JOURNAL of YOUTH DEVELOPMENT

http://jyd.pitt.edu/ | Vol. 17 Issue 4 DOI 10.5195/jyd.2022.1199 | ISSN 2325-4017 (online)

Can We Efficiently Help Adults Strengthen Their Relational Practice?

Thomas Akiva
University of Pittsburgh
tomakiva@pitt.edu

Annie M. White
Saint Vincent College
annie.mcnamara@stvincent.edu

Sharon Colvin
University of Maryland, College Park
scolvin99@gmail.com

Junlei Li
Harvard University
junlei_li@gse.harvard.edu

Peter S. Wardrip
University of Wisconsin
wardrip@wisc.edu

Abstract

Human interactions across settings shape young people's learning and development, and building adult expertise in facilitating productive interactions takes deliberate practice and reflective experience. However, relational practices are not consistently part of adult learning for those who work with youth. We describe a 2-year design study to develop the Simple Interactions Leadership Program, a professional learning workshop focused on relational practices. We refined the program across 3 iterations with library and after-school staff (with a total of 41 participants). Iterative changes included adding participant-driven "try-it-out" projects, adding external accountability features, and combining staff from the library and after-school sectors. Using artifacts and memos from workshops and participants' reflections, we found that these features incrementally improved participants' engagement, depth of learning, and sense of professional community—which we suggest are three central goals for related professional development efforts. As a collective youth-serving field, we need effective and scalable ways to help adults recognize and strengthen their relational practices with young people. The Simple Interactions Leadership Program offers a flexible structure for professional learning focused on building expertise in

relational practice while sustaining change and improvement through continuous reflection within communities of practice.

Key words: youth development, adult–child interaction, professional development, youth work, design research

Introduction

The interactions young people have with the myriad adults in their life shape their learning and development in positive and negative ways (Osher et al., 2018). Every adult–youth interaction has the potential to contribute to young people's learning and development, and meaningful adults can include youth program leaders, child and teen librarians, museum docents, teachers, caregivers, and others. However, despite this importance, relational practices are often not a consistent or intentional part of professional learning for those who work with young people. This may be partly due to the challenge that relational practices can be difficult to standardize, institutionalize, and deliver across settings at scale. But decades of youth development scholarship and the cumulative science of human relationships (Cantor et al., 2019; Li & Julian, 2012) suggests we address this challenge: How can we help adults across developmental settings strengthen their relational practice with young people in ways that are efficient, effective, and scalable?

We present here a 2-year design study in which we set out to iteratively develop a professional learning program that targets adult leaders' relational practices with youth. Across five cohorts (for 41 total participants) and using a conjecture mapping approach (Sandoval, 2014), we refined a professional learning program: the SI (Simple Interactions) Leadership Program. Our goal was to build an efficient approach that would encourage participants to grow their relational practice and improve the relational quality/focus of their program both during and after the workshops. In order to accomplish this goal, we sought to structure the professional learning so that it would (a) engage professionals across youth-serving sectors, (b) deepen their learning in relational practice, and (c) build a community of practice. With a social constructivist and strengths-based approach, we sought to help youth-serving adult leaders to understand and articulate their existing practice in relational terms, then build on that foundation.

In shaping this professional development program in the context of a design study, we do not seek to prove whether this program worked better or not in comparison with other programs. Rather, we sought to uncover general design principles that might apply across multiple settings

and to professional learning approaches beyond our particular context. Specifically, we aimed to uncover principles that would apply to any voluntary professional development that is focused on adult–child interaction. This voluntary aspect is important: In contrast to teacher professional development in school settings, the majority of adult leaders in our training were not required to obtain any continuing education credit. Therefore, their motivation and engagement were a primary design concern (Wlodkowski, 2003). By focusing on relational interactions in a strengths-based context, we help validate that relational practice—which most participants described as the core function of their jobs—was real work, worthy of recognition, and requires continuously developing expertise. Second, we found that expanding the professional learning community by bringing together youth-serving staff from after-school and library child/teen services created powerful learning experiences that affirmed their professional identities and empowered their development.

Before describing the SI Leadership Program and our design study, we first provide some brief background on relational practice in developmental settings, followed by a summary of professional learning in the youth fields. We then describe our initial conjecture to support the development of relational practice for youth development program leaders.

Relational Practice

The importance of positive youth–adult relationships is prominent in positive youth development (PYD) scholarship (e.g., Brion-Meisels & Jones, 2012; Jones & Deutsch, 2011), and recent research summaries from the Science of Learning and Development Alliance (Cantor et al., 2019; Osher et al., 2018) emphasize the importance of youth–adult interactions for development and learning. Sustained youth–adult relationships are described as key factors for program effectiveness in virtually every assessment or list of best practices in the youth development field (e.g., Eccles & Gootman, 2002; Yohalem et al., 2009). Youth engagement in positive and healthy program experiences can be an important protective factor for health and resilience, especially for youth experiencing adverse experiences (Bethell et al., 2019). In particular, PYD draws from relational developmental systems theory, which considers individual<>context relations to be the building blocks of development (Lerner et al., 2021), and the adults in a youth program setting (e.g., after-school or library) can be key aspects of those individual<>context relations.

The *active ingredient* hypothesis suggests that the quality of adult–youth relationships in a setting determines the effectiveness of the setting or intervention (Li & Julian, 2012). We consider developmental relationships—namely, sustained, productive relationships between

adults and young people—to grow from the building blocks of everyday youth–adult interactions (Bowers et al., 2015). We define relational practice as the practices or "moves" that adults engage in to shape those interactions.

Powerful, everyday interactions with young people are "simple," but not simplistic. Like all expertise, adult capacity to facilitate interactions with children or youth takes deliberate practice and reflective experience to develop (Ericsson et al., 1993). In one of the few extant studies that investigated expertise for adult leaders in youth programs, Larson and Walker (2010) considered everyday practice dilemmas, such as group discussions dominated by a singular youth or group motivation waning over the course of a multi-session project. They found that more experienced leaders were able to identify multiple youth-centered responses to dilemmas of practice whereas less experienced leaders saw fewer possibilities (Larson & Walker, 2010; Walker & Larson, 2012). Such findings suggest that developing expertise in relational practice helps adult leaders adapt their situational responses in both difficult and mundane scenarios. Intuitive practice, developed through experience, may also play a role in adults' interactions that build relationships with youth. What may appear as "intuition" in expert leaders is not merely something they are born with, but a rapid recognition of patterns and a flexible repertoire of alternative responses in otherwise puzzling or intense situations (e.g., Okoli et al., 2016). A strong professional learning program would integrate both intuition and intentional reflection to explicitly recognize the centrality of relational practices.

We define and operationalize relational practice using the SI tool, which is freely available online (www.simpleinteractions.org) and has been adopted and evaluated in numerous studies (Akiva et al., 2016; Akiva et al., 2020; Jacobson, 2019; Li & Winters, 2019). The tool provides simple illustrated rubrics for four interwoven dimensions of adult–youth interactions. *Connection* describes affective intune-ness and emotional attachment (Bronfenbrenner, 1979). *Reciprocity* refers to the balance or back-and-forth nature of interaction (e.g., National Scientific Council on the Developing Child, 2014). *Inclusion* assesses the degree to which all children or youth are invited and involved in an interaction, a dimension closely related to supports for sense of belonging (Baumeister & Leary, 1995; Deci & Ryan, 2008). *Opportunity to Grow* describes the balance between scaffolding and fading in skill development (Vygotsky, 1930-1934/1978). In this project, we used the SI tool as a guided structure to facilitate professional learning conversations about relational practice and not as an evaluative measure of individual staff. We explain this further in the description of our initial design in methods.

Professional Learning in the Youth Fields

The default mode for professional learning in education is transmission-based "best practices" workshops that are not designed to empower educators. Gordon (2004) provided a list of ways in which professional development for teachers tends to be ineffective in top-down, outside-in, and "one-shot workshop" modes. Similarly, Miles (1995) described the common "one-size-fits all" and "imposed rather than [staff] owned" training approaches in schools as "pedagogically naive" (p. vii). Professional development for adult leaders in after-school and out-of-school time has a similarly predominant focus on transmission of knowledge, often in the form of prescribing standards and protocols of practice. As summarized by Akiva et al. (2016), this transmission typically occurs through topic-based professional development or through quality initiatives.

Baldwin (2019) argued, in contrast, that a social constructivist approach to professional learning in out-of-school time offers several benefits and is well-suited to the complexity of youth work. As a premise, we acknowledge that professional learning does not build on the mere accumulation of decontextualized knowledge by adult leaders, but rather on new ways to organize what they already know—what Minsky (1988) refers to as "Papert's Principle." Specifically, our conceptualization of social constructivist professional development starts with the notion that every learner constructs their understanding (e.g., Patton, 2015, pp. 121-127). Our approach is strengths-based, trusting that youth work practitioners already have substantial knowledge of productive practices and ways of being with young people, and their development can build on such knowledge. As with the "IKEA effect" in which research suggests that people place increased value on items they have built (Norton et al., 2012), we hypothesized that participants in a constructivist professional learning process—where they develop their own working models and understandings—would invest and adapt techniques more fully than if the information was introduced as outside expertise or prescribed as top-down requirements.

Approach and Aims

The increasing accessibility of inexpensive and high-quality digital video recording—from cameras, cell phones, or tablets—makes it practical to capture day-to-day practice as a learning asset for professional development. In particular, the SI approach involves collecting short unscripted video clips of adult leaders interacting with young people and curating a set of videos for professional learning using a strengths-based dialogic protocol (Akiva et al., 2016). Creating opportunities for learners to identify and describe their relational practices as well as to appreciate the practice of proximal others can contribute to a robust sense of professional self-efficacy (Bandura, 1994). Having teachers watch themselves on video has been found to be

motivating and effective for learning about practice (Hattie, 2009; Seidel et al., 2011), though little research currently exists on using video in out-of-school-time professional development contexts.

Our approach to professional learning also draws from the field of Improvement Science (Bryk et al., 2017). In the SI Leadership Program, participants participate in "rapid cycles" of developing and testing "student-centered" practice ideas within a supportive community of practice (Bryk et al., 2017). This is akin to design studies, which research shows are a particularly effective set of strategies in developing innovative professional development models (Borko & Borko, 2004). When educators have opportunities to engage as designers, they learn how an innovation works rather than simply what works (Gravemeijer & Van Eerde, 2009).

In our design of this professional learning program, we prioritized three main aims. First, we sought to support participant **engagement**. Engagement is the outward manifestation of motivation (Skinner et al., 2009) and includes both attending workshop sessions and actively participating within each session. Second, our goal was to deepen participants' **learning in relational practice**. Research from across developmental contexts suggests that adult–child interactions are *the* "active ingredient" in programs and practices that support positive child and youth development (Li & Julian, 2012). We chose to explicitly focus on building capacity, understanding, and expertise in relational practice, something that is diluted in overly complex and procedural professional training for those that work with youth. Third, we aimed for **community building** to help connect a productive and supportive community of practice for adults who work with young people across learning contexts. This included the interpersonal connections among the participants during training, as well as a sense of belonging to an overall professional identity of adults who work with young people. Combining these three aims through iterative cycles, we wished to support participants to grow their practice, develop contextualized knowledge and skills, and improve their program during and after the workshops were completed. We sought to do this in a time-efficient way, due to the limited number of hours typically allotted for professional development in the youth-serving fields.

Methods

Design Research Approach and Starting Design

We employed a design-based research (DBR) approach to carry out this investigation. By taking the learning research from the laboratory to the real world and integrating experimentation, observation, and intervention, DBR can suggest when, how, and why innovations might work

within the context of educator practice (The Design-Based Research Collective, 2003). In this project, we held the dual foci of designing a professional learning program as well as understanding and describing the engagement, learning, and sense of community that the adult leaders experienced. We utilized a conjecture mapping framework to clarify the learning theories and design conjectures in our DBR process (Sandoval, 2014).

Our starting design was from "Simple Interactions," a professional development approach that utilizes practice videos and staff dialogue along with a one-page tool to analyze human interactions. A major strength of the SI approach is its flexibility and adaptability across a wide range of developmental settings in which adults interact with young people. In addition to early childhood settings, it has been used in after-school, residential youth care, museums, elementary schools, hospitals, and even with school crossing guards (Jacobson, 2019). At the heart of Simple Interactions is the collection of local video that is then discussed using a strength-based protocol. Researchers or trainers visit each participant and video record them interacting with young people (after permission has been obtained). They then curate short clips to share and discuss during workshops (typically between 30 seconds and 5 minutes in length).

Members of our team had previously arranged the Simple Interactions techniques and ideas into a three-session workshop for staff at youth programs, which we now call SI Foundations. The design elements of SI Foundations are

- Each session has opening and closing activities.
- The bulk of time is spent engaging in a process of watching and participating in strengths-based dialog about locally collected video clips of participants interacting with young people (typically 30 seconds to 5 minutes in length).
- Leaders gradually introduce four Simple Interactions micro-interaction dimensions (connection, reciprocity, inclusion, and opportunity to learn).
- Leaders gradually help the group move from affirmation to improvement.

From 2013-2017, over 250 adult leaders across nearly 50 youth program sites completed SI Foundations. This program takes an average of only 4.5 hours to complete, including three staff meetings and video collection time.

SI Foundations is an effective introductory workshop; however, in order to deepen the experience, we instituted changes aligned with our three main aims. First, although participants regularly report that they find SI Foundations to be *engaging,* with extremely high ratings on standard satisfaction scales (e.g., 4.6 out of 5.0 in a composite measure for satisfaction in Akiva

et al., 2020), the three-session program typically does not have full attendance for all three sessions, likely due in part to a lack of stability in the youth work field (Pozzoboni & Kirshner, 2016). Second, we have evidence that participants experience *learning in relational practice* from their participation in SI Foundations, as seen in experimental effects with a pre–post measure of beliefs about the importance of relational practice (Akiva et al., 2020). However, when we measured relational practice (i.e., the actual interactive practices staff engage in) through video coding, pre-to-post behavior change was less clear. Third, the nature of the strengths-based protocol used in SI Foundations is such that the program supports *community building;* however, we have limited data in this area.

Building upon the SI Foundations model, we designed the SI Leadership Program to deepen the learning experience and transfer more of the agency and ownership to participants. The SI Leadership Program incorporates three main design elements: (a) the Simple Interactions strengths-based, video-based dialogic process, as established in SI Foundations; (b) developmental research learning with short informational videos (created by the team and by external researchers) and research-based readings; and (c) Try-It-Out projects, scaffolded individualized projects that incorporate reflection and in-class activities grounded in Improvement Science.

Participants and Design Iterations

We implemented and refined three iterations of the SI Leadership Program between Winter 2018 to Spring 2019 (see Table 1). Across iterations, a total of 41 after-school and library adult leaders participated in the SI Leadership Program. This study was approved by the Institutional Review Board of the University of Pittsburgh. Adult staff members signed consent forms to participate. For children and youth that appeared on video, we provided an opt-out parental consent form at least 2 weeks prior to the recording sessions and obtained verbal consent on the days of recording. Any child or youth whose parent/guardian signed the opt-out form were not video recorded and they went about their regular activities. The videos were not used in research and were used only for staff professional development.

All but one participant had at least 1 year of experience working with children and youth ranging from 1 to 16 years. Thirty-one of the participants (76%) worked with teens, middle, and high school (including 14 who also worked with children) and 23 (56%) worked with children who were early childhood and elementary age (including 14 who also worked with teens). In addition, six (15%) of the participating staff also worked with adults and families and did outreach in the community in addition to their roles with children and youth. Seventy-eight

percent of participants were female, 68% were White, 27% were Black/African American and 5% were other (Latinx, Middle Eastern). We used observational and participant-disclosed information to determine demographics of participants. In Iteration 1, 50% of participants were female (one identified as non-binary, three were male) and 100% were White. In Iteration 2, 100% of participants were female, 57% were White, and 43% were Black. In Iteration 3, 80% of the participants were female, 62% were White, 31% were Black, and 8% were other.

Table 1. SI Foundations and SI Leadership Program Iterations

	SI Foundations (not part of current study) [a]	**Iteration 1: Custom projects**	**Iteration 2: Raising the stakes**	**Iteration 3: Combining sectors**
Participants	157	8 (Two cohorts)	7 (One cohort)	26 (Two cohorts)
Timing	2016-2017	Winter 2018	Spring 2018	Fall 2018 + Spring 2019
Sector	After-school	Library	After-School	After-School + Library
Application	No	No	Yes	Yes
Sessions	3	5	6	6
Project presentation	No	No	Yes	Yes
Homework completion	N/A	N/A	61%	79%
Program completion	40%	88%	86%	92%

[a] Although we conducted SI Foundations workshops from 2013-2017, our data about program attendance is from a randomized control trial with 157 participants in 2016-2017

Data Sources

Table 1 lists key characteristics for each iteration. After-school staff came from a wide variety of programs. They included both staff and directors. Staff planned and led program activities, supported homework, and supervised unstructured time. Directors spent time running programs, completing paperwork, and filling in when needed. Library staff (Iterations 1 and 3) came from multiple branches of a large, citywide library system and all served the role of either teen librarian or children's librarian (which included teens). Their jobs included planning and

running programs (e.g., STEM activities and story time); assisting patrons with questions and finding resources; and interacting with children, youth, and families throughout the library. In Iteration 3, which combined library and after-school staff, 38% of participants were library staff and 62% worked in after-school programs.

Our data collection process paralleled the iterative and social constructivist nature of the design study. We followed a structured and intentional plan for data collection throughout each iteration. We also allowed data collection methods to evolve to align with the changes to the design. In addition, most of our data collection also had a programmatic function. We used many of the designed professional learning activities as ways to understand more about participants' engagement, learning, and community building. We draw from two categories of data sources to describe the iterative research: "workshop measures" were associated with in-person workshop sessions and "reflective data" involved participants reflecting on their workshop experiences outside of sessions.

Workshop measures included *facilitator memos* collected during and after sessions and during researcher meetings. We collected *participant artifacts*, including posters and slides from try-it-out projects and the public Celebration of Learning, and photographs of in-class sharing activities. During the last session of each cohort, we conducted a within-session *focus group activity* and asked participants three questions: (a) How did you grow from this experience? (b) What was most useful about this professional development? and (c) What would make this professional development more useful? Participants shared their answers, wrote them on a whiteboard, and engaged in a discussion while researchers documented their responses. Finally, we collected *participant attendance* at each session across the iterations and used these data to track program completion. For Iteration 1, we considered completion to be when a participant attended all five sessions. For Iterations 2 and 3, we defined program completion as presentation of their final project.

Reflective measures included *homework reflections*, which we assigned to participants in Iterations 2 and 3. This included a one-page (3–5 questions) document to be completed in between sessions. We asked participants to reflect on an element of their own practice related to their interactions (after session 1), facilitation techniques (after session 2), and try-it-out project (after session 3 and 4). Next, participants in each iteration completed a *post-workshop survey,* a one-page questionnaire at the end of the SI Leadership Program that asked participants to rank the usefulness of each feature of the training, the usefulness/quality of the training overall, and what we might do to improve the program. Finally, we conducted *follow-up*

interviews. In the fall of 2019 (6 months to 18 months after program completion), two researchers interviewed 16 people who had participated in SI Leadership Program (each interviewed half the sample): five from Iteration 2 and 11 from Iteration 3. Interview questions addressed what participants learned and how they sustained this learning beyond the SI Leadership Program. All interviews were recorded and transcribed.

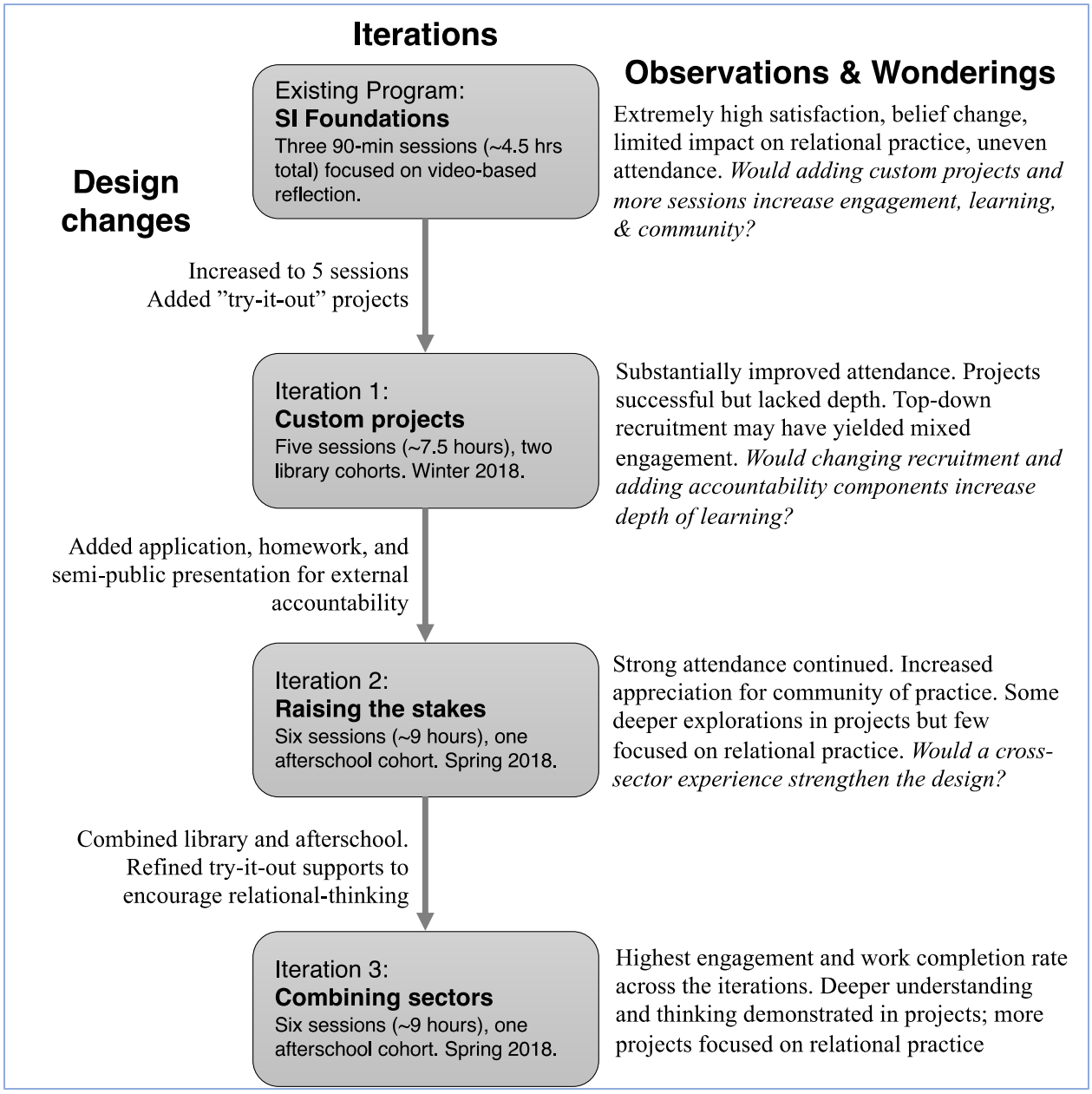
Data Analysis

To gain overall understanding of the iterations, we reviewed all facilitator memos, attendance records, and post-workshop surveys. In addition, to deepen our understanding of each iteration, we applied specific coding techniques to particular data sources. We reviewed transcripts from the within-session *focus group activity* to understand participants' experience of the professional learning experience in each cohort. The lead researcher identified initial themes, and the research team had several conversations and came to consensus on themes that emerged among participants in each cohort (Miles et al., 2014). We examined *homework reflections* and *participant artifacts* to analyze participants' understanding of relational practice as exemplified in their try-it-out projects. We coded projects based on the extent to which these were focused on relational practice using a binary code (yes/ no). We then categorized projects in each group based on common themes that emerged. For the 16 *follow-up interviews*, coding was done iteratively and collaboratively (Miles et al., 2014) by two researchers. They first coded the interviews inductively for emergent themes, including connections to other youth workers and the social constructivist approach described above. To ensure trustworthiness of the coding process, these researchers met several times to discuss themes, to combine and collapse codes (Saldaña, 2015). Through this process they engaged in regular discussion with the entire research team to finalize the codebook and how the data aligned with the themes of the paper. Once agreement on the codebook was achieved, we applied the codes to the themes in this paper.

Designs

We describe here the evolution of the SI Leadership Program through three design iterations. Each iteration included one or two cohorts who completed the SI Leadership Program, with a total of five cohorts and 41 participants. Figure 1 summarizes our observations and wonderings that led to design changes from the existing program through three iterations. We characterize the three iterations as (a) custom projects, (b) raising the stakes, and (c) combining the after-school and library sectors.

Figure 1. Evolution of Design Across Three Iterations



Design Iteration 1: Custom Projects

In the first iteration, conducted with two 4-member, library-only cohorts, we increased the program from three to five sessions and introduced custom "try-it-out" projects as a participant-driven element. The primary design motivation was to address whether these changes might support engagement, deepen learning, and strengthen a community of practice.

For engagement, as shown in Table 1, attendance improved dramatically in the move to Iteration 1 as compared to SI Foundations. Indeed, attendance more than doubled, when using the metric of attending all sessions. In other words, participants attended this five-session program at substantially better rates than the three-session version, suggesting perhaps that participants prioritized and possibly internalized the value of the five-session version.

Participant reflections in Iteration 1 revealed that several aspects of the workshop helped participants deepen learning about developmental relationships in their work. In response to a question about the usefulness of the SI Leadership Program, a good amount of time was spent discussing "having the language to describe the interactions we engage in every day." It seems that interactions with young people is a hidden part of their work and having a language helped validate it. Another noted the richness of interaction: "realizing there are distinct layers to each interaction." In cohort 2, this idea also came out—they named the SI Tool as the most useful component of the workshops (rating it 4.25 in a 1-5 scale vs. 3.25 for try-it-out, 2.0 for research modules). Cohort 1 participants also made several suggestions to increase the amount and types of videos, suggesting they found this component valuable.

In general, the topic of try-it-out projects was not a substantial component of focus group reflections in either cohort, suggesting it did not make as much of an impact as the personal video-based components. This is not surprising as facilitators spent less time scaffolding projects compared to later iterations and there was no accountability built into the design. Participants that did conduct try-it-out projects tried only one thing and did not iterate on their improvement area. Additionally, projects were not all relationship focused. For example, one participant sought to make digital lab equipment more visible to youth and another wanted to help youth be more creative during arts projects.

Iteration 2: Raising the Stakes

Iteration 2 included seven participants from 6 separate after-school programs, and the design additions included an application and selection process for participants, homework assignments, and a semi-public presentation during the final session of the workshop (inspired by the presentation offered in the Afterschool Matters Fellowship; see Hill et al., 2017). With these changes we hoped that participants would experience some external accountability and visibility, thereby deepening engagement and learning. We also made incremental improvements in how we described and delivered the try-it-out projects.

In this iteration, we saw some increases in participant engagement and continued learning in relational practice. All but one participant completed the full, six-session program and presented a final project. We saw a 61% completion rate on the newly added homework assignments. In the focus group discussion, participants said they appreciated learning about the science behind interactions. Participants described the value of continually learning about and improving their interactions with children and youth. In a follow-up interview from this iteration, one participant explained, "the program showed how much growth can come just from something little or something simple that you don't think about every day." In the last session, several participants stated that they thought about relational interaction in their everyday practice. For example, one participant said, "Interactions is at the core of what we do!"

Iteration 2 participants identified several aspects of the workshop that they found useful, especially learning in a community of practice. In the focus group discussion, participants said they wanted more video clips to watch throughout the program so they could reflect on growth and learn from others. In a follow-up interview, one participant reflected, "I think there's value in the way that other people have interactions, and you can see things that work really well for other people [and] translate back into your work." In particular, participants appreciated getting feedback from other adult leaders in the same field and hearing ideas from others they could use for their own growth. In a follow-up interview, one participant explained, "I enjoyed being able to collaborate with other nonprofits, that was an exciting time." These participants were enthusiastic about continuing to build a community of practice with future cohorts of the SI Leadership Program. For example, one participant offered to speak to participants in Iteration 3 to share an example of a try-it-out project. Participants also specifically asked for more time to consider sustainability and how to bring Simple Interactions to the staff and administrators at their own programs.

Iteration 3: Combining Sectors

Iteration 3 included two cohorts of 13 participants each, one in the Fall of 2018 (roughly half library staff and half after-school staff from a single organization) and one in Spring 2019 (a mix of library and after-school staff from many organizations). Our main goal for this iteration was to maintain the strengths of previous iterations while exploring whether it would be productive to combine two sectors that appeared very different on the surface but, in our view, shared relational practice as a core in their work.

Engagement and learning in relational practice seemed strongest in the final iteration of the SI Leadership Program. Across both cohorts, we saw a 79% homework completion rate, an

increase from Iteration 2. Twenty-four out of the 26 participants (92%) fully completed the workshops and presented final projects. In the focus groups, participants noted that the try-it-out project provided something concrete to focus on each week and they appreciated the accountability of the weekly training and wanted to engage in more critical thinking in homework. Participants stated that the workshops affirmed their work and gave them confidence that they could productively change things in their program. One participant, in a follow-up interview, explained that "it was really uplifting and reminding that the work that we do is really important and that I'm not the only one going through it."

Another theme was learning to be intentional about relational practice. In a follow-up interview, one participant noted that she started "making sure to focus on kids even when paperwork needs to be done, put in the effort, show [the] child that they are the priority." Another participant commented that the professional development offered an opportunity to be more intentional when engaging with youth and trying new techniques. One participant, in her survey, remarked that she is "better able to slow thoughts and engage youth when I'm thinking of which Simple Interactions domain to do most." Others explained that they were more present and able to "recognize that youth need to be leaders and problem solvers."

Participants unanimously stated that they found the workshops enjoyable and useful. Focus group and survey data indicated that they found reflecting on practice, learning from others, and gaining confidence from observing their own practice (on video) to be professional development activities they wanted to focus on even more. One participant, in their survey, explained, "I'm not doing as bad as thought and I'm not stuck and changes can be made to better my program, shows me how much more I need to actively reflect and it doesn't take that much time to do." This group also wanted to connect with colleagues at a deeper level and sought additional insight into the iterative try-it-out project design process of the other participants.

Evidence suggests that the community of practice developed in Iteration 3 benefited from having both library and after-school staff together. Participants reported that they enjoyed being a cohort and learning from peers in a different organization. One participant, in a follow-up interview stated that "It was nice to talk to some folks who were coming from the same field, if you will, but who were having very different on the ground experiences, in the sense that the librarians were having to have interactions with the general public in a way that [we don't] necessarily [have] (within a membership-based after school program)." Focus group data indicated that participants believed that activities helped them get to know each other as

professionals. Participants stated that they loved getting peer feedback and being more aware of other participants' programs. They wanted even more sessions focused on networking and getting to know other organizations. In a follow-up interview, one participant explained, "I liked being able to interact and hear perspectives from people representing different organizations." They also wanted to talk about how people are adapting the program in their own organizations, both successfully and unsuccessfully. As one participant explained in a follow-up interview, "Everyone in the leadership cohort was friendly and open to giving and receiving advice."

Finally, compared with two previous iterations, we saw the deepest understanding about relational practice demonstrated in try-it-out projects in this third iteration. In earlier iterations of the SI Leadership program, more projects focused on growth areas that were not explicitly related to relational practice (25% in Iteration 2 and 17% in Iteration 2). By Iteration 3, a majority of projects (91%) focused on relational practice. The project goals included strengthening interactions with and among youth, increasing youth engagement, and providing youth voice as well as training other staff at participants' programs to strengthen positive interactions and relationships. For example, one participant used Simple Interactions in staff meetings to encourage colleagues to focus on relational practice. Another participant focused on reciprocal "serve-and-return" interactions with truant youth in her library to support their agency and ownership of the space.

Discussion and Conclusion

In this design study, we conducted and studied three incremental revisions of the SI Leadership Program, a professional learning program for adults who work with young people across sectors. We explored how to make relational practice the focus of professional learning and engage adult leaders to recognize and grow their individual practice expertise and expand their collective organizational capacity. We incrementally modified and expanded a series of professional development sessions to support adult leaders' deep learning about their *own* everyday relational practices. Through these design iterations, we found that adult leaders' engagement in learning, their focus on relational practices, and their participation and belonging in a community of practice interdependently contributed to their own professional growth.

Focusing on Relational Practice in a Strengths-Based Context

All three iterations shared a common focus on understanding relational practices in the context of the adult leaders' day-to-day work. This focus made explicit to the adult leaders that relational practice is an essential domain of their professional expertise. Like all expertise, it can be described, analyzed, and grown. Watching actual practice on video from adult leaders' programs created opportunities for each person to affirm their existing practices and learn from "proximal others" (someone who share their practice and context). These design features created conditions for developing self-efficacy (Bandura, 1994) and laid the foundation for engagement and the development of individual agency. Although logistical and organizational improvements of the professional development likely improved attendance incrementally, we believe that consistent engagement over time is ultimately a by-product of the developing sense of relevance between learning and daily practice. Participants affirmed that the content and process of the professional learning was rooted in core aspects of their professional work.

To deepen their learning about relational practice, we found that we also needed to support adult leaders' capacities to adapt their learning more broadly to a diverse range of encounters and contexts. The three design iterations provided varying levels of scaffold for learners to look within their individual practice and look across their organizational and programmatic contexts for opportunities of improvement. Consistently high levels of engagement, affirmative relation building among peers, and articulating a common domain of practice with both practical and theoretical language worked together to create a sense of collective efficacy (Bandura, 2002). The learners' shared identity, belief, and motivation in creating positive impact for youth through relational practices may sow the seeds of resilience and persistence—what Bandura called "staying power"—when such efforts inevitably encounter obstacles and resistance in real-world integration. The evidence demonstrated increasing depth and breadth over time in what the learners identified as opportunities for sustained action. With each design iteration, adult leaders' projects progressed from focusing on material needs, to relational needs, to organizational structure and culture that support relationship building.

Expanding the Youth Development Community

The three design iterations incrementally pushed the boundaries of the community of practice—creating learning spaces separately for library or youth program staff (in Iteration 1 and 2), and then connecting them. The workshop embodied the three elements of what makes a community of practice (Lave & Wenger, 1991). It (a) identified relational practice as a credible domain of expertise shared by the learners; it (b) facilitated appreciative and supportive relationships among the learners as they engage in understanding, rather than evaluating or

critiquing each other's practices; and it (c) offered a repertoire of resources (a common descriptive tool, language, and analytical method) for learning from and improving practice. The success of combining staff across sectors in Iteration 3 was the most surprising and meaningful finding for the workshop facilitators. Indeed, expanding and connecting *who* we consider part of the youth development field may be critical to strengthening this field (Robinson & Akiva, 2022).

Limitations

Limitations are both specific to the study and more generally related to the design study approach. First, although our iterative design study process allowed for relatively rapid development, the design did not allow for causal inference. We do not know, for example, if the accountability elements we added in Iteration 2 were responsible for the positive related changes we observed. In addition, as we allowed measures to evolve with the project, the evolving set of measures made some comparative analyses difficult to interpret. For example, it would have been useful to have more consistent and targeted reports of participants' experience of the professional learning community throughout the iterations. Finally, because the project focused on the learning experiences of training participants and did not directly evaluate the participants' professional practice, we do not know whether attending these workshops shaped participants' practice in ways that improved their work with young people. Such inquiries should be approached with other methods in future studies.

Implications

We share the findings and reflections of this series of design experiments to spur conversations in the youth fields about respecting and cultivating relational practice expertise.

The value of a design experiment like ours is to outline a process by which professional development can be responsive and adaptive to the needs and the performance of participants. In the future, researchers may choose to extend this work in many ways. We have demonstrated a promising and repeatable structure with the SI Leadership Program model, which can be scaled flexibly, whether by adoption, adaptation, or re-mixing (Morel et al., 2019). The design features of "custom projects," "raising the stakes," and "combining sectors" may be instantiated in other ways in professional learning designs. For example, combining staff across sectors (in our case, library staff and museum staff) may offer productive exchanges on how to support youth through relational practice. In addition, researchers may choose to intentionally carry out similar work across different out-of-school settings. The design choices in this study

created opportunities for new learning while remain responsive to the constraints and needs of the local settings.

Just as young people learn and grow through relationships, so do the professionals who serve them. Through our three iterative design experiments, we found that professional learning strategies to support engagement, cultivate community, and promote individual and collective agency were central to supporting deep learning for youth staff. Whether the topic area is generalized relational practice, or specific content domains such as arts, science and mathematics, literacy, or culturally affirming empowerment, it is essential that the professional development efforts build on the mutual recognition and affirmation of real, authentic practices by staff. Such a focus can foster a common identity across staff based on their existing knowledge and expertise and create a community of practice to sustain development and improvement through continuous reflection and imagination.

Author Note

The activities of this project were funded by The National Science Foundation, Advancing Informal STEM Learning (AISL #1713299), The Heinz Endowments, and the Grable Foundation.

References

Akiva, T., Li, J., Martin, K. M., Horner, C. G., & McNamara, A. R. (2016). Simple interactions: Piloting a strengths-based and interaction-based professional development intervention for out-of-school time programs. *Child and Youth Care Forum*, *46*(3), 285–305. https://doi.org/10.1007/s10566-016-9375-9

Akiva, T., White, A. M., Colvin, S., DeMand, A., & Page, L. C. (2020). Simple interactions: A randomized controlled trial of relational training for adults who work with young people across settings. *Applied Developmental Science*, *0*(0), 1–14. https://doi.org/10.1080/10888691.2020.1819809

Baldwin, C. K. (2019). Exploring a constructivist redesign of youth work training: Transformative-oriented learning and trainer development. *Child & Youth Services, 40*(4), 331–362.

Bandura, A. (1994). Bandura Self-efficacy defined. In *Encyclopedia of Human Behavior*.

Bandura, A. (2002). Social cognitive theory in cultural context. *Applied Psychology*, *51*(2), 269–290. https://doi.org/10.1111/1464-0597.00092

Baumeister, R. F., & Leary, M. R. (1995). The need to belong: Desire for interpersonal attachments as a fundamental human motivation. *Psychological Bulletin*, *117*(3), 497–529.

Bethell, C., Jones, J., Gombjav, N., Linkenbach, J., & Sege, R. (2019). Positive childhood experiences and adult mental and relational health in a statewide sample: Associations across adverse childhood

experiences levels. *JAMA Pediatrics*, *173*(11), e193007. https://doi.org/10.1001/jamapediatrics.2019.3007

Borko, H., & Borko, H. (2004). Professional development and teacher learning: Mapping the terrain. *Educational Researcher*, *33*(8), 3–15. https://doi.org/10.3102/0013189X033008003

Bowers, E. P., Johnson, S. K., Warren, D. J., Tirrell, J. M., & Lerner, J. V. (2015). Youth–adult relationships and positive youth development. In E. P. Bowers, G. J. Geldhof, S. K. Johnson, L. J. Hilliard, R. M. Hershberg, J. V. Lerner, & R. M. Lerner (Eds.), *Promoting positive youth development: Lessons from the 4-H Study* (pp. 97–120). Springer, Cham.

Brion-Meisels, G., & Jones, S. M. (2012). Learning about relationships. *Positive relationships* (pp. 55-72). Springer.

Bronfenbrenner, U. (1979). The ecology of human development: Experiments by nature and design, (pp 56 – 60). Harvard University Press.

Bryk, A. S., Gomez, L. M., Grunow, A., & Lemahieu, P. G. (2017). *Learning to improve*. Harvard Educational Review.

Cantor, P., Osher, D., Berg, J., Steyer, L., & Rose, T. (2019). Malleability, plasticity, and individuality: How children learn and develop in context1. *Applied Developmental Science*, *23*(4), 307–337. https://doi.org/10.1080/10888691.2017.1398649

Deci, E. L., & Ryan, R. M. (2008). Self-determination theory: A macrotheory of human motivation, development, and health. *Canadian Psychology/Psychologie Canadienne, 49*(3), 182–185. http://doi.org/10.1037/a0012801

The Design-Based Research Collective. (2003). Design-based research: An emerging paradigm for educational inquiry. *Educational Researcher*, *32*(1), 5–8. https://doi.org/10.3102/0013189X032001005

Eccles, J.S., & Gootman, J. A. (Eds.). (2002). *Community programs to promote youth development.* Institute of Medicine*,* National Research Council, Division of Behavioral and Social Sciences and Education, Board on Children, Youth, and Families, Committee on *Comm*unity-Level Programs for Youth. National Academy Press.

Ericsson, K. A., Krampe, R. T., & Tesch-Römer, C. (1993). The Role of Deliberate Practice in the Acquisition of Expert Performance. *Psychological Review*, *100*(3), 363–406. https://doi.org/10.1037/0033-295x.100.3.363

Gordon, S. P. (2004). *Professional development for school improvement: Empowering learning communities*. Pearson Education.

Gravemeijer, K., Van Eerde, D. (2009). Design research as a means for building a knowledge base for teachers and teaching in mathematics education. *The Elementary School Journal*, *109*(5), 510–524. https://doi.org/10.1086/596999

Hattie, J. (2009). *Visible learning: A synthesis of over 800 meta-analyses relating to achievement*. Routledge.

Hill, S. L., Connolly, J., Akiva, T., & McNamara, A. R. (2017). Taking it to a new level: Inquiry-based professional development as a field building enterprise. In H. J. Malone & T. Donahue (Eds.), *The growing out-of-school time field: Past, present, and future.* Information Age Publishing.

Jacobson, L. (2019). Educators continue Mister Rogers' legacy through "Simple Interactions." *Education Dive*. https://www.educationdive.com/news/educators-continue-mister-rogers-legacy-through-simple-interactions/567922/

Jones, J. N., & Deutsch, N. L. (2011). Relational strategies in after-school settings: How staff–youth relationships support positive development. *Youth & Society, 43*(4), 1381–1406.

Larson, R. W., & Walker, K. C. (2010). Dilemmas of practice: challenges to program quality encountered by youth program leaders. *American Journal of Community Psychology*, *45*(3–4), 338–349. https://doi.org/10.1007/s10464-010-9307-z

Lave, J., & Wenger, E. (1991). *Situated learning: Legitimate peripheral participation*. Cambridge University Press.

Lerner, R. M., Lerner, J. V., Murry, V. M., Smith, E. P., Bowers, E. P., Geldhof, G. J., & Buckingham, M. H. (2021). Positive youth development in 2020: Theory, research, programs, and the promotion of social justice. *Journal of Research on Adolescence, 31*(4), 1114-1134.

Li, J., & Julian, M. M. (2012). Developmental relationships as the active ingredient: A unifying working hypothesis of "what works" across intervention settings. *American Journal of Orthopsychiatry*, *82*(2), 157–166. https://doi.org/10.1111/j.1939-0025.2012.01151.x

Li, J., & Winters, D. (2019). Simple , Everyday Interactions as the Active Ingredient of Early Childhood Education. *Bridging Research and Practice, January/February*, 60–62.

Miles, M. B. (1995). Foreward. In M. Guskey, T. R.; Huberman (Ed.), *Professional development in education: New paradigms and practices* (pp. vii–ix). Teacher's College Press.

Miles, M. B., Huberman, A. M., & Saldaña, J. (2014). *Qualitative Data Analysis: A Methods Sourcebook* (3rd ed.). SAGE Publications, Inc.

Minsky, M. (1988). *Society of mind*. Simon and Schuster.

Morel, R. P., Coburn, C. E., Catterson, A. K., & Higgs, J. (2019). The Multiple Meanings of Scale: Implications for Researchers and Practitioners. *Educational Researcher*.

National Scientific Council on the Developing Child. (2014). Supportive relationships and active skill-building strengthen the foundations of resilience. *Working Paper No. 13.* http://developingchild.harvard.edu/resources/reports_and_working_papers/

Norton, M. I., Mochon, D., & Ariely, D. (2012). The IKEA effect: When labor leads to love. *Journal of Consumer Psychology*, *22*(3), 453–460. https://doi.org/10.1016/j.jcps.2011.08.002

Okoli, J. O., Weller, G., & Watt, J. (2016). Information processing and intuitive decision-making on the fireground: towards a model of expert intuition. *Cognition, Technology and Work*, *18*(1), 89–103. https://doi.org/10.1007/s10111-015-0348-9

Osher, D., Cantor, P., Berg, J., Steyer, L., & Rose, T. (2018). Drivers of human development: How relationships and context shape learning and development1. *Applied Developmental Science*, *24*(1), 6–36. https://doi.org/10.1080/10888691.2017.1398650

Patton, M. Q. (2015). *Qualitative Research & Evaluation Methods* (4th ed.) SAGE Publications.

Pozzoboni, K., & Kirshner, B. (2016). *The changing landscape of youth work: Theory and practice for an evolving field*. Information Age Publishing.

Robinson, K., & Akiva, T. (2021). Introduction: A new way forward. In T. Akiva & K. Robinson (Eds.), *It takes an ecosystem: Understanding the people, places, and possibilities of learning and development across settings* (pp. 1-12). Information Age Publishing.

Saldaña, J. (2015). *The coding manual for qualitative researchers*. SAGE Publications, Inc.

Sandoval, W. (2014). Conjecture Mapping: An Approach to Systematic Educational Design Research. *Journal of the Learning Sciences*, *23*(1), 18–36. https://doi.org/10.1080/10508406.2013.778204

Seidel, T., Stürmer, K., Blomberg, G., Kobarg, M., Schwindt, K. (2011). Teacher learning from analysis of videotaped classroom situations: Does it make a difference whether teachers observe their own teaching or that of others? *Teaching and Teacher Education*, *27*(2), 259–267. https://doi.org/10.1016/j.tate.2010.08.009

Skinner, E. A., Kindermann, T. A., & Furrer, C. J. (2009). A motivational perspective on engagement and disaffection: Conceptualization and assessment of children's behavioral and emotional participation in academic activities in the classroom. *Educational and Psychological Measurement*, *69*(3), 493–525. https://doi.org/10.1177/0013164408323233

Vygotsky, L. S. (1978). *Mind in society: The development of higher psychological processes* (M. Cole, V. John-Steiner, S. Scribner & E. Souberman., Eds.; A. R. Luria, M. Lopez-Morillas & M. Cole [with J. V. Wertsch], Trans.) Harvard University Press. (Original manuscripts [ca. 1930-1934].)

Walker, K. C., & Larson, R. W. (2012). Youth worker reasoning about dilemmas encountered in practice: Expert-novice differences. *Journal of Youth Development*, *7*(1), 23-May. https://doi.org/10.5195/jyd.2012.149

Wlodkowski, R. J. (2003). Fostering Motivation in Professional Development Programs. *New Directions for Adult and Continuing Education*, *2003*(98), 39–48. https://doi.org/10.1002/ace.98

Yohalem, N., Wilson-Ahlstrom, A., Fischer, S., & Shinn, M. (2009). *Measuring youth program quality: A guide to assessment tools* (2nd ed.). The Forum for Youth Investment.