CLASS® and Child Outcomes: What the Research Shows

What 200+ Studies Say about the Classroom Assessment Scoring System (CLASS®)

CLASS is the most evidence-based and widely used assessment of teaching quality. Over 200 research studies have demonstrated that children in learning settings with more effective educator-child interactions, as measured by CLASS, make gains in areas critical for success in school and life.

CLASS is Effective from Birth Through Twelfth Grade

Improved educator-child interactions matter, whether a child is an infant or nearing graduation.

- Preschoolers in classrooms with higher quality interactions showed greater learning gains across school readiness domains, including executive functioning and early literacy. Vitiello, Bassock, Hamre, Player, & Williford, 2018 (PK)
- + Fifth-graders who experienced higher quality interactions reported more positive feelings about school, were more engaged, performed better in math and reading, and had more closeness and less conflict with teachers. LoCasale-Crouch, Jamil, Pianta, Rudasill, & DeCoster, 2018 (K-5)
- Middle and high-school students in classrooms where teachers received coaching on CLASS performed better on standardized achievement tests across content areas. Gains were equivalent to moving the average student from the 50th to the 59th percentile in achievement scores. Allen, Hafen, Gregory, Mikami, & Pianta (2015) (SEC)

CLASS Improves Outcomes in Literacy, Math, and Social-Emotional Learning

Not only do children in learning settings with higher CLASS scores learn more in these areas, but they may also experience less stress, better inhibitory control, and increased working memory.

- For preschoolers, higher levels of Instructional Support were associated with greater gains in letter-word identification, spelling, and applied problems in kindergarten. Johnson, Markowitz, Hill, & Phillips, 2016 (PK/Head Start)
- + Children in child care settings with lower Emotional Support, showed a spike of cortisol in the afternoon, suggesting increased stress levels; in contrast, children in classrooms with higher Emotional Support showed a decrease in cortisol levels, suggesting lower stress. Hatfield, Hestenes, Kintner-Duffy, & O'Brien, 2013 (PK)
- + Children who experienced higher quality classrooms showed gains in social and cognitive skills, including inhibitory control, working memory, and language and literacy skills. Hamre, Hatfield, Pianta, & Jamil, 2014 (PK)



- Kindergartners in classrooms with higher Classroom Organization made more gains in literacy than those in classrooms with lower Classroom Organization. Ponitz, Rimm-Kaufman, Brock, & Nathanson, 2009 (K)
- + In the Measures of Effective Teaching Study, CLASS was as strong or a stronger predictor of student learning gains than was the Danielson protocol, the most common observational assessment in K-12 settings. Students in classrooms with teachers at the 80th percentile on CLASS learned 3 months more math content than did students in classrooms at the 20th percentile on CLASS. Kane, T. J., & Staiger (2012). Gathering Feedback for Teaching: Combining High-Quality Observations with Student Surveys and Achievement Gains. Research Paper. MET Project. Bill & Melinda Gates Foundation.

CLASS is Used Across Varied Settings

Across the world and in various settings such as family child care, under-resourced areas, and learning settings with Dual Language Learners, CLASS-enabled educators are impacting the lives of children.

- In a study conducted in rural Appalachia, preschool children in classrooms with higher CLASS scores were significantly more likely to demonstrate kindergarten readiness across academic and behavioral domains. Justice, Jiang, Khan, & Dynia, 2017 (PK/Low income Appalachia)
- Dual language learners in Head Start programs made greater gains in their Spanish and English language development when they were in classrooms with higher CLASS scores. Hindman & Wasik, 2013
- The quality of classroom interactions, in particular Emotional Support, enhanced the development of close educator-child relationships among an Australian sample of school-aged children considered to be at risk for poor school adjustment. Low levels of Emotional Support contributed significantly to conflictual educator-child relationships. Walker & Graham, 2019 (K-3)

CLASS Helps Educators Be More Effective

Schools and early childhood programs have shown that engagement in CLASS coaching and professional development has the power to transform teaching and learning - at scale.

- Pre-K teachers who received 1-1 video coaching on CLASS improved the quality of their interactions with children. The positive effects of coaching were particularly evident in classrooms with higher proportions of children who experienced economic risks. Pianta, Mashburn, Downer, Hamre, & Justice, 2008 (Pre-K)
- Pre-K teachers who enrolled in a course on effective interactions reported more intentional beliefs about teaching and demonstrated greater knowledge of and skills in detecting effective interactions. In addition, the teachers were observed to demonstrate more effective emotional and instructional interactions. Hamre, Pianta, Burchinal, Field, LoCasale-Crouch, Downer, Howes, LaParo, & ScottLittle, 2012 (Pre-K)
- CLASS-based coaching can help address the exclusionary discipline gap. Middle and secondary school teachers who participated in MTP-S reduced their use of discipline referrals for all students, and there was no difference in referral rates for Black students and their peers. These lower levels of discipline referrals were maintained the year after the coaching ended. Gregory, Hafen, Ruzek, Mikami, Allen, & Pianta, 2016 (UE/SEC)







CLASS Can Close Gaps in Early Learning Outcomes

CLASS enables educators to be better observers of children so they can respond appropriately to each child, which can make a difference in children's long-term success.

- + High levels of Instructional Support (IS) can help close the achievement gap. First-grade classrooms that provided low levels of IS, showed a gap in achievement between students whose mothers had high and those who had low levels of education. In classrooms that provided moderate levels of IS, the at-risk students learned as much as their peers who were not at risk. In classrooms that provided high levels of IS, students at-risk due to low levels of maternal education performed as well as their peers. Hamre & Pianta, 2005
- Children in preschool classrooms with consistently high-quality Instructional Support showed greater gains in language and literacy than did children who experienced consistently low-quality Instructional Support. Children who experienced higher quality IS in kindergarten made even greater gains, suggesting a cumulative effect of high-quality interactions. Cash, Ansari, Grimm, & Pianta, 2019 (PK/K)
- Children who had more years of better classroom quality had higher thirdgrade literacy scores. Furthermore, children who entered kindergarten with lower literacy skills benefited more from more years of exposure to effective interactions. Vernon-Feagans, et al., 2017 (K-3)



