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To cite this article: Stacey A. Rutledge, Stephanie Brown & Kitchka Petrova (2017) Scaling Personalization: Exploring the Implementation of an Academic and Social-Emotional Innovation in High Schools, Peabody Journal of Education, 92:5, 627-648, DOI: [10.1080/0161956X.2017.1368650](https://doi.org/10.1080/0161956X.2017.1368650)

To link to this article: <http://dx.doi.org/10.1080/0161956X.2017.1368650>



Accepted author version posted online: 18 Aug 2017.
Published online: 18 Aug 2017.



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Scaling Personalization: Exploring the Implementation of an Academic and Social-Emotional Innovation in High Schools

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Scaling in educational settings has tended to focus on replication of external programs with less focus on the nature of adaptation. In this article, we explore the scaling of Personalization for Academic and Social-emotional Learning (PASL), a systemic high school reform effort that was intentionally identified, developed, and implemented with adaptation in mind for both the innovation and the scaling process itself. Drawing on focus group and individual interviews with administrators, guidance counselors, and teachers in eight urban high schools in Florida, we explore five elements of scale: depth, sustainability, spread, shift in reform ownership, and evolution of PASL. We find that implementers demonstrated a depth of belief, sustainability, and spread related to the idea of personalization. They did not show the same levels of sustainability and spread regarding the organizational routines related to PASL, although this differed widely by school. The reform approach using continuous improvement helped with shift in reform ownership and gave implementers control over the evolution of the reform. Despite this active involvement, administrators and teachers responded to PASL much like they would have an external reform, identifying the lack of time and school norms as impeding the implementation of routines and practices.

INTRODUCTION

Scaling effective programs and practices in educational settings is both appealing and challenging. As reformers and researchers identify effective programs and practices in one context, they may want to spread successes to other sites. However, when reformers attempt to apply approaches to other sites, they face difficulties due to the complexity and range of contextual factors shaping

local contexts (Clarke & Dede, 2009). Efforts to understand the scaling of effective practices has led educational researchers to draw from fields such as engineering and health to explore strategies that have worked in these settings (Glennan, Bodilly, Galegher, & Kerr, 2004; Schneider & McDonald, 2007). Over the last 20 years, educational researchers interested in bringing reforms “to scale” have proposed frameworks for understanding this process in classrooms, schools, and districts (Clarke & Dede, 2009; Coburn, 2003; Glennan et al., 2004; Sabelli & Harris, 2015; Schneider & McDonald, 2007). What was originally understood as spread to other sites has evolved theoretically over the years, moving away from simple program replication toward more broad definitions of spread characterized by deep and systemic change in schools and districts (Clarke & Dede, 2009; Coburn, 2003). These updated definitions of scaling outline a process of implementation that accounts for the variation in local context, with the goal of sustainable educational improvement in multiple settings (Clarke-Midura, Dede, Ketelhut, Nelson, & Bowman, 2006; Penuel, Fishman, Cheng, & Sabelli, 2011; Sabelli & Harris, 2015). Bryk, Gomez, and Grunow (2010) suggest that one of the ways scaling can be achieved with the flexibility required by local contexts is through the use of a continuous improvement approach within Networked Improvement Communities (NIC). A continuous improvement approach enables implementers to quickly test ideas iteratively across varied local contexts in a parallel way, while the NIC provides a network of support where the outcomes of this learning can be exchanged in pursuit of shared improvement goals. Learning what works across different contexts in this way “increases the overall odds of efficacious outcomes emerging more reliably at scale” (Bryk et al., 2010, p. 22). Taken together, these studies offer a rich perspective on approaches to transferring practices that have been found effective in one context to others.

Drawing from empirical studies, researchers have identified three kinds of scaling in schools: programs and approaches aimed at reforming classroom teaching, reforms aimed at shaping school processes, and comprehensive school reform models (Glennan et al., 2004). Hung, Lee, and Teh (2015) echo these categories when they point to three “levels of innovation” as teacher-oriented, school-oriented, or systems-oriented (p. 37). Their studies have three main characteristics. First, they focus on the scaling of an externally developed reform as opposed to a reform that has been identified in one unit of the organization, such as a school in a district, and then scaled to other units within that organization, such as other schools in that same district. Second, most of the reforms focus on improving teaching and learning either directly through shaping teachers’ instructional practices, such as through a new mathematics program, or through school and system reforms. Last, even in reforms that emphasize a mutualistic approach that includes the active participation of implementers, these studies identify a tension between the fidelity of the implementation of core elements of a reform and the organizational flexibility that enables that reform to be adapted successfully to the local context.

One of the ways Thompson and William (2008) have examined this tension is through the “Tight But Loose” framework for scaling up classroom innovations, which they describe as:

An adherence to central design principles (the tight part) with accommodations to the needs, resources, constraints, and particularities that occur in any school or district (the loose part), but only where these do not conflict with the theory of action of the intervention. (Thompson & William, 2008, p. 1)

They reflect upon five case studies they have examined through this lens and find that “the implementations were assessed periodically, necessary corrections were made midstream—where they were needed so long as they did not hamper the theory of action. Thus, these changes

were made to strengthen the local variation of the program” (Wylie, 2008, p. 123). As such, the Tight But Loose framework is an approach for addressing the long-standing tension between maintaining the contextual sensitivity and fidelity of scaled “externally developed” innovations.

Unlike these studies where scale is either a goal after the identification of an effective program or practice or a comprehensive school reform process, we share findings on a high school reform effort that was intentionally identified, developed, and implemented with scale in mind for both the innovation and the scaling process itself. The goal of the National Center on Scaling Up Effective Schools (NCSU) from its inception has been to identify effective practices in high-performing district schools and “innovate” *with* practitioners to develop and adapt them to schools in the same district. NCSU, therefore, represents an internal and intentional effort to bring reform to scale.

This work began during the 2010–2011 academic year when NCSU researchers in a partnership with a large, urban Florida district studied what made two of their higher performing high schools more effective than two lower performing schools. Given that the lower performing schools were nested in the same state and district context and had similar demographics to the higher performing schools, we believed that other schools could learn from the higher performing schools and that these practices could be employed in their schools as well. Researchers found that adults at the higher performing schools made systematic and deliberate efforts to personalize students’ academic and social-emotional activities. We called this integration of academic, social-emotional, and behavioral systems in high schools Personalization for Academic and Social-emotional Learning or PASL (Rutledge & Cannata, 2016; Rutledge, Cohen-Vogel, Osborne-Lampkin, & Roberts, 2015). After corroborating these findings with extant research and using a process of collaborative improvement, NCSU worked with stakeholders—district and school administrators, teachers, and guidance counselors—to develop PASL into an innovation. Then, through an intentional process, stakeholders scaled PASL into first three and then five other high schools in the district over a two-year period, 2014–2016.

Our study provides a new perspective on scaling in two ways. First, we report on the scaling of an innovation that was developed internally and intentionally, integrating prior concepts of scaling and adaptation as part of the model. Second, we also provide insight into the process of scaling a systemic reform aimed at academic and social-emotional activities in high schools. Specifically, we focus on the following research questions: (a) Given our framework of scale, how did schools adapt PASL to their school sites? (b) What does this adaptation of PASL, an innovation aimed at academic and social-emotional systems in schools, tell us about the process of scaling?

We find that the district and school administrators and teachers in our study embraced the underlying premise of PASL, namely that adults in schools deliberately and intentionally engaged in strategies and norms of practice aimed at personalizing the learning environment for students. Because they viewed the idea of PASL as consistent with their ideas of interacting with students, over time there was a strong depth of belief in the innovation. Adults were less consistent in their systemic implementation of the routines and activities of PASL over time because schools varied in their ability to align PASL with existing infrastructures or policies or build sufficient capacity to form new ones. We also explored the sustainability, spread, and shift in reform ownership of PASL. While a core group of administrators and teachers were involved in the mutual adaptation of PASL at each school, we find that the more oversight by school administrators, the more integrity and commitment to the model. School administrators played an important role as brokers of the knowledge and tools necessary for implementing PASL and serving as hubs for multiple components of the innovation.

In what follows, we situate the NCSU process in the context of frameworks on scaling, describing the framework that we use to understand the process of scaling of PASL. We then explain PASL and the characteristics of our NIC. Afterward, we discuss our methods and the findings from our participating schools. We close with reflections on scaling and adaptation generally and the process of scaling PASL as a systemic academic-social-emotional reform specifically.

FRAMING SCALING

As discussed earlier, scaling as a concept in education was originally drawn from efforts to replicate effective practices in other fields such as engineering, the health fields, and business. Schneider and McDonald (2007) provide a general definition of scaling: “Scale-up is the enactment of interventions whose efficacy has already been established in new contexts with the goal of producing similarly positive impacts in larger, frequently more diverse populations” (p. 4). Discussions on scaling in education are quick to move from this definition, recognizing that the transfer of practices must be different in the context of schools and districts, “a multi-level system characterized by multiple and shifting priorities” (Coburn, 2003, p. 3).

Coburn (2003) argues for a conceptualization of scale that accounts for the degree of depth, sustainability, spread, and shift in reform ownership in schools and districts. A successfully scaled reform shows depth or a consequential change in teachers’ beliefs, norms of social interaction, and evidence of those beliefs embedded in practice. Sustainability is demonstrated when there is consequential change that is maintained over time and becomes taken for granted at the site. Spread occurs when the reform is visible within classrooms, schools, and administrative offices. Finally, when the reform is accepted and internalized by all stakeholders, it demonstrates a shift in reform ownership. Scaling, therefore, is a process of transfer in which the shift of external to internal is explicit and intentional.

Others have added a fifth dimension of evolution to Coburn’s framework (Clarke & Dede, 2009; Dede, 2006). Evolution occurs when innovation adopters, “revise [a reform] and adapt it in such a way that it is influential in reshaping the thinking of its designers. This, in turn, creates a community of practice between adopters and designers whereby the innovation evolves” (Clarke & Dede, 2009, p. 354). Scaling, therefore, needs to be understood as the ways that the reform is institutionalized at each site and through the process of revisions to the innovation itself where the reform is adapted to the local context. Sabelli and Harris (2015) similarly see mutual adaptation as a given and contend that [italics theirs]:

Rather than start from the premise that the core goal of scaling up is *expanding the use of an educational innovation*, we consider that the core goal of scaling up, despite the name, is *improving education through continuous progress toward a performance goal over time, using a working innovation to accomplish it*. (p. 14)

Under this conceptualization, successful scaling that leads to sustainable educational improvement requires an iterative process that, in turn, moves from the transfer of educational reform to the transformation of practice. As part of this process, adopters seek to meet the needs of the implementation site within the parameters of the research-based innovation. By employing strategies of continuous improvement, adopters routinize processes of adaptation (Bryk et al., 2010).

Other researchers have underscored these elements of scaling. Glennan et al. (2004), for example, explore the scaling of external reforms with goals ranging from change in specific classroom practices to whole school reform. From the empirical studies reviewed in their volume, they also describe scaling as an iterative and complex endeavor that requires the involvement and support of multiple system participants. Like Coburn (2003), they argue that for successful scale-up, district and school administrators and teachers must integrate reforms into the school infrastructure, policies, and practices.

Cohen and Ball (2007) take a different perspective by identifying the causes of failure of scaling innovations—such as poor design of the innovation, rigid school norms and structure, failure to respond to problems identified by practitioners, and the environment of schooling—with the presence of multiple policies and the school improvement industry that “tends to inhibit the growth, maturation and institutionalization of organizations that develop and sponsor innovations” (p. 21). They emphasize the importance of the match between the innovation on the one hand and the will and capacity of adopters for systemic change to occur on the other.

Several researchers have explored the features of successful scaling of social-emotional and academic innovations such as PASL. They call attention to structural features of schools that facilitate scale as well as the resources necessary for implementation. Hatch (2000) finds that schools that matched the innovation with existing structures and frameworks were much faster and more successful in their implementation. Elias, Zins, Graczyk, and Weissberg (2003), in their review of research, conclude that, “there must be a theory of innovation, a commitment to detailed planning with flexibility, and action research in the spirit of continuous improvement to maximize the gains that can be made in a given ecological context” (p. 314). In particular, they call for understanding the social-ecological adjustment and adaptation process of the sites in which implementation is occurring.

Taken together, these studies emphasize that successful scaling is a complex process that bridges the needs of adopters, the norms and structures of schools, with the reform. Here, we draw specifically on the five components of scale as the frame for our analysis: spread, depth, sustainability, shift in reform ownership, and evolution. Through these components, we track the scaling of “norms, beliefs, and pedagogical principles both between and within classrooms, schools, and districts” that leads to meaningful change (Coburn, 2003, p. 8). We also explore the process of evolution that schools went through as they adapted PASL to their local context. Through this framework, we examine the nature and process of an innovation identified, developed, adapted, and scaled to eight high schools in the same district.

PERSONALIZATION FOR ACADEMIC AND SOCIAL-EMOTIONAL LEARNING

Our intentional process of scaling began with a year-long study of four high schools in a large urban district in Florida (Rutledge et al., 2015). Through this study, we found that the two higher performing schools engaged in PASL or the systemic and intentional recognition of and attention to the interdependency of academic and social-emotional activities in schools. After identifying PASL, we conducted a comprehensive review of research in which we found empirical studies and theoretical frames that supported it. As enacted in these case study schools, PASL integrated academic and social activities such as looping administrators, teachers, and students over sev-

eral years (Burke, 1997; Cistone & Shneyderman, 2004), middle school articulation (Chapman & Sawyer, 2001; Smith, Akos, Lim, & Wiley, 2008), and explicit instruction on academic and social skills (Watt, Huerta, & Mills, 2009; Watt, Powell, Mendiola, & Cossio, 2006). Social cognitive theory also supported the underlying norms at these schools; the schools exhibited that when adults show interest and caring toward students, they engage in practices that increase students' noncognitive skills, including self-efficacy, self-regulation, and development of personal agency (Bandura, 1989, 2001, 2005; Pajares, 1996; Tschannen-Moran, Woolfolk Hoy, & Hoy, 1998; Zimmerman, 2000). Further, personalization—in which adults show interest in students' experiences and learning needs—bolsters students' sense of belonging and their engagement in their own learning (Hallinan, 2008; Jenkins & Keefe, 2002; McLaughlin, Talbert, Kahne, & Powell, 1990). Indeed, adults at both high-performing schools engaged in norms of practice aimed at promoting students' sense of belonging and agency, such as talking to students about their academic goals and performance, interests, and extracurricular activities.

To adapt PASL into an implementable innovation, we turned to a process of collaborative improvement between researchers, developers, and district and school participants (Cohen-Vogel et al., 2014; Cohen-Vogel, Cannata, Rutledge, & Socol, 2016; Tichnor-Wagner et al., forthcoming). Our model is predicated on the idea that while schools nested in the same state and district context are likely to share many of the same characteristics and constraints, each school will adapt innovations to meet its own demands and needs. We also used a Network Improvement Community model (Bryk et al., 2010). Members of our District Innovation Design Team (DIDT)—researchers, external developers, and district and school administrators and teachers—including teams of five from the three schools implementing PASL (School Innovation Design Teams or SIDTs)—met during the 2012–2013 school year to adapt PASL into an implementable innovation in the three schools. PASL, the concept of systematic and deliberate efforts to personalize students' academic and social-emotional activities, therefore, remained constant.

During the development process, members of the DIDT and SIDTs identified five core components of PASL to implement and adapt at their own schools. The first component was *educator teams* of administrators, guidance counselors, and teachers who met regularly to discuss participating students. By forming these teams, each school agreed to create pathways of communication between adults in the school around students' academic, behavioral, and social-emotional needs. *Rapid check-ins* were the second component. Here, teachers formally checked in with all their PASL students in two-week intervals and noted students needing additional follow-up. Third, a group of teachers at each school agreed to teach formal lessons aimed at providing students with explicit instruction regarding *goal setting/achievement skills*. Fourth, administrators, teachers, and guidance counselors agreed to *intentionally use data* to monitor students and identify those needing additional resources. This included monitoring students receiving Ds and Fs during a grading period or with poor attendance as well as sharing data with other teachers, guidance counselors, and administrators. Finally, participants in PASL agreed to make concerted and intentional efforts to build a culture of personalization at their school with practices such as greeting students in the hallway, developing mentoring programs, and promoting students' extracurricular activities. By participating in the five components of PASL, implementers agreed to an organizational approach to personalization, one that incorporated traditional features of high schools, such as advisories and use of data, and more unique ones, such as rapid check-ins. Schools were encouraged to implement the components of PASL in a way deemed manageable and appropriate for their school.

TABLE 1
Case Study School Demographics, 2014–2015 (Innovation Schools Shaded)

School	Total enrollment	% Black	% Latino	% FRPL	FL school grade
Sabal Palm	2,400–2,700	55–65	10–20	65–75	C-D
Mangrove Bay	2,000–2,300	80–90	10–20	80–90	C-D
Hibiscus	2,900–3,200	25–35	40–50	50–60	A-B
Pelican	1,500–2,000	25–35	40–50	80–90	C-D
Sandpiper	2,400–2,700	20–25	30–40	50–60	A-B
Manatee Bay	1,200–1,700	20–25	20–25	40–50	A-B
Blue Marlin	2,400–2,700	10–20	40–50	30–40	A-B
Kingfisher	2,900–3,200	30–40	10–20	40–50	A-B

Notes. Data comes from the FLDOE and PK–12 Education Enrollment Reports, Broward County Public Schools. School grades are from the prior school year (2013–2014) to reflect the accountability context in which schools were operating. Data is reported in ranges to protect the anonymity of the schools.

RESEARCH DESIGN AND SCHOOL DESCRIPTIONS

We used a comparative multilevel case study design (Yin, 2014) to understand the scale-up of PASL in our three innovation schools (2014–2016) and our five scale-out schools (2015–2016). Like the schools in the Year 1 study, the innovation schools were chosen using a combination of value-added modeling and district participation to identify schools that were below the district average in attendance rates, graduation rates, and student achievement.¹ At least one administrator and teacher at all but one of the scale-out schools had participated as DIDT at-large members, so their schools were included in the second wave of scaling.

Piloting occurred during the spring of 2014 and full implementation began in the 2014–2015 school year for the innovation schools (Sabal Palm High School, Mangrove Bay High School, Hibiscus High School) and 2015–2016 for the scale-out schools (Pelican High School, Sandpiper High School, Manatee Bay High School, Kingfisher High School, Blue Marlin High School). (We have assigned pseudonyms to each school and provided ranges to protect the confidentiality of participants.) Among these schools, four (Hibiscus, Manatee Bay, Pelican, and Kingfisher) chose to begin to implement PASL in the entire ninth grade and three (Sabal Palm, Sandpiper, and Blue Marlin) implemented it with a smaller group of ninth-grade teachers and students. Mangrove Bay chose to implement it schoolwide during the 2014–2015 school year, but then limited implementation to the ninth grade in 2015–2016.

The eight high schools were all urban high schools similar in size and composition, with enrollments between 2,000 and 3,200 students. All schools were eligible for Title 1 funding, with Mangrove Bay having the highest percent of students eligible for free and reduced-price lunch (FRPL) (70% to 80%) and Hibiscus having the lowest (55% to 65%). See Table 1 for demographic information.

¹ Using achievement data from the 2008–2009 and 2009–2010 school years, we calculated VAM scores for each of the district's high schools as well as subgroups within each school: students qualifying for free and reduced-priced lunch, African American/Hispanic students, and English Language Learners. From this pool and particularly drawing from the subgroup performance, we identified six traditional high schools that were at or above the district average. We took the list to our district liaison and further identified three schools that were not implementing any major initiative during the upcoming three years. The principals of the three identified schools all agreed to participate.

DATA COLLECTION AND ANALYSIS

To understand the scaling of PASL in our participating schools, we turn to two sets of data: field visits to the innovation and scale-out schools and data collected during our quarterly SIDT and DIDT meetings. We discuss the data collection and analyses of both in turn.

We conducted field visits in the spring of 2015 in the innovation schools and in both the innovation and scale-out schools in the spring of 2016. In the spring of 2015, we conducted 47 semistructured interviews with administrators, guidance counselors, and teachers, during which we asked participants about their relationships with students, changes in practice, and perceptions of the impact of PASL. We also conducted seven focus groups with students across the three schools and observed 20 teachers' classrooms. We returned in the spring of 2016 and conducted 39 semistructured interviews, 13 adult focus groups, and 15 student focus groups across the eight schools. In interviews and focus groups, participants were asked to describe if and how PASL was being implemented at their school. They were also asked to describe the implementation of the five "core components" of PASL; their attitudes and experiences about PASL, including their will to implement the innovation; and their beliefs and evidence on its viability and success, as well as its potential to reach students and change their outcomes.

After each interview or focus group we completed a reflection form to document our initial findings and identify emergent themes (Miles & Huberman, 1994). At the end of the weeklong visits, we drew on the forms to complete a summary for each school in which we synthesized preliminary findings, identified emerging themes, and refined future data collection.

Once the interviews and focus groups were transcribed, we categorically analyzed the transcriptions of the interviews and focus groups, using a set of a priori codes (Patton, 2002) around three themes: implementation (e.g., will, capacity, mutual adaptation), outcomes (e.g., adult awareness of student status, quality of adult–student relationships, students' sense of belonging), and scaling (e.g., spread/scale-out, mechanisms for sustainability, ownership of the innovation). We also allowed themes to emerge from the data. Each researcher coded a common set of documents to ensure reliability, and researchers met weekly during the coding process to discuss disconfirming evidence and refine the coding framework (Corbin & Strauss, 2008).

The research team then wrote analytic memos for each school to identify patterns in the data. They met weekly during the memo-writing process to discuss key findings, resolve inconsistencies, and identify the similarities and differences in outcomes across the three schools. The analytic memos were structured around the a priori codes as well as specific subthemes that emerged, such as teachers knowing students' academic, behavioral, and social-emotional status. We also drew from these memos to rate the integrity of depth of implementation in the five components of PASL (see Table 2). Through this approach, we developed a comprehensive view on how participants at each school were implementing PASL as well as understanding PASL's impact on their school.

In addition, we collected audio recordings of and analyzed data from our quarterly SIDT and DIDT meetings and our two-day Summer Institutes. We draw here from data collected at three SIDT and DIDT meetings and two Summer Institutes held between June 2015 and June 2016 where all eight schools participated. The SIDT meetings provided dedicated time for the eight school teams to come together and engage with data collected from their schools around PASL through Plan-Do-Study-Act (PDSA) cycles, share challenges and best practices, and build on the experiences of other schools. PDSA cycles are often used to test how changes are implemented

TABLE 2
Depth of Implementation of PASL Components (Innovation Schools Shaded)

Indicator	Sabal Palm	Mangrove Bay	Hibiscus	Manatee Bay	Pelican	Sandpiper	Blue Marlin	Kingfisher
Intentional points of contact (RCIs)	1	3	2	2	2	2	1	3
Goal setting	1	3	1	2	2	2	2	3
Intentional use of data	2	3	2	3	2	1	2	2
Educator teams	1	3	2	2	3	1	2	2
Norms for engagement	2	2	1	1	1	1	1	1
Average	1.4	2.8	1.6	2	2	1.4	1.6	2.2
MODE	1	3	2	2	2	1	2	2

Scale: 3 = high; 2 = medium; 1 = low; 0 = no evidence.

in real-world environments. The PDSA cycle has four phases: Plan (planning the logistics of implementing the change); Do (trying the change in real-world setting); Study (observe the effects of the change); and Act (make decisions to refine the change based on the accumulated evidence) (Cohen-Vogel et al., 2015). The DIDT meetings convened the principals and coordinators from the eight schools and, on occasion, invited additional guests from the district such as nonparticipant principals and, in another, the superintendent. The two high school directors from the district increasingly assumed the leadership of these meetings throughout the 2015–2016 school year, which, in previous years, was largely a responsibility of the developers. During the Summer Institutes, schools shared best practices, learned about findings from the data collected by the researchers, and planned for the next school year.

The data from these meetings has been drawn mostly from audio reflection forms that we completed after reviewing audio recordings of the whole-group and small-group discussions. An analytic framework guided the process, targeting themes such as the delivery of learning and the participants' understanding about key topics such as scaling, PASL, and continuous improvement. Other key themes addressed by the forms included: learning across schools, alignment and integration with existing practices, and each of Coburn's (2003) four indicators of scale.

SCALING PASL

We now turn to how PASL was adapted and scaled in the innovation schools over the almost two years of implementation and the scale-out schools after eight months of implementation. We use our five dimensions of scales, focusing first on Coburn's four dimensions and then on evolution (Clarke & Dede, 2009; Dede, 2010; Sabelli & Harris, 2015). Of the five dimensions of scale, we go into most detail on the degree of depth as well as the evolution of PASL, given that these are the dimensions of scale most applicable to a two-year implementation timeline. We do, however, consider sustainability, spread, and shift in reform ownership.

DEPTH

Coburn (2003, p. 4) defines depth as deep change that “moves beyond surface structures and procedures (such as changes in materials, classroom organization, or the addition of specific activities) to alter teachers’ beliefs, norms of social interaction, and pedagogical principles.” Depth, in this conceptualization, focuses on beliefs, pedagogical principles, and norms of practice. When applied to PASL, this entails a strong belief in personalization as a mechanism to improve adult–student relationships, as well as changes in classroom practices and norms of engagement. Here, we focus on the last two elements, going into more detail on beliefs in the section on shift in ownership, as beliefs are central to reform ownership.

Table 2 provides a numeric representation of the depth of implementation of PASL components. To understand the depth of implementation, we drew from reflection forms and school memos, assigning a number between one (minimal implementation of the component) and three (component implemented consistently throughout the year). Researchers met to rate each practice and reconcile differences in their scores. After this process for each school, the median score was taken as the measure of the depth of implementation. For the innovation schools who had been involved with two years of implementation, we provide findings as to the depth of implementation after two years of full implementation. For the scale-out schools, we report on their first year of implementation. As noted in the table, the depth of implementation of routines, practices, and procedures ranged from being incorporated on the surface to being ingrained in the daily routines of administrators and teachers. Aspects of all the PASL components were enacted at all the schools with the depth of implementation differing by school.

Shaded schools are the innovation schools with two years of implementation. Non-shaded schools are scale-out schools with one year of implementation.

Pedagogical principles. As a systemic reform, PASL does not map neatly onto pedagogical principles. We therefore extend the definition of this element to include the routines, practices, and procedures related to our innovation: rapid check-ins, goal-setting activities, systemic use of data, and educator teams. In PASL classrooms, teachers were expected to engage in rapid check-ins and goal-setting activities, pedagogical approaches to improve student–teacher interactions. In addition, they used data and employed educator teams outside of the classroom.

We begin with the innovation schools with their longer involvement with PASL and then turn to the scale-out schools. With the innovation schools, we found the highest level of integrity of the routines of PASL at Mangrove Bay. As mentioned earlier, Mangrove Bay first implemented PASL throughout the whole school. Their AP/PASL coordinator/DIDT member encouraged this move, explaining that it would be more politically prudent to do so. After a year, though, the SIDT decided to scale many of the PASL components back to ninth grade. In terms of routines, we found that during both years of implementation at Mangrove Bay, teachers were assigned a PASL classroom during first period, which the school called the Power of Period 1. They routinely conducted rapid check-ins with their students using a worksheet disseminated by the school, which each teacher kept in a PASL binder. (Note: While the check-ins were routine, throughout both years of implementation, the intensity and oversight of them dissipated as the year progressed.)

They did goal-setting lessons with these students as well. Teachers met four times over the year in “Quarterly Talks,” an adaptation made specifically at Mangrove Bay. Quarterly Talks were identified by nearly every participant as the primary structure through which adults in the school

discussed and supported PASL students. They took the form of large “focus groups” with approximately 25 staff members and small meetings of two or three teachers who shared a student in need of support. The large cross talks occurred during professional development days; the small cross talks often occurred more informally via e-mails or conversations between teachers in the hallways. During Quarterly Talks, teachers discussed topics such as improving students’ grades, tardiness or truancy, and general behavioral or social issues. They documented these interactions on a sheet distributed by the PASL coordinator. Two teachers also mentioned that Quarterly Talks provided an opportunity to discuss unique challenges that English Language Learners (ELL) students faced.

We found the least level of implementation depth in Sabal Palm. At Sabal Palm, participants shared a general perception that PASL implementation had largely taken the form of a cultural movement—as one leader put it, a kind of “branding” for several new and existing initiatives in the school. Sabal Palm’s implementation of the specific practices, structures, and routines encapsulated within the PASL innovation was less robust, however. During both years, teachers reported that the routine rapid check-ins were done with students individually, with little support or oversight from the school. Three goal-setting lessons were conducted by two physical education teachers. Teachers met with each other once a month for 15 min on the mornings of “Academic Tuesdays” to check in about students. Several participants, however, reported that these periodic 15 min windows allocated for the practice were insufficient for meaningful collaboration. One participant, for example, shared that the constrained nature of “Academic Tuesdays” “... made that [collaboration] next to impossible. We try and do it in 15 min on Academic Tuesday like, once a month. It’s not sufficient time to do it justice.” The leadership at Sabal Palm created a new position in the school—a “behavior specialist”—who interfaced with PASL teachers around the needs of their students and worked broadly to facilitate the growth of the “personalization” culture within the school. Creating this new intermediary position added more interactions among PASL teachers and the behavior specialist who served as a liaison between them and the administration.

At Hibiscus, the third innovation school, participants reported making efforts to implement the other four nonnegotiable components of PASL. By the second year, the ninth-grade administrator emerged as having a central role in the implementation and oversight of most, if not all, of these core components. Teachers reported that they informally checked in with students. Two physical education teachers oversaw the goal achievement lessons, although they tapered off during the second year. In addition to the integral role of the ninth-grade administrator monitoring students, the school implemented two types of educator teams. The “core group” consisted of members from the School Innovation Design Team (SIDT), the ninth-grade administrator, and a select group of the PASL teachers identified as “PASL Friends.” A PASL professional learning community (PLC) was also created specifically for this “core group” to have a more structured opportunity to meet twice every nine weeks. Teachers not belonging to this PLC were expected to collaborate about PASL within PLCs of their respective academic departments. Several members of the implementation team noted that there was some degree of collaboration around information sharing and capacity building between the “PASL Friends” and the wider body of the PASL teachers, however teachers did not discuss these interactions when asked about collaboration.

In the scale-out schools, three schools implemented PASL in the full ninth grade and two others implemented it with a small subset of ninth graders. We found greater institutionalization of routines and participation in PASL activities in those schools that implemented PASL with the full ninth grade. In these schools, ninth-grade teachers and guidance counselors checked in with

students, used data to identify students in need, and brought teachers together to talk about students. Each school designed its own approach, but they participated in the routines. At Pelican, for example, the ninth-grade assistant principal (AP) organized weekly educator team meetings with all ninth-grade teachers. Together, drawing from student data, they identified students in danger of failing, assigned a teacher as a point person to each of these students, and discussed these students during these meetings. Teachers reported conducting check-ins, although the frequency of these differed by teacher—some reported intentional weekly interactions with all students while others said that they conducted them daily. The ninth-grade AP had each student complete a goal-setting sheet. A SIDT member, who taught a ninth-grade course on study skills, also reported exploring students' goals. Students in this course explained that they “get to know teachers at another level so that maybe if I have a problem with my work they could help me better so I could do better than average in my work.”

In the two scale-out schools that implemented PASL with select ninth-grade teachers, Sandpiper and Blue Marlin, we observed less commitment to the routines of the innovation, although even in these schools, efforts were being made. An administrator at Sandpiper explained early in the process that although gaining teacher involvement was difficult at first, the teachers were beginning to contribute ideas to the school's PASL program, showing their growing involvement and internalization. At the other three scale-out schools, however, we saw greater depth, suggesting that the commitment of the full ninth-grade team facilitated the implementation of routines.

Norms of engagement. We now turn to the fifth element of PASL, norms of personalization. In the innovation schools, we found that two of the schools had stronger norms of personalization, with the third school focusing more on the other four components. At Sabal Palm, culture and “norms of practice” envisioned by the PASL design were the most advanced elements of the school's enactment of the innovation. In 2015, members of the Sabal Palm leadership, including the principal, articulated a strong emphasis on their embrace of personalization as a core part of the school's mission and vision. This manifested through several changes, including a revision of the school's mission statement, explicit messaging regarding PASL to students and parents, the creation and placement of PASL signage throughout the school, and a general adoption of PASL terminology among members of the implementation team. Multiple participants in 2015 reported that uptake of the PASL “culture” was, generally, strong in the school. In 2016, a member of the SIDT explained, “I think [Sabal Palm] is much more . . . nurturing, and it's accepted, it's a given, and you don't have to think about it. I think it's more of a constant, again.” Many attributed this to a perception that the innovation's focus on personalization and students' social and emotional well-being was well-aligned to existing practices at the school and beliefs among the faculty regarding the nature of “good” teaching.

Similarly, adults at Mangrove Bay integrated PASL practices into their norms of engagement. The administrators at Mangrove Bay reported making efforts to establish norms of engagement for PASL, explaining that PASL is brought up “every time we ever meet about kids.” Teachers corroborated that PASL was invoked at regular faculty and professional development meetings. The school took additional steps to weave PASL into the culture of school, emphasizing adult-student relationships in schoolwide announcements and creating PASL T-shirts for teachers and assigning teachers to be PASL “ambassadors.” Ambassadors were teachers who implemented the PASL innovation the previous year and modeled PASL for their colleagues. Like Sabal Palm, several teachers and administrators described other school activities, such as “Adopt-a-Senior,” monthly character development lessons, and the Honor Roll, as PASL.

At both schools, adults said that PASL dovetailed well with prior practices. By embracing the language of PASL, participants made PASL intentional and gave it a name. Two years into implementation, adults articulated that PASL had become an important part of how ninth-grade teachers approached interactions with students and each other. This was particularly true at Mangrove Bay where ninth-grade teachers met weekly to discuss other ninth-grade students. Teachers described this focus as not only helping them connect with their students, but also connect with each other.

At the third innovation school, Hibiscus, and the five scale-out schools, we did not find the same degree of depth in norms of engagement. Hibiscus expended effort toward the implementation of the other components of PASL which had not yet translated into norms of practice. Participants at the scale-out schools said that they had just not spread PASL to enough stakeholders for depth to occur around norms for engagement, frequently calling attention to the fact that “this was only our first year.” As a counselor at Kingfisher explained, “Well, I know that we use the language a lot. We’re trying to promote it. So I would say that it’s very supported. But in implementing it, I think that it takes some time. More than a school year to really get the culture going, quite frankly.”

SUSTAINABILITY

Coburn (2003) defines sustainability as consequential change over time. Sustainability entails moving the innovation beyond implementation into systemic routines and practices that become taken-for-granted features of schools. Strong leadership facilitates sustainability while administrative and teacher turnover, changing political demands, and competing priorities undermine it.

For both our innovation and scale-out schools, we contend that it is too early to assess for sustainability, though there is evidence to suggest that participants at the school and district levels have the will to sustain PASL. As of the data collection for this paper, the innovation schools had scaled for two years and the scale-out schools for eight months. We see some evidence for sustainability in the ways in which participants at the schools saw the value of PASL through their comments. For example, one teacher at Mangrove said during a professional development meeting, “I’ve become a better teacher because of PASL. I used to go right to the referral or right to the consequence, but, now it’s why are you doing this, why are you late? And the kids are coming in class after you have that conversation.” Statements such as this suggest that PASL has helped some teachers reorient the ways in which they address student interactions and behavior—they look at the reason for student behavior, not just at the behavior itself.

We see some other areas, though, that suggest that PASL as an innovation is highly reliant on a strong assistant principal or other administrator for sustainability. In one of the scale-out schools, Pelican, participants keenly observed this dynamic and shared their belief that PASL should be implemented in such a way that in the administrator’s absence, PASL could still thrive, asserting, “We can carry on with the program if [PASL coordinator] was not there. We’re not so dependent on her.” We believe that district commitment to PASL also contributes to sustainability; however, the need for district commitment again suggests that PASL requires strong administrative oversight, a factor that might undermine sustainability if the leader were to exit the school or district.

SPREAD

Coburn (2003) describes spread as the expansion of the innovation within sites as well as to other sites. She writes, “Spread at the school level not only involves the reform moving to more and more classrooms, but also reform principles or norms of social interaction becoming embedded in school policy and routines” (p. 7).

In our study, we observed three types of spread. First, we saw PASL embraced by multiple stakeholders at both the district and school levels as the beliefs of PASL gained traction and school leaders reported improved attendance, fewer failing students, and improved grades. Here, the principles and norms of PASL were embraced in district and school policy, but experimented on as norms of social interaction. At the district level, we saw the two administrators overseeing high schools embrace PASL and take ownership over the professional development meetings. Second, we observed the dynamics of internal spread within the innovation schools (it is too early to assess spread in the scale-out schools) with Sabal Palm and Hibiscus maintaining the same level of scale as at the beginning of the initiative and Mangrove Bay scaling back from whole school to ninth grade. Finally, we observed spread to different schools as PASL scaled from three to eight high schools.

Taken together, the findings on the spread of PASL are mixed. We observed the spread of the belief in PASL at the district and school administrative levels. We also documented the spread to additional schools, sanctioned by the district. We did not, however, observe spread to other grades at our original three schools—one school, Mangrove Bay, even scaled back. Important to note, however, is that while Mangrove Bay may have scaled back to the ninth grade, they seemed to reengineer the program in a way that encouraged spread in a different way. They developed a vertical teaming with the neighboring middle school to ensure the incoming ninth graders knew about PASL. Further, in the second year, teachers described a strong PASL community both with students and with other teachers. Although the innovation was arguably made stronger by scaling back, and we continued to see systemwide evidence of norms of engagement, this lack of spread at the core of implementation at the three innovation schools points to nuances and challenges.

SHIFT IN REFORM OWNERSHIP

Shift in reform ownership refers to an innovation moving from an external reform to an internal one, with the “authority for the reform held by districts, schools, and teachers who have the capacity to sustain, spread, and deepen reform principles themselves” (Coburn, 2003, p. 7). In the context of NCSU, shift in ownership occurred in two ways. First, shift in ownership occurred when stakeholders assimilated the purpose and beliefs in PASL and when the design and implementation of PASL shifted from researchers and developers to district and school administrators and teachers. We discuss these in turn.

School and district belief. Across all eight schools, we found a high degree of belief in the idea of PASL and the potential of personalization to have positive effects on student outcomes. Across our interviews, participants expressed a belief in PASL that translated into strong school and district ownership over the reform. Participants across the innovation schools described PASL as “an intentional approach at getting to know the students on a personal level and making sure

you are giving them all of the resources they need to succeed”; “what most teachers do naturally but its making sure we do it with intention”; “PASL is making the personal connection so that [students] can come to you and they know that you care”; “PASL is common sense for good teachers.” The principal at Mangrove Bay explained in 2015,

PASL is definitely something that adds to that positive change, no question about it. . . . It actually brings a level of awareness for the teacher. Then the teacher is able to see beyond, a little more beyond certain things [academic issues]. Before, they could not get past those, and now they see them not . . . as an attack to them personally, but as a sign that the kid may need help with something. So it’s helping the teachers.

We also found that adults at the eight schools saw the value in intentional personalization—they described how they believed in PASL and said it helped in guiding their interactions with students. The ninth-grade assistant principal at Pelican put it this way: “it’s all about making connections with kids and building relationships, and giving them the support they need so that they can graduate. We have to get them on the right track.” Similarly, a teacher at Pelican explained that PASL was “making that personal connection so that [students] feel they can come to you and they know that you care so that they’re not just one of many kids out there. They feel a connection.” A counselor at Kingfisher described PASL in this way: “It’s about relationships. It’s about students always feeling safe and comfortable and able to reach out and have somebody. Because this is a big place. And so it’s absolutely a necessity.”

In addition to finding that school-level participants assumed ownership of the idea of PASL, we also found a shift in reform ownership at the district level. At the beginning of the grant, by agreeing to participate, the BCPS made a commitment to the project and its goals. However, during the design phase of PASL, school-based DIDT members voiced concern—both during meetings and through feedback forms—at the lack of active district involvement. The district had endorsed hiring a district liaison who was a former principal who exemplified the ideas of PASL; however, these DIDT members worried that the district was highly centralized and that without clear endorsement from district administrators, implementing PASL was unrealistic.

This shift in district reform ownership began to change as the schools implemented PASL and began to report on their findings at the quarterly DIDT meetings. At these meetings, assistant principals shared findings from their PDSA cycles as well as analyses of academic and behavioral data such as attendance rates, D & F numbers, and behavior referrals. In this sharing of positive findings with district administrators, there was a feedback loop: district administrators and school principals heard positive findings on PASL and began to show greater commitment to the reform. In turn, school implementers began to see the support of the district and felt legitimized going forward. An SIDT member described this process:

In education there are enough initiatives and enough products that are put in boxes and tried to be sold to schools to fix whatever problems ail you that . . . the school itself, from the principal down to the teacher to everyone else, has to see the value in whatever that product is, and the data that’s coming from PASL will create that value for us, and it’s going to . . . raise enough eyebrows to the folks who

are not participating to at least spark their interest to come hear about what's going on and how it's being done, and I think the district needs to facilitate those conversations.

District belief, therefore, was built by seeing the value reported by the participating schools.

Ownership over design and professional development. Participants also demonstrated a shift in ownership by assuming control of the design and professional development of PASL. From 2012 through 2015, developers, with support from the researchers and feedback from practitioners, organized the DIDT and SIDT meetings. However, during the 2015–2016 academic year, district administrators, along with the assistant principals/PASL coordinators, began to organize these meetings with district priorities in mind. In fact, the messaging from the district administrators continued to emphasize this shift in ownership when acknowledging the importance of selecting the “right” school staff to be involved in PASL implementation. For instance, during a DIDT meeting, a district administrator shared with the group:

Find the group of teachers that will take ownership and make the things better. It is not what you are doing, but how you are doing it. Know what your school is capable [of] and everything you do is a step towards PASL. Make it real and make it your own.

Schools valued this autonomy and, to the extent possible, were relatively intentional about who they involved with PASL to assume more ownership in the process at the school level. An SIDT member from Hibiscus noted that the “PASL project has given the schools back the power and the initiative to make the changes without the mandate from the district.” Shift in authority for the reform, therefore, did move from the researchers and developers to the district and school leadership of all schools as the years progressed.

EVOLUTION

Over the last decade, researchers have noted that scaling is characterized by an iterative and evolving process of change. Recognizing this active process of adaptation on the part of implementers as they alter reforms to their local context, Clarke and Dede (2009) add “evolution” to Coburn’s framework on scale. Sabelli and Harris (2015) further turn our attention to the mutual adaptation of scaling, which highlights the continuous improvement process of reform. Drawing from this lens, we focus on the iterative process of improvement of PASL through PDSA as well as the movement from “the transfer of educational reform to the transformation of practice” (p. 14). Two main findings emerge from this perspective. The first focuses on the relationship between the process of scaling and spread and the way practitioners tested and refined PASL practices. The second highlights the dynamics of scaling PASL as a systemic reform that entails implementing specific routines on the one hand, and social-emotional and academic norms and beliefs on the other.

We start the process with scaling to provide the context for the challenges in integrating a reform entailing both routines and beliefs. Administrators, teachers, and guidance counselors participating in the development and implementation of PASL met in quarterly meetings where they used the Plan-Do-Study-Act (PDSA) process of continuous improvement (Cohen-Vogel et al., 2014). At these meetings, SIDT members engaged in a process in which they established a set

plan around one or two of the components of PASL with a select group of students/teachers and/or analyzed the data collected from the implementation of the plan and, drawing from this data, set a new plan. Across all schools, participants reflected and improved upon their prior approaches. Kingfisher is a good example of the use of PDSA to improve components of the innovation, specifically rapid check-ins. During the first iteration, ninth-grade teachers conducted paper check-ins. The SIDT realized at the second SIDT meeting that this process could be centralized using shared FileMaker Pro software that would allow teachers to access each other's data and bring the PASL components of rapid check-ins, use of data, and educator teams together as a system. By centralizing the process during the second cycle, the ninth-grade assistant principal and teachers experimented with using student data during educator team meetings to have a shared context on areas of improvement with students. The SIDT at Kingfisher used the quarterly meetings to iterate on this process, improve the rapid check-in process, and link it to the intentional use of data and educator teams.

At the quarterly meetings, SIDT members from each school came together and reported on the proximal outcomes of PASL as well as their PDSA process. In the first cycles, SIDT members reported on the progress they were making with their implementation. As time passed, however, individual school representatives reported on proximal outcomes data such as attendance, retention, and students' grades. They also reported on the findings from their PDSA cycles, which often centered around the improvement of how specific components of PASL were being implemented. Through this sharing, participants heard about the progress, successes, and challenges associated with integrating PASL in different school contexts.

The process of mutual adaptation, however, highlighted a major challenge involved in the scaling of PASL. As illustrated in Table 2, schools varied in their degree of depth of implementation, with some schools implementing the routines and norms of PASL with greater depth and integrity than others. However, despite the differences in implementation, the opportunity each quarter that SIDT members had to report and share their struggles with the innovation with each other created a community of learners among the SIDT members and reinforced the fundamental logic of PASL and its promise as an innovation. We believe this helped to account for the scaling of the belief of PASL and solidify reform ownership. One district administrator explained,

[Teachers have] bought into it because they see the impact that it's making and the academic success of students and parents. And because of that, they've become believers of the PASL and of the process. But they don't necessarily think in the PDSA mind-set, to continuously be looking at it. But I think that that buy-in has been the major driver into the success and really ultimately the data that's reflecting in student behaviors and student academic performance that has allowed the programs to really just take off.

Further, hearing other SIDT members' student outcomes related to PASL and their different strategies reinforced the challenges, potential avenues, and successes of the routines of PASL. As schools reported on the positive proximal outcomes, district administrators began to see the promise of the innovation and the value of supporting it across district schools.

The quarterly meetings and PDSA cycles provided a venue and process for schools to make decisions about adaptation of PASL to their school contexts. PASL evolved over the course of implementation as members of the SIDT adapted it to their school site. At this juncture, we do not see any major redesign; however, this might be the next step as participants continue to iterate and PASL continues to evolve.

REFLECTING ON SCALING PASL

Our study explored the scaling of a reform that was developed with intentional scaling in mind. Whereas most studies examine the scaling of reforms external to a business or nonprofit organization (Coburn, 2003; Glennan et al., 2004; Sabelli & Harris, 2015; Schneider & McDonald, 2007), we discussed the progress of a reform that was identified and scaled within a school district. We also considered the implications of a reform with a system orientation that leaned heavily on strengthening adult–student ties in schools, which moved beyond the more commonly implemented and scaled curricular and instructional reforms.

When looked at through the lens of Coburn's (2003) conceptualization of scale, participants' activities demonstrated a depth of belief, sustainability, and spread related to the *idea* of personalization. The participants, however, did not show the same levels of sustainability and spread regarding the specific bundle of practices and organizational routines, although this differed widely by school.

The high degree of agreement with the beliefs of PASL suggests that an innovation aimed at improving adult–student ties and the social-emotional system in schools may resonate differently from the curricular and systemwide reforms covered in most scaling research. District and school actors found PASL to be consistent with their conceptions of their purpose, which may account for the shift in reform ownership in PASL. It is possible that the DIDT and SIDT process along with PDSA reinforced PASL with district and school leaders as well (Durlak, 2015, Durlak, Weissberg, Dymnicki, Taylor, & Schellinger, 2011). We discuss this in more detail below.

Adults were less consistent in their systemic implementation of the routines and activities of PASL. Their consistency was largely contingent upon the extent to which schools could either align PASL with existing infrastructures or policies or build sufficient capacity to form new ones. Other studies on scaling have had similar findings, particularly studies on scaling up technology-based innovations (Clarke & Dede, 2009). Although one could consider the presence of existing programs or practices in schools alongside or as part of other reforms as evidence that a school has not wholly embraced an innovation, Hatch (2000) has found that alignment to preexisting structures leads to greater integrity of implementation.

We found that district and school administrative involvement was critical to the spread of the routines and practices of PASL. District and school administrators not only played a role as the process of scaling moved from researchers and developers, but assistant principals played a critical role in implementing PASL at their school sites. Assistant principals, for their part, had greater access to student-level data compared to teachers, which, given the role of data in the PASL innovation, somewhat necessitated this oversight. They also organized and oversaw educator team meetings, data-sharing strategies, and the fidelity of implementation of the rapid check-ins. It is possible to conclude or infer, therefore, that because PASL requires coordination of multiple systems, it requires greater administrative oversight than a curricular reform that rests in teachers' jurisdiction. Although ninth-grade teachers at Mangrove Bay came closest to functioning independently, their participation was still contingent on an active and strong assistant principal and full support by the principal, reinforcing the necessity to not only build capacity for the implementation and scale of an innovation itself, but to also build necessary capacity for the governance of systemic changes.

As we seek to understand the elements of scale, we suggest more attention to the dynamic of administrative and teacher leadership in the scaling process. What role do formal and informal

leaders play in the scaling process? Scaling implies buy-in from all stakeholders, suggesting that teacher leadership is critical, yet administrative leadership can provide system legitimacy, making the innovation less likely to be ignored.

We find that our internally identified and developed innovation faced many of the same challenges as an externally identified innovation (Cohen & Ball, 2007). Despite active involvement in co-construction by DIDT and SIDT members, administrators and teachers still responded to PASL much like they would have an external reform. They identified school norms and structure as impeding the implementation of routines and practices. They complained that multiple demands, such as the need to cover their curriculum to the presence of accountability policies, competed for time with PASL.

Sabelli and Harris (2015) suggest that scaling must incorporate *the process* of reform. Indeed, our study illustrates the importance of this iterative approach in building belief and norms of practice at multiple levels of the school and district. The PDSA process proved to be an important tool for establishing routines and shaping them to meet the schools' needs. That said, because the PDSA process occurred with SIDT members who may or may not have included other stakeholders when they returned to their school, not all implementers at the school level were involved in the PDSA process. School administrators were particularly central in the process of scaling because they provided the oversight and support necessary to ensure school policies and infrastructures would facilitate and not hinder scaling efforts. Yet much depended on how well they communicated to and facilitated teacher networks once back on site. These findings raise questions about who needs to be involved with the continuous improvement process and whether the responsibility for continuous improvement should reside in the hands of a few or if all implementers should be involved.

Time will tell if the PASL innovation in our Florida district achieves implementation at scale. For now, it remains a work in progress. Though PASL resonates with administrators, teachers, and guidance counselors, these stakeholders continue to find the routines challenging. Sustainability, the ultimate measure of a reform's success, is the extent to which the different components of PASL and practices become taken-for-granted features in the implementing schools. It would also entail that the components of PASL work together as a system, rather than as independent activities. Such an integration requires the continued support of district and school administration as well as the general support for PASL by teachers and other adult stakeholders.

FUNDING

This research was conducted with funding from the Institute of Education Sciences (R305C10023). The opinions expressed in this report are those of the authors and do not necessarily represent the views of the sponsor.

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