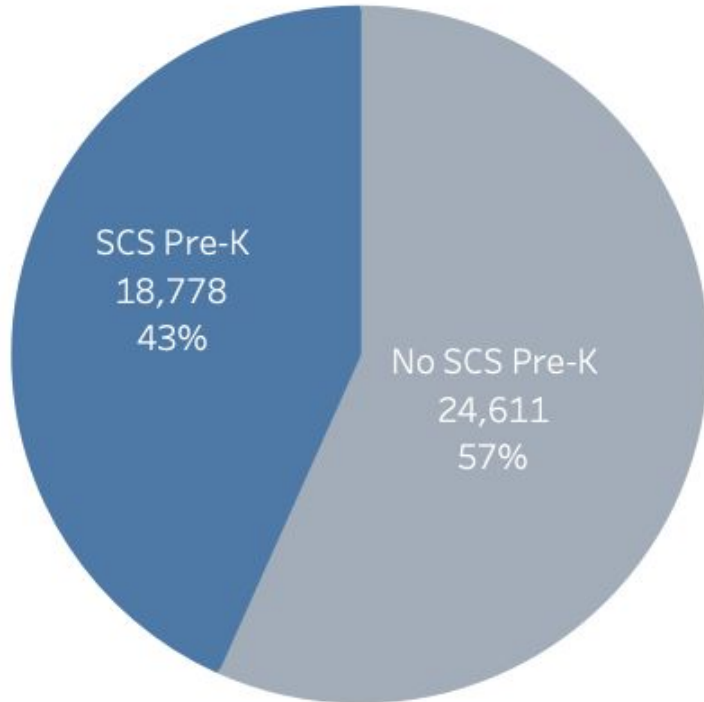
NWEA MAP Sample- ELA



- 26,700 students tested total across 4 years and 4 grade levels
 - 2016-2019 school years
 - Tested in grades K-3
 - Reading
- Only economically disadvantaged students selected
- 44% attended SCS Pre-K



i-Ready Sample- ELA



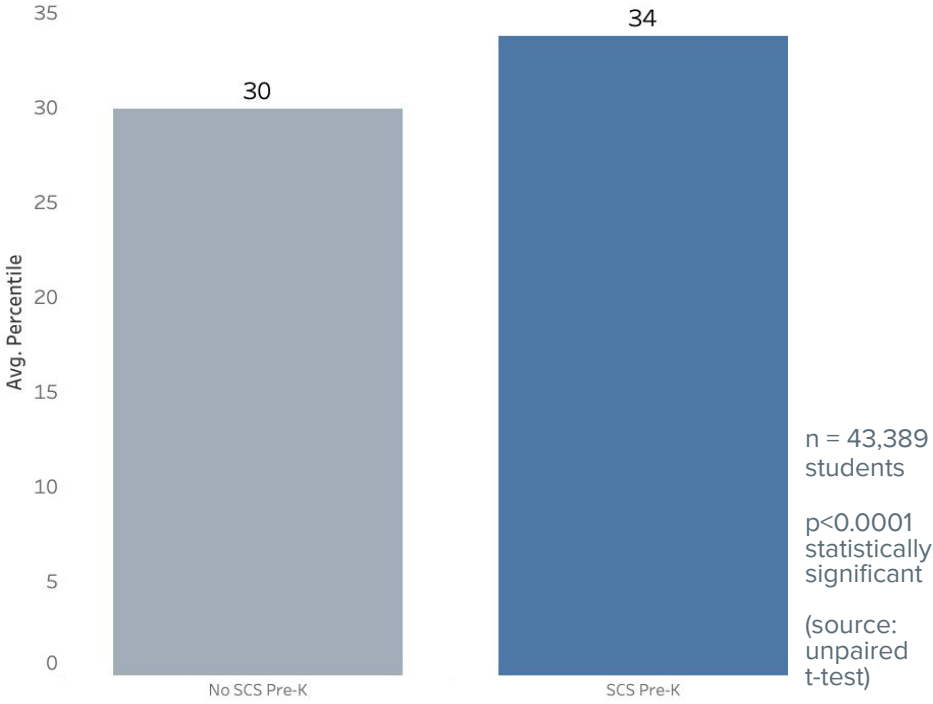
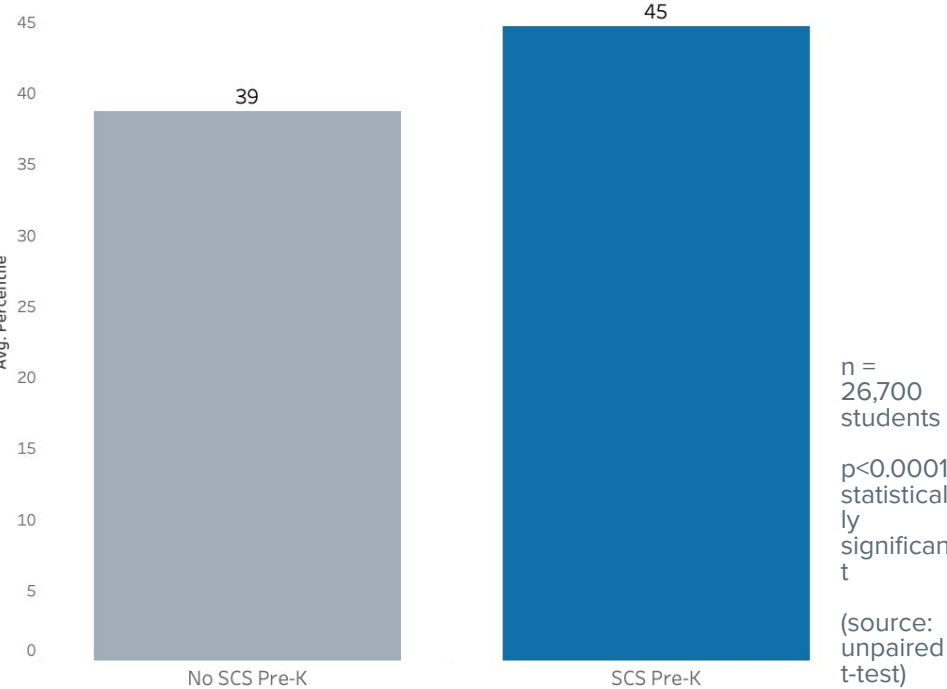
- 43,389 students tested total across 3 years and 8 grade levels
 - 2020-22 school years
 - Tested in grades K-7
 - ELA
- Only economically disadvantaged students selected
- 43% attended SCS Pre-K

ELA Results by SCS Pre-K Status



NWEA MAP- Across all applicable grades (*K-3*) and years (*2016-19*), students who attended SCS Pre-K outperformed those who didn't by an average of **6 percentile points** (*45th vs 39th*) or by **15%**

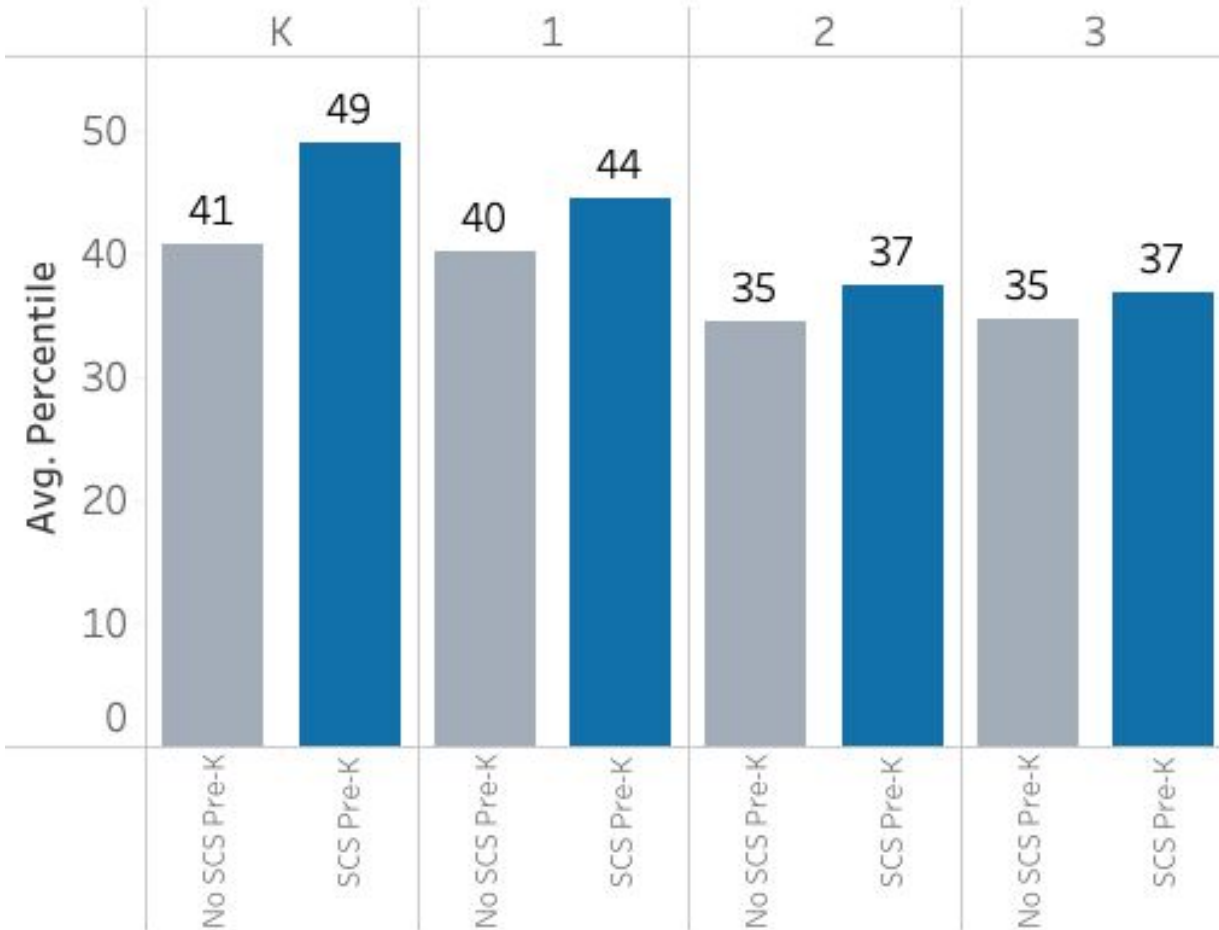
i-Ready- Across all applicable grades (*K-7*) and years (*2020-22*), students who attended SCS Pre-K outperformed those who didn't by an average of **4 percentile points** (*34 vs 30*) or by **13%**

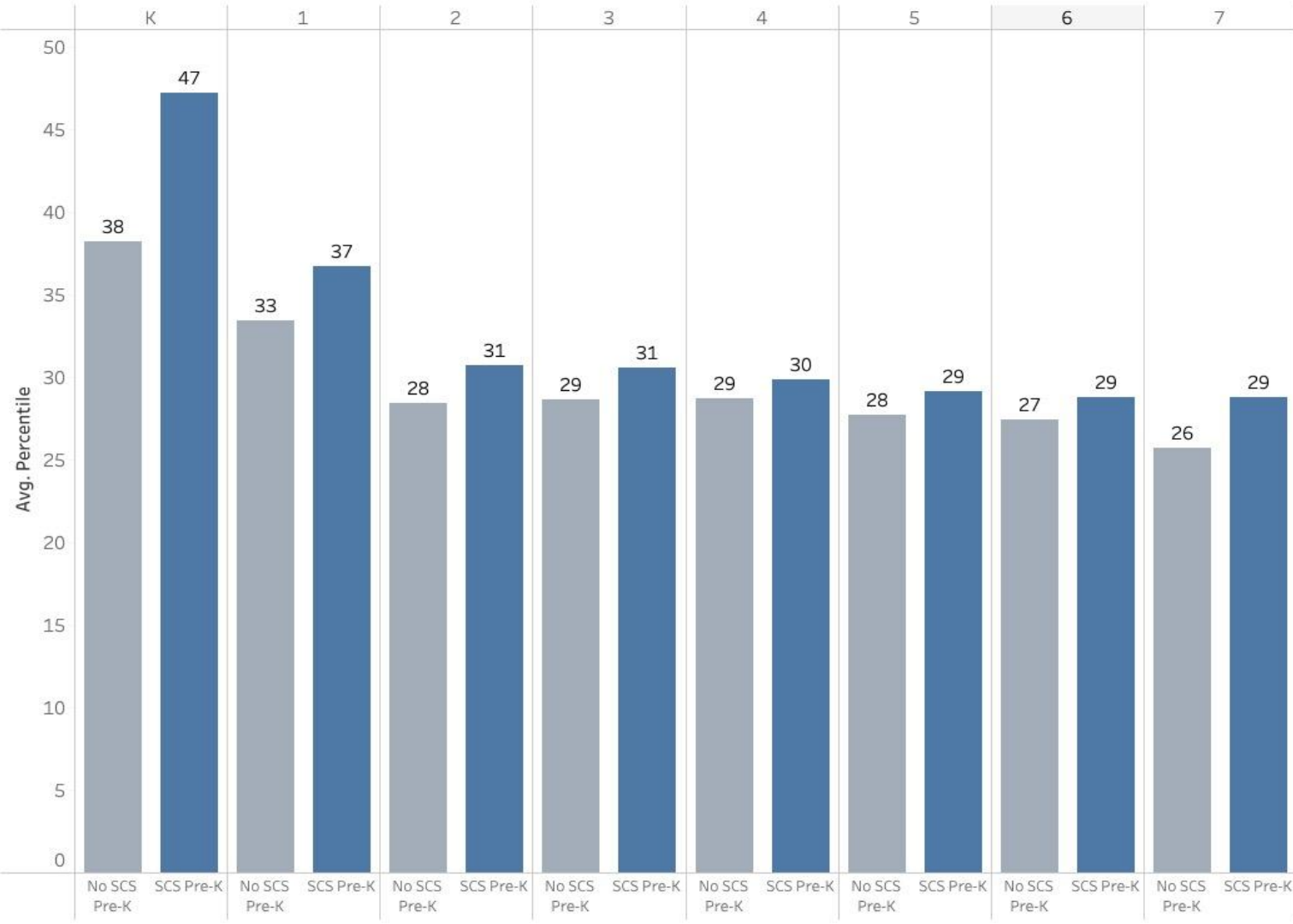


NWEA MAP ELA Results

By grade level at time of assessment

- Biggest performance difference is in Kindergarten
- Difference does diminish slightly as students age, but positive difference persists through 3rd grade
- Note: upper grade data only represents the first Pre-K cohorts to be tracked and thus has a smaller sample size and represents students in Pre-K prior to many quality improvements





i-Ready ELA Results

By grade level at time of assessment

- Biggest performance difference is in Kindergarten
- Difference does diminish slightly as students age, but persists through 7th grade

Summary of ELA Results

On average for each year and grade level tested:

- SCS Pre-K students outperform their non-SCS Pre-K peers by between 4 percentile points (iReady) to 6 percentile points (MAP)
- SCS Pre-K students outperform their non-SCS Pre-K peers by between 13% (iReady) and 15% (MAP)
 - A 15% increase in performance is equivalent to an extra 27 days in school *each* year

Comparing Results

	VPK Study	SCS Data
Sample	2,990 economically disadvantaged students from across Tennessee, 2 cohorts of students in Pre-K in 09-10 and 10-11	26,700 (MAP), 43,389 (IReady) economically disadvantaged students from Shelby County, 7 cohorts starting with Pre-K in 13-14
Assessment Analyzed	TCAP/TN Ready- criterion referenced state achievement test	MAP/IReady - norm referenced national formative assessments
Outcome	Students in VPK had lower state achievement test scores in third through 6th grades than control children, with the strongest negative effects in 6th grade	SCS Pre-K students outperformed their non-SCS Pre-K peers by 15% on MAP and 13% on IReady with the positive difference persisting through 7th grade

Comparing Results

- Further exploration and research could help elucidate the:
 - Difference in performance in rural vs urban areas
 - Difference in performance on achievement tests vs formative assessments
 - Impact of changes in Pre-K quality since the initial 2009-2010 cohorts
 - Influence of Pre-K on unconstrained skills vs constrained skills



Quality Improvement in Shelby County

As of 2021-2022, all SCS and F8M Pre-K classrooms include the following:

- 20 student class size with 1:10 student to adult ratio
- Teachers who are licensed or hold a bachelor's degree and Teaching Assistants who hold at least an associates in Child Development
- Wraparound Services for all classrooms with designated Family Engagement Personnel to provide two-generational support to families
- Individualized instructional coaching and support at minimum monthly
- State-approved curriculum in place, which aligns to the Early Learning Development Standards
- Community support in program implementation and policy advocacy through the F8M Pre-K Consortium and Leadership Council



High-quality services to meet families where they are



Focus on **holistic family engagement** through wraparound service providers; meet immediate needs during COVID



Imbue services and metrics with **flexibility** to support both **virtual and in-person students**



Use assessments to **identify curricular needs** and implement **continuous quality improvement** practices



Hold all **stakeholders accountable** to delivering high quality services

Ensuring Quality in Pre-K



Attendance & Enrollment



Accommodate **attendance and enrollment** given **COVID-19 impact on communities**

Holistic Wraparound Services



Two-generation supports provided through ongoing family engagement, resources and referrals to support a families individual needs

Assessments



Use Brigance assessments to **identify DAP instructional processes** for individual learners, and implement **continuous quality improvement** practices












Instructional Coaching



Provide **job-embedded supports** to classroom teachers

Performance Measures



	2019-2020	2020-2021 & 2021-2022			
Engagement	 CONSISTENT ATTENDANCE	 TEACHER SYNCHRONOUS INSTRUCTION	 STUDENT ENGAGEMENT	 FAMILY OUTCOME ASSESSMENT	 FAMILY FOLLOW-UP SERVICES
Pre-K Skills	 PRE-LITERACY ASSESSMENT (PRE/POST GROWTH)	 PRE-K SKILLS ASSESSMENT	 PRE-LITERACY ADMINISTRATION & ASSESSMENT (POINT-IN-TIME)	 CONTINUOUS IMPROVEMENT	
Kindergarten Readiness	 K-READINESS ASSESSMENT		 K-READINESS ADMINISTRATION & ASSESSMENT		

Key Takeaways

Community	Quality	Results
Shelby County has consistently improved Pre-K program quality through community effort	Program quality was improved through investment, coordination, and socio-emotional support	Students who attend SCS Pre-K retain their lead over peers through 7th grade Pre-K as an intervention strategy is associated with