Chapter 14
Problem-Solution Projects with Young Children

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Abstract Problem-Solution Projects (PSPs), designed to promote empowerment of teachers and their students, combines service-learning and critical pedagogy. PSPs involve teachers and students in service, not as charity but as a vehicle for social change. During the PSP process, quite often educators asked the question, "Aren't they too young?" especially for prekindergarten and kindergarten students; however, concerns about whether children were too young to understand problems and how to solve them crossed all elementary grade levels. Our response to "aren't they too young," is a resounding "no." In this chapter, we provide an explanation of the critical pedagogy and service-learning roots of the PSP. We share personal vignettes that reflect the PSP process and, in doing so, we present three distinct, yet interrelated ways the PSP supports the development of early childhood educators and the children they teach: (a) engagement; (b) social emotional learning; and (c) empowerment. As we will show, teachers engaging in the PSPs with young children supported their development as active, empowered learners and problem-solvers as they participated in meaningful curriculum. We conclude with implications for practice.

Keywords service-learning • Critical pedagogy • Social emotional learning • Curriculum engagement • Empowerment

Introduction

> *I chose to teach critically because I believe young children are capable of amazing things—far more than is usually expected of them. I am not talking about raising a score on a standardized math test (although that often happens). I am talking about*

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> *thinking critically and learning to learn, learning to use basic skills like reading, writing, solving mathematical problems, analyzing data, public speaking, scientific observations, and inquiry as an active citizen in your community.* (Cowhey 2006, p. 18)

Primary grades teacher Mary Cowhey underscores our point that our youngest students should be afforded opportunities to think critically and inquire about their circumstances as a way to maximize their learning and civic capacities. We agree with Cowhey's (2006) perspective about the amazing and often underestimated capacities of young children. We also take seriously the notion that engaging young children in critical ways need not, nor should not be done separately from developing their academic and social/emotional skills. It is from this vantage point that we discuss the affordances of the Problem-Solution Project that provides a process for advancing curriculum, building social and emotional skills, and cultivating student and teacher empowerment.

Problem-Solution Projects (PSPs) involve teachers and students in service, not as charity but as a vehicle for social change. As teachers have implemented PSPs with their elementary students, they often raise the question, "Aren't they too young to do a Problem-Solution Project?" Teachers across grade levels, particularly those teaching pre-Kindergarten and Kindergarten, specifically shared concerns about whether children are too young to understand problems and how to solve them. As we will show, teachers engaging in the PSPs with young children support their development as active, empowered learners and problem-solvers. PSPs also provide opportunities for developing meaningful curriculum. In this chapter, we begin with the assertion that children are *not* too young to participate in service-learning through a critical pedagogical framework, such as experienced through the PSP. In fact, we believe that such an approach: (a) fosters engagement, thereby supporting an enhanced learning environment; (b) develops and builds social and emotional learning essential for human development; and (c) facilitates transformative learning environments that not only empower students but teachers as well.

The Problem-Solution Project

All of the authors have participated in facilitating the PSP with their students. Francheska was initially introduced to the PSP by her colleague and co-author, Lindsay. As a sixth-year teacher, Francheska took such an interest in the PSP she bought and read the book co-authored by the fourth author (Stenhouse et al. 2014) in order to try aspects of it with her own students. Lindsay first conducted the PSP 11 years ago as an assignment during the second year of her teacher preparation program at Georgia State University while earning her Master's in Education. Stacie had the opportunity via an assignment as a veteran teacher while earning her Education Specialist degree at Georgia State University several years ago. Vera has introduced the PSP to preservice teachers as an instructor during the first year of their teacher preparation program.

PSPs are student-centered, student-driven projects designed to promote empowerment of teachers and their students while advancing curriculum. Since 2002, PSPs have been implemented in a 2-year certification and Master's program at Georgia State University designed to prepare teachers to work in elementary schools with a majority of racially, economically, and linguistically-marginalized students. PSPs are an assignment during inservice teachers' coursework that they implement with their PK-5 grade students. Consequently, Problem-Solution Projects have been conducted by beginning, newly certified in-service teachers working with students in grades PK-5. Since 2008, veteran teachers (3 or more years of teaching) have been conducting PSPs in their elementary classrooms while earning their Education Specialist degree. To date, over 200 newly-certified teachers and over 40 veteran teachers have conducted PSPs. The main series of steps in the PSP include: (a) brainstorming and problem-solving with students about how they would like to change their school, community, or world; (b) helping students decide on a class project from their list of ideas; (c) developing a web of ideas on what could be done in the project; (d) examining the state and school district curriculum for standards/objectives that could be addressed while implementing the project; (e) conducting pre- and post-surveys of students' understanding of the project issues and their feelings of empowerment; (f) implementing the project with the students; and (g) reflecting on the project.

To provide a general sense of the PSP process, we briefly elaborate on the steps and offer examples of how the PSP works. In our case, students began by brainstorming (i.e., problem-posing) issues or ways they would like to change their school, community, or world. We have found that teachers often engage students in this process via reading a fiction or non-fiction children's book about an issue or change-making children. Teachers recorded all the ideas without filtering or judging the children's suggestions. If nothing else, this process revealed important information for teachers about their learners' observations and thinking. Below is a list of problems generated by a first grade class:

- getting toys for kids who don't have any
- helping sick people
- recycling our old toys for kids who don't have any
- helping people who don't have homes
- helping to build new homes
- Fixing windows and doors on different classmates' homes
- helping the environment by picking up trash
- helping the environment by recycling
- helping people who may be hurt/choking/drowning, or with broken legs and arm.

After brainstorming, the teacher guided a decision-making process which included students initially ranking their preferences, voting, or arriving at a consensus. It was critical that the students make the decision, not the teacher. After the students chose a topic, they and the teacher designed a project web illustrating all the various ideas they considered implementing. The teacher then mapped the

curriculum standards to the project web. Teachers did not have any difficulty linking standards to the project activities and, in fact, were often surprised by how many they could meet, regardless of the project focus.

Prior to beginning the project, teachers developed a pre-test/assessment of students' knowledge and feelings about the project. At the close of implementing the PSP, they administered a post-test/assessment. Teachers themselves generated a reflection on the entire process and submitted it, along with the other PSP materials, to their teacher preparation program professor. We know from these PSP data that students in the early grades (PK-K) selected projects that include beautification of their school through various clean-up efforts or planting flora. Other projects centered around educating others about a particular issue, for instance, bullying or playground safety. Recycling projects and food drives for a children's hospital were also conducted. In addition, first and second-graders undertook beautification and trash-related projects as well as fundraising efforts, working to reinstate recess, and conducting global outreach.

Theoretical Foundations: Service-learning and Critical Pedagogy

Extensive details of the PSP and its theoretical underpinnings are shared elsewhere (Jarrrett and Stenhouse 2011; Stenhouse and Jarrett 2012; Stenhouse et al. 2014). Therefore, what follows is a brief overview of the PSPs informing theories, service-learning, and critical pedagogy. With respect to service-learning, we assert that it is *not* community service, charity, philanthropy, or other forms of giving. Although worthwhile, such approaches are not necessarily tied to curricular objectives nor do they always explicitly address the dynamics of power or structural conditions that foster the need for service. Service-learning produces outcomes beyond academic learning such as socio-emotional and dispositional qualities towards self and others. The service-learning aspects of the PSP are a way of teaching content through ongoing experiences that can broaden the scope and depth of learning while fostering particular dispositional qualities.

PSPs are further grounded in the tenets of critical pedagogy as catalysts for empowerment by challenging forms of education that can repress, depress, and compress learners' potential and constrain their educational environments. We use Shor's (1992) "agenda of values" for an empowering education as the PSP's critical pedagogy framework. Informed by critical theory and critical theorists, Shor's (1992) critical pedagogy approach guides teachers and students through a problem-posing framework that includes the following values: participatory, affective, problem-posing, situated, multicultural, dialogic, de-socializing, democratic, researching, interdisciplinary, and activist. Though they appear as a list of independent elements, in practice they intertwine and inform the totality of the process with an intentional critical approach. Also significant is taking a *generative*

approach in the process, which means the substance of a learning topic is generated from and driven by students, not the teacher (Shor 1992).

The PSP resides at the intersection of service-learning and critical pedagogy (as defined by Shor 1992) with two distinguishing features: its attention to challenging deficit thinking and its implementation with populations who are typically recipients of service. Specifically, approaches to service-learning have been critiqued as reinforcing paternalistic and deficit perspectives about communities being served. Furthermore, service-learning is traditionally conducted by individuals or groups supplying a community need to another individual or group. Given its critical pedagogy approach, the Problem-Solution Project is intended to address some of the limitations that may hinder the benefits of service-learning such as lack of attention to deficit notions, power, authority, voice, agency, and locus of control regarding decision making and action-taking. In its most desired form, service-learning fosters mutual benefits strengthened by addressing issues of power informing "providers" and "recipients." As such, the PSP starts with the idea that traditional service recipients are not lacking as observers of "problems" and initiators of thoughtful "solutions." Distinctively, the PSP has its genesis with populations who are often the targeted beneficiaries of service-related initiatives, thereby slightly reframing typical notions of "providers" and "recipients".

Engagement, Socio-emotional Learning, and Empowerment

Herein we focus on three facets of the PSP we think are particularly relevant for those who teach young children: engagement, social and emotional learning, and empowerment. To introduce each facet, we begin with a separate personal vignette from three of the authors, followed by key points we wish to emphasize and will further discuss in the implications. Each vignette serves to illustrate a main point while providing insights into the PSP process as experienced by three different teachers. Francheska offers her view of the PSP and engagement, while Lindsay discusses the PSP and social and emotional learning. Stacie reflects on the PSP and its role in empowering teachers.

Engagement

The room was bright and clean, in fact a bit too clean for it to be the beginning of May, the last month of school. My third-grade students had completed their standardized assessments a few weeks prior, but were focused on completing what seemed to be a very important task; at least to them. The walls were fairly uninviting and frankly uninspiring. I removed or covered much of my instructional material for testing, and had not yet returned the vibrant posters and student work to their former homes hung neatly on the walls. The bookshelves and manipulatives were

in boxes; my room was being renovated over the summer. The desks and chairs were stacked and placed neatly in a corner; after all, we did not need them for the task at hand. This is what you would see if you walked into my room at any given time during that last month of school. But where were the children? Well, they were everywhere. Group 1 was comfortably spread out on the floor near the butcher paper working on our poster; they had completed a draft showing the most important information that someone would need to know about the focus of our project; its purpose and how it could impact our community for the greater good, along with details about our room number and other important contact information. All of this information had to be neatly displayed, in correct grammar, and in an inviting and attractive manner. Group 2 was using the computer to research information about the organization with which we hoped to partner. They had a graphic organizer, and were required to fill it in with the appropriate URL, links, icons, and most importantly the contact information for the organization. Groups 3 and 4 were sent to the principal's office, and not for their lack of willingness to participate in these activities. On the contrary, they were on official business; delivering an oral presentation of their persuasive letters which explained why the principal should permit them to solicit the school for help in their endeavor. The children were engaged, they were excited, they were happy and, most importantly, they were learning. As they were engaged, they were fulfilling the demands of meeting curriculum standards for literacy, writing, technology, mathematics, life science, and geography.

Throughout the entire duration of my facilitation of the PSP in my classroom, my students *wanted* to learn. This was an essential difference. My students were the driving force and had to participate in their own learning because the project only moved forward as it was fueled by their thinking and their actions. In addition, everyone had a role. For instance, Mark was very artistic; in fact, he was often off task during the school day because he preferred drawing over completing his assigned classwork. During the class work on the PSP, Mark emerged as a leader in the group who was responsible for creating print material to share with the school about our project. He was also more willing to complete the other aspects of the project that addressed his less desired standards (writing, reading, etc.) because of his high level of engagement with the overall outcome of the project; he was invested. Neiman was very animated and dramatic. He loved to entertain friends, especially at the wrong time. However, he was a star with students and teachers school-wide, as he traveled from one classroom to another, encouraging people to get involved in our cause. Similarly, students who had difficulty getting along soon found value in collaboration as they worked together to achieve a common goal.

The reader may be wondering about the topic of our PSP, who we decided to help, and maybe even why. The truth is, the topic does not matter so much as making the point that it mattered to my students. The students have control (bearing in mind what's appropriate) over the needs they identify and the one they choose to address in the form of a PSP. I learned that my role as facilitator was to understand the requirements of the curriculum and adjust the content of my lessons to correspond with their reality. As my students reflected on their decisions, I was able to do the

same. My students and I made adjustments to achieve our goals; theirs of supporting a local animal shelter and mine of creating an environment that fostered their most creative, free thinking problem-solving, and learning. If you walked into my room during that time, you might wonder "Where are the students?" or, equally as important, "What are they learning?" The beauty of PSPs is, if you asked this question, my students could respond. Each of them would thoroughly explain the process of the project from brainstorming through the implementation and post-assessment phases. They would also explain the importance of their role in this collaborative effort. My students completed the PSP with an understanding of Common Core State Standards, as well as their importance as change agents in the world.

A broad range of literature defines engagement in the classroom as it relates to young children. Common vocabulary used to define the term engagement is attention, investment, initiative, and involvement. Klem and Connell (2004) state:

> In a review of theoretical perspectives on engagement, Marks conceptualized engagement as 'a psychological process, specifically, the attention, interest, investment, and effort students expend in the work of learning.' [Marks] also offered definitions of other researchers including: students' involvement with school, [a sense of belonging and an acceptance of the goals of schooling], their 'psychological investment in and effort directed learning, understanding, or mastering the knowledge, skills, or crafts that academic work is intended to promote,' and students' 'interest' and 'emotional involvement' with school, including their motivation to learn. (p. 262)

According to Skinner et al. (1990), engagement means, "children's initiation of action, effort, and persistence on schoolwork, as well as their ambient emotional states during learning activities" (p. 24). Kaye and Connolly (2013) further offer that "student engagement best recognized through thinking, initiative, problem solving, and many other descriptors form the list of capacities for the literate individual. Ultimately what is missing is the *wanting* to learn" (p. 2). Appleton et al. (2006), describe engagement as "energy in action, the connection between person and activity" (p. 428).

Additional common themes among multiple definitions of engagement are investment, involvement, attention, and learning. All of these are components embedded into the PSP design. Students are the primary source of direction for the project; therefore, they engage in high levels of involvement with and attention to the progression of the project. The ability to choose the project focus generally results in personal investment. The first step in conducting a PSP is asking students to identify "problems" they observe in the life of their school, communities, and world. This *problem-posing* process is followed by students deciding which issue they wish to work on with teachers merely facilitating, not dictating. Klem and Connell (2004) suggest that three core needs must be fulfilled before students are fully engaged in learning: they must believe that the teachers are involved and that they care, they need to feel that they can make important decisions for themselves and that their work is relevant to their present or future lives, and they need a clear sense of structure to help guide this decision making.

Studies show that as students matriculate through elementary, middle, and high school, they become increasingly disengaged (Klem and Connell 2004). Given what

the literature indicates about the significance of supporting engaged students, it's an area that should begin with young children. One way to address issues of disengaged learners is to provide opportunities for students to feel a sense of connection to their learning in meaningful ways. The PSP serves as such a catalyst for engaging curriculum.

Social and Emotional Learning

It was late spring when I met my class at the urban farm located in the heart of the historic Sweet Auburn District in downtown Atlanta, Georgia. The plan was to spend that Sunday afternoon building and planting garden beds along with families in the community. I was completely overwhelmed. I felt so connected to my students and the community we had engaged with for our service-learning project. It seemed odd that I almost hadn't started the project at all. It made me think back to how it all began.

Two months earlier, I was in a completely different place emotionally. I was deeply frustrated and completely disconnected from my roots as an educator. But worse than that, I was disconnected from the needs of the children in my care. This was the year students had to be prepared for a new standardized test. It was all my administrators and fellow teachers could talk about. I was caught up in it too. I was co-teaching a special education classroom, and the needs of my students were varied and in great number. The pressure of the test was weighing on me. It was March, prime time for test practice and Scantron bubble form lessons. I knew that test practice was important but not really what my class needed at that moment. I decided to go with my gut and focus on preparing my students for life, not a test. It was in that moment that I decided to begin our service-learning project.

We started our project on a Monday morning. In a circle, after greeting one another and sharing our news from the weekend, I introduced the Problem-Solution Project to my students. Our first task was to find a problem. We walked around the school. Our school was under construction, so it wasn't hard to find things that were wrong. As another activity, we read a book about a little girl who helped her community and used it as a prompt to discuss issues we noticed in our community. After we wrote down every problem we could think of in the school, community, and world, the students had to select one to solve. It was a bewildering list. The list had everything on it from homeless pets to poaching. Students were concerned about so many things, many of which we had never really talked about in class.

The students finally agreed that the problem they cared the most about was the issue of food deserts, which plagued many of our city's communities. The classroom was abuzz with the noise of students excitedly discussing the problem and what we would do to solve it. We began working in small groups reading articles, researching organizations, and watching videos. Students interviewed and heard presentations from community organizers. They gave presentations and argued about what projects were the best to fund with the money we were raising.

Children who typically had trouble working in groups were participating and, dare I say, collaborating with their teammates. A child, who wouldn't write more than a paragraph without completely shutting down, wrote a two-page persuasive letter to the principal about the project that made me want to cry; mostly because it was so good, but also because he had all that inside of him and I hadn't been able to unlock it before now. The whole feeling in the classroom changed. The behavior issues I had been up at night worrying about were, for the most part, resolved. My students felt empowered by their ability to contribute. And they helped one another. If someone had trouble understanding a word, their group helped them. If someone had trouble presenting, the whole class encouraged them. It was like we were all part of a collective consciousness. One being made up of different but compatible parts, connected to the project, connected to the community, connected to each other.

During the time in which my students and I were supposed to feel the pressure of testing, we were working on something that would actually help them with the test but completely transcended what the test could measure. We were doing something that gave our learning real meaning . . . because it was meaningful. Students, who normally lacked confidence, seemed more confident and eager to participate. The Problem-Solution Project had turned my classroom into a place where everyone felt valued and connected. Even me.

When one becomes an educator, one learns about teaching curriculum, scaffolding, learning, and differentiating academic instruction for students' needs. What we are more often missing from our development is how to purposefully teach and differentiate social and emotional skills in the classroom. This can quickly become a barrier to student academic understanding. We recognize that children cannot learn if their basic needs are not being met or if they do not feel emotionally connected to their teachers or classmates. Furthermore, they cannot work cohesively in a group if they cannot communicate their needs and have empathy for their peers. For these reasons, teachers are taught classroom management and behavior intervention tools. It was not until I fully implemented the PSP that I realized that the aforementioned teaching tools were bandages for a deeper root cause for behavior issues—a lack of connectedness and social and emotional competency.

In my experience, the PSP has proven to be an amazing teacher tool for helping students reflect on their learning, collaborate in groups, resolve conflict, and have empathy for others—all elements instrumental to fostering social-emotional learning. As is true with academic growth, children come to us in very different places in their social and emotional growth. The use of service-learning as a vehicle to teach social-emotional skills as well as academic standards has become a major focus of my instruction as a classroom teacher and now as a social emotional learning coach. The PSP, a specific service-learning strategy I learned over 11 years ago as a preservice teacher, quickly became a critical element in my classroom as teacher because of the natural way a service-learning project fosters the development of a high social-emotional IQ. As part of my role as a social-emotional learning coach, I have learned about the Collaborative for Academic, Social, and Emotional Learning (CASEL).

CASEL defines five basic competencies that encompass all social and emotional skills: (1) *Self-Awareness,* or the ability to identify and understand emotions, (2) *Self-Management,* or the ability to regulate one's emotions, set goals, and manage time, (3) *Social Awareness,* or the ability to have empathy for others and take their perspective, (4) *Relationship Skills*, or the ability to establish bonds, resolve conflict, and collaborate, and (5) *Responsible Decision Making* which results from attaining the first four competencies. As educators, we should not assume that students arrive to our childcare centers and classrooms with social-emotional learning skills. Research points to the fact that social and emotional intelligence is not an innate skillset. Social-emotional competency is learned but, more importantly, social-emotional intelligence is the foundation for the acquisition of academic knowledge and the number one indicator for future success (Durlak et al. 2011; Elias et al. 1997).

There are numerous contexts through which educators can teach these five social and emotional competencies to their students. Engaging students actively and experientially in the learning process, in educational strategies, such as service-learning, has been shown to be an excellent opportunity for the development and application of social and emotional learning (Zins et al. 2004). In fact, students who participate in service-learning projects develop and practice skills such as collaboration, critical thinking, problem solving, and reflection—all skills reflective of social and emotional competency. Students also develop self-efficacy and empathy as they learn about their ability to act in the world and help in the lives and cultures of others (Kaye and Connolly 2013). Although not formally recognized as a research- based intervention for the intentional learning of social and emotional skills, it is clear that service-learning provides a rich context for implementation and practice of social and emotional skills (Zins et al. 2004).

The PSP has proven to be a viable platform to develop and reinforce social-emotional skills. For example, using CASEL's competencies, self- and social awareness occur at all levels of implementing the PSP. Self-management is particularly evident as learners conduct research and implement their tasks, exercising self-discipline, goal setting, and organizational skills. Relationship skills are continuously practiced through the high levels of collaboration experienced through the PSP. Navigating conflicts, seeking support, giving support, and participating in discussions are embedded in the PSP process. The PSP offers ongoing opportunities for learners to make responsible decisions through active problem solving, situational analysis, and reflection.

Student and Teacher Empowerment

Second grade classroom teacher by day and graduate student by night, I was seeking to find the instructional light to ignite an empowering learning experience that provided sustenance for my students and me. I was reading and breathing every word scholars such as Gloria Ladson-Billings, Asa Hilliard, Lisa Delpit, Paulo

Freire and Ira Shor had written. For 13 months, my breakfast, lunch, dinner, snack, and other meals in between were culturally-relevant pedagogy, constructivism, critical pedagogy, teaching for social change, teacher as a leader, and many others topics. Stuck in a state of hunger for a better way to reach and teach my students, the time had come to intellectually convert the classroom into a diner so that my students and I could indulge in an educationally-nourishing meal. The entrée was served in the form of a Problem-Solution Project, a required assignment of the Early Childhood Specialist program. My students brainstormed a multitude of concerns they had about their school and neighborhood. After much discussion, they decided to take a bite against the bullying that occurred on the school bus and in the school daily. Students began to tell me all about the bullying campaigns they were knowledgeable of from PBS Kids television programming. With PBS Kids programming being the appetizer, it became clear to me that the students had already had a taste of the problems with bullying in our world. I observed as students cooked up meals against bullying. Using the computers in our classroom, they researched topics on bullying, watched YouTube videos, read books, and shared their personal experiences with bullying. After spending much time at the buffet learning about bullying using the aforementioned utensils, the campaign began. Students created speeches, posters, t-shirts, and presentations to educate others in the school about bullying and how to end it. They saw bullying as a problem and took a stand to address it in their school. Even more, they got to be a part of the solution—their dessert. As the classroom teacher, I was no longer the sole possessor of knowledge or the leader of the learning process. I did not have to spoon feed students at the onset of the assignment. They had a wealth of information and experiences that were more comprehensible than any examples I could make up. Their reality and concern was served by way of the world they lived in daily.

The numerous acts of engagement the students initiated and participated in provided a fresh sense of instructional practice for me as the teacher. I felt empowered because now I had a choice of how to plan instruction around students' interests, community concerns, and their real- world lived experiences. This opportunity created an avenue for students to choose, vote, and decide how to address this problem. For me, I was positioned to share the leadership role and relinquish control over driving all of the learning, decision making, and instructional planning. The transformation of the leadership role was pivotal for me because now student leadership escalated. The most transforming aspect of teacher empowerment for me was when my students and I functioned as a community with a shared vision of solving a problem collectively. To be able to influence behavior that is transferrable to other life situations is absolutely empowering. Students will be able to see themselves as problem solvers with tools because they have lived it, and it was their real world experience. My idea of empowerment resides here when, as the teacher, I see more collaboration, community engagement, and collective learning rather than competition and individual gain.

The literature on the effects of engaging in service-learning types of activities are predominantly focused on the providers of service and, to an extent, the recipients. Furthermore, in many cases, research describes the experiences and outcomes of

students in PK-12 and higher education conducting service-learning projects in their schoolwork (Furco and Root 2010; Furco 2011; Gross 2010). What I highlight is how the PSP affects the students *and* the teacher. Specifically, the PSP facilitates a learning environment that engenders a sense of empowerment that fuels students and teachers—an experience I had directly from my own involvement in a PSP and other teachers have had as well (Jarrrett and Stenhouse 2011).

Although I have a sense of what it means to me, capturing the essence of what empowerment looks and feels like has its challenges. In terms of teacher empowerment, words seem to limit the profound effect it has on an individual or groups. However, scholars have provided guidelines to aid in identifying significant behaviors and mindsets. For example, Short and Rinehart (1992) indicate six dimensions of empowerment which include decision-making and impact.

Shor's (1992) 11 characteristics, mentioned earlier, serve the core indices of fostering empowerment within the PSP. Shor's components are fluid and can and will overlap. This ensures that the PSP is not a linear process. Therefore, teachers and students are able to be immersed in an action encompassed by one or more characteristics simultaneously. Shor's concept has a focus on problem-solving in the context of the students. Consequently, students and teachers encounter empowerment attitudes because, as students strive to address concerns or problems, teachers are positioned to facilitate learning, sharing responsibility and empowerment throughout the entire process. Such a process leads to increased collaboration skills, an enhanced sense of community, and increased productivity through collective learning. These empowered outcomes are possible through the PSPs' ability to engage students and develop their social and emotional skills.

Implications for Practice

We began by sharing that the PSP was initially a required assignment which was often attached to a course and course grade. We want to acknowledge from the outset that requiring service-learning within a critical pedagogical framework has its tensions (See Stenhouse et al. (2013, in press) for additional discussion.) Requiring the PSP made it possible to directly scaffold this opportunity so that teachers could experience a way of teaching that challenges traditional norms for classroom practice, in general, and classroom practice for young children. We do know from asking program graduates that they indeed continue to implement PSPs in their classroom, beyond being required to do so.

Based on over 200 teachers' experiences with the PSP, we discuss how Francheska's, Lindsay's, and Stacie's representative experiences highlight the following implications for practice. First, curriculum and learning is enhanced through engaging learners. Although this might be an obvious implication, we are acutely aware that the contexts in which teaching takes place do not always allow or provide support for the type of engaging outcomes that the PSP engenders. Second, children need to feel connected to learning through engagement and relationships.

It is this connectedness (first cultivating it, then nurturing it as part of social and emotional learning) that provides space for academic gains and, more importantly, competencies that enhance children's development as human beings. Third, the effects of service-learning are not unidimensional, nor unidirectional. Teachers too are shaped by the experience, leading to feelings of empowerment for students and teachers. Below we expand on these implications informed by service-learning research and our direct experiences.

Engagement

The literature on student engagement provides many definitions for the term, yet a common theme includes intrinsic motivation to begin a task and persevere through problems with positive reactions to challenges. Engagement is often further categorized by researchers into subtypes such as psychological, cognitive, behavioral, and emotional. Although measures of engagement vary as much as definitions, it is considered a fundamental aspect of learning. Klem and Connell (2004) state that, "researchers have found student engagement a robust predictor of student achievement and behavior in school, regardless of socioeconomic status" (p. 262). In their study of student engagement (as related to student achievement) among elementary students across six different schools, Klem and Connell (2004) reported the following findings: Students who rated themselves as "highly engaged" according to a Likert scale rating were 44 % more likely to do well and 23 % less likely to do poorly on performance and attendance ratings. Similarly, students who had high ratings from their teachers on levels of engagement were more than twice as likely to do well and 39 % less likely to do poorly on performance and attendance ratings. They also found low engagement to be a liability for high performance and attendance ratings.

The power of a learner-centered/learner-driven approach was affirmed repeatedly, as teachers like Francheska, Lindsay, and Stacie reflected on the high levels of engagement they witnessed in their students. That being said, teachers had to really hone their ability to allow learners to decide and direct the process. Many teachers often found doing so difficult and wanted to maintain control. This tendency showed up when students brainstormed a topic a teacher felt was unrealistic, implausible, or uncomfortable to solve. Yet, students were always thoughtful and creative in the ways they used their knowledge and skills to address an issue. Instead of being the transmitters of knowledge to passive students, teachers functioned as facilitators and guides of the curriculum. Those who were better able to fight their tendency to want to control often experienced greater results in student engagement.

The PSP has the capacity to render curriculum more engaging for learners on multiple levels and, consequently, increase the opportunities and outcomes for learning. As a service-learning enterprise, the curriculum demands a fundamental role in its implementation. Teachers are given state and local standards. Currently, many are implementing Common Core State Standards (CCSS); however, the PSP

serves as a learner-centered approach that facilitates the implementation of any curriculum. Teachers must build the curriculum around learners' chosen topics. As a result of learners' key roles in decision-making throughout the process, we have found the indices of learning expanded and heightened. Soslau and Yost (2007) discussed professional development opportunities that showed how the standards of the district core curriculum connected with service-learning and, more importantly, the potential of service-learning to enhance authentic connections in students' learning.

Admittedly, one of teachers' primary concerns was being able to address the required curriculum. This concern was eased when teachers drew the curriculum web and connected the standards to the various parts of the project work. Teachers often expressed surprise at how many standards they were able to address, and the various learning skills they were able to advance, based on the topics learners selected (Stenhouse et al. 2014). PSPs are a direct way for teachers to understand and better appreciate the academic learning aspects of service. To those ends, student engagement must be prioritized when designing and implementing curriculum in the classroom. The PSP is a venue to support educators in providing the opportunity to "provide a more authentic context for the application of learning, and by so doing elevate students' abilities and understandings, assist them in seeing why learning matters, and recognize that they are already people of value to society" (Kaye and Connolly 2013, p. 2).

Social and Emotional Learning

The PSP not only supports academic learning but also the affective development of students' thorough social and emotional learning. We recognize that early childhood educators are presented with a prominent role in developing young children's social and emotional skills. Shor (1992) emphasizes the role of the affective in establishing an empowering education. Through the affective domain, which we ascribe to the social and emotional aspects of human development, students are primed to transform and engage their learning opportunities. We know from personal teaching experience and research that the affective elements of the classroom have a strong bearing on the nature and receptivity to learning that students experience. Part of students' engagement is an outcome of their feelings of ownership over their learning. In its 2008 Technical Report, the Collaborative for Academic, Social, and Emotional Learning (CASEL) states:

> Social and emotional learning (SEL) involves processes through which children and adults develop fundamental emotional and social competencies to understand and manage emotions, set and achieve positive goals, feel and show empathy for others, establish and maintain positive relationships, and make responsible decisions. (Payton et al. 2008, pp. 5–6)

The PSP process is just as valuable, if not more valuable, than any particular product produced from the project itself. The PSP establishes a foundation for

growing socio-emotional skills. As teachers, it is our job to teach social and emotional skills and differentiate based on the needs of each learner. With this understanding, teachers make a paradigm shift in their thinking about what their roles are as educators and how they look at their classroom and the relationships in it. Implementing the PSP helps teachers recognize the inextricable link between social-emotional learning and developing an affirming learning environment.

Teacher and Student Empowerment

Up to this point, we have primarily shared the benefits of the PSP as a service-learning, critical pedagogic approach in relationship with learners. As illustrated by Francheska, Lindsay, and Stacie's vignettes, teachers were directly affected in almost equal measure. A key outcome of the PSP was empowerment—experienced by learners and their teachers—as they co-developed ways to transform learning. We contend that empowerment is a transformative force and one that should be cultivated in learning environments. A transformative approach challenges students to think critically, ask questions, make connections between what they learn in the classroom and what goes on in their lives, and think about how we challenge the power dynamics that structure all our lives (Hunt 2011). If teachers are to transform teaching so that students can actively learn and explore ways to ask, live, and act on their questions, teachers must create space for all students to ask those questions, encourage students to question authority (including their own), and engage students about how to learn to make change (Hunt 2011). The PSP creates opportunities for teachers and their students to engage in the learning process and function as activists in their spheres of influence (Jarrrett and Stenhouse 2011).

Unfortunately, teachers increasingly find themselves in situations where important decisions are made by persons far removed from the actual activities of the school. These decisions limit the teachers' abilities to meet the educational needs of students and their own needs for feelings of significance and self-worth (Short 1992). This practice has led in-service teachers to feel a sense of abandonment by their profession and does not mirror the training teachers engage in during their pre-service teacher studies. In-service teachers could greatly benefit from support that is professionally empowering to combat the disempowering dynamics of their career. As educators are supported in their schools and classrooms, they are better equipped to support students and facilitate learning. Empowerment, in our view, is too often underrepresented as a focal feeling expected as part of teachers' professional growth. As a dimension of empowerment, professional growth refers to teachers' perceptions that the school in which they work provide them with opportunities to grow and develop professionally, to learn continuously, and to expand one's own skills through the work life of the school (Short 1992, 1994; Stewart 2012). As evidenced during and after the PSP, empowerment propels teachers and students to execute their roles closer to their full potential—not from a place of lack or limitation—but from applying their capacities and abilities to forge innovative teaching and learning experiences.

Often times, teachers struggle with the decision to implement innovative instructional plans. This stems from nervousness about change, adhering to their teaching style based on habit, and fear of an unsuccessful lesson. However, the research has indicated that, as teacher empowerment is developed, these components of teaching will be diminished (Stenhouse et al. 2014). As teachers are expected to transition to an instructional style that leads to student learning and problem solving, then a safe environment must be crafted to transform behaviors and philosophy. Students must also embrace the teaching style of the teacher who serves as the facilitator of the learning. We have found young children less resistant to this approach, as their socialization as passive learners has yet to crystalize at this earlier stage in their educational journey. Simultaneously, teachers must refrain from a teaching style that impedes authentic learning experiences. In this sense, students are captivated by the experience and knowledge that is constructed based on their own interpretation and application. In order to maximize the opportunities for empowerment, teachers will necessarily have to confront several facets of their teaching, including their own perceptions of the challenges they might face in implementing a service-learning, critical pedagogy project like the PSP. Examples of challenges teachers have faced include believing that children are capable; feeling the pressures of "push down" academics and testing; and lack of support from the school administration or community. While the PSP is not a panacea for these issues, it does mitigate them given its focus on students, attention to curriculum, and its development as a collaborative endeavor.

Conclusion

We have described the PSP conceptually as an approach that makes practical the elements of service, learning, and critical pedagogy. This approach is built on a foundation of engaging learners by building the curriculum around their interests, fostering opportunities for social/emotional learning, and cultivating empowering learning environments for learners and their teachers. To a degree, describing the PSP as an approach is a bit misleading. In reality, the PSP is actually a way of being as an educator. It requires a commitment to perceiving all children as collaborating with teachers in their learning. As such, we argue that none of the aforementioned implications for engagement, social-emotional learning, and empowerment will seem viable if early childhood educators approach young children from a fixed standpoint of what they perceive these children can or cannot do. According to Hart (1997), children can and should have a fundamental role in engaging, managing, and transforming their environment(s) as critical and reflective participants in their respective communities. Cannella (1997) encourages early childhood educators to reconsider the conceptualizations of young children that hamper their full potential. Crucial to the PSP process, teachers are encouraged to position themselves differently in the course of their students' learning. As a result, teachers' perceptions of children's abilities to identify and work towards deeper

understanding of problems/solutions shifted, enabling teachers to experience the power and possibility of PSPs in the lives of their young students. According to the National Association for the Education of Young Children (NAEYC) standards, teachers are responsible for nurturing young children's abilities, providing security, and helping young children self-regulate. The NAEYC standards also state that young children should be engaged in problem-solving and thinking skills as well as developing academic and social competencies. Toward these ends, we have shared how the PSP is a process that can support educators in reaching these goals for young children.

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