POLICY BRIEF

Building a Sustainable Intervention to Address the Out-of-School Factors Affecting Achievement:
A Primer and a Case Study
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Introduction

While emphasis on evidence-based practice in education continues to grow, practitioners and policymakers want to implement interventions that are also sustainable. Researchers are arguing that to be worth investing in, an evidence base is only a beginning; an intervention must also be implemented in a way that ensures it will take root and last (Fixsen, 2005). Only by choosing interventions that are both grounded in evidence and unlikely to fade over time can educational leaders and policymakers be confident that an intervention is worthwhile.

There is now a rich literature in the interdisciplinary area of implementation science on what makes an intervention sustainable. Here, we offer a primer on this literature and illustrate its findings through a case study of City Connects – an evidence-based and scalable intervention. The literature review and the sustainability plan outlined in the case study offer recommendations that apply to other contexts and interventions.

Description of Case Example

OVERVIEW OF CITY CONNECTS

Out-of-school factors can significantly impact students' readiness to learn and thrive in school, especially in high-poverty urban districts. Hunger, a stay in a homeless shelter, persistent medical problems, or simply a lack of access to enriching activities in arts and sports can affect a student's life in school. City Connects provides an organized way for schools to address these factors.

The City Connects system of student support links each and every student with the tailored set of supports and enrichments that s/he needs to succeed in school. At the core of the intervention is a full-time coordinator in each school, trained as a Master's-level school counselor or school social worker, who works with each teacher to assess strengths and needs of every student in key domains of development (academic, social-emotional, health, and family). The coordinator then creates a unique support plan for each student and collaborates with the family to connect the student to services.

An important aspect of the role of the coordinator is developing and maintaining partnerships with community agencies and institutions in order to ensure the needed types of services are available to address the full spectrum of student strengths and needs. Supports range from prevention and enrichment services (e.g., classroom-based health and social skills interventions; arts or leadership enrichment programs; before- and after-school programs), to early intervention services and supports (e.g., mentoring; behavior plans; small social skills groups), to intensive intervention services that address significant needs (e.g., medical services; crisis or violence

prevention; mental health counseling). City Connects coordinators capture information about reviews, services, and community partnerships in a proprietary web-based data system, allowing them to track, follow up, and report on supports for students.

EVIDENCE BASE

There is wide agreement that if an educational intervention is to be scaled and sustained, it should begin with a well-established evidence base. Fixsen, Blasé, Duda, Naoom, and VanDyke (2010) identify one of the key steps in setting an educational intervention in place:

"If we are going to go to all the trouble to implement an evidence-based program and align system structures and functions to scale it up and sustain it, we want to make sure the evidence-based program is worth all that effort. Thus, it behooves us to select innovations that are supported by data" (Fixsen et al., 2010, p. 32).

Twelve years of research has demonstrated that the City Connects system significantly improves academic performance and thriving and narrows the achievement gap. The positive effects of City Connects not only appear in elementary school, but continue throughout middle and high school, after students have left the intervention (Walsh et al., 2014). City Connects is especially beneficial to students most at risk, particularly English Language Learners (City Connects, 2012).

Across several outcomes, students who were enrolled in City Connects elementary schools significantly outperform their peers who were never in a City Connects school (see City Connects, 2014):

- Higher standardized test (SAT-9) scores and report card scores in elementary school

- Higher statewide test scores in ELA and Math in middle school

- Lower rates of being held back in a grade—a strong predictor of on-time high school graduation

- Lower probability of being chronically absent

- In high school, about half the likelihood of dropping out of school

These studies have demonstrated that City Connects makes a significant difference for academic achievement and thriving for students in urban schools—an argument for expanding and sustaining the intervention.

SCALABILITY AND SUSTAINABILITY

City Connects began in six Boston public schools in 2001, and was implemented in another geographic area of the city in 2007. It expanded to Springfield, MA in 2010, and is now in place in over 60 schools across multiple states. The story of City Connects' expansion over the past decade—from six schools to almost 80, and from one state to several—shows success at entering new districts. In fact, evidence of its effectiveness is not limited to one school district – positive effects have also been demonstrated in Springfield, MA (City Connects, 2014), providing evidence for the scalability of the intervention.

The next question is how to sustain the work of City Connects beyond its initial, intensive involvement with a district. City Connects has developed a sustainability plan to ensure that its work and its beneficial effects can be carried on in a district over time.

City Connects' sustainability approach is grounded in the literature on implementation science and includes features that apply more generally to sustaining educational interventions or programs that address other school or community needs.

How to Sustain an Educational Intervention

Sustainability may be defined as "the ongoing maintenance and successful implementation of a model program with good effect" (Franks & Schroeder, 2013, p. 9). The broad field of implementation science includes the study of the ways programs are implemented in such diverse areas as medicine, public health, social work, and education – see Durlak and DuPre (2008), for example, for a meta-analysis of findings from over 500 studies in these and other fields. The field is becoming more rigorous, with increasing attention to, and insistence on, practices that are evidence-based (Wandersman et al., 2008, p. 171).

The literature as a whole identifies four areas of work as key to ensuring that the discoveries of science influence and guide the delivery of interventions, and lay the groundwork for sustainability: (1) selecting an evidence-based program; (2) planning; (3) implementing; and (4) monitoring and evaluation. For each category, we highlight key findings that generalize to educational interventions as we describe the four-phase City Connects sustainability plan.

1. SELECTING AN EVIDENCE-BASED PROGRAM

The literature in implementation science emphasizes selection of an evidence-based model as a critical first step to laying the groundwork for sustainability. "Implementation of an intervention that has documented efficacy (i.e., has been shown in rigorous studies to be effective at least on a small scale) is the *sine qua non* of a successful scale up," (Sarama & Clements, 2013, p. 175). As noted above, City Connects has a 12-year evidence base.

2. PLANNING

Once an evidence-based practice is chosen, the literature recommends a designated committee or group to guide the planning phase (Franks & Schroeder, 2013). With respect to City Connects, a steering committee – including members from the district and representatives of the City Connects intervention – is established. This steering committee engages in several types of planning.

Needs Assessment

City Connects works with districts to survey principals, teachers, community agencies, and families to understand current student support needs.

Initial assessment of an organization's or community's needs, readiness to implement an intervention, and capacity for change is essential at the beginning of implementation (Franks & Schroeder, 2013, p. 11). Fixsen et al. (2005, pp. 9-10) note the importance of measuring readiness both among staff who will be implementing a new program and at the community level.[1]

Structuring the Implementation Process

City Connects provides infrastructure and supports to school districts as they prepare to implement the intervention.

Fixsen et al. (2005) argue it is critical to identify a target set of practitioners within an organization who will be adopting the intervention, as well as a communication link, or individuals charged with working to ensure the intervention is implemented with fidelity. Franks and Schroeder (2013) call for a "well-articulated methodology" that can help those involved anticipate what will be required for implementation. The steering committee establishes these communication links and also maps out implementation activities, including a timeline for launch.

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[1]In their meta-analysis of studies of sustainability, Stirman et al. (2012) find that reporting on an organization's capacity for implementation was "relatively common" in the 125 studies they analyzed (see p. 9).
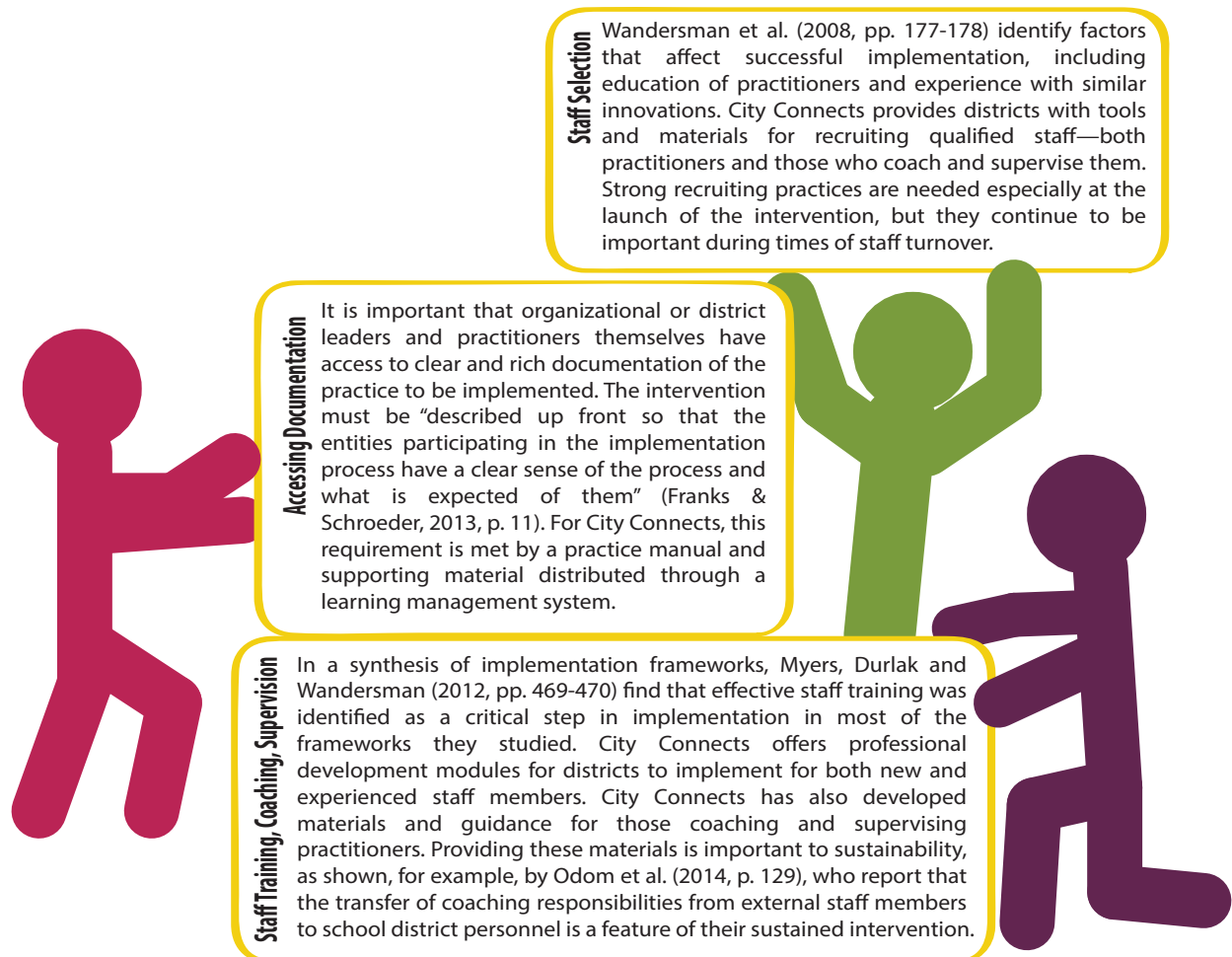
Establishing Buy-in by Participants

City Connects demonstrates awareness of the distinct needs of each district and its staff members in order to establish buy-in by all stakeholders.

Ensuring that those who will be participating in implementation "buy in" before the decision is made to implement is important to success (Coffey & Horner, 2012, p. 408). Because buy-in includes a shared vision for success, the views of participants gathered in the needs assessment process are essential. Also critical are in-person meetings (for example, with school principals) to establish alignment of priorities.

3. IMPLEMENTING

Fixsen et al. (2005) define implementation as "a specified set of activities designed to put into practice an activity or program of known dimensions," (p. 5). The category "implementing" includes an initial stage in which the intervention is launched. This initial stage requires significant time and care at the organizational (in this case, district) level, including commitment, structure, and support for the new intervention (Simpson, 2002; Wandersman, 2008).

As full implementation unfolds, work that promotes sustainability falls into several categories.

Staff Selection

Wandersman et al. (2008, pp. 177-178) identify factors that affect successful implementation, including education of practitioners and experience with similar innovations. City Connects provides districts with tools and materials for recruiting qualified staff—both practitioners and those who coach and supervise them. Strong recruiting practices are needed especially at the launch of the intervention, but they continue to be important during times of staff turnover.

Accessing Documentation

It is important that organizational or district leaders and practitioners themselves have access to clear and rich documentation of the practice to be implemented. The intervention must be "described up front so that the entities participating in the implementation process have a clear sense of the process and what is expected of them" (Franks & Schroeder, 2013, p. 11). For City Connects, this requirement is met by a practice manual and supporting material distributed through a learning management system.

Staff Training, Coaching, Supervision

In a synthesis of implementation frameworks, Myers, Durlak and Wandersman (2012, pp. 469-470) find that effective staff training was identified as a critical step in implementation in most of the frameworks they studied. City Connects offers professional development modules for districts to implement for both new and experienced staff members. City Connects has also developed materials and guidance for those coaching and supervising practitioners. Providing these materials is important to sustainability, as shown, for example, by Odom et al. (2014, p. 129), who report that the transfer of coaching responsibilities from external staff members to school district personnel is a feature of their sustained intervention.

4. Sustained site – Monitoring and Evaluation

Finally, the literature underscores the importance of continued monitoring and evaluation in a sustained site. For City Connects, the district assumes major responsibility for implementing and sustaining the City Connects intervention. Monitoring implementation and evaluating outcomes are important activities in this phase, as are creating the conditions that allow for innovations and adaptations to change.

Monitoring fidelity
The City Connects fidelity monitoring system provides reports for district staff to use mid-year and at the end of the year to review progress.
In Myers, Durlak, and Wandersman's (2012) study of implementation frameworks, the implementation element that appeared with highest frequency in the frameworks reviewed (96%) was evaluation of the process. Monitoring fidelity of implementation can help identify areas for focus and improvement, and it also informs evaluation by demonstrating that the intervention is being delivered as designed (see Lloyd, Supplee, & Mattera, 2013).

Evaluating outcomes
While the beneficial effects of City Connects on student achievement and thriving have been demonstrated (Walsh et al. 2014), ongoing outcomes can help sustained sites determine whether the intervention is meeting their goals.
Gathering data and examining outcomes is an integral part of sustainability (Johnson, Collins, & Wandersman, 2013). Measuring outcomes can help assess whether an intervention is meeting its goals, establishing whether or not the intervention works, whether it should be continued, and what might be changed (Chinman, Imm, & Wandersman, 2004, p. 115).

Adapting and innovating
City Connects provides materials and engages in periodic conversations with partner districts to promote these good practices.
Change can threaten sustainability, but building strong practices to adapt to change mitigates the threat. For example, while staff turnover is a challenge, building "redundancy" (shared knowledge across staff members) and establishing robust recruitment and staff development practices can help (Hill & Olds, 2013). To help ensure that a good intervention becomes part of "education as usual" in a sustained way, Fixsen et al. (2010) call for building an organization's capacity to reflect regularly on the ways that individual programs or interventions align, both structurally and in terms of function, with the whole.

Conclusions

The phases of work outlined above have been successful in establishing City Connects as a sustained district- and school-based approach to addressing the out-of-school factors that impact students' ability to learn and achieve. Many components of this approach—such as selecting evidence-based practices; including a carefully structured planning period; using well-documented implementation processes, recruiting procedures, and professional development; and monitoring fidelity and outcomes—can strengthen efforts to sustain a wide variety of educational interventions, and even community interventions. Sustainability is achieved through attention to these dimensions from the very beginning and through every stage of work on a promising intervention.

For more information visit cityconnects.org, or contact Mary Walsh, Executive Director of City Connects, 617-552-4231.

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