Effects of Sustained Quality in PreKindergarten, Kindergarten and First Grade in DallasISD: Executive Summary

A study conducted by SMU's Center on Research and Evaluation shows that DallasISD students in high quality PreKindergarten (PreK), Kindergarten and 1st grade classrooms outperform their peers in lower quality classrooms. The comprehensive approach to data-driven instructional coaching adopted by the district is positively influencing student outcomes.

What is CLASS?

DallasISD has adopted use of the CLASS system¹ which has three key components:

- (1) a multi-dimensional framework for thinking about classroom quality that includes Classroom Organization, Instructional Support and Emotional Support
- (2) collection of observational data by external SMU observers
- (3) rapid use of observational data

What did the study find?

Quality in DallasISD. Quality in PreK, Kindergarten and 1st grade, as measured by CLASS, is pervasive across the district. A small ratio of students are in low-quality classrooms and the district is actively engaged in both increasing and sustaining quality. Across all analyses, an optimal pathway is evidenced: when students are exposed to sustained quality for multiple consecutive years, their academic outcomes are best. The Emotional Support and Classroom Organization domains of the CLASS model seem to be most responsible for driving these trends.

PreK Takeaways

Enrolling in PreK of any level of quality is better than not enrolling in PreK at all and a high quality PreK environment produces the best results. Students in high quality PreK classrooms are more likely to be academically ready for kindergarten. This readiness translates into a greater likelihood of being successful during the Kindergarten year, which in turn sets a strong foundation for early elementary experiences. CORE's analyses show that especially when Emotional Support is present in the PreK classroom, students benefit.

Kindergarten Takeaways

Quality Kindergarten should be paired with quality PreK for optimal end-of-kinder results, especially with respect to language arts and reading. Quality PreK followed by quality Kindergarten makes students significantly more likely to be academically "on track" at the end of Kindergarten. High quality Kindergarten cannot compensate for lack of a high quality PreK experience. However, low quality Kindergarten can erode some of the positive gains achieved by high quality PreK. The positive effects of high quality Kindergarten add to the positive effect of high quality PreK but do not make up for the absence of it.

First Grade Takeaways

PreK quality continues to have positive influence on academic outcomes through the first grade; over time, the domains of Emotional Support and Classroom Organization seem to be the drivers of these trends. The effect of high quality Emotional Support and Classroom Organization during PreK shows a consistent and positive effect on end-of-1st grade outcomes for language arts and reading, regardless of the quality of Kindergarten and 1st grade. Demonstrating the accumulating impacts of quality over multiple years, positive effects of high quality Kindergarten and 1st in these same domains continue to add to the positive effect when PreK quality is high in these areas, but does not make up for the absence of it.

¹ Classroom Assessment Scoring System; https://teachstone.com/class/



How was the study conducted?

DallasISD's Early Learning Department and SMU's Center on Research and Evaluation (CORE) are engaged in a longitudinal research-practice partnership aimed at supporting quality early childhood educational experiences. CLASS observations are conducted by CORE and rapid feedback of actionable data is allowing the Early Learning Department, instructional specialists and campus leadership to provide targeted coaching to early elementary teachers (PreK to 2nd grade). This ongoing data collection also allows CORE to document how quality is changing semester over semester and year over year and to document the longer-term implications of sustained early childhood quality for student outcomes.

For the current analyses, CORE focused on a single cohort of students; those who entered PreK in the 2015-16 school year, kindergarten in the 2016-17 school year, and first grade in the 2017-18 school year. Data sources used to conduct the analyses include: extant DallasISD data about student enrollment, demographic characteristics and academic outcomes (Istation's ISIP literacy assessment and the Terra Nova standardized assessment), as well as CLASS® observational data. CORE provides annual descriptive reporting to DallasISD. This is an additional and deeper-dive report, made possible by local funders, focusing on PreK, Kindergarten and 1st grade analyses. CORE will continue to create supplemental reports as additional longitudinal data become available and as cohorts of students move through subsequent years of elementary school.

Why does it matter?

CORE's findings support other national evidence that the PreK years represent a critical opportunity for learning that is not easily regained if missed; excellent Kindergarten cannot make up for having no or low quality PreK in terms of end-of-Kindergarten academic assessments. Other national data shows that these effects persist over time; over time, CORE will continue to assess impacts on student outcomes through grade levels.

Some national studies point to a "fade out" effect where the influence of PreK diminishes over time. However, many of these study designs lack sustained data about quality and therefore provide only a partial picture of how PreK really works. The DallasISD data is unique in the nation; it consists of a large sample that represents a diverse student body, it utilizes external and highly trained observers utilizing a psychometrically valid rating tool, and it defines quality as aspects of the transactional relationship between students and teachers and supportive aspects of the classroom climate.

The CLASS approach avoids some of the biggest pitfalls of high stakes testing and the accountability mindset that is pervasive in education, while still setting high expectations and then supporting teachers and school leaders in reaching them. CLASS does not conflate student academic performance and teacher or classroom quality. CLASS assesses classroom quality in and of itself. These conditions for quality do not depend on the characteristics of students that walk in the door and instead focus on specific and malleable actions that are within teachers' and school leaders' control. These conditions for quality can then be related to student outcomes in order to determine broad impacts for academic achievement.

These findings point to a sustainable and scalable way forward. That is, the comprehensive adoption of the CLASS system by DallasISD is demonstrating how quality can be provided, at scale. The DallasISD Early Learning Department has adopted a comprehensive approach to instructional coaching that has created broad conceptual aims that all can orient toward, balanced with more granular drill-down instructional coaching, customized to individual teachers or school settings. In partnership with CORE, DallasISD is collecting data for ongoing formative assessment and continuous quality improvements with early learning teachers. The ongoing research partnership demonstrates a proof of concept for ongoing quality improvement, and data-informed decision making.

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