



# CLASS Improves Outcomes In Language\* And Literacy\*\*

(Pre-K-3rd Grade)

Young children's language and literacy outcomes are important indicators of school readiness and predictors of later academic success<sup>1</sup>. Children's skills are not automatic, but developed through conversation, engagement with language- and print-rich environments<sup>20</sup>. Teachers can promote language and literacy outcomes through the creation of such environments and through interactions in formal lessons and informal moments throughout the day<sup>21</sup>. Effective interactions with teachers, peers, and classroom materials enhance children's literacy development by modeling new language, inviting children's verbal expression through questions and conversation, engaging students in interesting and meaningful lessons, and encouraging persistence and attention when learning new concepts.

Consistent evidence, from <sup>57</sup> studies, demonstrates that children perform better in literacy and language when they are in classrooms that provide effective teacher-student interactions, as measured by the Classroom Assessment Scoring System (CLASS). These findings hold up across pre-k to 3rd grade and among diverse populations of children such as dual-language learners (DLL) and children who live in poverty.

The CLASS measures the effectiveness of interactions among teachers and children in the classroom. The Pre-K CLASS framework categorizes interactions into ten dimensions across three broad domains: Emotional Support, Classroom Organization, and Instructional Support.

Emotional Support assesses how teachers support children's social and emotional functioning. Classroom Organization captures how teachers manage children's time, attention, and behavior. Instructional Support measures how teachers promote higher-order thinking skills and language.

All three CLASS domains support children's language and literacy skills both within one school year and over the course of several school years. Children who experienced warm and supportive relationships, engaging lessons, effective feedback and language modeling were more likely to perform better on measures of vocabulary, phonological awareness, letter-word recognition, and reading comprehension. Children in Head Start specifically showed improved letter naming and vocabulary skills when in classroom with higher levels of Instructional Support, and DLL children showed increased skills in phonological awareness, letter naming, and vocabulary in classrooms with effective Emotional Support and Instructional Support.

Below, we highlight key studies describing the critical link between effective teacher-child interactions and children's language and literacy outcomes. The complete reference list is available upon request.

*\*Language skills are defined as skills that help children hear and use oral language such as receptive and expressive vocabulary, phonological awareness, and pragmatics.*

*\*\*Literacy skills are defined as skills that help children read and write such as letter naming, letter-word recognition, print awareness, decoding, encoding, and reading comprehension.*



## Children's Literacy and Language Gains are Stronger in Classrooms Offering More Effective Instructional Support

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Instructional Support interactions include how teachers promote higher-order thinking skills such as analysis and reasoning, provide specific feedback in response to children, and support receptive and expressive language development. When children experience more effective Instructional Support, they gain in multiple language and literacy skills such as letter-word recognition, vocabulary, and phonological awareness. For young children, these skills are critical for later reading ability and academic success.

- Children in an urban Head Start program demonstrated stronger letter-word recognition and picture vocabulary when provided with more effective Instructional Support interactions<sup>2</sup>.
- In a national sample of Head Start programs, children who experienced higher Instructional Support showed increased letter naming and phonological awareness abilities, two key literacy skills that support children's later decoding during the reading process. Children whose mothers had lower education levels demonstrated higher vocabulary skills only in classrooms with more effective Instructional Support<sup>3</sup>.
- Even after accounting for child and family characteristics, children who experienced higher Instructional Support in preschool demonstrated better receptive vocabulary and rhyming skills<sup>4</sup>.
- Both teacher ratings of children's language and literacy skills and children's expressive vocabulary scores were higher in classrooms with more effective Instructional Support<sup>5</sup>.
- Instructional Support also acted as a buffer between income levels and children's literacy skills. Children from lower-income backgrounds scored higher on tests of letter-word recognition when they attended classrooms with higher Instructional Support<sup>9</sup>.



## Effective Emotional Support and Classroom Organization also Promote Literacy and Language Outcomes

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Emotional Support and Classroom Organization also support the development of language and literacy skills. When teachers relate warmly and sensitively to children, follow children's leads, and facilitate engaging lessons, children are more likely to demonstrate skills such as identifying letters and using expressive vocabulary.

- When Emotional Support and Classroom Organization averages were at or above <sup>6</sup>, children demonstrated higher levels of phonological awareness and print awareness, respectively. These links were not seen in classrooms that did not meet these thresholds<sup>10</sup>.
- When children in an urban Head Start program were in classrooms with higher Classroom Organization, they performed better on tests of letter-word recognition skills<sup>2</sup>.
- In general, children showed lower levels of literacy skills when in classrooms with high levels of challenging behavior. However, when teachers demonstrated high levels of Emotional Support, children displayed higher letter-word recognition despite the presence of challenging behaviors<sup>2</sup>.
- Children demonstrated more early writing skills, phonological awareness, listening comprehension, alphabet knowledge, and book knowledge when there were higher levels of Classroom Organization<sup>13</sup>.
- Unfortunately, adverse effects of low levels of Emotional Support also exist. Children in classrooms with lower Emotional Support demonstrate fewer receptive vocabulary skills<sup>14</sup>.



## Dual-Language Learners' Language and Literacy Outcomes Benefit from More Effective Interactions Across Domains

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Children's gains in language and literacy skills are seen for children who are dual language learners. Across the CLASS domains, DLL children who experienced higher quality interactions performed better on tests of vocabulary, phonological awareness, and letter-word recognition.

- Preschool-aged, dual language learners performed better on vocabulary tests in both English and Spanish when in classrooms with higher Instructional Support scores. Additionally, children who scored lowest on English vocabulary at the beginning of the preschool year benefited the most from effective instructional interactions<sup>6</sup>.
- When children are in classrooms with higher proportions of DLL children, Concept Development (a dimension of Instructional Support) acts as a buffer between classroom composition and vocabulary growth. Children who experienced higher levels of support for higher order thinking showed increases in their expressive vocabulary skills<sup>7</sup>.
- For DLL children specifically, higher Language Modeling promoted children's gains in language and literacy skills, specifically receptive vocabulary, phonological awareness, and print awareness<sup>8</sup>.
- Spanish-speaking preschoolers showed gains in letter-word recognition when they experienced more effective Emotional Support. Additionally, these gains were multiplied when high Emotional Support was combined with instruction in their home language<sup>11</sup>.
- Dual language learners who experienced increased levels of Emotional Support performed better on tests of letter naming<sup>12</sup>.
- Dual Language Learners' language skills were higher in both pre-k and kindergarten when they experienced effective Emotional and Instructional Support in their Head Start preschool classrooms<sup>15</sup>.



## Gains in Literacy and Language Last into Elementary School

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When preschool and kindergarten children experience higher quality teacher-child interactions in all three domains, they demonstrate increased levels of language and literacy skills in first and third grade.

- Students demonstrated stronger reading comprehension and literacy skills at the end of third grade if they had more years of better teaching. While all students benefited from access to more effective teachers, it was most critical for students who entered kindergarten with low literacy skills<sup>16</sup>.
- First-grade children who experienced higher overall interaction quality in kindergarten were more likely to score well on tests of sight word and decoding skills than first-graders who were in classrooms with less effective interactions<sup>17</sup>.



# Children's Language and Literacy Skills Benefit Most from Multiple Years of Effective Interactions

Although children experience gains in language and literacy skills from one year of quality interactions, they perform even better when they are in high quality classrooms for multiple years (e.g., pre-k and kindergarten as compared to only pre-k).

- Preschool children who had higher Instructional Support performed better on receptive and expressive vocabulary in kindergarten. If these children attended a kindergarten classroom with higher Instructional Support as well, they received an added boost in their language skills<sup>18</sup>.
- Similarly, when children experienced more effective Classroom Organization and Instructional Support in both preschool and kindergarten, they showed higher levels of literacy skills (letter-word identification and phonemic awareness) at the end of kindergarten<sup>18</sup>.
- Children in preschools classrooms with higher Instructional Support showed gains in language and literacy skills such as receptive vocabulary and rhyming skills at the end of preschool. The students who went on to experience higher Instructional Support in kindergarten showed additional gains in expressive vocabulary and letter-word recognition at the end of kindergarten<sup>19</sup>.

Taken together, these studies show that children benefit from effective interactions as measured by the CLASS. When children experience sensitive and responsive teachers, child-led and engaging instruction, positive and structured classroom management, and in-depth support for cognition and language, they demonstrate higher language and literacy skills.

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