

Research Brief

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Research Highlights Aligned to SFUSD's Early Ed Research Agenda

This memo summarizes key findings from research related to relevant strategies for the SFUSD Early Education Department in 2024-2025 School Year. For each cluster of strategies, we explain key headlines and then provide links to briefs and longer reports summarizing the research in the footnotes. A lot of the research cited stems from research between SFUSD and Stanford University. In a few cases, research from other research partners and agencies are cited.

Research related to systems for instruction

Here are a set of key findings from research related to systems for instruction...

At the classroom and school levels:

- **It takes multiple departments working together to successfully implement a Prek through first grade literacy assessment, and when expectations for teacher and schools are reduced by school district leaders mid-implementation, the effectiveness of the use of the assessment by teachers and schools diminishes.** In the 2011-2012 school year, SFUSD had a strong implementation of the PALS early literacy assessment in half of SFUSD's PreK, Kindergarten and first grade classrooms. For example, SFUSD leaders trained 100 percent of its teachers in the participating schools on PALS administration; attendance at both PALS Facilitator Trainings was 90 percent; and 92 percent of teachers uploaded data following the fall PALS administration, most of whom uploaded data for all of their students. However, there were some implementation challenges that may have led to the assessment and its use of data being less effective. For example, the district leaders did not communicate a specific implementation plan and the leaders

reduced expectations related to program intensity and twice during the year, despite opposition from PALS experts.¹

- **While there is a stronger “continuity” in SFUSD curriculum systems, than SFUSD assessment and professional development systems Pre-K to third grade, generally, system wide efforts of continuity and alignment were mostly insufficient. For example, while school data from the assessment is developed by teachers and school leaders, it is under utilized by teachers and school leaders to monitor progress:** In a study during 2016-2018, researchers found at the time SFUSD’s PreK through third grade curriculum had continuity and alignment in mathematics while the assessment and professional development systems had less continuity. For example, the interim assessment system only had moderate alignment with the mathematics curriculum. In another example, there was weak alignment between school-leader learning and the mathematics curriculum. While professional development for leaders helped with preschool operations, it did not focus on the content involved in early learning or mathematics. Generally, system-wide efforts were insufficient like a joint vision of high-quality mathematics instruction was shared by the mathematics and early education departments but not incorporated into the district’s supervisory structure or student data to monitor progress not institutionalized but determined by teachers and school leaders.²
- **Efforts at coherence in PreK to third grades were challenged by a lack of district-level vision for PreK-third grade coherence and system-wide teacher participation undermined coherence.** In 2023: In a case study of two schools, researchers found using PLCs to build PreK-3 continuity in staff has some strengths (e.g., positive structures and environments, effective and collaborative team roles and responsibilities, productive organizational routines) and challenges (e.g., need a stronger system level roadmap for PreK-third grade coherence, need more participation from teachers across grade-levels).³

At the district level:

- **Two years of early education are better than one for long lasting impacts.** Relative to one year, children with two years of preschool had higher cognitive, social-emotional, and literacy skills by the end of preschool. Fall skills and attendance during the second year of preschool were mediating factors.⁴
- **How students are doing early on in their schooling (K-readiness) supports longer-term impacts.** In a study examining longitudinal literacy data of SFUSD students in early grades, the study found preschool language and literacy development, and math development were the strongest predictors of children’s reading level in the fall of first grade. Only two foundational skills significantly predicted first grade reading level: lower case letter recognition and beginning sound awareness. Also, children who were not kindergarten ready entered kindergarten with a significant gap in foundational literacy skills, such as letter knowledge and phonological awareness. In the fall of

¹ Loeb, S., York, B., Karr, M. (August 2012). Report on San Francisco Unified School District’s 2011-12 Implementation of Phonological Awareness Literacy Screening in Kindergarten and 1st Grade; Nyhan, P. The Power of a Good Idea: How the San Francisco School District is Building a PreK-3rd Grade Bridge. New America Foundation.

² Hu, S.A., Franke, M., Coburn, C. (2020). Summary of Mathematics Curriculum: A Tool for Fostering Continuity Across Preschool and Elementary Grades; Coburn, C.E., McMahon, K., Borsato, G., Stein, A., Jou, N., Chong, S., LeMahieu, R., Ibarra, M., & Stipek, D.(2018). Summary of Fostering Pre-K to Elementary Alignment and Continuity in Mathematics in Urban School Districts: Challenges and Possibilities. Research Brief. Stanford-SFUSD Partnership.

³ Menon, P. & Carlson, J. (2023). PreK-2 Literacy Coherence Research Study in Cohort 3 of SFUSD.

⁴ McDoniel, M. E., Connolly, C., Steyer, L., & Obradović, J. (2022). Preschool dosage, outcomes, and mechanisms: Why are two years better than one? Early Childhood Research Quarterly.

first grade, children who were not kindergarten ready thus remained two reading levels, or about half a grade level behind those who were kindergarten ready.⁵

- **There is some variation in student outcomes (attendance, academics) and readiness based on the early education program students experience prior to entering SFUSD.** In a study summarized in this brief of the early education collaborative between SFUSD and three of San Francisco's community-based Head Start agencies (Kai Ming Head Start, Mission Neighborhood Centers, and Wu Yee Children's Services), some key findings are: a) In the 2013-2014 cohorts of students, across all agencies, b) kindergarten students have relatively high rates of chronic absence, defined as missing more than 10% of school days; c) the proportion of students who met academic benchmarks increased as they moved from kindergarten to second grade, d) there are some variation in outcomes across agencies described in the brief.⁶

Research related to systems for operations and management

Here are a set of key findings from research related to policy, operations and management...

At the school level regarding *classroom quality and size*:

- In a study from 2019, researchers examined SFUSD's preschool classroom quality measures to better understand how the classroom practices influences student outcomes.⁷ They found:
 - **Classroom practices may have more impact on preschoolers' skills in the second half of the school year when teachers and children have settled into a routine.**
 - **Positive interactions - teacher to student interactions, peer interactions, discipline strategies and attention to a child's needs and safety - mattered for cognitive, self-regulatory, social-emotional, linguistic, and physical development.**
- In a study from 2019, researchers examined the effects of SFUSD's preschool experiences on school readiness. They found:
 - **Pre-K had a positive effect on students' literacy and cognitive/motor skills.**
 - **TK had a positive effect on all three school-readiness domains.**
 - **TK had a larger effect on literacy and cognitive/motor skills than pre-K.**
 - **The social-emotional benefits of the SFUSD preschool programming were limited.**

At the school level regarding *staff recruitment and retention*:

- **Conditions, not only pay, matter for retaining SFUSD teachers.** In a study using 2003-2015 data, researchers found certified staff, including a sample of teachers with ECE classification, that leave is not necessarily leaving for higher pay, and may in fact be leaving because of conditions, like realities of childcare and family needs. In a study using 2003-2015 data, researchers found certificated staff that leave SFUSD largely stay in education, and mean earnings are slightly lower. However, 20% are unemployed or leavers with high salaries when leaving are mostly higher. Presence of children or higher earning spouses suggest family conscious policies might support teacher retention.⁹

⁵ Garcia, E. (2015). The Importance of Early Literacy. SFUSD Action Research Team. Stanford-SFUSD Partnership.

⁶ John W. Gardner Center for Youth and Their Communities. (2023). The San Francisco Unified School District – Head Start Early Learning Collaborative: 2016-2019. Stanford University.

⁷ McDoniel, M.E., Townley Flores, C., Sulik, M.J. & Obradović, J. Preschool Classroom Quality. SPARK Lab. Stanford University Graduate School of Education.

⁸ Sulik, M.J., Steyer, L. Townley Flores, C., & Obradović, J. Effects of Preschool on School Readiness. SPARK Lab. Stanford University Graduate School of Education.

⁹ Brummet, Q., Penner, E. K., Pharris-Ciurej, N., & Porter, S. R. (2024). *After School: An Examination of the Career Paths and Earnings of Former Teachers. Educational Evaluation and Policy Analysis*, 0(0).

- **Conditions like lack of substitutes and teacher financial anxiety also play a role in teacher dissatisfaction and retention especially at historically underserved schools and high equity gap schools.** In 2017-2018, teachers in historically underserved schools and high equity gap schools reported significantly higher levels of dissatisfaction, trouble finding a substitute teacher, and financial anxiety than teachers in schools that don't face these realities.¹⁰
- **Leadership and business services (like payroll) matter for teacher satisfaction.** In a survey of over 1200 teachers in 2022, including a portion of early education teachers, teachers reported their reasons for dissatisfaction with the school and district for these reasons listed. From over six years of administering the survey, these were the lowest levels of dissatisfaction. Teachers were a bit more likely to consider leaving the profession in 2022 in comparison to the last five years.
 - 14.6% of teachers mention "leaders"/"leadership"
 - 14.3% mention "EmPower" or "Payroll"
 - 5.3% mention "board"
 - 4% mention "cost" or "cost of living"
 - 3% mention "politics"¹¹

Research related to systems for cultural issues

Here are a set of key findings from research for strategies addressing these cultural issues including...

At the school level regarding interrupt systemic racism.

- **Shoestrings program interrupts disproportionality in special education identifications and suspensions.** As of 2023, over the last five years of the existence of the Shoestring program in SFUSD serving students in TK, K, and first grade, primarily students of color, no students who engaged in the program have received an Emotional Disturbance (ED) designation, and 16 out of 78 have received another health impairment (OHI) designation. Of the 64 students with data, only six out of 64 have been suspended.¹²
- **In PreK, Kindergarten, and 1st grade families and school staff report the use of informal exclusionary discipline practices that emerge early in children's educational trajectories.** The vast majority (90%) of participants (n=63) reported the existence of one or more informal exclusionary discipline practices, including 100% of teachers, 89% of administrators, 87% of parents, and 85% of behavior support specialists. The two most commonly cited practices involve sending a child out with a non-instructional adult or home early, mentioned by 59% and 47% of participants, respectively. Further, our findings suggest that children may experience these practices over time as a cascade—for example, teachers initially instructing them to engage in a separate space or activity within the classroom, before sending them to the principal's office and, weeks later, reducing their school schedule. These results underscore the importance of paying attention to more subtle within-classroom informal exclusionary practices, which may be precursors to increasingly exclusionary within-school or out-of-school experiences.¹³

¹⁰ Gordon, S., Graham, C., Loeb, S., Menezes, D. (2017). The Quality Teacher & Education Act and Beyond: A SFUSD and Stanford Collaboration. Presentation at the Stanford-SFUSD Partnership Meeting.

¹¹ Loeb, S. (2022). Educator Insights and Experiences Spring 2022 QTEA Survey Results Teachers, Administrators, and Paraeducators. Annenberg Institute. Brown University.

¹² Hawkins, C., Steyer, L., Obradovic, J. (2024). A study of SFUSD's Shoestrings program: A wraparound early childhood intervention to disrupt significant racial disproportionality in discipline and special education. A presentation at the Stanford-SFUSD Partnership Annual Meeting.

¹³ Steyer, L., Provencal, M., Pearman, F., & Obradovic, J. (2024, December 6). De Facto Suspensions: Informal Early Childhood Exclusionary Discipline Practices in an Era of Formal School Discipline Reform.

At the district level regarding interrupt systemic racism.

- **At the district level, initiatives need to be more grounded in coherence and understanding in implementation and accountability measures, rather than only vision for an initiative.** In a 2018-2019 study of an equity-centered initiative in SFUSD called PITCH, interviews with central leaders found modest agreement among administrators related to the PITCH categories of the supports provided by PITCH, but there was little agreement related to either impact or return on investment and no agreement on effort. There was agreement among administrators on the specific actions they needed to take to support the initiative:
 - Establishing coherence across departments and schools and building a general understanding of the initiative
 - Developing a clear implementation processes, and
 - Developing clear accountability measures to drive action.¹⁴

¹⁴Moore, X. & Schwartz, D. Summary of Reaching for Equity in SFUSD: A Midpoint Analysis of PITCH. Research Brief. The Stanford-SFUSD Partnership.