POLICY BRIEF Principles of Effective Practice for Integrated Student Support

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Mary E. Walsh, Ph.D., Joan Wasser Gish, J.D., M.A., Claire Foley, Ph.D., Maria Theodorakakis, M.A., Kirsten Rene, M.A.

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 twothirds of the variance in student achievement.¹ Developmental systems theories and neurobiological disciplines have more recently begun to explain the link between these outside factors and educational outcomes.² This research provides insight into why experiences like poverty and trauma can inhibit learning, and what can be done to counteract their effects.

Drawing on vast interdisciplinary literature, this brief distills key insights from the developmental sciences, identifies principles of effective practice in student support emanating from the science, and highlights new peer-reviewed evidence demonstrating that when the principles of effective practice are implemented, students have better effort, grades, and attendance; significantly narrow achievement gaps; and are less likely to drop out of high school.

Developmental Science

The theoretical and biological developmental sciences provide insights that help us to better understand the role and potential of integrated student support, a school-based approach to advancing student achievement by "developing or securing and coordinating supports that target academic and non-academic barriers to achievement."³ These insights include:

Every child is unique. As a function of differing genetic and environmental circumstances, no two children experience the same developmental trajectory.⁴

Development occurs across domains. Child development takes place across multiple domains – including academic, social-emotional, health, and family, with each domain impacting all other domains.⁵

Strengths and risks co-act. There is a delicate dialogue between risks and strengths, where a child's protective resources such as positive relationships, talents or interests may or may not help to mitigate the impacts of risk factors like deprivation, abuse, or anxiety. The presence of risk factors does not necessarily lead to a negative outcome because of the co-action of a child's protective factors.⁶

Intensity matters. Children experience difficulties and strengths along a continuum of intensity, requiring varying levels of support.⁷

Development occurs in different contexts. Children develop in multiple contexts, including their home, school, and community. All contexts play an important role in their development.⁸

Development occurs over time. Positive and negative childhood experiences affect a student's success and adjustment during the elementary school years, which, in turn, affect behavior and learning during middle school, high school, and beyond.⁹

Development 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.¹⁰

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."¹¹ 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.¹² In short, the research suggests that to be an effective intervention, student support should be: Customized, Comprehensive, Coordinated and Continuous.

Customized

- Individualized: Optimize each student's healthy development and readiness to learn
- Universal: Assess each student's strengths and needs

Comprehensive

- Whole child: Assess each student's strengths and needs across all developmental domains – academic, socialemotional, health, and family.
- **Multi-tiered:** Evaluate the intensity of support required in each domain from preventive to intensive which may differ for each child in each domain.

Coordinated

- Intentional: Through a culturally sensitive lens, and in collaboration with teachers, students, and their families, match each student with resources and opportunities aligned with the domains and intensities of their individual needs and strengths in order enhance protective factors and mitigate risk factors. Because of the diversity of student needs and strengths, high quality matches likely require connections to resources located in the school and in the community.
- Organized: Collect and organize information about school- and communitybased resources to increase efficiency and quality of match between child and resources and opportunities. Establish ongoing, reciprocal communication and information sharing, consistent with privacy laws, regarding student needs and progress.

Continuous

- Systemic: Integrate this process into the functioning of the school, creating a cyclical approach that allows for follow-up and responds to changes for each child over time.
- Accountable: Evaluate fidelity of implementation and impact. Use this information to improve quality and efficacy of implementation.

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.¹³ 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.

The Practice. Each fall, every teacher in a City Connects school has a one-hour conversation with a Master's-level City Connects Coordinator, usually a social worker or school counselor, to discuss every child in their class. Informed by the principles of developmental science, the Coordinator taps into the teacher's knowledge and observations regarding each of their student's strengths and needs across multiple domains of development (academic, socialemotional, health, and family). The Coordinator then assesses the complexities interfering with each child's learning and healthy development on a continuum ranging from "no risk" to "severe risk" across each domain. Based on the profile of the child that emerges from the teacher's

feedback and observations, and in consultation with the family and school staff, every child then receives an individualized support plan detailing the tailored services, resources, and opportunities needed to optimize the child's readiness to learn. The Coordinator is responsible for ensuring that each plan is implemented. To meet the complex of children's needs, City Connects establishes partnerships with community providers in order to access resources outside of the four walls of the school. These partnerships collectively provide a range of prevention, early intervention, crisis intervention, and enrichment services.

The Evidence. Students attending City Connects elementary schools demonstrated improved effort, behavior, attendance and grades. When followed into 8th grade, they close half of the achievement gap in English and two-thirds of the achievement gap in math relative to the Massachusetts state average.¹⁴ When followed into 12th grade, their high school dropout rate is cut by almost 50 percent.¹⁵ Subgroups, including immigrant students and students learning English, also experience significant benefits.¹⁶ This approach is also cost-effective. Economists at Columbia University find that the cost of resource coordination and assignment produces \$11 in benefits for every \$1 in costs, and when the costs of all services – provided across area schools, nonprofits, government agencies, and programs - are included, the return on investment is \$3 for every \$1 invested.¹⁷

Conclusions

The evidence emanating from City Connects has broad implications for both policy and practice. The evidence shows that when the research-based principles of effective practice for integrated student support are implemented, they can serve as a powerful and cost-efficient tool for narrowing achievement gaps and reducing dropout rates.¹⁸

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- ² Center on the Developing Child. (2016). Toxic Stress. Harvard University. Retrieved from http://developingchild.harvard. edu/science/key-concepts/toxic-stress/; Shonkoff, J. P., Garner, A. S., Siegel, B. S., Dobbins, M. I., Earls, M. F., McGuinn, L., ... & Wood, D. L. (2012). The lifelong effects of early childhood adversity and toxic stress. Pediatrics, 129(1), e232-e246. Note: In short, all children possess or encounter risk and protective factors that can complement, contaminate, or compensate for one another over time. For example, children living in poverty may be exposed to risk factors such as persistent hunger or cold, pain due to untreated medical or dental needs, or the experience of traumatic stresses tied to abuse, domestic or neighborhood violence. These risk factors may undermine working memory, attentiveness, and ability to develop the socialemotional and cognitive skills required for academic success.
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