
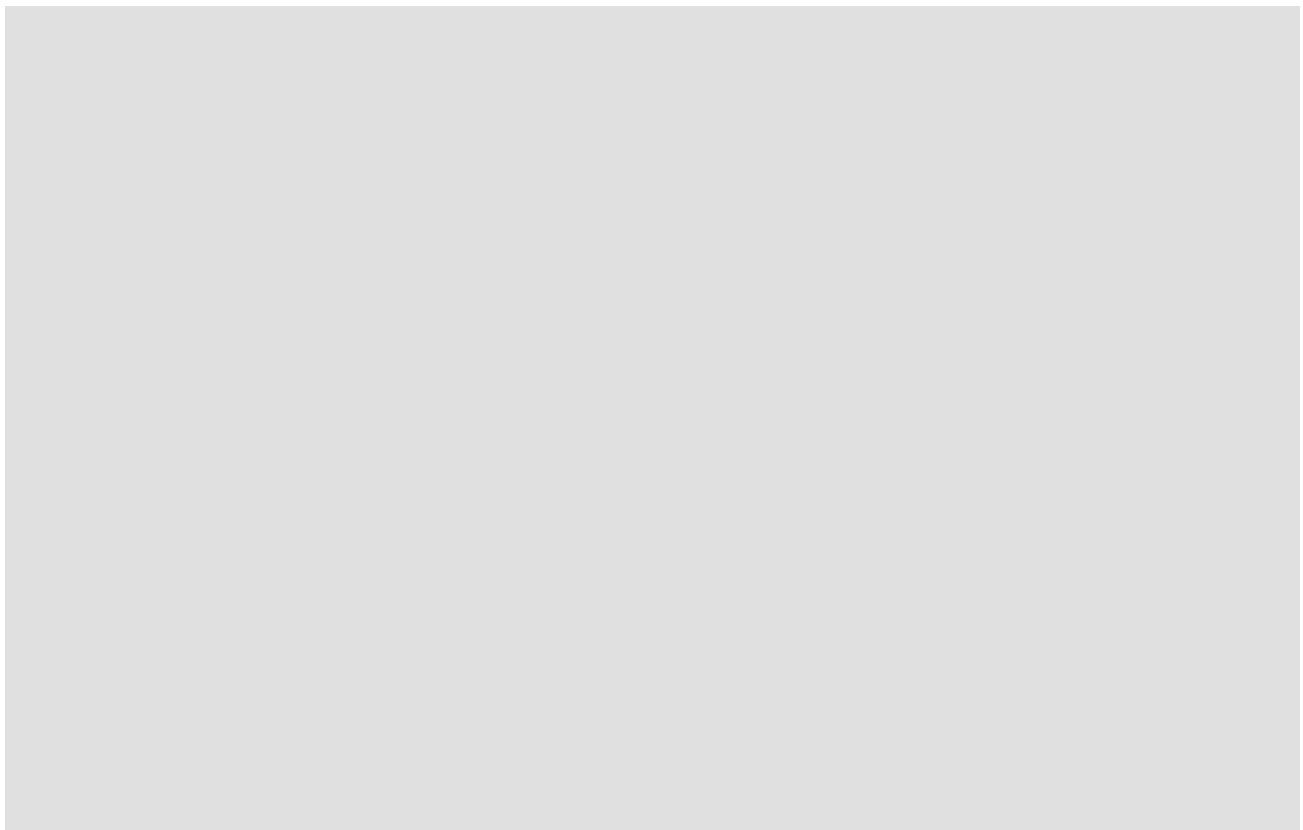


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## Introduction

For over half a century, it has been recognized that contexts beyond school—like health, social-emotional wellbeing, family, and neighborhood—can account for up to two-thirds of the variance in student achievement. Developmental systems theories and neurobiological disciplines have more recently begun to explain how these contexts can be disrupted. Exposure to chronic adversity and trauma can lead to toxic stress, which can adversely impact children's brain development and diminish academic outcomes. In spite of these challenges, developmental science also recognizes the phenomenon of brain plasticity and the malleability of development, which makes it possible to intervene in the course of development. 



## Principles of Effective Practice

Developmental science illuminates risks to child development and learning, as well as opportunities for meaningful intervention. The literature on development makes clear that: (1) protective factors can be bolstered while risk factors can be addressed, essentially making it possible to tilt a child's negative developmental trajectory in a positive direction; and (2) child development is influenced across contexts that include home, school, and community.

So what does this imply for practice? Decades of scholarship from diverse fields emphasize the importance of systemic, comprehensive approaches to student support aimed at meeting the needs of the whole child. Across the nation, approaches to wraparound, comprehensive services, full service schools, community schools, Promise Neighborhoods, or collective impact, are pursuing this aim. More recent scholarship asserts that because of the dynamic influences on child development and readiness to learn, effective approaches to intervention must tailor to the heterogeneity of variations or differences across children and across time. In short, the research suggests that to be an effective intervention, student support should be: Customized, Comprehensive, Coordinated and Continuous.

## Evidence of Efficacy: The Example of City Connects

City Connects was designed to operationalize the principles of effective practice and see whether they would have an impact on students. Co-designed by researchers at the Boston College Lynch School of Education and Boston Public School principals, teachers, families, and area community agencies, City Connects presently operates in over 85 urban public, charter, and parochial schools in nine cities across five states. About 90% of students served by City Connects are low-income, 20% are learning English, and 19% receive special education services.

## CUSTOMIZED

- **Individualized:** Optimize each student's health development and readiness. (h)3.9d petm



Emotional and Behavioral Difficulties, 8(2), 102-112.; Reinke, W. M., Heiman, K. C., & Simon, M. (2013). Classroom-level positive behavior interventions in school implementing SW-PBIS identified for enhancement. *Journal of Positive Behavior Interventions*, 15(1), 39-50.

Bonfenbrenne, U. & Moiré, P. A. (1998). The ecology of development. In W. Damon & R. M. Levine (Eds.), *Handbook of child psychology*, Vol. 1: Theoretical models of human development (5th ed., pp. 993-1023). New York: John Wiley and Son, Inc.; Bonfenbrenne, U., & Moiré, P. A. (2006). The bioecological model of human development. *Handbook of child psychology*.

Elde, G. H. (1998). The life course of development. *Child Development*, 69(1), 1-12.; Shonkoff, J.P., & Phillips, D., A. (2000). From neighborhood: The science of early childhood development. *National Academy of Science*. Washington DC, USA.; Walsh, M. E., Kenn, M. E., Wieneke, K. M., & Harding, K. R. (2008). The Boston Connection: Promoting learning and health development. *Professional School Counseling*, 12(2), 166-169.

Cene on the Developing Child. (2016). *Toxic Stress in Early Childhood: Implications for Learning, Brain Development, and Academic Achievement*. JAMA Pediatrics, 169(9), 822-829.; Shonkoff, J. P., Gaane, A. S., Siegel, B. S., Dobbin, M. L., Early, M. F., McGinnis, L., ... & Wood, D. L. (2012). The lifelong effects of early childhood adversity and toxic stress. *Pediatrics*, 129(1), e232-e246.; Ullrich, A., & Noble, K. G. (2016). Neighborhood socioeconomic context: Multiple mechanisms and implications for measuring socioeconomic status. *Psychological Science*, 53(1), 71-82. Shonkoff, J. P. (2010). Building a new biodevelopmental framework for early childhood policy. *Child Development*, 81(1), 357-367.

Adelman, H. S., & Taylor, L. (Eds.). (2006). *The School Leadership Guide to Learning Progress: A National Research Council (2002). Commission Report on the Quality of Education*. National Academic Press.

Cicchetti, D., & Smeets, L. A. (2000). The past, present, and future of developmental psychopathology (Special Issue). *Reflecting on the Past and Planning for the Future of Developmental Psychopathology*, 12, 255-264.; Maen, A.S., Tellegen, A. (2012). Resilience in development. *Psychological Science*, 24, 345-361. Moores, K.A., & Emig, C. (2014). Inequality in development: A matter of evidence-based policy making. *Research in Child Development* / *Journal of Child Psychology and Psychiatry*, 55(1), 1-12.; Shonkoff, J.P., & Phillips, D., A. (2000). From neighborhood: The science of early childhood development. *National Academy of Science*, Washington DC, USA.; Walsh, M. E., Theodoraki, M. D., Backe, S. (2016). Redefining a Core Function of School: A Systemic Evidence-Based Approach to Student Progress. In H. A. Larson & D. Van Veen (Eds.), *Developing Communities, Schools, and Learning Centers: Evidence-Based School and Community Improvement Practices, Policy, and Research* (pp. 127-147). The Hague, NL: Springer International.

Deating, E., Walsh, M. E., Sibley, E., Lee-Stronach, T., Foley, C., & Raczek, A. E. (2016). *Can Community and School-Based Student Improvement Enhance the Achievement of High-Risk Children?*