Understanding Educators' Everyday Practices in Out-of-School Learning Contexts:

Adaptive Facilitation and Social-Emotional Supports

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Submitted to the Graduate Faculty of the School of Education in partial fulfillment of the requirements for the degree of Doctor of Philosophy

University of Pittsburgh

2019

UNIVERSITY OF PITTSBURGH

SCHOOL OF EDUCATION

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Out-of-school learning (OSL) environments can be important developmental contexts for children and youth. Educators that work in OSL programs play an essential role in facilitating innovative learning experiences and promoting outcomes that OSL is well-positioned to support. This dissertation focuses on understanding the everyday practices of OSL educators through two empirical studies. Study 1 is a mixed methods examination of the in-the-moment facilitation adaptations educators make in museum-based active learning environments. Quantitative analyses of 198 coded video clips showed that educators use adaptive facilitation differently and that the museum context can be designed to encourage adaptive facilitation. Qualitative analyses revealed techniques educators use to adapt their facilitation moves. Study 2 is a qualitative investigation of how 23 experienced afterschool educators describe supporting social and emotional learning (SEL) as well as the top-down and bottom-up influences on their practice. Findings show that educators are adept at catching SEL teachable moments and that directors' role and approach may relate to how this happens on the ground. Across both studies, findings suggest that OSL educators integrate learning into adult-child interactions, that OSL contexts offer strengths to the educational landscape, and educators are essential to the value of OSL programs. By understanding what OSL educators do well, we can work towards making more of this happen through the policies we create, research we conduct, and practices that we support.

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In Memory of Grandpa and Grandma Faux

Preface

Mister Rogers once said, "*It is through relationships that we grow best – and learn best.*" This could not be truer throughout my life, and in my doctoral experience. I have been *so* incredibly fortunate to have good people supporting me along the way and I thank each and every one of you.

First, to my family. Mom, thank you for your unending love and support. From helping me "push the submit," to talking through ideas, cheering me on, and believing in me. You've encouraged me through every up and down, big and small (and *really* small). You are and have been a model for me in life and I cherish being a Mac girl. I am here because of you. Austin, you have been there with me and for me throughout the PhD process. You joined me where my program took us without hesitation. And you made the daily grind so much more fun with adventures and "parts" along the way. You love to help, and you have helped so much. You make my heart full. Dad, you guided me to become the writer I am today. I appreciate all of your thoughts about education and professionalism and checking in every step of the way. Those typing skills I used to avoid learning sure have come in handy. Grandma Alice and Grandpa Nick, our visits these past five years have been a joy and I've loved being able to talk about school and life with you. Grandma and Grandpa Faux, I know you would be so proud. Thinking of you has brought me strength throughout this process, and in my life.

The highest of appreciations to Tom, my advisor and dissertation chair. You are what all advisors, mentors, and friends should be. You provided just the right amount of "opportunity to grow" by giving me ownership of projects, listening to my ideas (even the rambling ones), and answering any and all questions I had. You give real feedback that is both positive and constructive; this has strengthened not only this dissertation but also my ability to be a scholar. You are a role model for how to "do academia" by balancing life, making research fun, and focusing on what matters most. I have learned so much from you and I am incredibly grateful. Thank you also to my dissertation committee. Shannon, your mentorship throughout my doctoral experience, including guidance on teaching and completing comps, was invaluable. Junlei, your thoughts, words, and reflections are inspiring and have shaped my trajectory thus far and will continue to do so going forward. Jenn, you are an excellent teacher and I've learned so much from you during classes, meetings, and any time we get to interact. Thank you *all* for your positive approach, strong support, and deep questions. I am grateful to have worked with you and you will continue to be a model for me to aspire!

I also could not have gotten through this PhD journey without many friends and colleagues. I've been so lucky to work with the members of the (soon-to-be-named) Akiva Lab. Sharon, thank you for bringing cheer, jumping in to help, and being my research partner (Study 2 could not have happened without you!) Marijke, I appreciate your perspective on the world, kind hellos, and sage advice. Alex, I loved the *hours* we spent watching videos, problem-solving research tasks, and most importantly sharing about life. Kelly, your positivity, kindness, and grounded view was the perfect way to begin my PhD journey. Thank you also to my fellow doctoral students. Alyssa, our pow wows have been a highlight and source of support through each milestone. Katelynn, Paulette, Ross, and Laura – I learned from you through our debates in class *and* at happy hours at Hems. Thank you to Stacy, Kaleen, and Christy for providing such good models of how to navigate the PhD process. Thank you also to research assistants, Ruchira and Katie, for your hard work and insight on Study 1.

Finally, many thanks to the colleagues I've worked with outside of academia during the past five years. At the Children's Museum - Lisa and Peter, I've learned so much from you both;

thank you for providing mentorship and support during this process. Alison and Talia, you are both wonderful to work with and I value your perspectives and appreciate your comradery. MAKESHOP and Studio teams, thank you for welcoming me into your space and allowing me to learn from you and with you. Thank you also to Stephanie and Kathryn from APOST, I could not think of better collaborators and leaders in our region. Finally, thank you to the Simple Interactions team at the Fred Rogers Center; Dana, Emma, and Kate, your work helping the helpers reminds me to keep relationships at the center of the work I do too.

From the bottom of my heart, thank you all!

1.0 Understanding Educators' Everyday Practice as the "How" of OSL Programs

Research shows that out-of-school time and informal learning environments $(OSL)^1$ – such as museums and afterschool programs - can be important developmental contexts for children and youth (Eccles & Gootman, 2002; Lerner et al. 2011; Mahoney, Larson & Eccles & Lord, 2005; Vandell, Larson, Mahoney, & Watts, 2015). Programs tend to be engaging (Larson, 2000) and offer opportunities for young people to explore their interests, discover new content, and build relationships with adults and peers (Fredricks & Eccles, 2006; Halpern, 2003; Roth & Brooks-Gunn, 2017; Vandell et al., 2015). Participation is associated with a number of positive outcomes for children, such as interest exploration, social and emotional learning and, in some cases, academic success (Durlak, Weissberg & Pachan, 2010; Lauer et al., 2006; Vandell et al., 2015). And, these contexts provide a space for educators to experiment with innovative educational techniques (Pittman, 2018). Though OSL settings contribute many strengths to the educational landscape, they are often positioned in contrast to, or in service of, school rather than as a partner (Halpern, 2006). In response, leaders in the field are calling for a shift in how OSL defines itself from where (e.g., community centers) and when (e.g., after school) to a focus on what child outcomes OSL is well-positioned to support and how programs can do this (Pittman, 2018).

¹ I use the term out-of-school *learning* rather than the more common out-of-school *time* to better reflect the outcomes associated with participation in programs. OSL refers adult-supervised and structured activities that children and youth engage in outside of the formal school day (Mahoney et al., 2005; Vandell et al., 2015).

In this dissertation, I investigate an element critical to the *what* and *how* of OSL: understanding the everyday practices of adults that work with children and youth. Educators² are at the heart of all learning and developmental contexts. They encourage learning by encouraging children to think in new ways and to broaden their minds. They support positive development by listening, caring, and responding to children. In fact, research shows that having "at least one" stable and supportive adult relationship can positively change the trajectory of a child's life (Center on the Developing Child at Harvard University, 2015, p. 1). Educators work with children at the *point of service*; this is a concept defined as the moments when educator practices and a child's experience connect to potentially produce positive outcomes (Smith, Peck, Denault, Blazevski, & Akiva, 2010). What occurs at the point of service can be intentional (e.g., structured activities) or spontaneous (e.g., when a child comes to an educator with a challenge). The goal of the point of service is for educators and children to build relationships through moment-by-moment interactions and for children to engage in content that is increasingly difficult over time. My aim for this dissertation is to contribute to our understanding of how educators facilitate learning experiences and foster children's social and emotional learning at the point of service.

Educators play an important role in facilitating the innovative learning experiences that OSL is well-suited to support. OSL programs often have curricular flexibility allowing them to structure activities that are engaging, child-centered, and hands-on (Pittman, 2018). One type of

² Researchers use many terms to define the adults that work with children and youth in OSL programs. Some terms include program leader, youth worker, staff, OST professional, and others. In this dissertation, I use "educator" because this describes a primary focus of the work that child- and youth-serving adults do every day – they educate, mentor, scaffold and guide young people as they navigate their social, emotional, and academic lives.

learning experience that many OSL programs incorporate is *active learning.*³ Active learning is grounded in constructivist theory, which posits that children construct their own knowledge through experiences (Piaget, 1954), and socio-constructivist theory, which describes that knowledge construction occurs in a social context where children are influenced by the people in their environment (Vygotsky,1978). In other words, a child takes the lead in his or her own inquiry often with the support of a "more knowledgeable other," such as an educator (Akiva, McGovern, & Okasinski, 2012; National Research Council, 2000; Vygotsky, 1978). Active learning is associated with interest exploration, knowledge transfer, engagement, and motivation (Alfieri, Brooks, Aldrich & Tenenbaum, 2011; Bonwell & Eison, 1991; Prince, 2004; Walker & Leary, 2009). Findings from a meta-analysis of 69 OSL programs show that active learning is a component of effective OSL programs (Durlak et al., 2010), and it is featured on a majority of OSL quality assessments (e.g., Smith et al., 2012; Yohalem & Wilson-Ahlstrom, 2010).

The effectiveness of active learning depends on the educators that facilitate it. They must structure activities, provide individualized scaffolds, and mediate group dynamics (Lazonder & Harmsen, 2016). In fact, many studies show that educators' strategies at the point of service are the reason active learning experiences are associated with positive outcomes (Barron et al., 1998; Browne & Campione, 1994; Mayer, 2004; Parsons et al., 2018). However, educator factors (e.g., experience, beliefs) and context factors (e.g., activities, grouping type, caregiver presence) may

³ Active Learning is concept that is associated with many different terms across fields. For example, researchers have referred to this approach as hands-on learning, guided discovery learning, experiential learning, inquiry- or problem-based learning, authentic learning, among others.

affect facilitation. More research is needed to understand how these environmental factors impact facilitation of active learning settings.

Educators are also essential to promoting outcomes that OSL is well-positioned to support, including social and emotional learning (SEL). Afterschool programs, in particular, are aligned with the goals of SEL. Their purpose and mission have always been to provide an environment through which the whole child can grow. And, one theoretical framework central to OSL, positive youth development (PYD), is an approach to research and practice that is centered on strengthening the social, emotional, and cognitive capacities of children and youth. The structure of OSL programs also make them a good fit to support SEL. They are often flexible, allowing educators to focus on the content or skills of their choice; they are also rich in relationships, which research shows is vital for social and emotional growth (Hurd & Deutsch, 2017; Pittman, 2018). Through their everyday work with children, OSL educators can play a key role in supporting social and emotional learning (Hurd & Deutsch, 2017; Jones & Bouffard, 2012). Educators may deliberately create opportunities for children to practice skills by incorporating SEL-related activities or lessons. And, educators may "catch" teachable SEL moments in their daily interactions with children and youth (Blyth, 2018). We have a sense of the practices and curricula educators can use to support SEL (e.g., Durlak et al., 2010; Smith et al., 2016), but we know less about how they do this intentionally and spontaneously at the point of service.

The national conversation about SEL is on the rise with researchers, policymakers, and funders beginning to focus efforts on this developmental outcome. For example, we've seen media mentions of SEL increase from about 400 in 2008 to nearly 3,000 in 2018.⁴ This is a moment of

⁴Data comes from the Nexis database which accesses 26,000 news and business sources.

opportunity for OSL programs to take the lead (Pittman, 2018). However, national conversations often trickle down to OSL educators in a way that emphasizes requirements and metrics over educators' experience with children and youth. How is the SEL movement playing out in OSL programs – is it being informed more by top-down requirements or bottom up expertise? Are there differences in how directors and staff think about supporting SEL, and does a director's approach affect staff's use of SEL strategies?

In this dissertation, I describe two separate studies that I conducted with the goal of contributing to the "how" of the OSL field, namely understanding educators' everyday work with children and youth (see Figure 1.1). In the first study, I analyze how environmental factors may relate to museum educators' use of adaptive facilitation in active learning. In the second study, I investigate how experienced afterschool educators support SEL through explicit teaching, intentional plans, and spontaneous moments as well as how their role may affect their perceptions and use of these strategies. Finally, I conclude with themes that emerge across the two studies and implications for research, policy, and practice. By understanding how educators support children every day, we can work towards understanding the "what" of OSL – learning and positive development of children and youth.



Figure 1.1 Graphic Representation of Dissertation Studies

2.0 Adaptive Facilitation of Active Learning in Museums: Environmental Features and Educator Techniques

One of the oldest conceptualizations of human learning is that we learn through experience. Ancient philosophers shared anecdotes of "learning by doing" and today's researchers find that this type of learning is associated with many positive outcomes, such as knowledge retention and transfer, engagement, and motivation (Alfieri et al., 2011; Bonwell & Eison, 1991; National Research Council, 2000; Prince, 2004; Walker & Leary, 2009). Indeed, *active learning*, which incorporates both behavioral "hands-on" and cognitive "brain on" activity (e.g., Akiva et al., 2012; Mayer, 2004; National Research Council, 2000), is prevalent in educational settings in and out of school, especially in informal settings like museums (Andre, Derksen, & Volman, 2017). Some argue that active learning "has become the dominant view of how students learn" (Mayer, 2004, p. 14) and others claim that hands-on forms of learning are far better than solely relying on didactic instruction (Durlak & Weissburg, 2010).

Research shows that for active learning to optimally support children's learning and development, educators are critical (Barron et al., 1998; Browne & Campione, 1994; Mayer, 2004). In fact, researchers have found that without educator guidance, an approach referred to as "pure discovery," the positive outcomes associated with active learning are less likely than "guided discovery," which incorporates educator scaffolding and fading (Lazonder & Harmsen, 2016; Mayer, 2004; Mayer & Wittrock, 1996). Imagine a group of children each trying to light a circuit block without any prior knowledge. With a pure discovery approach, a child may figure out how to light the circuit block independently. But, without an educator's guidance, the child may struggle to understand why or how the circuit block works. In this example, if an educator were

present, they might add structure to the learning experience, elicit reflection, offer complexity, or have peers teach one another. These facilitation moves might result in a rich learning experience that sparks interest among the children present.

Active learning environments, like in the circuit block example, can be complex for educators to facilitate. Educators must consider children's unique abilities and balance features in the surrounding environment and then adjust the strategies they use in the moment. I use the term adaptive facilitation to describe how educators, especially in informal settings, tailor their facilitation strategies to the needs of each child and the environment. This is defined by two concepts and gets at the extent to which an educator is interactive. First, adaptive facilitation includes reciprocity, or a back-and-forth interaction during which an adult and child respond to one another. Second, it includes "opportunity to grow"⁵ or scaffolding and fading of developmentally appropriate learning supports (Vygotsky, 29178). Adaptive facilitation is based on adaptive teaching, which is common in K-12 school settings and refers to modifications that teachers make to formal lesson plans (Parsons et al., 2018). This is considered the "cornerstone of effective instruction" in the formal setting. In informal settings, educators rarely have lesson plans; rather, they adapt their facilitation techniques to individual children's needs through reciprocity as well as scaffolding and fading. More research is needed to understand the techniques OSL educators use to do this.

⁵ I use "opportunity to grow" as a singular term for both scaffolding and fading. This term captures educators' ability to provide and fade scaffolds even during short amounts of time (i.e., a few minutes), as is often the case in museum settings.

Though research suggests educator adaptations are important for active learning, we know less about how informal educators use adaptive facilitation given environmental features present. Research in both formal and informal settings show that both educator and contextual factors influence facilitation (Parsons et al., 2018; Pattison et al., 2018). Educator factors include an educators' in-the-moment thinking, beliefs, and background experiences, which can shape the adaptations they make. Context factors include the way educational activities are structured, which may prompt educators to use particular facilitation strategies or techniques. Perhaps an educator asks more questions when playing a game with a child or scaffolds more learning when engaging children in a complicated task. Another context factor includes the grouping type (e.g., one-onone, small group, whole class) that may impact adaptive facilitation. For example, one-on-one interactions may allow educators to zero-in on a child's needs while educators might use small group interactions to support peer collaboration (Pai & Sears, 2015). Finally, presence of a caregiver, which is common in museum settings, is a context factor that may help structure (or hinder) the child's participation in the learning activity (Crowley, Callanan, Tenebaum, & Allen, 2001).

Understanding the extent to which educator or context factors influences adaptive facilitation may have implications for practice. Educator factors and context factors likely both play a role in how educators facilitate learning experiences. But, is one more important than the other? Put another way, if a museum director had to choose where to allocate limited resources, should they invest in hiring and training qualified educators or in intentionally designing, structuring, and outfitting exhibits?

In this mixed methods study, I aim to understand the how features of an active learning environment – namely, the educator and context factors – relate to informal educators' use of adaptive facilitation. Informal learning contexts are well-suited to examine active learning because they tend to be flexible and allow for the development and testing of innovative learning activities (Durlak & Weissburg, 2010; Pittman, 2018). I begin by delving into what prior research tells us about active learning, adaptive facilitation, and how features in informal, and particularly museum, environments might play a role in how educators adapt their facilitation. I will then share quantitative analyses of how adaptive facilitation may differ based on educator and context factors. Next, I provide qualitative descriptions of techniques associated with high and low levels of adaptive facilitation. Finally, I conclude with interpretation across both kinds of data and offer implications for research and practice.

2.1 Literature Review

2.1.1 Active Learning

Active learning is a type of learning through which individuals can construct their own knowledge within a social context. Researchers from across fields have used many terms that get at this concept, such as hands-on learning, guided discovery, experiential learning, inquiry- or problem- based learning, among others. Here, I use the term active learning broadly as an approach grounded in three foundational learning theories. These include constructivism, which states that children construct their own knowledge through experiences (Piaget, 1951, 1954); also, socio-constructivism (Vygotsky, 1978) and situated learning theories (e.g., Brown, Collins, & Deguid, 1989), which add that that knowledge construction occurs in a social context where children are influenced by the people in their environment and knowledge is tied to social, cultural and physical

contexts. Active has two meanings as described by Mayer (2004). Active learning includes behavioral activity. This may look like engagement in hands-on activities, group discussions, or learning-related games as opposed to passive reception of content. Active learning also includes cognitive activity, which is defined as higher-order thinking tasks such as the processing of information, thinking through challenging questions, or applying knowledge to new situations. Cognitive activity can occur during activities that are behaviorally active or while learners are engaged in more stationary activities such as reading, writing, or taking notes. Colloquially, one can think of active learning as children "doing things and thinking about what they are doing" (Bonwell & Eison, 1991, p. iii).

Despite a diversity in how active learning may look across informal settings, active learning environments have commonalities. First, they incorporate concrete experiences. This involves child engaging in authentic activities, hands-on projects, or real-world problems and is contrasted with decontextualized forms of knowledge transmission, such as lectures (Herrington & Oliver, 2000; Honebein, Duffy & Fishman, 1993). Second, active learning is most effective when children reflect on their experience to uncover knowledge acquired (Barron et al., 1998). Third, learners must have agency in their active learning experiences. They should have a choice about how they contribute to their own learning experiences and they play a role in how they construct knowledge (Reeve & Lee, 2014). Fourth, active learning often incorporates an element of collaboration among peers or with adults. This stems from ideas that children construct knowledge with the others in their surrounding environment (Greeno, 1998; Lave & Wenger, 1991; Rogoff, 1994; Vygotsky, 1978).

Most importantly, educators are essential in the effectiveness of active learning experiences. Through facilitation, the educator deepens learning by pushing children to stretch

beyond what is comfortable and engage in a productive cognitive struggle (e.g., Hiebert & Grouws, 2007). Critics of active learning argue that direct instruction, which is explicit and teacher-directed, can be more effective because it is easier for teachers to implement and leads to fewer misconceptions (e.g., Hung, 2011; Kirshner, Sweller, & Clark, 2006). However, evidence suggests that with educator support, active learning can be quite effective (Barron et al., 1998; Browne & Campione, 1994; Mayer, 2004). For example, in a meta-analysis of 72 studies, Lazonder & Harmsen (2016) found that guidance allows learners to more skillfully complete an open-ended project, learn information, and score higher on tests. Mayer & Wittrock (1996) also noted that guidance during discovery experiences can lead to increased understanding. Educator facilitation promotes the effectiveness of active learning across contexts including informal learning settings.

Active learning is a very common approach in museums (Pattison et al., 2018). These settings are less constrained by standardized testing and curriculum requirements than formal K-12 settings. Therefore, educators can be flexible in the type of activities they offer and how they approach teaching (Pittman, 2018). Active learning is also associated with positive outcomes in the museum setting. Andre et al. (2017) reviewed 44 theoretical and empirical studies of children's learning in museums from 1999-2012 across countries. They found that guided, hands-on activities were not only the most common, but also the most effective for learning in most children's museums.

2.1.2 Adaptive Facilitation

The import role that educators have in active learning is dependent upon how they facilitate learning experiences. Educators' use of adaptive facilitation in informal settings emphasizes

interactions between adults and children. Adaptations are made at the *point of service*, where educators' practices and children's experiences meet (Smith et al., 2010). In this study, I conceptualize adaptive facilitation as two key components that get at the extent to which an educator is responsive or interactive at the point of service: reciprocity and opportunity to grow. These are two concepts that researchers believe are central to positive adult-child interactions at the point of service (Li & Julian, 2012), and they are indicators of adaptive facilitation in active learning environments.

Reciprocity refers to a back-and-forth or "serve and return" interaction between and educator and child (Li & Julian, 2012; National Scientific Council on the Developing Child, 2004). For example, if a child would like to sew a pillow, the educator might ask questions about the child's goals (e.g., "how big do you want your pillow to be?") and the child also contributes his/her ideas about making the pillow in response. From the perspective of behavioral and developmental research, reciprocity is necessary and influences a child's brain architecture and their cognitive, social, and emotional development (Center for the Developing Child, 2015; Fisher, Frenkel, Noll, Berry & Yockelson, 2016). Reciprocity is also important in museum settings, where researchers find that allowing children take the lead in their own learning experience is best practice (Falk & Dierking, 2000). Educators' use of reciprocity may relate to elements present in a particular context. For example, Li & Julian (2012) describe four case studies of how reciprocity can range from adult-controlled to balanced depending on the elements in the environment.

Adaptive facilitation also includes *opportunity to grow*, or educators' use of scaffolding and fading. This is rooted in Vygotsky's (1978) zone of proximal development theory which posits that educators scaffold smaller steps of difficult tasks and gradually fade away support to match the child's skill level. Scaffolds may be tangible (e.g., physically moving materials to support a learner) or informal (e.g., a well-timed question or verbal prompt; Liu, Wivagg, Geurtz, Lee, & Chang, 2012). For example, an educator might show a child how to properly hold a saw to cut wood, then have the child saw with physical assistance, followed by sawing independently. The adult gradually gives the child more challenge as he or she seems ready. This component of adaptive facilitation highlights that "opportunities" to grow can occur during micro-interactions and are the building block for learning and development over time. This is important in museum settings where educators sometimes interact with visitors only for a few minutes. The educator may or may not witness a child accomplish something new but offering opportunities during small moments sets the foundation for growth.

Adaptive facilitation is related to adaptive teaching in classroom settings, where teachers adapt lesson plans based on students' needs. In a synthesis of 64 research papers published between 1975 and 2014, Parsons et al. (2018) looked across studies using related terms, such as responsive teaching, teachable moments, and dialogic instruction. Across these terms, common definitions related to how educators responded to a child and scaffolded learning. The authors also coded adaptive facilitation into categories including teacher factors and contextual affordances and barriers (i.e., factors that allowed for more or fewer adaptations). And, among the studies they reviewed, they found that adaptive teaching is associated with academic achievement, learner agency, and engagement.

In informal settings, very little research focuses on educator adaptations. In one study, Tran (2007) found that museum-based educators use adaptive teaching practices when facilitating preplanned lessons with field trip groups. However, the author discussed these practices as similar to K-12 formal educators (i.e., adaptations to a lesson plan) rather than during interactions at the point of service. More recently, Pattison et al. (2017) created a model of "responsive facilitation" through a design-based research study at an interactive math exhibit in a science center. They describe this as cycles of observing, supporting, and reflecting to promote goals of visitor satisfaction, mathematical reasoning, and intergenerational communication. Pattison et al. (2018) tested this model using a quasi-experimental design and found that when educators were trained to be responsive to family's needs, it had positive impacts on satisfaction and engagement at the exhibit. This study made progress towards understanding how educators are responsive to visitors' needs in an interactive museum exhibit to support family interactions. To build on these findings, more research is needed to understand interactions between educators and children (not just among family members), factors that affect interactions, and the techniques educators use to support learning and development.

2.1.3 Environmental Features

The features in an informal active learning environment shape how educators may use adaptive facilitation. To conceptualize this, I adapt Parsons et al. (2018) model of adaptive teaching and Pattison et al. (2017) responsive facilitation model. The Parsons et al. (2018) model is built from a synthesis of decades of research on adaptive teaching in K-12 settings and offers a heuristic for studying educators' adaptations. The Pattison et al. (2017) model overviews museum educators' responsiveness and suggests that particular factors influence interactions with visitors. In Figure 2.1, the adapted *Adaptive Facilitation Model* depicts how educator factors and context factors might associate with educators' actions, specifically related to adaptive facilitation.⁶

⁶ In Figure 2.1, the boxes and text that are in grey indicate that they are not a primary variable in this study.



Figure 2.1 Model of Adaptive Facilitation

2.1.3.1 Educator Factors

Research indicates that educators' facilitation is affected by their thinking (Parsons et al., 2018), their attitudes and beliefs (Nespor, 1987; Fang, 1996), and their background knowledge and experiences (Sameroff, 2010). First, at the point of service, educators use reflection and metacognition to continually assess what is happening in the learning environment. Some researchers refer to this as "reflection in action" (e.g., Schon, 1983). This is the idea that educators use problem-solving skills in the moment to promote child learning. Research on how educators' thinking impacts their facilitation is limited in informal settings. Pattison et al. (2017) and King and Tran (2017) both discuss the importance of educators observing and reflecting on interactions with museum visitors. In addition, some informal research suggests that educators to learning (Andre et al., 2017; Weier, 2004). School-based research on this topic is more robust (Parsons et al., 2018). Studies show that educators may offer opportunities for a child to lead (reciprocity) or provide

appropriate scaffolding (opportunity to grow) by monitoring and regulating their actions based on their cognitive assessment of what a child is doing.

Educators' attitudes and beliefs may also affect their adaptive facilitation. Educators have differing ideas about how content should be taught (Farrell, 2006; Fennema et al., 1993; O'Brien & Norton, 1991; Upadhyay, 2005), about their own self-efficacy to teach (Muir et al., 2010), and about the children and youth they teach (Vadasy et al., 1997). For example, Tran (2007) found that museum educators' actions were influenced by their personal goals for educating children (e.g., to promote interest in science). Also, attitudes and beliefs may affect an educators' style of facilitation. In one study of child behavior during free-choice activities in a museum, Van Schjendel et al. (2010) found that child behavior varied based on educators' facilitation approach. For example, when educators used scaffolding language, children actively manipulated the exhibit. And, research, especially in K-12 settings, suggests that educators may interact with children differently based on characteristics such as race (Russell & Van Campen, 2011). In particular, research shows that some teachers may have deficit-oriented views of the African American children, and others from minoritized groups, that they teach (e.g., Bartolome, 2004). These conscious or subconscious biases may affect how educators adapt their teaching (Tenenbaum & Ruck, 2007).

Lastly, educators' experience and prior knowledge shapes how they use adaptive facilitation. Research on expertise in youth programs shows that experienced program leaders have more and varied skills to react to situations compared to novices (Larson & Walker, 2010). For example, expert leaders often place youth at the center of decision-making and they have more mental models and techniques to address challenging situations (Walker & Larson, 2012). Expert educators are also more skilled at noticing teachable moments, or opportunities to grow. For

example, Tran (2007) found that skilled museum educators were more able to adapt a lesson to accommodate students' prior knowledge while still allowing the child choice and agency in the learning experience. Across educational contexts, research shows that educators' practice is malleable and can evolve through professional development and experience (Allen & Crowley, 2017; Pattison et al., 2018).

2.1.3.2 Context Factors

In addition to educator factors, affordances and challenges of a learning context also impact adaptive facilitation (Parson et al., 2018). In this study, I overview three context factors that are particularly relevant to museum settings. These include activities, grouping type, and caregiver involvement.

Activity Type

The types of activities offered in informal learning settings may afford differing levels of adaptive facilitation. In museum research, it is well-established that activity design is associated with visitors' behavior (Bitgood, Patterson, & Benefield, 1988) and that effective exhibits can promote learning (Andre et al., 2017; Money & Heimlich, 2008). Some researchers even claim the physical design of the space may be as important as educators' facilitation strategies (Pattison & Dierken, 2013). Activity design is also important for facilitation. Perhaps a facilitator can ask more questions (reciprocity) when a child is sewing or offer more opportunities to grow when engaging children in a complicated task, such as carpentry. Indeed, in a quasi-experimental study of a responsive facilitation model, Pattison et al. (2018) found that design differences across three exhibits had one of the strongest effects on facilitation. And, in experimental designs, Roberts and Lyons (2017) found that exhibit features could promote interactions among visitors and Tison-

Povis (2016) found that using an interactive object (a flashlight) could increase joint attention and conversation between parents and children.

Researchers have identified some particular aspects of activity and exhibit design features that may promote learning (e.g., Andre et al., 2017; Falk et al., 2007; National Research Council, 2009). First, certain *types* of activities within an exhibit may lend themselves to more or less to adaptive facilitation. Research shows that activities featuring technology in the museum setting can be highly interactive and learner-centered (Andre et al., 2017). Also, educators tend to scaffold learning successfully during multi-media activities (Murriello and Knobel, 2008). Second, particular *elements* of activities may allow for higher reciprocity. Many studies show that museum activities that are inquiry-based and promote conversation were successful in helping children learn (e.g. Melber 2003). Studies also show that activities that are hands-on promote interactivity and engagement (Tennebaum et al., 2010; Van Schijndel et al., 2010).

Educators can also plan for adaptive facilitation in activity design. For example, Wolf and Wood (2012) suggest that educators can build in scaffolding opportunities by determining the accessibility of an activity's content for children of different ages. In other words, educators can plan how they will support learning before they actually working with a child.

It may also be that adaptive facilitation practices transcend individual activities and should be understood as techniques that work across activity types. Educators tend to use common strategies when facilitating in open-ended learning environments (Barniskis, 2016; Kuhn, 2009; Moust, van Berkel & Schmidt, 2005). These include strategies such as asking questions, inviting children to manipulate materials, telling stories, or having children describe what they notice (Beauchamp & Kennewell, 2010; Braund & Lelliot, 2017; Mallos, 2012). Educators tend to use strategies based on the environmental features present. Through a research-practice partnership in a children's museum setting, educators described how they employ techniques based on their intuition of a situation, learner type, or their goals for the interaction (McNamara, Akiva, Wardrip, Brahms, Crowley, in preparation; Grabman, Stohl, McNamara, Brahms, under review).

Grouping Type

The type of interaction – one-on-one, small group, whole class – may also impact how an educator uses adaptive facilitation. Museum visitors interact with exhibits and educators in varying group compositions (Astor-Jack, Kiehl, Whaley, Dierking, Perry, & Garibay, 2007). Research shows that grouping type is associated with visitor experience variables, such as length of interactions and how educators facilitate learning (Mony & Heimlich, 2008).

First, individual interactions between adults and children are a key indicator of quality in developmental and educational settings (Pianta, Downer, & Hamre, 2016). One-on-one interactions allow educators to listen to a child and zero in on their needs to provide appropriate supports. Research from school-based settings shows that when children have positive individual interactions with their teacher, they tend to engage more (Bogner, Raphael, & Pressley, 2002). This can result in motivation and learning (Finn et al., 2003). In addition, Li & Julian (2012) describe how, across developmental contexts, focusing on reciprocal one-to-one interactions between adults and children, in part, promoted positive development.

Small group work may also shift how the educator facilitates learning experiences. In museum settings, research shows that facilitating small groups of children may be a useful strategy to support learning. For example, in one study, Rennie & McClafferty (2002) found that children were twice as likely to use an exhibit as intended when working with a group and that children explored more meaningfully with a peer. The effectiveness of small group learning settings depends on the composition of the group (e.g., culture, gender, size, and age), experience level of

the group (Astor-Jack et al., 2007) and how the educator facilitates peer interactions (Pai & Sears, 2015). For example, in one K-12 study, Gallas (1995) found that allowing children to lead and ask each other questions in small groups promoted learning.

Whole-class instruction may also be associated with how educators use adaptive facilitation. Educators can be interactive in whole group settings. For example, some educators offer student-led, dialogic instruction when teaching a whole class (Beauchamp & Kennewell, 2010). Also, when educators use explanatory language during whole-class interactions, Van Schijndel et al. (2010) found that this prompts children's exploratory behavior. Other research, largely from K-12 classroom settings, found that whole class situations were often teacher-led with limited opportunities for children to contribute to the interaction (Burns & Myhill, 2004). Whole class settings may influence how educators offer opportunities for reciprocity and opportunity to grow.

Caregiver Involvement

In museums, a caregiver (e.g., parent, grandparent, teacher) often accompanies their child (Crowley et al., 2001). Caregivers play a critical role in structuring a child's museum experience and research shows that families often interact with an exhibit without support from an educator (e.g., Ash, 2002; Crowley & Jacobs, 2002; Ellenbogen, 2002; Garibay Group, 2013). When an educator facilitates an activity, caregivers have different ways of reacting. In one study that took place in a science center, Schauble et al. (2002) found that some parents believed that they should "stay out of the way" (p. 434) when a facilitator was present while others believed it was their responsibility to actively join in the interaction. Pattison et al. (2018) also found that presence of an educator was actually associated with less interactions between caregivers and children.
Research also shows that educator facilitation combined with family interactions can enhance a child's learning experience. When educators give caregivers clear explanations of an exhibit, adults tend to scaffold child learning more (Puchner et al. 2001). Educators can also leverage teachers or chaperones during field trips (e.g., as timekeepers, student managers) and ask question to gather background information about children (Tran, 2007). This can help educators tailor their facilitation to children they may be meeting for the first time. Another promising strategy is for museum educators to support family interactions (Tran, 2007; Pattison, 2011; Pattison & Dierking, 2012). Engaging an entire family in the museum experience can prompt child learning (Andre et al., 2018; Benjamin et al. 2010; Freedman 2010; Tison-Povis, 2016; Wolf and Wood 2012).

2.2 The Current Study

Educators use adaptive facilitation to tailor their interactions with children during active learning activities. However, more research is needed to understand how environmental features relate to adaptive facilitation and how educators do this in practice. To address these gaps, I conduct a mixed methods study to investigate how adaptive facilitation relates to educator factors and context factors and to describe the techniques museum educators use to make adaptations. I use an Explanatory Sequential Mixed Methods Design (see Figure 2.2). This is a type of design in which data are collected in two phases, beginning with quantitative and followed by qualitative to provide explanation of the initial quantitative results.



Figure 2.2 Visual Model for Explanatory Sequential Mixed Methods Design

I use data from a museum-based exhibit that features active learning activities to answer two research questions. First, *how does adaptive facilitation differ by educator vs. context factors?* In four separate quantitative analyses, I consider differences in adaptive facilitation by A) educator, B) activity, C) grouping type, and D) caregiver involvement. The second research question is: *what characterizes high and low adaptive facilitation?* To answer this question, I use qualitative data and thematically code descriptions of videos high and low in adaptive facilitation to explore how museum educators use these techniques.

2.3 Methods

2.3.1 Sample

The sample for this study consists of 198 video clips, each 2.5 minutes in length, that capture educators (N=6) interacting with children and families in a well-established children's museum in the mid-Atlantic region of the United States. We collected all video clips in a makerspace, which is a permanent exhibit in this museum. Making is an educational innovation that is designed to be hands-on and to include open-ended exploration of tools, materials, and processes, usually with the help of an educator (Brahms & Wardrip, 2014; Vossoughi & Bevan, 2014). For example, typical activities in this space include digital technologies, woodworking, and fiber arts.

Our research team chose 2.5 minutes as the video length by conducting statistical analyses that indicated video length was not correlated with the main outcome variable (adaptive

facilitation) when videos are longer than two minutes.⁷ We realize that 2.5 minutes is not enough to capture a comprehensive picture of all interactions; however, we believe this length provides a sufficient snapshot through which to answer the research questions.

The six adult educators (see Table 2.1), three female and three male, were either full-time staff (N=4) or they were part-time staff with more than one year of experience working in the makerspace exhibit in the Spring of 2016 (N=2). As depicted in Table 2.2, children, ages 3-11, along with caregivers (when present) also appear in the video clips. The sample of 198 clips included 386 children and 151 adults on video. Note this is the total number of children and adults that appear in all clips, not the number of unique individuals (e.g., some adults and children were captured in multiple clips). The majority of children were white (80%) and a little fewer than half were female (44%), averaging six and a half years old. The majority of adults in video clips were

⁷ To determine clip length of 2.5 minutes, we began with an exploratory dataset of 171 videos collected in the museum makerspace ranging in length from 19 seconds to 4 minutes (averaging 78 seconds). We coded videos for reciprocity and opportunity to grow using the Simple Interactions Tool (Li, 2014) as described in the quantitative measures section of this paper. We then calculated correlations between length of clip and the two measures of adaptive facilitation. Reciprocity and clip length were significantly correlated, r(171) = 0.21, p<0.01, and opportunity to grow and clip length were significantly correlated, r(171) = 0.39, p<0.01. We iteratively re-ran correlations deleting videos in 30-second increments (i.e., we calculated correlations between length and adaptive facilitation in all videos above 30 seconds, then all videos above 1 minute, then above 1.5 minutes, etc.). We found that when clips were longer than 2 minutes, length was no longer correlated with adaptive facilitation. We decided to set the final length at 2.5 minutes as a conservative estimate. We deleted videos from the exploratory dataset shorter than 2.5 minutes and collected additional videos until we achieved the final dataset size of 198 clips.

female (75%) and white (97%). Caregivers were visible in 41% of the clips. Of the clips captured,

13% occurred during a field trip.

Educator	Number of Clips	Age	Race	Gender	Part/ Full Time	Years in Makerspace	Experience with Children (Years)
1	36	30	White	М	Full	5	9
2	28	28	White	М	Full	< 1	3
3	19	31	White	М	Full	2	8
4	38	28	White	F	Full	< 1	2
5	34	28	White	F	Part	1	5
6	43	31	White	F	Part	1.5	4

Table 2.1 Educator Demographics

	Ν	Mean/ %	SD	Min	Max
Participants in Clips					
Children					
Child Female	386	44%			
Child White	386	80%			
Average Child Age	386	6.49			
Caregivers					
Adult Female	151	75%			
Adult White	151	97%			
Clip-Level Statistics					
Interactivity					
Reciprocity	198	3.17	0.35	1.70	4.30
Opportunity to Grow	198	2.53	0.75	1.04	4.52
Fading	198	77%			
Activity					
Electronic& Digital	198	39%			
Construction	198	22%			
Sewing	198	28%			
Modular & Demo	198	10%			
Interaction Type					
One-on-one	198	61%			
Small group	198	24%			
Whole Class	198	15%			
Caregiver Interactions					
Present, Interacting	198	33%			
Present, Not interacting	198	26%			
Not present	198	41%			

Table 2.2 Descriptive Statistics of the Sample

2.3.2 Quantitative Measures

2.3.2.1 Adaptive Facilitation

In this study, I define adaptive facilitation as reciprocity and opportunity to grow. For the past three years, our research team has worked to develop a reliable method to code videos for these two domains across diverse contexts that offer active learning experiences. In 2015, we collected exploratory video data in a museum makerspace exhibit and determined a minimum clip length through an initial round of coding (described above). We then collected and double-coded 200 video clips using an established coding scheme, the Simple Interactions Tool, which identifies four domains of developmental relationships (Li, 2014; see Appendix A). However, reliability was a challenge; that is, we achieved acceptable inter-rater reliability at a scale level but not for particular domains of interaction.

We then collaborated with a team of University of Pittsburgh researchers in the Department of Psychiatry to develop a behavioral coding procedure, based on procedures originally used in research with non-human primates (e.g., Cameron et al., 2003; Coleman, Dahl, Ryan, & Cameron, 2003; Fawcett et al., 2014). This method, also using the Simple Interactions Tool, produced extremely high internal consistency for coding parent-child interactions in a controlled setting (α = 0.93). The coding scheme uses a decision-making flowchart diagram that allows for more objective coding decision rules (Murphy et al., under review). We adapted this coding procedure to the museum makerspace, which was far more diverse in activity than in the Murphey et al. (under review) study. We found that this approach yields nuanced data about changes in reciprocity and opportunity to grow as it occurs (i.e., second-by-second). In the present study, two coders achieved reliability on the behavior coding scheme for reciprocity ($\alpha = 0.78$) and opportunity to grow ($\alpha = 0.77$).⁹

The adaptive facilitation measure uses a flowchart diagram that asks a series of questions about micro-interactions throughout the clip. For reciprocity, coders stopped the video every 15 seconds and recorded a score based on the flowchart (see Appendix B). For opportunity to grow, coders recorded a score based on the flowchart and then changed the score to match interactions in the clip as they occurred (see Appendix C). Using the flowchart rules, coders assigned a score of an X, Y, or Z for each reciprocity and opportunity to grow. I calculated final scores for each domain by multiplying X scores by 1, Y scores by 3, and Z scores by 5 and then adding totals for each. I then averaged coders scores for each clip. The average reciprocity score was 3.17 (SD = 0.35) with a fairly normal distribution (skewness = -0.39^{10} , kurtosis= 5.43^{11} ; see Figure 2.3). The average opportunity to grow score was 2.53 (SD = 0.75) with a normal distribution (skewness= 0.24, kurtosis=2.65; see Figure 2.3). Additionally, within opportunity to grow, we noted *fading* (a score of Z) as a binary score if it did or did not occur. Fading, defined as moments when an educator appropriately removed a scaffold (e.g., allowed a child to try something independently), occurred in 77% of the videos. Reciprocity and opportunity to grow were positively correlated (r=0.22,

⁹ We assessed interrater reliability using a two-way mixed, consistency, average-measures ICC (McGraw & Wong, 1996). An ICC of 0.80 indicates a high level of consistency across raters (Cicchetti, 1994).

¹⁰ Skewness is a measure of symmetry; standard practice suggests that when skewness is between -0.50 and 0.50, the data is not distorted from a symmetrical bell curve (Shavelson, 1996).

¹¹ Kurtosis is a measure of peakedness; standard practice suggests that when kurtosis is between -3.00 and 3.00, the tails are proportionate to the peak of the bell curve (Shavelson, 1996). In this study, the reciprocity is slightly leptokurtic, meaning the bell curve has a slightly higher than normal peak.

n=198, p<0.01). Fading and opportunity to grow were positive correlated (r=0.43, n=198, p<0.001). Reciprocity and fading were not significantly correlated.



Figure 2.3 Distribution of Reciprocity and Opportunity to Grow

2.3.2.2 Educator

During data collection, researchers noted which of the six educators was highlighted in the clip. We captured an average of 33 videos per educator (ranging from 19 to 43 videos per educator). In Table 2.3, I include mean adaptive facilitation score by educator.

Educator	Number of clips	Reciprocity		Opportuni	Fading	
		М	SD	М	SD	%
1	36	3.08	0.33	2.30	0.61	77%
2	28	3.29	0.33	2.34	0.6	64%
3	19	3.37	0.39	2.57	0.85	68%
4	38	3.14	0.45	2.41	0.76	84%
5	34	3.04	0.29	2.68	0.69	70%
6	43	3.20	0.22	2.83	0.86	88%

Table 2.3 Dependent Variables by Educator

2.3.2.3 Activity Type

We sorted activities captured in clips into four categories that we developed in collaboration with museum-based researchers (see Table 2.4). These capture the majority of activities in this particular museum makerspace exhibit. The researcher collecting video clips noted

the activities captured at the time of video collection. Categories include: 1) *Electronic and Digital Media* activities that use electronics and digital tools, such as circuit building, digital fabrication, and stop motion animation (78 videos); 2) *Construction* activities in which the learner uses tools to create something new, such as wood-working or building with recycled materials (44 videos); 3) Sewing, which consisted of any type of weaving, knitting, stitching, sewing, or practice with sewing materials (56 videos); and 4) *Modular Building & Interactive Demonstration*, which are activities where a child can manipulate the placement of an object without actually changing the structure of that object (e.g., stacking wooden blocks, moving gears on a table, adjusting pieces of a pin ball machine) as well as educators' explanation of activities in the space (20 videos). In four videos, more than one activity was noted. We re-watched these videos and placed them into the category visible for a majority of the clip. In Table 2.5, I provide mean adaptive facilitation scores based on activity.

Activity Type	Clips Collected	Description
Digital and Electronics	78	Activities that utilize digital technology or electronics, such as circuit blocks, stop motion, iPads, etc.
Construction	44	Activities in which the learner uses tools (hammer, chisel, etc.) to build and create something new. This also includes construction with recycled materials (e.g., creating a house with cardboard boxes).
Sewing	56	Activities such as knitting, stitching, yarn work, creating projects with fabric, etc.
Modular Building & Demonstration	20	Activities where a child can manipulate the placement of an object without actually changing the structure of that object. These can be done independently or with a facilitator. Examples include building with wooden blocks or Legos, moving gears on a table, and adjusting pieces to a pinball machine. This also includes facilitator explanation or demonstration of activities (e.g., describing the layout of the makerspace to a visitor).

Table 2.4 Educational Makerspace Activity Types

Activity	Number of Clips	Reciprocity		Opportuni	Fading	
		М	SD	М	SD	%
Electronic & Digital	78	3.23	0.29	2.86	0.73	92%
Construction	44	3.19	0.33	2.48	0.65	70%
Sewing	56	3.11	0.36	2.30	0.62	68%
Modular	20	3.03	0.52	2.04	0.87	60%

Table 2.5 Dependent Variable by Activity

2.3.2.4 Grouping Type

Researchers noted grouping type during data collection including: 1) *One-on-one,* where the educator engaged with one child for the majority of the clip or where the educator worked individually with many children throughout the clip (120 videos); 2) *Small group*, where the educator interacted with a group of at least two children but not all of the children in the makerspace (48 videos); and 3) *Whole class*, where the educator worked with the entire group in the space for the majority of the clip (30 videos). In Table 2.6, I provide mean adaptive facilitation scores by grouping type.

Table 2.6 Dependent Variables by Interaction Type

Interaction type	Number of Clips	Reciprocity		Opportuni	Fading	
		М	SD	М	SD	%
One-on-one	120	3.22	0.33	2.61	0.74	79%
Small group	48	3.11	0.43	2.33	0.72	75%
Whole class	30	3.05	0.26	2.55	0.82	73%

2.3.2.5 Caregiver Involvement

During video collection, researchers noted whether a caregiver (e.g., parent or teacher) was 1) involved in the interaction (66 videos), 2) present but not involved (51 videos), or 3) not present (81 videos). For example, an involved adult might help a learner understand how an activity in the makerspace works while a non-involved adult might be standing in the background watching the child from afar. Caregivers that were not present were out of the video frame; for example, they were helping another child in a different area of the exhibit. In five instances one caregiver was present and interacting and one was present and not interacting; we coded this as present and interacting. In Table 2.7, I provide mean adaptive facilitation scores based on caregiver involvement.

Caregiver type	Number of Clips	Reciprocity		Opportuni	Fading	
		М	SD	М	SD	%
Not present	81	3.19	0.38	2.56	0.66	77%
Present, not						
interacting	51	3.24	0.34	2.56	0.90	75%
Interacting	56	3.08	0.30	2.47	0.73	79%

Table 2.7 Dependent Variables by Caregiver Type

2.3.2.6 Visitor Demographics

Researchers noted the *number of children* in the clip and their observed *age*, *sex* and *race* as well as the *number of adults* in the clip and their observed *sex* and *race* (see Table 2.1). In this study, we did not collect self-reported race, gender, or age demographics for children or caregivers because we did not wish to disrupt the visitors' experiences.

2.3.3 Qualitative Coding

When video coding was complete, I grouped videos based on coded adaptive facilitation scores. I characterized "high" adaptive facilitation videos in the top 5th percentile on reciprocity (9 videos above 3.71) and opportunity to grow (9 videos above 3.86). I characterized "low" adaptive facilitation videos bottom 5th percentile on reciprocity (8 videos below 2.60) and opportunity to grow (9 videos below 1.28). Four videos were in both the low reciprocity and opportunity to grow groups. No videos overlapped in the high reciprocity and high opportunity to grow groups.

I re-watched videos in the high and low adaptive facilitation groups and created written descriptions of each, including actions and quotes from the educator and child(ren). Written descriptions of the lowest and highest videos for reciprocity and opportunity to grow appear Appendix D.

I then developed codes based on themes that emerged from the descriptions of the videos (see Appendix E). I and a second graduate student coder independently coded all videos in the high and low adaptive facilitation groups. Two coders increase the clarity of coding definitions and provide a reliability check resulting in greater credibility of findings (Miles et al., 2014). Once we completed coding descriptions, I calculated counts of codes and percentages of each that occurred in the high and low groups.

2.3.4 Data Analysis

In this study, I use an Explanatory Sequential design to investigate the environmental features that relate to adaptive facilitation of active learning. To do this, I first conduct a series of one-way analysis of variances (ANOVAs) to analyze the degree to which adaptive facilitation¹² differs by educator compared to context factors. This included four separate sub-analyses: A) individual educator, B) activity type, C) grouping type and D) presence of a caregiver and their level of involvement. Second, I look qualitatively at the videos in the high and low adaptive facilitation groups and analyze the themes that emerged in descriptions of these videos. Third, I

¹² In all four sub-questions, I also investigated fading (i.e., binary count of an Opportunity to Grow score of 5). I conduct chi-square tests to examine how fading related to educator and context factors. Results mirrored opportunity to grow, so I do not include fading in this paper.

use a joint display to compare the results from the qualitative analyses to explain the quantitative analyses through an integration of the two.

2.4 Results

2.4.1 RQ1: How Does Adaptive Facilitation Differ by Educator vs. Context Factors?

A. How does adaptive facilitation differ by educator?

A one-way ANOVA test indicated that reciprocity differs by educator, F(5, 192)=3.86, p<0.01). In other words, the extent to which educators were captured using reciprocal "serve-and-return" strategies varied based on the individual educator. Opportunity to grow also differed by educator, F(5, 192)=2.94, p<0.05. This suggests that the extent to which educators were captured providing and fading learning scaffolds differed based on the educator.

B. How does adaptive facilitation differ by activity?

Reciprocity did not differ based on the activity captured in the clip, F(4, 193)=2.36, p=0.07. Opportunity to grow, however, did differ by activity, F(4, 193)=10.96, p<0.01. This suggests that the extent to which educators were captured providing and fading learning scaffolds differed based on the activity that educators were facilitating. A post-hoc Tukey test indicated that educators tended to offer more opportunities to grow when facilitating electronic and digital media activities compared to other activities in the makerspace.

C. How does adaptive facilitation differ based on grouping type?

A series of one-way ANOVAs revealed differences in adaptive facilitation by grouping type. Reciprocity differed based on grouping type, F(2, 195)=3.92, p<0.05. A post-hoc Tukey test

revealed that clips capturing one-on-one interactions featured higher reciprocity than whole class interactions. Opportunity to grow did not differ based on grouping type.

D. Is caregiver presence and their level of involvement associated with adaptive facilitation?

Finally, one-way ANOVAs examined the effect of caregiver involvement on adaptive facilitation. I found that educators were captured using reciprocity to different extents based on caregiver presence and involvement. Specifically, a Tukey test indicated that when caregivers were interacting with their children, educators used less reciprocity, F(2, 195)=3.08, p<0.05. Opportunity to grow did not differ by caregiver presence or involvement.

2.4.2 RQ2: What Characterizes High and Low Adaptive Facilitation?

Qualitative analyses revealed many similarities to quantitative analyses (see Table 2.8). First, there was variation in educators captured in clips in both high and low adaptive facilitation groups (see Figure 2.4). In the high adaptive facilitation group, three educators made up 83% of the high clips (18 videos). In the low adaptive facilitation group two educators made up a 65% of clips. This matches the quantitative finding that educators differ in their use of reciprocity and opportunity to grow. Next, a majority of clips in the high adaptive facilitation group (56%) captured interactions of electronic and digital media activities while none of the clips in the low adaptive facilitation group featured this kind of activity. This matches the quantitative finding that digital and electronic activities featured more opportunity to grow. Also similar to quantitative findings, a majority of clips in the high adaptive facilitation group featured one-on-one interactions (78%) and only about a quarter of clips in the low group featured one-on-one interactions. Instead, nearly half of clips in the low group featured small group interactions. Finally, 88% clips in the high group captured interactions where the caregiver was not present or not interacting. This was similar to quantitative findings. Although low clips featured more interactions with a caregiver interacting than high clips (matches quantitative finding), this still was not a majority of the clips (different from quantitative findings).

	Environmental	Follow Up		
Group	Feature	Theme		
	(Quantitative)	(Qualitative)		
High Top 5 th percentile 18 clips	3 educators captured in 83% of clips 56% Electronic and digital media activities 78% One-one-one interactions 44% Caregiver not present 44% Caregiver not interacting	Both Questions Small tips Materials for learning Teaching information Reciprocity Child lead Personal connections Co-creating Educator sitting Opportunity to Grow Notice Suggestion for challenge		
Low Bottom 5 th percentile <i>17 clips</i>	2 educators captured in 65% of clips 35% Sewing 47% mod/ demo 47% Small group interactions 41% Caregiver not	Analogy/metaphol Narration/ naming Reciprocity Material reorganization Circulating Talking to another educator Educator standing Opportunity to Grow Introducing activities		
	interacting			

Table 2.8 Joint Display of Study 2 Qualitative and Quantitative Analyses



Figure 2.4 Variation in Educators based on High and Low Adaptive Facilitation Group

I also thematically coded descriptions of the 35 videos in the high and low groups using codes described in Appendix E. The most common techniques that emerged across all videos were: using materials for learning (51% of all clips), asking questions (49% of all clips), and offering opportunities for a child to try something independently (49% of all clips).

As depicted in Table 2.9, patterns emerged when I looked at how techniques varied based on: A) high and low adaptive facilitation groups and B) reciprocity and opportunity to grow within the high and low groups. In the *high* adaptive facilitation group, educators used questions (76% of all clips were in the high adaptive facilitation group), offered small tips (64%), leveraged materials to support learning (61%), and taught children how something worked (86%). These techniques were equally common in the high reciprocity and opportunity to grow groups. The following techniques emerged in at least 60% of the high reciprocity clips: allowing the child to lead, discussing personal connections, co-creating an activity, and an educator sitting next to a child. The following techniques emerged in at least 60% of the high opportunity to grow clips: prompting the child to notice, offering suggestions for a challenge, using an analogy or metaphor, and narrating to describe or define what a child was doing. In the *low* facilitation group, other educator practices emerged. Of the low adaptive facilitation clips, the following techniques emerged in at least 60% of the low reciprocity clips: reorganizing materials and cleaning, circulating around the room, talking to another educator, and the educator standing during the clip. Of the low adaptive facilitation clips, the following techniques emerged in at least 60% of the low opportunity to grow clips: introducing activities.

Some techniques emerged equally in the high and low adaptive facilitation groups. These included offering opportunities for a child to try something independently, parallel play, and watching children.

2.5 Discussion

The goal of this study was to understand how educator factors and context factors relate to informal educators' use of adaptive facilitation and how educators use these strategies in practice. Results suggest that educator factors were associated with use of adaptive facilitation – both reciprocity *and* opportunity to grow. Context factors were associated with only one aspect of adaptive facilitation – either reciprocity *or* opportunity to grow. In particular, one-on-one interactions feature higher reciprocity and clips with a caregiver (e.g., parents, teachers) present and interacting feature lower reciprocity. Educators' use of opportunity to grow was highest in clips featuring electronic and digital media activities. Finally, high adaptive facilitation clips qualitatively depicted common facilitation techniques (e.g., asking questions, offering challenges) and videos featuring low adaptive facilitation tended to depict educators' actions less related to facilitation (e.g., cleaning materials, talking to other educators). In this section, I overview findings across four themes: educator differences, activity design, reciprocity, and facilitation techniques.

2.5.1 Educator Differences

In research question one, I investigated differences in adaptive facilitation by individual educator. One finding that emerged is that there may be variation in how educators use reciprocity and opportunity to grow. Research suggests that educators' facilitation relates to personal characteristics such as their thinking (Parsons et al., 2018), their attitudes and beliefs (Nespor, 1987; Fang, 1996), and their background knowledge and experiences (Sameroff, 2010). In this study, the only educator factors I measured were demographics and years of experience and there were many similarities among educators in this sample. All educators were white and of a similar age. Educators also all had two or more years of experience working with children and were either full-time staff or part-time staff that had been in the organization over a year. In addition, educators all had similar training in how to facilitate in this particular active learning setting and met weekly for professional development.

Despite these similarities, individual differences emerged in how educators were captured using reciprocity and opportunity to grow. This may relate to educators' thinking at the point of service and how they cognitively assessed and monitored their behavior using "reflection in action" (e.g., Schon, 1983). For example, a few educators were captured on several clips cleaning and organizing the space rather than interacting with children. This, of course, may be related to the clips we happened to catch. It could also suggest these particular educators were attuned to the tidiness of the space, which affected their in-the-moment practice. Educator differences may also relate to their attitudes and beliefs, such as how content should be taught (Farrell, 2006; Fennema et al., 1993; O'Brien & Norton, 1991; Upadhyay, 2005), about their own self-efficacy to teach (Muir et al., 2010), and about the children and youth they teach (Vadasy et al., 1997). Because we

did not measure attitudes and beliefs, we cannot assume how this affected the educators in this sample.

Future research could investigate how other educator factors influence adaptive facilitation. For example, perhaps a belief that direct instruction is the most effective way to impart knowledge to children is related to less reciprocity when facilitating. Or, an educator that is more familiar with a particular age group may be able to offer nuanced opportunities to grow based on a child's developmental level. Research also suggests that teacher beliefs and actions are malleable. For example, educators can reflect on their practice through video-based professional development and they can learn techniques from colleagues. Learning more about informal educators' practices at the point-of-service would be a valuable step towards unpacking this finding.

2.5.2 Activity Design

A second finding that emerged from RQ1 is that activities, specifically digital and electronic activities, are related to frequency of educators offering opportunities to grow. Indeed, a majority of clips in the qualitative high adaptive facilitation group featured this kind of activity. This finding aligns with museum-based research showing that exhibits which incorporate technology are highly interactive and learner-centered (Andre et al., 2017).

In this particular dataset, many digital and electronic clips featured interactions at a circuit block table. Circuit blocks are considered a "staple" of this makerspace and researchers and educators have used the activity as a case study to understand learning in making (Brahms & Wardrip, 2014). For this reason, it may be that staff are comfortable facilitating this kind of activity and have common strategies for doing so. In my qualitative analyses of high adaptive facilitation clips featuring circuit blocks, educators often used similar techniques to facilitate this activity. For

example, educators offered the analogy that a circuit is like a circle and used questioning to push children's thinking about how a circuit worked. Also, the circuit block activity may be easy for educators to "level up." Once children get the hang of how a simple circuit works, educators can offer small challenges (e.g., adding a switch or adding another component to the circuit).

The finding that activities are an environmental feature that can influence adaptive facilitation also builds on existing research. A study by Pattison et al. (2018) found that differences in exhibit design had one of the strongest effects on facilitation. Other research shows that activities in informal learning environments can be designed to support child learning (Falk et al., 2007) and to improve educator facilitation of that activity (Tran, 2007). Wolf and Wood (2012) add that educators can design scaffolding opportunities based on developmental level within an activity. Implications of this finding suggest that professional development for informal educators could focus on common techniques or "scripts" for facilitating certain activities. In addition, activities could be designed to offer opportunities for educators to level-up learning.

2.5.3 Reciprocity

Reciprocity differed based on educator, grouping type, and caregiver interactions. This suggests that perhaps reciprocity is sensitive to features in the environment. In other words, it may be that educators use reciprocity more or less depending on what is happening in the surrounding context. This aligns with research describing how reciprocity can look different within and across settings (e.g., Li & Julian, 2012).

In this study, I found that reciprocity was higher in clips with one-on-one interactions; similarly, 78% of clips in the high adaptive facilitation group feature one-one interactions. This finding aligns with previous research that adult-child interactions are related to quality in

educational settings (Pianta, Downer, & Hamre, 2016). When working with one child, the educator may be able to listen to that child more easily, ask more questions, and have more serves and returns. In small group or whole class interactions, reciprocity can still occur, though it may be more challenging to have a serve-and-return with multiple children. Strategies for how to have reciprocal interactions with small groups and a whole class might be a good aim for professional development.

I also found that when a caregiver was present and interacting, educators used less reciprocity. This aligns with previous research about family involvement in museum settings. Studies show that effective museum educators can enhance family interactions that are already occurring (Tran, 2008; Pattison, 2011; Pattison & Dierking, 2012). This may be especially true for children with less experience who often learn best through conversations with parents (Palmquest & Crowley, 2006). Research also shows that educators can give caregivers clear instructions for how to facilitate an activity to promote child learning (Rosenthal & Blankman-Hetrick, 2002; Trans, 2007). In this study, it may be that the experienced educators in the sample stepped back to let the caregiver and child work together – resulting in lower educator reciprocity towards the child.

2.5.4 Facilitation Techniques

Finally, in RQ2, I qualitatively investigated clips that featured high and low adaptive facilitation. Educator techniques emerged from these analyses. Some strategies seemed prevalent in all high adaptive facilitation clips and were not specifically related to reciprocity or opportunity to grow. First, in high-adaptive facilitation clips, educators asked questions. In fact, in one clip in the high-adaptive group, the educator talked almost exclusively in questions. Research shows

questions can prompt a serve-and-return interaction and also can be used as a scaffold to support learning (Liu et al., 2012; Li & Julian, 2012). In high adaptive facilitation clips, educators also taught children information and offered small tips as they worked. For example, an educator might explain how electricity moves through wire pathways or suggest that a child hold a tool a certain way to be more effective. In addition, educators used materials to support learning. This strategy is common museum and school-based research, which indicate that inviting children to manipulate materials can give them agency and also prompt learning (Beauchamp & Kennewell, 2010; Braund & Lelliot, 2017; Mallos, 2012).

High reciprocity clips featured strategies such as allowing the child to lead, co-creating an activity, making personal connections with the material, and sitting next to the child. By allowing a child to lead, the educator is sharing the balance of power in the interactions, which is a key component of reciprocity (Li & Julian, 2012). Similarly, by co-creating an activity, the educator and child share the control of the project or activity. Personal connections include things like a child talking about how her grandfather does woodworking or an educator sharing that he was doing a weaving project at home. These connections open up the possibility of a serve-and-return conversation between the adult and child. Finally, sitting next to a child gives a non-verbal cue that the adult and child are on the same level promoting a more reciprocal interaction. In clips with low reciprocity, educators tended to circulate around the room (e.g., to check for safety, to make sure children seemed engaged), reorganize or clean materials, or talk to another educator. In all cases, there was with minimal conversation with children. Additionally, there were more instances of an educator standing in low reciprocity clips. This might have been a physical cue that the adult was more in control of the interaction, limiting reciprocity. Reciprocity is one of the most important characteristics of developmental relationships (Center for the Developing Child, 2004).

It is important to support educators to notice and use opportunities for serve-and-return interactions when working with children and also to design activities that allow for higher reciprocity.

Related specifically to high opportunity to grow clips, educators tended to point out something for a child to notice (e.g., "look at how that moves"), offer suggestions for a new challenge (e.g., "How could you make the circuit work with a switch?"), and narrate a child's actions or give them correct vocabulary to use (e.g., "you are 'counter balancing'"). Also, educators use analogies and metaphors to scaffold understanding. These strategies match with previous research in museum settings suggesting that educators offer children scaffolds by asking open-ended questions and directing a child's attention to parts of an exhibit (Van Schijndel et al. 2010). In low opportunity to grow clips, educators were captured introducing activities. For example, an educator might welcome a field trip group to the makerspace and give an overview of the different activities they could try. Though important for children to get acquainted with the space, introductions may not offer much opportunity to grow.

Focusing educator professional development on noticing, discussing, and trying out techniques may be a powerful way to support educators' use of adaptive facilitation. One researchpractice partnership between university researchers and museum educators found that conversations about the nuanced techniques educators use in their everyday practice helped them come to a common language to discuss in-the-moment facilitation (McNamara et al., in preparation; Grabman et al., under review). These conversations also helped them reflect on how they might use techniques based on features in the environment.

2.6 Limitations

Although this study has strengths, it is important to note methodological limitations. First, this study took place in a well-established museum-based makerspace. The organization is well-resourced and a leader in the field of making. This may limit generalization to other informal contexts. Also, while we did ensure that clips were taken across each day the museum was open and during all hours of operation, we did not randomly sample our video collection procedures. This could have resulted in a biased sample of video clips; for example, we may have taken more clips during weekdays than weekends and overrepresented the types of families that attend during the week. Furthermore, the nature of video collection could have altered the natural tendencies of the facilitators of children captured on film. Finally, though each clip is unique, a few clips show the same child and a similar scenario as other clips (about 10% of the clips). This might skew results toward the kinds of activities, grouping type, or caregiver interaction captured in scenarios that repeated across multiple clips.

2.7 Conclusion

This study adds to our understanding of how educator and context factors relate to adaptive facilitation in active learning environments. Specifically, educators differ in their approaches to facilitation, activities may be designed to support learning, and reciprocal interactions may be especially affected by environmental features. This study also illuminated common techniques educators use during adaptive facilitation. From these findings, we can look towards innovative ways to support educators and design contexts to be most responsive to children.

3.0 Supporting Social and Emotional Learning in Afterschool Programs: Balancing the Top-Down and the Bottom-Up

Social and emotional learning (SEL) is a growing movement in the United States. Academic publications about SEL have steadily increased from 660 in 2008 to about 3100 in 2018 (see Figure 3.1) and 14 states now have K-12 standards related to the topic. In one notable report, *From a Nation at Risk to a Nation at Hope*, a commission of thought leaders framed SEL as "the substance of education itself" rather than a passing fad (Aspen Institute, 2019, p. 6). They note that parents, children, educators and employers value these skills and that researchers have compelling evidence for focusing our attention on SEL. Indeed, social and emotional skills (SE skills) are essential for humans to navigate life successfully. We must be able to build relationships, understand and express our emotions, and regulate our actions. SE skills can set the foundation for a successful future (Jones, Greenberg, & Crowley, 2015), and they are associated with positive behaviors, academic performance, and mental health (e.g., Durlak et al., 2011).



Source: Google Scholar

Figure 3.1 SEL Publications 2008 to 2018

Research also suggests that SE skills are malleable; that is, they can change through intervention or through positive social interactions (e.g., Cantor et al., 2018; Durlak et al., 2012; Farrington et al., 2012; Jones & Bouffard, 2012; Jones & Kahn, 2017). Neuro-developmental science shows that through relationships, children's brains can be structured for adaptive social interactions and emotional regulation (Jones & Bouffard, 2012; Porges, 2009). And, the field has produced a growing number of SEL programs and curricula rigorously tested in efficacy trials and implemented in schools and out-of-school learning programs (Collaborative for Academic, Social, and Emotional Learning, 2013; Domitrovich et al., 2007; Durlak et al., 2011; Payton et al., 2008; Rimm-Kaufmann et al., 2014).

The goals of OSL programs have always been to support child and youth development, including skills that we now call SEL (Afterschool Alliance, 2018; Futch Ehrlich, Deutsch, Fox, Johnson, & Varga, 2016; Hurd & Deutsch, 2018). For example, many programs take a positive youth development (PYD) approach, which focuses on youth-centered learning activities to stimulate positive growth (Lerner et al., 2011; Blyth, 2018; Mahoney & Weissburg, 2018). The structure of OSL programs tends to be more flexible than K-12 school settings, which allows programs to focus on the content or skills they believe are most important (Pittman, 2018). Indeed, many local and national programs choose SEL-related goals at the core of the activities they offer. This flexibility also gives adults opportunities to spend time building relationships with children and youth, a key component of SEL.

OSL educators play an essential role in supporting social and emotional learning through their everyday work with children (Hurd & Deutsch, 2017; Jones & Bouffard, 2012). They encourage SEL through relationships, and some literature also describes SEL-supportive strategies that OSL educators may use. For example, in a meta-analysis of 68 afterschool programs, Durlak, Weissberg, & Pachon (2010) found that being explicit and focusing on SE skills is associated with personal and social outcomes. Blyth (2018) also describes how OSL educators can "catch" social and emotional learning through teachable moments during activities or when children seek help with a challenge. And, Smith et al. (2016) define program features that emerged in exemplary OSL programs associated with SEL. Little research exists about how OSL educators *actually* support SEL in their daily interactions with children and youth (Vandell et al., 2015). What specific SE skills do educators think about supporting? In what ways do educators explicitly teach about skills? Or, if SEL happens organically in OSL programs, how are educators intentional about creating and finding teachable SEL moments?

The field of OSL can offer insight into how a context-based and integrated approach grounded in educators' experiences with children can lead to rich social and emotional learning (Pittman, 2018). We can learn, from the bottom-up, effective strategies OSL educators use to support SEL. However, history shows that trends in national conversations often affect OSL in ways that are top-down. For example, in recent years academic achievement has been a primary outcome of concern to funders and policy makers and OSL programs, perhaps in support of these goals, have become increasingly institutionalized. That is, programs have adopted school-based structures including scripted educational curriculum, required lesson plans, and adult-defined learning goals (Fusco, 2014). Directors of OSL programs, who may feel pressured to meet requirements imposed on them from above, often must focus on outcome goals (e.g., academic achievement) as they supervise their staff. If the OSL field takes a top-down "school-like implementation" of SEL initiatives, it may miss a great opportunity to lead the national conversation about SEL. But, how is the recent SEL movement playing out in OSL programs? Is it coming from the bottom up or the top down?

In this study, I conduct interviews with 23 experienced afterschool educators – including program directors and frontline staff – to examine two main research questions about SEL in OSL. First, *how do experienced afterschool educators describe SEL in practice*? How do they prioritize, teach about, plan for, and catch SEL? Second, *is there evidence of top-down implementation of SEL in OSL programs*? Are there differences in how directors and staff think about supporting SEL and does a directors' approach affect staffs' use of SEL strategies? The aim of this research is to contribute to our understanding of practices that educators use to support SEL in their daily work with children and to gain insight into how the national conversation about SEL is playing out in OSL programs.

3.1 Literature Review

3.1.1 Social and Emotional Learning

Social-emotional learning is an umbrella term that emerged in the 1990s and now reflects a rapidly expanding field (Blythe, 2018). SEL generally refers to the development of social, emotional, and cognitive competencies necessary for positive social relationships and healthy selfmanagement (CASEL, 2013). Research suggests these skills are associated with prosocial behaviors, academic success, and mental health in childhood and beyond (e.g., Domitrovich, Cortes, & Greenberg, 2007; Durlak et al., 2011). Researchers and educators have historically talked about SE skills as separate from more traditional academic skills, such as reading or writing. Leaders in the field are now shifting the conversation towards integrating SEL into educational settings. For example, Pittman (2018) claims that "SEL skills, in short, are learning skills" (p. 296).

However, there is a lack of agreement on exactly how to define SE skills and competencies; researchers, educators, and policymakers have created many categorizations of social-emotional learning. Some have used 21st century skills, soft skills, non-cognitive skills, or life skills. The American Institute for Research (AIR) synthesized 136 different SEL frameworks spanning 14 fields, including psychology, positive youth development, public health, and education (Berg et al., 2017). Since there are many ways to categorize and represent SEL, we can look to frameworks with traction in the fields of interest in this study. One of the most well-known frameworks in the field of education was created by the Collaborative for Academic and Social Emotional Learning (CASEL), a leader in the field of SEL. They define SEL competencies as: responsible decisionmaking, self-management, self-awareness, social awareness, and relationship building. Specifically related to the OSL field, Smith et al. (2016) similarly define these skills as teamwork, emotional management, empathy, responsibility, initiative, and problem solving. Across all frameworks, SEL competencies are interrelated and rooted in concepts long-studied across multiple fields relating to social, self, emotional, and cognitive processes (Jones & Bouffard, 2012).

3.1.1.1 Social Skills

Social skills are defined as the skills children use to navigate their interactions with others. These include *relationship and teamwork skills* such as communicating clearly, listening to others, negotiating conflict, seeking and offering help, sharing, and collaborating (Jones et al., 2012). Social skills also include *social awareness*, which is an individual's ability to read social cues, relate to and respect others, show kindness, and take other people's perspectives (CASEL, 2013). Many researchers see social skills as central to all development. In the AIR study of SEL frameworks, the authors note that this is the most cited competency across studies synthesized (Berg et al., 2017). And, some researchers have even asked, "what aspects of development are not related to social understanding?" (Carpendale & Lewis, 2016, p. 382).

An abundance of research addresses children's social development upon which social competencies are rooted (Carpendale & Lewis, 2016). Developmental scientists have studied the trajectory of social skill development across childhood. This begins in infancy through synchrony, or coordinated exchanges with a caregiver, as well as through patterns of attachment (Ainsworth, 1973; Bowlby, 1988; Feldman, 2007). In early childhood, individuals develop a theory of mind, or the realization that others think differently from them (Wellman et al., 2011). This influences their ability to take another's perspective, to empathize with others, and to exhibit prosocial behaviors (Eisenberg & Fabes, 1998). As children grow, they continue learning about how to interact with others through play with peers (Xu, 2010) and eventually through friendships and romantic relationships in adolescence (Eccles, 1999). Children also become more sophisticated in their ability to read and respond to social cues, understand humor, and coordinate actions with others (Berger, 2015). Though social development is a typically developing process, children can strengthen these skills through practice and coaching.

3.1.1.2 Self and Emotional Skills

Another key component of SEL relates to children's awareness and management of themselves and their emotions. Some researchers refer to self- and emotional- regulation as "the preeminent psychosocial task," especially in early childhood (Berger, 2015, p. 313). These skills include self-awareness, or the ability to recognize and identify emotions and thoughts and to build an accurate self-perception. Developmental researchers find that this awareness begins with a child's realization that they are a unique being separate from their caregiver and eventually this is related to an individual's self-efficacy (Bandura, 1997) and self-concept (Shavelson & Bolus,

1982) as they mature. In addition, self- and emotional-skills are related to how children regulate their behavior and emotions. This includes managing stress, controlling impulses, and disciplining or motivating oneself as well as handling positive or challenging emotions. A number of theories from across fields relate to self- and emotional- management such as self-regulation (McLelland et al. 2015), effortful control (Eisenberg et al., 2014), and attribution theory (Weiner, 1985). These skills also relate to structures in the brain. In particular, the limbic system is associated with emotional functioning and the prefrontal cortex is associated with higher cognitive thinking and behavior management. These two parts of the brain communicate with one another and impact a child's ability to exhibit control (Berger, 2015). Experience with self- and emotional- skills can strengthen connections in the brain and impact a child's ability to use these skills effectively.

3.1.1.3 Cognitive Skills

Finally, cognitive skills are those related to a child's thinking. This includes *problem solving* or the ability to identify problems, strategize solutions, implement complex tasks over time, and reflect on learning. This requires critical thinking, memory recall, and analytic reasoning – all concepts studied in cognitive science research. Cognitive skills also include *responsibility*, which is the extent to which a child fulfills obligations, to oneself and to others, and internalizes accomplishments (e.g., completing homework). This is related to attentional control, which is the ability to focus on a task and ignore distractions (Berg et al., 2017). Finally, *initiative* is defined as one's capacity to persevere in the face of challenge (Larson, Hansen, & Walker, 2005). This is rooted in positive youth development research which describes initiative as a central developmental task related to other skills, such as creativity, leadership, and civic engagement (Larson, 2000). Initiative also relates to research in psychology and cognitive science about inhibitory control, or the ability to control one's natural reactions towards a short- or long- term

goal (Muller & Kerns, 2015). As with other social and emotional skills, cognitive skills can be strengthened through supports in a child's environment.

3.1.2 Social Emotional Learning in Out-of-School Learning Programs

Out-of-school learning (OSL) programs provide a unique developmental context through which children and youth can develop social and emotional skills (Mahoney, Larson & Eccles & Lord, 2005). OSL encompasses supervised and structured activities that children and youth engage in outside of the formal school day (Mahoney et al., 2005; Vandell et al., 2015). Distinct bodies of literature have developed around the different types of OSL settings. In particular, *afterschool programs* are defined as supervised programs that meet regularly during the school year and offer diverse activities, such as homework help, enrichment, or recreation, to groups of children (Lauer et al., 2006; Mahoney et al., 2005; Vandell et al., 2015). A variety of organizations run afterschool programs, including public and private schools, religious groups, and nation-wide and community-based non-profits (e.g., The Boys and Girls Club of America and The Y¹³).

OSL well-suited to support SEL for many reasons (Devaney & Maroney, 2018; Hurd & Deutsch, 2018; Pittman, 2018; Smith et al., 2016). First, the historical roots of OSL have always included SEL. Afterschool programs emerged in the late 19th century when a growing number of children had "idle time" after school resulting from child labor laws and a mandatory public education (Mahoney, Parente, & Ziglar, 2009). At their inception, programs were created with the goal of children's social and academic development (Lee, 1915). Program attendance rose

¹³ The Y is the organization formally known as the YMCA (Young Men's Christian Association).

throughout the 20th century as American society saw an increase in dual-working households and changing neighborhood and family structures (Hurd & Deutsch, 2018). Caregivers, educators, and politicians saw that by attending afterschool programs, children and youth could have opportunities to learn social competencies, improve academic outcomes, and "stay out of trouble" (Halpern, 2003). Indeed, more recent research has shown that that participation in afterschool programs is associated with social and emotional outcomes; this is especially true when programs focus on SEL (Durlak & Weissberg, 2010) and create a positive program environment through practices like giving children agency and building strong relationships (Pierce et al., 1999, 2010).

Second, a theoretical framework related to SEL, positive youth development (PYD), emerged in the 1990s and became foundational to OSL programs. PYD is an approach to both research and practice which posits that youth have cognitive, social and emotional capacities to be enhanced (Benson, Scales, Hamilton, & Sesman, 2007, Gestsdottir & Lerner, 2007; Lerner et al., 2011). Researchers have studied PYD as a developmental process to understand how youths' interactions with their environment can promote their strengths - such as their ability to take initiative, work towards long-term goals, or reflect on their sense of purpose (Damon, 2008; Larson, 2000). PYD is also a philosophy that OSL program leaders and educators use to focus on practices that promote positive development, such as adult-child relationships and skill-building activities. The field of OSL has aimed to foster broad PYD goals although individual programs do so in diverse ways and with varied intentionality. PYD and SEL have some differences (Blyth, 2018). SEL tends to be more focused on competencies and is rooted in formal K-12 and early childhood literature, while PYD is often more youth-centric (e.g., supports youth agency, choice and voice) and stems from research on OSL environments and middle childhood and adolescence. However, PYD and SEL share many of the same goals. Both approaches recognize the importance of supporting SEL through experiences and relationships across developmental periods (Blyth, 2018).

In addition to historical and theoretical roots of OSL, programs tend to have curricular flexibility (Hurd & Deutsch, 2018; Pittman, 2018). OSL programs typically do not have to prepare children for standardized tests or uphold state-mandated standards. Thus, programs are often able to focus on skills and content of their choice, such as SEL. In addition, this flexibility gives adults more time to build relationships with children and youth during activities that align with young people's interests or during unstructured time. There have been recent challenges to the flexibility of OSL programs. In the past few decades, programs have faced pressure to align program offerings with academic outcome measures. In some cases, this has limited the extent to which program can offer activities that support SEL (Hurd & Deutsch, 2018).

Finally, many OSL programs are "rich in relationships" (Hurd & Deutsch, 2018, p. 96). This is perhaps the most cited, and arguably most important, feature of OSL programs (Akiva, Li, Martin, Galletta, & McNamara, 2016; Baldwin & Wilder, 2015; Jones & Deutsch, 2010; Rhodes, 2004; Vandell, Pierce, & Dadisman, 2005; Halpern, 2003; Roth & Brooks-Gunn, 2017; Vandell et al., 2015) and it emerges across multiple frameworks as a program element important for positive development (e.g., Eccles & Gootman, 2002; Catalano & Hawkins, 1999; Lerner, 2004; Roth & Brooks-Gunn, 2003). OSL programs have been described as a "sanctuary" (Akiva, Carey, Cross, & Brown 2017), "home-places" (Deutsch & Hirsch, 2002; Hirsch, 2005), and a "third space" (Fusco, 2014) in which young people have a safe space to build family-like bonds with peers and with the adults who work there. This happens through trust, emotional support, and relational practices (Eccles, 1999; Jones & Deutsch, 2010). Research shows that children and youth learn social and emotional skills through relationships. Thus, this feature of OSL programming makes the context well-suited to encourage SEL. OSL educators often build relationships into the fabric of their programming and many consider relational practice to be *the* work of OSL educators (Fusco, 2014).

3.1.3 How OSL Educators Support SEL

OSL educators can play a role in both teaching SE skills and also finding teachable moments in their everyday work with children. Researchers have identified some practices OSL educators use to help children develop socially and emotionally. For example, Blyth (2018) poses a useful framework for describing these strategies as "taught" and "caught." Smith et al. (2016) describes program practices, such as sequencing content and using responsive practices, to support SEL. However, in order to inform the SEL conversation from the bottom up, more research is needed to understand how educators describe the practices they use in their everyday work. In this section, I overview the taught, planned, and spontaneous strategies research suggests OSL educator could use to support SEL as depicted in Figure 3.2, though more research is needed to understand how educators described in Figure 3.2.



Figure 3.2 Educator Supports of SEL Skills

3.1.3.1 Taught Strategies

One way that educators might support SEL is by explicitly teaching SE skills. This is intended to pass on information from a "more knowledgeable other" about the meaning and use of SE skills (Blyth, 2018; Vygotsky, 1978). In OSL, this can occur through curricula focused on SEL content. Evidence-based curricula designed specifically for OSL programs is less common compared to curricula for school; some include WINGS, Before the Bullying A.F.T.E.R. School, and Girls on the Run (Jones et al., 2017). Instead, some programs may have adapted curricula designed for school (e.g., PATHS, Responsive Classroom) to their OSL context. Explicit teaching can also occur through staff-created lessons. For example, an educator might teach a lesson about labeling emotions or how to find coping strategies. Particular features of SEL curriculum used by OSL educators may be important for outcomes. In the Durlak et al. (2010) meta-analysis, researchers found that when activities are sequenced to scaffold skill-building, active with opportunities for practice, focused on particular skills, and explicit in their learning objectives (i.e., SAFE), it is associated with the development of personal and social skills. This finding is replicated in other OSL studies which show that age-appropriate supports and scaffolding are associated with SEL (e.g., Pierce, Bolt & Vandell, 2010; Vandell et al., 2015).

Explicit teaching plays an important role in giving children SEL strategies and skills to practice and improve on. And, research shows that explicitly teaching SEL is associated with social, emotional, and academic growth (e.g., CASEL, 2013; Domitrovich et al., 2007; Durlak et al., 2011; Payton et al., 2008; Rimm-Kaufmann et al., 2014). However, the extent to which OSL programs are using "taught" SEL strategies is less clear given the many other priorities prevalent in the field (e.g., academic achievement). And, if educators are using explicit teaching strategies, do they do this in a way that is scripted and tied to funding metrics?
3.1.3.2 Planned Strategies

Planned strategies relate to how programs and educators set the conditions to support SEL. Though not directly framed with an SEL lens, OSL researchers have investigated program features that support general positive development (e.g., Eccles & Gootman, 2002; Roth & Brooks-Gunn, 2003; Lerner, 2004). Across this literature, three categories commonly emerge as important for program quality: a program's culture and climate, activities, and relationships (e.g., Durlak et al., 2010; Lerner, 2004; Pierce, Hamm, & Vandell, 1999, Roth & Brooks-Gunn, 2003; Vandell et al., 2015). These features shape a child's experience in a program and could be intentionally cultivated to support SEL if prioritized by program directors and staff.

Culture and Climate

Programs and educators might create the conditions to support SEL through its culture and climate. This includes an organization's staffing practices as well as norms and routines.

Staffing Practices. To optimally support learning, programs must ensure that they have enough staff present to work directly with children. For example, states have created policies related to adult-child ratios, and some programs have even stricter ratio requirements than those enforced by the government. Smith et al. (2016) describe staff ratios as a program feature that could be leveraged to enhance SEL. In their study of exemplary afterschool programs, having more than one educator present during program activities allowed educators to share the responsibility of supporting children. For example, one staff could pause to help a child reflect on a social and emotional learning moment that occurred, while the other staff could focus on teaching the rest of the group. Many programs in the Smith et al. (2016) study also had paid time for educators to plan and to debrief what happened when working with children. This can be challenging in the field of OSL, that often experiences high turnover and limited funding. How common is beyond "exemplary" programs, like those described in Smith et al. (2016)?

In addition, staff training is an important element of creating a culture and climate that can support SEL (Aspen Institute, 2019; Blyth, 2018; Hurd & Deutsch, 2018). Professional development (PD) related to SEL can help staff identify which skills to support and how to do so. However, SEL training is limited for educators both in and out of school (Jones & Bouffard, 2012). In addition, the training that does exist tends to be one-shot workshops or technical assistance related to curricula rather than continuous improvement models (Akiva et al., 2016). One promising model of PD described in K-12 settings is educator coaching on how to support SE skills (Jones & Bouffard, 2012). This can occur during one-to-one meetings with a supervisor or time for colleagues to reflect as a community of practice (e.g., by watching video or observing one another). Another useful PD strategy might be giving educators time to focus on their own SEL. If staff have strong SE skills, they may be better able to plan effective SEL activities, build positive relationships, model and scaffold SEL, and catch SEL moments (Carlock, 2011; Jennings & Greenberg, 2009; Maurer & Brackett, 2004; Roeser, Skinner, Beers, & Jennings, 2012).

Norms and routines. Another aspect of culture and climate are the consistent set of beliefs, rules, and patterns that programs put in place (Eccles & Gootman, 2002; Sarason, 1996; Feldman & Pentland, 2003). These are the things educators might describe as "the way things are done around here" (Hemmelgarn et al., 2006, p. 75). Formal or informal routines are important for children's social and emotional learning (Jones et al., 2017). This includes intentionally creating a "safe space" or a culture in which children feel welcomed and that they belong. Educators might do this by encouraging children if they make a mistake and reinforcing group norms so that all children feel respected and heard (Eccles & Gootman, 2002; Fusco, 2007; Jones & Deutsch, 2011;

Smith et al., 2016). Research shows that creating a climate of psychological safety is associated with social and emotional wellbeing (Wanless, 2016) as well as SEL outcomes in OSL programs (Peirce, 1999). Expectations and routines can also be intentionally shifted by educators to further support SEL (Sherer & Spillane, 2007). For example, educators can create a culture and climate that focuses on relationships (Fusco, 2007; Gottfredson, Gottfredson, Payne, & Gottfredson, 2004) or expectations for children to use respectful language and exhibit empathetic behavior (Bradshaw, Koth, Bevans, Ialongo, & Leaf, 2008; Thapa et al., 2012).

Activities

Engaging and skill-building activities are a foundational element of OSL programs that could be leveraged in support of social and emotional learning. (Lerner, 2004; Eccles & Gootman, 2002; Durlak & Weissberg, 2010). Programs offer a variety of structured and unstructured activities depending on program goals and youth served. For example, many programs offer homework help, enrichment and recreational activities, and free time (Vandell et al., 2015). Because attendance is not required at most OSL programs, activities are often what draws youth to participate (Akiva & Horner, 2016) and they tend to be engaging and aligned with youth interests (Fredricks & Eccles, 2006). OSL research shows that children and youth benefit most from activities that are authentic, challenging, and provide opportunities to build skills (Roth & Brooks-Gunn, 2003; Lerner, 2004). Not much research has investigated if or how OSL educators specifically use activities to support SEL. Blyth (2018) describes that programs can "catch" learning during activities not related to SEL. But, what does this look like on the ground?

Building Relationships

Finally, educators can create a program culture rich in relationships in order to support SEL. Research shows that children build their SE skills by engaging in positive social interactions (Jones & Bouffard, 2012). That is, youth learn relational skills by experiencing good relationships. Recent research suggests that the human brain and nervous system have evolved to participate in social interaction (Porges, 1995). As children have interactions, neurological patterns increasingly become a well-worn path (e.g., sensing connection, feeling safe to engage) and this constitutes powerful social and emotional learning. If children are able to engage in meaningful adult-child interactions, their higher brain systems become more active and enable development of the core SEL competencies. For example, it enables them to do things such as manage their emotions, take other's perspectives, cooperate and work toward collective goals, and pay attention to consequences of actions.

As mentioned in the previous section, aspects of OSL programs make them particularly well set-up for educators to build relationships with children. For example, in one study of nine afterschool programs, researchers found that when children had a strong connection with at least one staff member, they showed greater self-control than children that participated in OSL without a positive adult relationship (Wade, 2015). OSL educators can build relationships by cultivating a deep understanding of children and youth's interests as well as actively including and listening to youth (Jones & Deutsch, 2011; Smith et al., 2016)

3.1.3.3 Spontaneous Strategies

In addition to teaching and planning to support SEL, educators could also support SEL at the point of service – defined as moments where educator practices and a child's experiences meet (Jones & Bouffard, 2012; Smith et al., 2010). Educators may do this by "catching" spontaneous teachable moments and integrating SEL into their daily practice (Blyth, 2018). Integrating SEL can sometimes seem challenging for educators, especially at programs with many requirements related to academic outcomes, who may claim that SEL feels like an additional burden. But, if educators can weave SEL into their moment-by-moment interactions with children, it can increase positive SEL outcomes (Durlak et al., 2011; Jones & Bouffard, 2012). Research suggests that responsive practice and educator techniques are two ways that OSL educators may support SEL.

Responsive Practices

Responsiveness is a key component of educational and developmental contexts that some research shows is related to SEL. Responsiveness is when an educator listens and attends to what a child is signaling and then provides a response to meet that child's needs. This is sometimes characterized by reciprocity, or a "serve and return" interaction between an educator and child (Li & Julian, 2012; National Scientific Council on the Developing Child, 2004). For example, an educator can be responsive by sharing a child's focus of attention, responding to a child using supportive language, using body language such as getting on a child's level and making eye contact, and listening to a child rather than leading with directives (Center for the Developing Child, 2015). Responsive practices can influence a young person's brains architecture by strengthening neural connections related to social, emotional, and cognitive skills (Fisher, Frenkel, Noll, Berry & Yockelson, 2016).

In OSL settings, educators can be responsive to children and youth at the point of service to support SEL. Smith et al. (2016) describe that OSL educators at exemplary programs "coach, model, scaffold, and facilitate in real time as challenges occur" (p. 27). For example, they might demonstrate a social or emotional skill for a youth to emulate or coach a child in how to approach a disagreement with a friend. OSL educators also use questioning as a way to actively listen to children to understand their needs so they can craft an appropriate response based on individual differences (Hurd & Deutsch, 2018). This includes recognizing and valuing diversity and adjusting practice to reflect this respect (Fusco, 2007).

Techniques

Lastly, research shows that educators often use techniques akin to "tools in a toolbox," which they could use to support SEL. In research from K-12 settings, Jones, Baily, Brush, & Khan (2017) describe "bite-size" practices that can be easily integrated into daily interactions between educators and children. For example, an educator could give a non-verbal transition cue to help a child focus on a cognitive task or prompt a child to breathe and count to ten to manage emotions. Educators likely develop more and varied techniques as they gain experience working with children and they may also consider more nuances of a situation in choosing which techniques to employ (Walker & Larson, 2012). Techniques are a promising strategy that educators can use to integrate SEL because they can be named, identified, and learned through reflective practice and professional development. However, educators often use techniques subconsciously and more research is needed to identify which types of spontaneous strategies are used often and effectively (Jones & Bouffard, 2012).

3.1.4 Aligning SEL Supports to the OSL Context

OSL programs are well-aligned to support children's social, self-emotional, and cognitive skills. However, the national conversation about SEL is just beginning. In the past five years, we have seen a flurry of publications and funding opportunities related to SEL and a search of the Nexis database, which accesses 26,000 news and business sources, shows that mentions of SEL increased from about 400 in 2008 to nearly 3,000 in 2018 (Grant & Gilbert, 2018). The SEL

movement is just starting to impact educators on the ground; states are starting to develop school curriculum standards related to SEL and recent opinion polls show educators believe these skills are important (CASEL, 2019). It is still unclear how this growing national conversation will affect directors and staff in OSL programs.

There tends to be a pattern in how educational ideas and trends play out across the learning landscape in the United States as depicted in Figure 3.3. National conversations related to education have many originations that can be both top-down or bottom-up (Grant & Gilbert, 2018). They may stem from employers' needs (e.g., "we need to hire people that can work on teams"), current events (e.g., school shootings, elections), adults' observations (e.g., children's use of cell phone), among others. National conversations may also be influenced educators' experiences with children, such as their goals for supporting the whole child, building relationships, and promoting positive development. As conversations gain popularity, they incite policy-makers, foundations, and researchers to focus attention on understanding or improving the topic of conversation. This then trickles down to executive leadership of learning institutions and programs. Leaders may have to follow new policies, seek funding tied to grant requirements, or measure different (or additional) outcomes. As executive leadership responds to the national conversation, mid-level managers (e.g., directors or principals) may need to incorporate new requirements into their schools or programs. The manner in which directors implement these new priorities and goals can have implications for staff's direct work with children, (Aspen Institute, 2019; Allensworth & Hart, 2018).



Figure 3.3 Conceptual Depiction of the Flow of National Conversations about Education

As a part of the learning landscape, OSL programs are influenced by these national conversations. Take, for example, the STEM movement. This originated primarily in a top-down way, from a national conversation about the United States lagging behind other nations, especially in the content areas of science, technology, engineering, and math. For example, in the 1980s a seminal report, *A Nation at Risk*, painted a grim picture of how US children were poorly equipped to be leaders in a global society with technology on the rise. This conversation played a role in increasing standards and accountability measures as well as policies and grants at the local, state, and level. For example, from the late 1980s, education funding through the National Science Foundation steadily increased from about \$110 million in 1987 (current US dollars) to \$910 million in 2019 (peaking at \$944 million in 2004). Some grants specifically targeted STEM learning in OSL. Executive leaders and directors of OSL programs, in need of funding, sought these grants – many citing the flexibility of OSL as a perfect opportunity to support this content area. Researchers also began investigating STEM in OSL and have now published a number of

journal articles and reports about the benefits and opportunities of this partnership (e.g., Afterschool Alliance, 2013). The way that the STEM movement has played out in OSL is often related to explicit teaching and is structured like school (Fusco, 2014). For example, many OSL programs now include STEM in their daily activities and some have requirements for how often educators need to do STEM.

The SEL movement is nascent and at the top of Figure 3.2 as evidenced by the number of research studies, policies, and grants related to the topic that have emerged in the past few years. SEL may be in the national conversation for many reasons. It could be a backlash to the focus on high-stakes academic outcomes during the No Child Left Behind era. It could also be driven by skills identified by employers. For example, a World Bank report of 27 studies founds that across region, industry, and educational level, employers are placing more emphasis on SE skills than basic cognitive or technical skills (Cunningham & Villasenior, 2016). In addition, our society is becoming more diverse and collaborative, requiring more attention to SEL (Hugh & Jones, 2011). Researchers, policy makers and foundations have also pushed forward the SEL conversation. There have been a number of studies that examine outcomes related to SEL (e.g., Domitrovich et al., 2007; Durlak et al., 2011), including a study on the economic return on investment of focusing on SEL (Bellfield, Bowden, Klapp, Levin, Shand, & Zandre, 2015). Policy-makers have implemented SEL standards for early childhood programs in all 50 states (CASEL). The National Assessment of Educational Progress (NAEP) incorporated SEL into the annual mandated standardized test and ten of California's largest districts now bases a portion of its school performance scores on SEL outcomes (Brackenridge, 2018). Finally, funding streams are increasingly focusing on this topic. For example, the Wallace Foundation recently funded a multimillion-dollar initiative to fund SEL. In addition, there have been several federally- and privatelyfunded grants that specifically focus on SEL (Berg et al., 2017).

The national SEL conversation is an opportunity for OSL. As mentioned, OSL is a good fit for supporting SEL given its curricular flexibility and focus on relationships. But, is the national conversation trickling down to OSL in a way that privileges competencies and requirements, as has happened with so many other national conversations (Halpern, 2006)? Or, are educators' experiences with children informing this conversation and how it is playing out in OSL?

3.2 Current Study

As the conversation around social and emotional learning gains national attention, the field of OSL has an opportunity to contribute by doing what it does best to support SEL (Pittman, 2018). We need more research about how OSL educators do this in their everyday interactions with children to inform the SEL movement from the bottom-up (Vandell et al., 2015). Understanding top-down influences, as evidenced by directors' approaches to implementing SEL, might also inform how we balance the roll-out of future SEL initiatives. In this study, I conducted interviews with experienced afterschool educators to examine two research questions:

1. *How do experienced afterschool educators describe SEL in practice?*

- a. How do they prioritize SE skills?
- b: How do they *explicitly teach* SEL?
- c. How do they *plan* to support SEL?
- d: How do they spontaneously support SEL?
- 2. Is there evidence of top-down implementation of SEL in OSL programs

a. How are afterschool directors' and staff perceptions of supporting SEL similar or different?

b. How do directors approach their role in supporting SEL and how does this affect staff?

3.3 Methods

3.3.1 Sampling

The sample of this study includes 23 experienced afterschool educators, including program directors and direct-service staff, from a medium sized rust-belt city in the United States. The research team recruited the sample through the local out-of-school time intermediary organization as well as by reaching out to afterschool program directors. This sample was purposefully selected using two inclusion criteria to bound the sample based on the research questions (Miles et al., 2014; Maxwell, 2013; Seidman, 2006). The first criterion is that educators must have worked with children for at least one year at the time of the interview. This criterion is based on previous research showing that educators increase in effectiveness after one year (Clotfelter, Ladd, & Vigdor, 2005). Also, because one goal of this study was to understand a particular phenomenon – strategies educators use to support SEL, it was important to get the perspective of educators that have experience doing this (Miles et al., 2014).

The second inclusion criterion is that participants are from one of two organizations: The Boys and Girls Club of America and The Y. These two are among the most well-known national youth organizations in the country and serve a combined 13 million young people nation-wide. BGCA and The Y have similar missions - they aim to help children "learn, grow, and thrive" (The Y) and to "reach their full potential" (BGCA) regardless of background (The Y) and especially for those in need (BGCA). In addition, both organizations have generations of experience with youth programming as both started in the late 1800s. Finally, in both organizations, educators' roles are hierarchically structured, which may help to better address Research Question Two.

In addition to inclusion criteria, there was also a sample quota of two educator roles: directors and staff (Goetz & LeCompte, 1984). We sought to include an equal number of these two major subgroups. Finally, after interviewing 23 educators, the data reached saturation of information, meaning that information was repeated across the interviews (Creswell & Creswell, 2016; Seidman, 2006).

3.3.1.1 Participants

The demographic characteristics of the 23 afterschool educators in this study are depicted in Table 3.1.¹⁴ Educators were split about equally between role (10 directors and 13 staff), and between organizations (13 at the BGCA and 10 at The Y; see Figure 3.4). Participants were majority female (83%) and majority white (83%). The average age of participants was 36.2; directors were about two years older than staff, on average. Directors were more majority full-time employees while staff were majority part-time.

¹⁴ All participant names are pseudonyms

Role	Director (10)	Staff (13)	
	5 BGCA	8 BGCA	
Organization	5 YMCA	5 YMCA	
	2 Madison Place	4 Madison Place	
	3 North Oak	4 North Oak	
Program	2 Beechwood	4 Beechwood	
	2 Center South	1 Center south	
	1 Western	0 Western	
Condor	8 Female	11 Female	
Genuer	2 Male	2 Male	
Dago	9 White	10 White	
Kace	1 Black	3 Black	
Average Age	37.4	35.2	
Average Years of Experience	18.7	10.3	
Average Years at Program	7.1	4.7	
Average Years in Current Position	3.6	3.7	
Work Hours	8 Full Time	4 Full Time	
WORK HOURS	2 Part Time	9 Part Time	
	6 Masters	3 Masters	
Education	3 Bachelors	6 Bachelors	
Education	1 Associates	2 Associates	
	0 High School	2 High School	
	7 Program Provided	3 Program Provided	
SEL Training	2 Independently Sought	4 Independently Sought	
	1 None	6 None	
Response to:	9 Yes	9 Yes	
"Are you an Educator?"	0 Somewhat	2 Somewhat	
Ale you an Educator?	1 No	2 No	

Table 3.1 Participant Demographic Information by Role





Educators in this sample were very experienced. Directors had 18.7 average years of experience ranging from 7 to 50 years. Staff had an average of 10 years of experience ranging from 3 to 20 years. Educators had been working at the current program for an average of 5.7 years and in their current positions for 3.7 years. Again, this was slightly higher for directors with about seven years of experience at the program and nearly five in their current position compared to staff that had an average of about four years at the program and in their current position. Educators described their other experiences working with children including teaching in formal K-12 settings, summer camps, special education, tutoring, babysitting, and working in other non-profit organizations. Three participants had actually attended the program at which they now worked.

The educational background of participants was also diverse. Nine educators had a master's degree ad nine had a bachelors, with more directors having an MA and more staff having a BA. The most common degree of study was education with 2 educators' degrees in Early Childhood, 5 in Elementary, and 2 Secondary as well as 3 with a Special Education certificate and 2 with an Education Administration certificate. In addition to degrees in education, participants also had degrees in psychology, social work, and other content areas (e.g., literary and cultural studies, wildlife studies). Three educators had an associate degree and one had a high school degree. Of these educators, two were currently rolled in a bachelor's degree program for education.

3.3.1.2 Sites

Educators worked across five different programs in BGCA and The Y.¹⁵ BGCA programs included North Oak and Madison Place. North Oak was run by a central office that also oversaw

¹⁵ All program names are pseudonyms

six other programs. Madison Place was a stand-alone program with executive leadership, directors, and staff all working at one place. Both programs sought funding largely through grants as well as through some donations and membership dues. The Y programs included Beechwood, Center South, and Western. All three programs were run by a central office that oversaw eight Y branches and 40 afterschool programs that took place at local schools. Regional directors at this organization supervised multiple sites and site directors supervised multiple staff. These programs sought funding largely through membership fees and some grant funding.

The daily structure for children was similar at both organizations. Program activities included homework help, snack, enrichment, and active free play time. Also, both programs served children in Kindergarten through 6th grade. Beechwood served children up to 8th grade and Madison Place served youth up to 12th grade.

3.3.2 Data Collection

Interviews took place between October 2018 and February 2019. Two researchers were present at all interviews. Interviews occurred in person at the site where the interviewee worked. In four instances, interviews took place in person but not at the worksite (e.g., coffee shop, library). In three instances, interviews occurred online via video-call software. During interviews, researchers took hand-written notes and audio-recorded conversations. We also had regular meetings throughout the data collection process to discuss and write memos of interpretation. Audio recordings were transcribed for analysis and notes from interviews were also used to supplement transcripts during data analysis.

A semi-structured interview protocol guided interviews and included four main components (see Appendix F). Using a semi-structured protocol allowed for pre-determined questions as well as flexibility for the interviewers to also ask probing questions (Robson, 2002; Berg, 1998). In addition, the use of interviews as the instrumentation device allowed us to gather information based on participants perceptions and in their own words (Miles & Huberman, 1994).

The first interview component was an activity to prompt reflection about participants' jobs. This was based on a meme in which participants described their job from six different perspectives – the community, the children, their boss, parents of the children at the program, their ideal description, and then an actual description (e.g., "What do you think you do?", "What do you actually do?"). Responses from this activity were used to understand the extent to which participants talk about SEL as a part of their job without prompting for SEL.

Next, we led interviewees through a video-based protocol by showing two short (1.5minute) video clips of scenarios in which children interacted with adults (See Appendix G for full description of the two clips). The first video depicted 2nd graders doing a gardening activity. In the clip, one child takes another child's shovel prompting the first child to cry. The second video depicted a small group of 5th graders when they first arrived at the afterschool program. The staff asks about the children's day while also stapling papers and the group jokes around with one another during the conversation. We chose these two videos because they both captured a moment that could be interpreted through an SEL lens but was also broad enough to elicit other reflection (e.g., about academic content). Additionally, clips were edited so that viewers could not see the entirety of what educator did to handle each situation. This was to spark conversation about strategies interviewees might use if they were in the situation. Finally, these two clips captured interactions with the age group that interviewees worked with (grades K-6).

After each video, interviewers asked a series of questions adapted from a protocol developed by Walker & Larson (2012). We asked the first two questions before prompting about

SEL ("What did you notice?" and "What opportunities for learning did you see?"). We asked two more questions after prompting about SEL ("What opportunities for SEL did you see?" and "What would you do if you were in this situation?"). The video-based protocol elicited reflection about point-of-service SEL strategies. This type of reflection would be challenging to do in an actual OSL setting because it would disrupt authentic adult-child interactions (for example, by interrupting a conversation between an adult and child to ask the adult to reflect on the situation).

The third part of the interview protocol included open-ended questions related to how the educators used explicit teaching, planned strategies, and spontaneous strategies to support SEL (Miles et al., 2014). We asked this in between prompts about the video.

Finally, the last section of the interview included questions about interviewees prior experience and education related to their current role in the afterschool program. This also included a question specifically about SEL-related training participants had received.

3.3.3 Data Analysis

3.3.3.1 Coding Process

The two researchers that conducted interviews also created the coding scheme and coded all interviews. We created the coding scheme through an iterative process that was both deductive and inductive (Miles et al., 2014; see Appendix H). We based a priori codes related to SE skills on the Smith et al. (2016) framework (emotion management, empathy, teamwork, responsibility, initiative, and problem solving) and also the CASEL competencies (self-awareness, selfmanagement, social awareness, and relationship skills). Responsible decision-making was originally included in the coding scheme but was eliminated during data analysis because no educator mentioned this skill exclusively. Later in the data analysis process, we grouped these skills into three categories (social, self-emotional, and cognitive). These categories are imperfect but help to parse data for ease of understanding. The a priori codes related to staff practices were also based on the Smith et al. (2016) framework (content sequence, safe space, responsive practices) as well as the Blythe (2018) framework of "caught" and "taught." During the analysis process, we grouped these practices into the categories of explicit teaching, planned strategies, and spontaneous strategies.

We also engaged in iterative cycles of coding (Saldaña, 2013). In an initial round of coding, we each read three transcripts to test the a priori coding scheme while also allowing codes to emerge from the data (Miles et al., 2014). We met to check understanding and to compare emergent codes. A revised coding scheme included more detailed definitions and examples of the a priori codes and an emergent code for relationships, as this theme was common in the data. In addition, we added a number of descriptive codes as indicators for analysis. These include participant descriptors (e.g., experience, current job), program descriptors, negative comments, responses to the video prompt, and "other" SE skills not captured by a priori codes. The "negative" flag applied if participants said something about another code but in a negative way (e.g., "They didn't listen to the kids at all"). Finally, we consulted an expert in the field of out-of-school learning and a researcher from outside the field of education who provided feedback on the coding scheme.

Once the coding scheme was finalized, researchers double-coded all 23 interview transcripts using an online qualitative software, Dedoose. In this round of coding, we identified segments of data for analysis (Miles et al., 2014). Data was segmented into 846 excerpts averaging 428 characters (roughly 63 words 2-3 sentences). Excerpts ranged from one sentence to about one paragraph. When the flag for "other SEL" skills was applied, we created a memo with a description of the emergent code for later analysis. While coding, we met periodically to ensure that we still

maintained a consistent understanding of the codes. Once coding was complete, we met to discuss discrepant codes. This process of collaborative coding increased reliability (Saldaña, 2013).

A final cycle of coding allowed us to segment data into a smaller number of categories for ease of interpretation (Miles et al. 2014). In addition, we coded the "other" SE skills that participants mentioned into common categories. We continued to have regular meetings and agreed on all detailed codes that fit within broader categories.

3.3.3.2 Analysis Process

The analysis process was also iterative as findings emerged from the data. The first author led the analysis process and met with the second researcher throughout. We began by using matrices to condense data and make meaning of coded excerpts (Miles, Huberman, & Saldaña, 2014). Initial matrices were used in an exploratory fashion as a heuristic for sorting through and understanding data (Miles et al., 2014). These included descriptive displays (e.g., educator demographics, interviewee responses), conceptually-ordered matrices (e.g., SE skills), and roleordered matrices (e.g., directors and staff). As a validity check, we met with an expert in the OSL field met to discuss preliminary findings.

Next, we looked systematically at information in order to draw conclusions. This included counting the number of participants that mentioned SE skills and practices. Another strategy we used was to note patterns that emerged in excerpts about explicit teaching, planned strategies, and spontaneous strategies. For example, 116 excerpts were coded as "planned strategies." We agreed that these responses fit into three main themes: group work, games, and other content. To investigate differences by role, we created contrast tables to compare characteristics of directors and staff. We also engaged in a process of sorting through excerpts to test if the patterns gleaned from throughout the analysis process were meaningful.

3.3.3.3 Reliability and Validity

Throughout the coding and analysis process, we intentionally created reliability and validity checks. Reliability refers to consistency across researchers and projects (Gibbs, 2007). Leveraging multiple researchers, as in this study, helps to increase the clarity of definitions and findings as well as provide a reliability check resulting in greater credibility (Miles et al., 2014). We had regular meetings throughout the interview, coding, and analysis phase of this process. Conversations allowed us to maintain common understanding of codes, prevent drift during the coding process, and broaden perspectives of analysis (Creswell, 2014; Miles et al., 2014). This also allowed for multiple observers' accounts to converge and for regular peer reviews at each step. In addition, we had regular intercoder agreement check-in meetings and discussed any discrepancies during the coding process. We also consulted with an expert in the OSL field throughout the coding and analysis process as well as an "external auditor" from outside the field of education (Creswell, 2014, p. 202).

Validity is the extent to which findings make sense and are credible. To address this, we incorporated the perspectives of 23 different educators across five programs and two organizations. Interviewing multiple individuals from five programs allowed access to many viewpoints in the analysis (Creswell, 2014; Miles et al., 2014). In addition, during the coding and analysis phase of the study, we investigated findings using multiple sources of evidence within the coded data. For example, the researcher calculated code counts and pulled quotes to ensure findings were well-substantiated. In the following sections, we aim to provide a rich description to give readers insight into participants' voices.

Finally, acknowledging researchers' backgrounds gives insight into interpretation (Milner, 2007). Both researchers that conducted interviews, coded, and analyzed data were white, female,

and both had previous experience working with children and youth in out-of-school settings (e.g., afterschool programs, libraries, summer camps) at the staff and director level. Their positionality gave both personal insight into topics of conversation and also shaped their interpretation.

3.4 Findings

3.4.1 Research Question One: How Do Experienced Afterschool Educators Describe SEL in Practice?

Four sub questions give insight into how afterschool educators describe the SEL supports they use regularly as depicted in Figure 3.3. First, related to the SE skills they talk about. Second, how educators explicitly teach about these skills. Third, the intentional plans educators use to support these skills. Fourth, how educators spontaneously support SEL through teachable moments. Theses analyses provides a basis for how we might inform the national SEL conversation from the bottom-up.

3.4.1.1 How Do Experienced Afterschool Educators Prioritize SE Skills?

All participants in this study mentioned at least one type of social and emotional learning skill during their interview. And, nearly all educators (18 out of 23) mentioned social and emotional learning without prompting from interviewers. Two themes emerged related to how educators talked about prioritizing SEL. First, as it pertains to their jobs working with children. Second, related to what educators noticed when watching video clips.

SEL as a Job Responsibility

When asked how they and others would describe their job, about half of educators explicitly stated their responsibilities related to supporting social and emotional learning (see Table 3.2). This was without prompting from interviewers. For example, one staff described that his job is to teach *"basically everything they don't teach them in school"* (Dave).

	Unprompted SEL in Job Description	Prompted SEL Supports	Total
Social	8	22	23
General Social Skills	3	0	3
Relationship/ Teamwork	5	18	19
Social Awareness/ empathy	0	18	18
Self & Emotional	2	15	17
Self-awareness	1	13	13
Self-management	2	5	6
Emotion-management	1	11	13
Cognitive	5	6	8
Problem solving	1	0	1
Responsibility	2	5	5
Initiative	4	2	5
Other SEL	10	14	17
Total	13	23	23

Table 3.2 Number of Participants that Mentioned SEL Skills Related to Job Description

Educators mentioned socials skills most often when talking about their job responsibilities. In particular, educators talked about relationship and teamwork skills. This includes skills such as communication, listening, resolving conflict, sharing, collaboration, and relationship-building. One educator described her role as a "negotiator" and described how she helps children work through conflicts they have with one another. Next, educators talked about cognitive skills and especially initiative. This related to working through challenges to complete a goal (e.g., finishing a project). Only two educators mentioned self and emotional skills when describing their jobs before prompting about SEL. We also prompted interviewees to reflect on the type of SE skills they believe they support when working with children (see Table 3.2). Again, the most common competency educators mentioned were social skills and nearly all educators mentioned that they use strategies to support relationship and teamwork skills as well as social awareness and empathy skills. This was closely followed by supports they use to teach self- and emotional- skills. In both cases, educators described situations during which they gave support to children who were "fighting" or upset about something. Educators did not mention cognitive skills as often when talking about strategies they use to support SEL.

Educators also used other language related to SEL, not captured in the a priori codes (see Table 3.3). Ten participants talked about other SE skills when describing their jobs and 14 participants mentioned other skills when talking about how they support SEL. The three most common "other skills" were 21st century skills, character skills, and life skills. These three terms are often used as umbrella terms, similar to SEL, that incorporate a variety of skills related to social, emotional, and cognitive competencies.

Skill	Educator Count	Description
21st Century Skills	9	STEM, critical thinking, "21st Century Skills"
Character	9	Values, attitude, sportsmanship, anti-bullying
Life Skills	7	Manners, "soft skills"
Career Readiness	6	Preparing for the workforce, looking for jobs
Developmental	6	"Whole child", identity, interest, self-expression, resilience
Community	5	Community service, citizenship, working with mixed ages
Confidence	5	Confidence, getting outside of one's comfort zone
Educators' SEL	2	Adults that work with children need SEL too

Table 3.3 Other SEL Skills Educators Identified

Noticing Opportunities to Support SEL

A second theme related to how educators noticed SE skills when watching clips. In the interview protocol, we asked two questions before prompting about SEL and then two questions afterwards. A greater number of educators talked about SE skills after prompting (see Table 3.4).

	Video 1: Gardening		Video 2: Hanging Out		
	Unprompted SEL	Prompted SEL	Unprompted SEL	Prompted SEL	Total
Social	14	17	9	10	23
General Social Skills	0	1	2	1	4
Relationship/ Teamwork	13	17	7	9	23
Social Awareness/ empathy	4	4	2	4	11
Self & Emotional	7	12	5	8	17
Self-awareness	4	10	4	7	16
Self-management	3	0	1	2	6
Emotion-management	3	6	1	2	8
Cognitive	1	2	4	2	8
Problem solving	1	1	0	0	2
Responsibility	0	1	3	2	6
Initiative	0	0	1	0	1
Other SEL	2	2	5	3	11
Total	17	20	14	15	23

Table 3.4 Number of Participants that Mentioned SEL Skills in Response to Videos

The most common SEL skill educators noticed in both video clips was relationship skills and teamwork, before and after prompting about SEL. For example, after watching video one, an educator said:

"The opportunity was learning how to have clear communication about the disagreement... I think that I would have had Jacob come over-- because that I'm sorry, it just doesn't work. It doesn't cut it. And so, "Let's come over here. Let's talk about it together." That would have been the learning I think that I would've liked to have seen." (Linda)

The second most endorsed skill educators noticed in both videos, before and after prompting, was self- and emotional- skills. Of these skills educators talked most about selfawareness, which relates to recognizing emotions, thoughts, values and strengths as well as having confidence. The number of educators that talked about these skills increased more than other skills after prompting. Eight more educators talked about self- and emotional-skills when prompted compared to only four more that talked about social skills and one fewer that talked about cognitive skills.

Cognitive skills came up the least in educators' responses to video clips. More educators talked about these skills, and responsibility in particular, related to video two. This may be related to the scenario depicted in the clip (e.g., a conversation about finding a job).

3.4.1.2 How Do Experienced Afterschool Educators Explicitly *Teach* to Support SEL?

A total of 15 educators described explicitly teaching SEL content and 4 talked about sequencing their curriculum lessons (see Table 3.5). The extent to which educators talked about explicit teaching related to the program at which they worked. At North Oak, directors described a grant they received to purchase an SEL curriculum, The Promoting Alternative Thinking Strategies (PATHS). PATHS is an evidence-based program created in the 1990s that includes sets of scripted lessons targeting SEL competencies. Directors at North Oak chose this particular curriculum based on a recommendation of a colleague at another OSL program. One director commented that "we wanted to make sure that we're doing it right and doing it in a way that was really going to help these kids" (Linda). Another director from the program added that she is "really looking forward to it because our kids definitely, definitely need some social and emotional-- more strategies to how to handle things" (Julianne).

Explicit Teaching	Planned Strategies	Spontaneous Strategies
Explicit SEL Content (15)	Culture & Climate (22)	Responsive practices (23)
-Purchased curricula	-Staffing	-Questions
-Staff-created curricula	-Norms & routines	-Individualization
-One-off lessons		
	Activities (16)	
Content sequence (4)	-Group work	Techniques (23)
	-Games	-Taking a break
	-Other content	-Perspective-taking
		-Leveraging peers
	Building relationships (23)	-Independent practice

Table 3.5 How Experienced OSL Educators Support SEL

At Madison Place, social emotional learning is already a part of current program offerings through a staff-created curriculum. Regular programming includes a "Life Skills" class that children can choose to participate in as program members. Historically, these classes were required, but now they can be substituted with other program offerings (e.g., robotics or art classes). One staff and one director run these year-long courses, which are separated by gender and by age group. Course leaders are tasked with creating the lessons that focus on SE skills, such as expressing emotions and social interactions. For example, one staff described a lesson where she had children draw strategies they use "to cope when they were feeling like mad, angry, and upset" (Chalise). Another staff mentioned weekly discussions focused on silly topics to help children learn "those soft skills to have a discussion respectfully with people that are not agreeing with them" (Dave).

Finally, another method some programs used to explicitly teach SEL was to create one-off lessons targeted at a specific SEL need or program requirement. This was most common at Beechwood, Center South, and Western. As one director said, "staff will try and look up some lessons or an activity that will deal with [an SEL skill] just to help those children" (Julie). Another director described that she tries to "to make my activities geared towards my kids. So I will ask them like, 'Listen. We have to do a 'global inclusion' lesson. Is there anything that you guys want *to do?* ''' (Danae) These types of lessons focused on explicitly teaching SE skills but were not as tied to a curriculum or structured program compared to North Oak or Madison Place.

Directors and staff at only one program, Madison Place, talked about sequencing instruction of SEL. These educators talked about the long-term development of skills they hope to foster among children that attend the program across consecutive years. One director from Madison Place said, "So we have a baseline of skills that we want to make sure they get before the next program... I mean we assume that a kid's going to be with us for 12 years. So, when we develop curriculum, we develop it with that spectrum in mind" (Joe). Another Madison Place director echoed that, "Hopefully, that will lead to more deep questions as we go throughout the year. And even with the little ones, some, by the time they get to be older, that they're comfortable having those conversations" (Chris). Finally, one Madison Place staff described this in action. He had been running an open technology lab on Friday nights for the past four years. This year, he started giving youth the opportunity to run the labs. He mentioned the informal sequencing and modeling he used to support youth to take on this new responsibility.

3.4.1.3 How Do Experienced Afterschool Educators *Plan* to Support SEL?

Educators also described elements of their programs that they intentionally cultivate in support of SEL. This emerged in three main ways: culture and climate, planning activities, and building relationships (see Table 3.5).

Culture and Climate

Educators talked about creating a positive culture and climate through staffing and norms and routines.

Staffing. Many educators talked about the importance of having enough staff available to best support SEL. Three programs had strict rules for staying in "ratio" to meet accreditation requirements. In fact, this was such an important feature that program directors often went to different programs to cover for staff that "called off" work so they could meet the ratio requirement. Other staff talked about the challenges of not having enough adults in a room. For example, one staff said, "I mean, so many times we're trying to get through an activity, but if there's only one adult in the room and there's like 10 kids, it's impossible to give your attention to all of those kids at once" (Danielle). This topic also came up often in educators' reactions to the gardening video, during which the clip depicting only one staff with many children. Educators said things as, "When you have 17 kids looking at you in an environment like this. So it just looks like she could use some support" (Samantha) and "So yeah, she's trying her best, but it's tough. I've been there" (Danielle).

Educators also talked about planned supports related to professional development about SEL. Sixteen educators had some training specifically related to social and emotional topics (see Table 3.1). About half of educators received this training from the program at which they worked through webinars, conferences, director-created sessions, or from outside agencies. An additional six educators talked about training they received from outside their programs, through higher education or opportunities they sought independently. Both directors and staff stated that they wanted to learn more about SEL. One director said, "*I feel I don't have enough experience to speak to maybe what the best practice*" about social emotional learning (Julianne). Other directors acknowledged the challenge of finding time for SEL training (e.g., "*because of time constraints, there really isn't much offered to them*" Linda). Some staff also shared frustration with the current topics of training. They said things like "*honestly… some of [trainings] are common sense*"

(Danae) and "I feel like if they did something based on your experience, maybe that would be a way to make it more interesting or relevant" (Christina).

Norms & Routines. Educators described the importance of creating a structured environment in support of helping children learn social and emotional skills at their programs. For example, a few educators described their programs as "organized chaos" during which they provide organization while also giving children agency. For example, one director described:

"I prefer to keep it at least-- control the chaos in that. Maybe we have board games at this table, blocks at that table, dramatic play over here. Something like that instead of just go to the gym and do free play, and the kids are all getting hit in the head with basketballs and stuff like that... And we try to keep it like a general schedule so that the kids know what's coming next. So, we do our open time, homework time at the same time, so the kids know that they have to at least find something quiet while those that are working on homework, work on homework. Then, we go into snack, and then they know we're going to do something." (Samantha).

In addition, when educators watched the video clips, many noted norms that existed in their program that they would want to implement in the clips to proactively support SEL. In response to the first clip, educators mentioned the need to establish more ground rules and to focus on safety. As one staff said, *"there were kids running everywhere, and that's always a difficult situation when it's really chaotic and you're outside and it's not like structured"* (Emma). Another described that she would *"stop everyone and maybe review the expectations again"* to prevent future conflicts between children (Julianne). In the second clip, educators talked about prohibiting cell phone use and wanting to rearrange the space to facilitate a more inclusive conversation. For example, one educator talked about a routine she would use to support social skills in the clip:

"I would probably make-- that conversation they had an everyday ceremony kind of thing. Maybe when they first come in, and everybody can talk about their day...So the kids would talk about their high yesterday and their low yesterday. And then we would talk about how we could have a better day today. So, something like that." (Christina)

Educators also specifically described how they aimed to create a safe space. One director noticed the educator in the clip "appears like they are aware of the community that they're in, the kids can relate to him ... I think is definitely inviting for the kids and helps them get more comfortable with their environment and the people that are there" (Michelle). Educators also talked about encouraging children's SEL to promote a safe space by being respectful, kind, and welcoming to one another. Educators said things like: "being kind, and being a good friend, and encouraging, and including everyone. Because that was a big thing that I saw last year, was they weren't very kind, they would just stick to their group" (Emma); "A lot of that is just being able to see that people can be different and that's okay" (Dave); and, "You have to create an environment that's going to welcome that [new] kid the first day" (Joe).

Activities

Another planned strategy that educators talked about was creating activities during which they knew SEL moments would emerge. For example, one director said, "those social and emotional skills, those other skills, cooperation and all are attached to something that's more of a tangible, planned activity (Joanne). Many educators mentioned how they planned for this to happen during group activities. They described situations they anticipated to arise, such as peer conflict or frustration, and they were ready to jump in and respond to the teachable moments that would inevitably happen. There were a few common types of activities that educators mentioned they planned to support SEL. One staff said:

"the most common thing we do is different games in the gym. Just promoting teamwork and sportsmanship. Because a lot of them have really bad sportsmanship. And they hate to lose. So just giving them a game that they can play where they have to think it's okay if I lose, and how will I express myself if I do lose and just being able to work on a team and so they can take turns and know-- everybody has a role and it's okay to be in that role and it's okay if you do good. It's okay if you do bad. It's just a game at the end of the day. (Christina).

Educators also mentioned planning activities related to arts, media, cooking, or history to elicit SEL. In particular, a few talked how SEL moments would happen during STEM activities. One director said, "*A lot of that revolves around STEM because it's just such a hot topic right now, but we do pull in collaboration in critical thinking*" (Samantha). Another staff (Allison) talked about self- and emotional- management during a STEM activity in which children had to touch a soap bubble without popping it. This activity was frustrating for children and the staff helped them to calm down and then persist to complete the activity.

Relationships

Finally, educators talked about creating a program culture rich in relationships, through which they might support SEL. All educators talked about the importance of relationship building during interviews and this emerged as one of the main priorities of OSL educators. As one director said, "we really, really, really put so much emphasis on relationships" (Joanne) and another commented that "to me, you don't run quality programs if you're not connected with the youth" (Linda). Educators talked about building relationships by getting to know children and youth. This occurred during program activities as well as during unstructured time. For example, an educator

described "*if I am playing ping pong, I'm also probably talking to the kid about how their day was, and how was school, or why are they tired.*" (Dave). Directors from both organizations emphasized relationships during staff training. For example, two directors said:

"Whenever we start a new tutor ... we always say, 'Go do homework help for two weeks. Talk to the kids. Get to the kids. Sit down,' because you can get to know the kids a lot when you're helping them with homework. We say, 'And if homework's over, just go sit down and talk to them. Go to where they're playing basketball. Go play basketball with them. Go do something, get that rapport with them. '" (Linda)

"One of our biggest things that we stress is that we don't want you to just supervise the kids... We want you to learn about them. We want you to get to know their parents... we want to engage and build the relationship with the families and with the kids. (Samantha)

Some educators talked about establishing relationships so that they can support learning, including SEL. An educator talked about how building relationships helps "to get the kids to buyin to whatever you're doing" (Linda) and another said, "if you're not taking the time to establish those relationships, you're going to fall short" (Chalise). Also, when asked about the strategies they use support social emotional learning, a few educators responded by saying they aim to build relationships. For example, a director said, "to me that's one of the most important [SEL] things we can do is just sit down and listen" (Linda). Another director described:

"I'm able to have a less formal discussion with them, then if they need something then they're comfortable talking to me... those are pre-planned strategies so whether it is they're having a great day or a bad day, they're used to coming and talking to me, because you can have a conversation that's deeper." (Dave) Relationships emerged as a salient aspect of afterschool educators' jobs and a way for them to create a culture and climate in support of social and emotional learning.

3.4.1.4 How Do Experienced Afterschool Educators Spontaneously Support SEL?

All 23 afterschool educators talked about spontaneous moments through which they support social and emotional learning (see Table 3.5). Staff and directors alike agreed that "the spontaneous strategies are constantly taking place" (Julianne) and that they "probably do the spontaneous the best" (Joanne). For example, one director said, "it's easier with kids in social and emotional to be in the moment and to fix it right then and there" (Marykate). Spontaneous strategies also came up when educators reacted to the two video clips (see Table 3.6). After being prompted to think about SEL, nearly all educators talked about a spontaneous strategy they would use to support SEL if they were responding to the situation in the clip (see Table 3.7).

Educators talked about two common situations during which they spontaneously catch teachable moments to support SEL. These included conflict between peers and when a child is upset. For example, one director explained:

"Their problem might be, "Sally is not letting me play with her. And I want to play with her," those kinds of problems ... Sometimes it's just, 'It seems today you're a little tired. Do you not feel well today? You're really quiet.' And then, that leads to perhaps solving some problems or helping gain insight." (Joanne)

Seven participants talked about peer conflicts; these related to sharing, feeling excluded, bullying, physical altercations, and arguing. In one case, a staff also talked about peer conflicts related to a child with special needs. Six educators talked about catching SEL moments when children were upset (e.g., *"I solve mini-meltdowns. I solve big meltdowns"* Danae). Educators described children's challenges caused by situations at home or at school as well as frustration

during program activities. One educator described a child's reaction to losing a game: "*He lost, he just broke out and snapped because he didn't win. And he broke out and left the room and started crying*" (Nathan).

	Video 1: Gardening		Video 2: Hanging Out		
	Unprompted	Prompted	Unprompted	Prompted	Total
Explicit Teaching	0	0	0	0	0
Explicit SEL Content	0	0	0	0	0
Content	0	0	0	0	0
Planned	5	18	7	15	20
Culture & Climate	4	18	3	15	18
Activities	1	1	0	1	1
Relationships	1	1	4	13	13
Spontaneous	7	19	4	18	19
Responsive Practices	6	18	4	18	18
Techniques	5	18	4	8	10
Total	9	19	7	18	20

Table 3.6 Strategies Educators Noticed in Response to Video Clips

Table 3.7 Strategies Educators Use in Practice

	Unprompted SEL in Job Description	Prompted SEL Supports Total	
Explicit Teaching	3	15	15
Explicit SEL Content	3	15	15
Content sequence	0	4	4
Planned	5	23	23
Culture & Climate	2	21	21
Activities	3	15	16
Relationships	3	22	23
Spontaneous	5	23	23
Responsive Practices	1	21	20
Techniques	5	23	23
	8	23	23

Responsive Practices

Educators often used responsive practices to teach SE skills. Responsive practices included asking questions and recognizing unique needs of children. First, educators used questions during moments of peer conflict to help children "*figure out what happened, why it happened, and having*

[children] work it out" (Marykate). They used questions such as, "Did you know that she wanted to play with you? No. Did she know you wanted to play just by yourselves? No. Did you tell her? No. Do you think you might have told her?"" (Joanne). Educators also used questions to check in with children – either about why they seemed upset, or to build a relationship. One educator stated that asking questions is "typically what I do. 'So, your day was good. What was good about the day?' And, "Was it that you had breakfast, or did you eat something that you liked today? Or did you get a good grade on your homework?'" (Chalise).

Educators also demonstrated responsiveness in how they recognized and responded to individual differences. One director said:

"Spontaneous strategies yeah. I think it happens all the time, and I don't think a lot of time they're planned out. I think a lot of times... you work with what you know with the kid. I knew there were kids ... I had to have that shock value. There are kids that you've got to coddle, and there's kids that you had to kick in the ass. And you had to know when it was time to coddle and when it was time to kick in the ass, and maybe that kid that's always kicked in the ass and there's one day that he just needed coddled or vice versa... There's a thousand of opportunities for learning if you know their personality, if you know their background, if you know what their strengths and weaknesses are" (Joe).

Responsive practices were especially common when interviewees were prompted about SEL after watching video clips. Educators noted the practices they saw the educators use and offered suggestions for what to do differently. For example, many educators attended to the body language of the educator in video clip two. They noted he could have turned his body to face the children or made more eye contact.

Techniques

Finally, educators described the techniques they use to spontaneously teach SEL. Educators talked the techniques they used similar to "bite-sized practices" as described by Jones et al. (2017). One common technique was to have children take a break from a situation to help them calm down or to give them space to process what had happened. One educator described that children in her program "can have that chance to go with an adult, maybe leave the room, walk down the hallway, or sit on a bean bag chair... if they're having a really rough day, we'll pull them aside and let them just get it all out" (Christina).

Another technique that educators talked about was related to perspective-taking. Educators helped children to think about how their actions might affect others. For example, an educator might ask a child *"How would you feel if this was happening to you?"* (Danae). Through these conversations, educators scaffolded children's ability and inclination to consider others' perspectives.

Some educators talked also about leveraging peers to help support SEL. One staff said, "If you're seeing someone crying, you can even get other kids involved in trying to say, 'Okay, what's going on?' Almost like peer intervention" (Linda). Another educator talked about how she has children share when they notice a peer doing something kind in order to promote SEL related to social and self- and emotional-skills.

A final common strategy was to give children opportunities to practice social and emotional skills. For example, at one program, staff created a "friendship bench" and used it as a method for children to resolve conflict independently. An educator described "we send them to the friendship bench, and they are supposed to work it out on their own. And then we go out after a while and
they will say, 'Well, we understand why we were fighting, and we've all forgiven each other' and talk about whatever had happened" (Claire).

3.4.2 Research Question 2: Is There Evidence of Top-Down Implementation of SEL in OSL Programs?

To address the second research question, we analyzed differences in how educators talked about SEL by role. The goal of addressing this question was to understand how the national SEL conversation is trickling down to directors and staff in OSL programs.

Educators in this sample fell into role categories based on how they described the amount of time they worked with children and how much control they had over program-wide decisions (see Table 3.8). In this sample, directors had responsibility over multiple staff in their program or multiple directors at different programs. They tended to spend less time directly with children and they had more control over program-wide decisions compared to staff. Directors described their general job responsibilities related to paperwork, making connections to external partners, "*playing the principal role*" (Dave, Julianne) and filling in whenever and wherever needed. Most directors spent some time with children throughout the week – such as when they covered for absent staff or to teach a lesson. However, their role often took them away from direct service work. Staff spent a high amount of time working directly with children and youth and had less control over program-wide decisions. Their jobs typically included things like helping children with homework, leading lessons, supervising during unstructured time, and playing games. Some staff had administrative duties, such as completing lesson plans or providing guidance to other part-time staff. However, their role was primarily focused on being with children. Analysis of this question is split into two sub questions. First, the similarities and differences that emerged by role. Second, how directors approach their role in supporting SEL.

	Direct Time	Control over	% of Respondent-Endorsed Strategies by Role			
Role	with Children	program-wide decisions	Explicit Teaching	Planned Strategies	Spontaneous Strategies	
Director	0 High 4 Medium 6 Low	6 High 4 Medium 0 Low	100%	70%	100%	
Staff	13 High 0 Medium 0 Low	0 High 0 Medium 13 Low	38%	69%	100%	

 Table 3.8 Participants by Role

3.4.2.1 What Similarities and Differences Emerge by Role?

When talking about SE skills, educators in both roles equally mentioned supporting social-, self- and emotional- skills. Directors, however, seemed to focus more on cognitive skills compared to staff (see Table 3.9). In particular, about 20-30% more directors endorsed problem solving and responsibility than staff.

	Directors (10)	Staff (13)
Social	100%	100%
General Social Skills	0%	0%
Relationship/ Teamwork	100%	100%
Social Awareness/ empathy	80%	92%
Self & Emotional	90%	100%
Self-awareness	90%	77%
Self-management	80%	85%
Emotion-management	70%	85%
Cognitive	70%	54%
Problem solving	30%	0%
Responsibility	50%	31%
Initiative	20%	31%
Other SEL	100%	85%

Table 3.9 Percent of Educators That Endorsed SEL Skills by Role

Directors and staff also talked about explicit teaching to different extents (see Table 3.8). All 10 directors talked about teaching SEL content while only 5 of 13 staff (38%) talked about this. Directors talked about how their programs teach SEL (e.g., through a scripted or staff-created curricula). In addition, many directors talked about how one of their primary roles was to create curricula and lessons. Though educators in general did not talk as much about sequencing SEL, those that did also tended to be directors.

Planned and spontaneous strategies were equally mentioned across roles (see Table 3.8). Directors and staff both said they found moments to support SEL through planned activities (e.g., games or non-SEL related lessons). And, educators in both roles talked extensively about the importance of relationships. In addition, directors and staff talked about using spontaneous moments to support SEL including both responsive practices and techniques.

Two differences emerged in how educators talked about the planned strategies related to culture and climate. When talking about norms and routines, directors were more likely to talk about structural features (e.g., program rules, regulations, ratios, safety and expectations) compared to staff. For example, when responding to video clips, one director said: "*I wouldn't be sitting here, and I'd also be standing over there so I can see the whole room because he has his back to how many kids now, and so I don't know what they're doing over there, which stresses me out even in this tiny, little video"* (Samantha).

Another difference related to culture and climate was about SEL training. More directors received SEL training through their current job and directors also played a role in choosing the SEL training their staff would receive. One director described that part of her job is to take what she's learned from webinars and "go out and talk to [staff], hands-on type of training" (Linda). Other directors talked about the outside organizations they brought in to talk about SEL topics such as "trauma and the impact that it has on kids" (Samantha) or "conflict resolution" (Dave). Additionally, some directors provided one-on-one coaching for staff about how to support SEL. For example, one director said, "you can be taught how to identify teachable moments and then

how to react in those teachable moments" (Joe). Directors at Madison Place and Western had regularly scheduled meetings with each of their staff and the director at North Oak tried to "touch base" with all staff before the children arrive. When staff talked about training related to SEL, they talked more about experiences they've received from outside the program. This included through their higher education as well as seeking out additional SEL-related trainings. For example, one staff summarized how her background has impacted her knowledge of SEL: "I majored in sociology and I feel like that's really helped me understand behavior and become more emotionally intelligent when dealing with kids… I've gone to a lot of trainings …. I've just been building it as I go along" (Danielle).

3.4.2.2 How Do Directors Approach Their Role in Supporting SEL and How Does This Affect Staff?

Finally, two approaches emerged from the data related to how directors support SEL. These include a "buffering" and a "compliance" approach (see Table 3.10). Directors' approaches also seemed associated with how staff described their role in supporting SEL.

Buffering

Six directors in three programs took a buffering approach. They talked about leveraging their role as director to support SEL by taking on challenging tasks so their staff could focus on direct service work with children. These directors described their role as being *"behind the scenes"* so that staff *"can just get out there and be with the kids."* (Linda). In one case, a director described getting to her program two hours early to complete the program requirements before the staff and children arrive. She said:

"I come back between 1:00 and 1:30 mainly because it takes a good deal of time to set up, and we have a number of accountability procedures that we have in place. And so there's checking out who's here and who's going to be here, getting the individual grade-level clipboards and schedules all put together... and getting our end of the cafeteria basically set up for 50 kids to come at once." (Joanne)

These directors also described how they support staff through challenging situations (e.g., "*they might have trouble dealing with, either with the families or with the kids,*" Julie). And, one director described his role as bridging the gap between staff and the executive leadership. He said: "*I end up being the tie between the boots on the ground and the overarching mission of the organization, trying to balance the budget and the people … I'm more like the ears on the ground but also the ears [up there]" (Joe).*

In addition, buffering directors often talked about valuing their staff's experience and expertise. Directors talked about the important role staff play in supporting social and emotional learning. One director talked about how she needed staff buy-in "to really make it part of what we do to serve the whole child. So, we said we serve the whole child but if you don't-- if you ignore one piece of a child's needs then you're not serving the whole kid" (Linda). Other buffering directors described giving staff agency in how they created their curriculum. For example, one director described his philosophy:

"And I always tell the program staff, 'Look, it's your curriculum, it's your program." I can seriously go up and tell [staff] you need to do this, this, this, this, this, this, this, this, this and these are lessons you're going to teach. Here you go, go.' Just like the school does. Or you can say, 'These are what we want the girls to come out of with this stage. Here's the finish line. It's your race to run. You choose the path and how you're going to get there... Because if you're standing up there and you're presenting my program, your heart's not going to be in it. You're not going to have a buy-in. The kids are going to feel that. They're not going to get onboard. And when you fail, you don't care. You're just doing what you're told." (Joe).

ruble chi o Director rippi ouch	Table	3.10	Director	Ap	proach
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	Buffer (6 Directors)	Compliance (4 Directors)
Director's Perceived Role	Directors should be "behind the scenes" by completing paperwork and assisting with challenging situations so that staff spend more time with children. "I try to be behind the scenes making what is going on at the clubs work. I try to keep all the paperwork, the administrative tasksso that our tutors don't have to worry about that and so they can just get out there and be with the kids. That's really what we try to do is try to take all of that away from them so that they don't have to worry about doing anything but worry about what little Johnny's doing right now. And worry about what he needsTo me, it's you don't run quality programs if you're not connected with the youth." (Linda)	Directors should uphold rules and regulations to ensure quality programming. "Regional directors go visit, and make sure that our program quality had improved, that our activity plans were being done, and that we were providing a decent program Then I come in as the regional director and I'm like, 'We can't do this, we can't do this, we can't do this.' So I'm always the bad guy" (Samantha)
Director's Perceived Staff Role	Staff should have agency over creating and implementing curricula. Staff should spend time building relationships. "And I always tell the program staff, 'Look, it's your curriculum, it's your program." I can seriously go up and tell [staff] I need to do this, this, this, this, this, this, this, this, this, this and these are lessons you're going to teach. Here you go, go. 'Just like the school does. Or you can say, 'These are what we want the girls to come out of with this stage. Here's the finish line. It's your race to run. You choose the path and how you're going to get there. '" (Joe)	Staff should submit lesson plans in advance for directors to review or follow the lessons the director provides. "As soon as I get in, I talk to them and be like, 'Okay, so we're doing this today' And then I fill them in if there's anything they need to know" (Julianne). "They make their activity plans for the entire month. So, the next priority is I have to review all of them for accuracy to make sure they have the minimum number of components, purchase all the supplies, and figure all that out." (Samantha)
Staff Attitudes	Staff describe their role as planning and teaching as well as building relationships with children. They also talk about having flexibility in their jobs. "If we're not in a scheduled program that we're teaching, we're on the floor talking to the kids, playing games with them, just hanging out We have the freedom to teach a lot of different things, and I like to	Staff described a disconnect between themselves and their directors. Staff also mentioned doing what needs to be done when the director is not watching. <i>"The higher-ups don't really understand what it's like to be on the jobIt's a totally different</i> <i>story as opposed to actually working with the kids</i> <i>rather than whenever you're planning for</i> <i>something." (Jenna)</i>

think we teach about lifeand those other things that	
teachers in schools don't hit on" (Danielle)	"When the boss walks away, you just do what you
	know needs to get done. If we did everything that
"I plan and implement all the gym classes for everyone	they wanted us to do, if we were able to, it would
and come up with all the games And then also play	be just like an extension of school. But we know
with all of the kids and really make a point to go to	what these kids need" (Karen)
different areas and do different things." (Emma)	
	hink we teach about lifeand those other things that eachers in schools don't hit on" (Danielle) "I plan and implement all the gym classes for everyone and come up with all the games And then also play with all of the kids and really make a point to go to different areas and do different things." (Emma)

Staff at programs with directors that took a buffering approach talked most about their job duties. They mentioned how they "*teach*" (Chalise), "*plan and implement*" classes (Emma), and how they are "*in charge*" of programs (Liz). They also talked about the importance of being present with children once program hours begin.

Compliance

The other four directors at two programs seemed to focus more on compliance in order to support SEL. These directors described their job as upholding rules and regulations. One director talked about the role she played in making sure that "program quality had improved, that our activity plans were being done, and that we were providing a decent program;" and, she sometimes feels like the "bad guy" when she "comes in as the regional director and I'm like, 'We can't do this, we can't do this, we can't do this. '" (Samantha). Directors that took a compliance approach tended to have more control over curriculum requirements. One director said "as soon as I get in, I talk to them and be like, 'Okay. So we're doing this today' And then I fill them in if there's anything they need to know (Julianne). At some of these sites, lessons had to be submitted 1-2 months in advance so that directors could check for compliance to program curriculum requirements. For example, one director said:

I have a site director at every location — they make their activity plans for the entire month. So, the next priority is I have to review all of them for accuracy to make sure they have the minimum number of components, purchase all the supplies, and figure all that out. (Samantha)

Some directors that took a compliance approach talked about the pressure they feel from executive leadership. They described the academic requirements they must fulfill rather than focusing on SEL. Two directors similarly commented that:

"We are expected to do a math and literacy [lesson] every day. And then we're expected to do the art and a few other things during the week. I'm like, 'We don't have enough time for this. I don't know where you guys think that I'm supposed to pull this time from.' (Danae)

"We have to have lesson plans. We have to execute lesson plans. We have to teach. We have to hit STEM. We have to hit all sorts of core knowledge" (Samantha)

They also described how ratio requirements combine with staffing challenges took them away from their administrative duties; this meant they could not buffer for staff, even though they wanted to. One director described her challenge that "when you're 'in ratio' at a program, you can't focus on what else is going on, because you have to focus on the kids... And I can't necessarily help even improve stuff" (Samantha). Another director talked about how she sometimes isn't able to visit all her programs because she has to cover for absent staff. She said, "I feel like there's a disconnect between what is really occurring especially if being short staffed if it's been weeks since I've been at a program. So, there's a huge disconnect there on what's occurring on a day-to-day basis, and what I think is occurring." (Marykate). Staff at these sites also described a disconnect between themselves and their directors. For example, two staff commented about their directors:

"they don't really understand what it's like to be... on the jobs, so they give us so much paperwork ... And I go, "What do they actually care about [inaudible]?" It's a totally different story as opposed to actually working with the kids rather than whenever you're planning for something. It's different actually stepping into the shoes and everything." (Jenna)

"They come in and they're like, "Don't do that!" Please don't-- sit down! Blah blah blah." You guys know nothing about children but you're running these programs." (Karen)

Staff at programs with compliance-focused directors also talked about frustration with academic requirements and lesson plans. One staff said planning lesson plans for a whole month "definitely gets in the way" (Christina). These staff mentioned they sometimes "just fill [the lesson plan] out to have something to give the regional director" (Christina). Another staff described that "When the boss walks away, you just do what you know needs to get done. If we did everything that they wanted us to do-- if we were able to do, it would be just like an extension of school. But we know what these kids need" (Karen).

3.5 Discussion

This study provides evidence for how OSL educators' descriptions of SEL in practice might inform the national conversation about SEL from the bottom up and how the national SEL

conversation may be playing out in OSL programs from the top-down. First, findings about educators' SEL priorities and practices can inform our understanding of effective SEL-supportive strategies. Educators talked most about supporting social skills followed by self- and emotional-skills and least about cognitive skills. Educators also described how they supported SEL through the program's culture and climate, planning activities, building relationships, and catching spontaneous teachable moments. Second, investigating educator role offers insight into how the national SEL conversation may be influencing directors and staff. Directors talked more about explicitly teaching SEL through lessons and curricula and about programs' rules and regulations compared to staff. In addition, directors took either a buffering or compliance approach to implementing SEL supports; this related to staff comments about their practice. In this section, I synthesize findings as they relate to three main themes: prioritizing SE skills, catching SEL movement.

3.5.1 Prioritizing SE Skills

Findings from this study show that afterschool educators prioritize social and emotional learning as part of their job and when observing adult-child interactions. Staff talked about SEL as *"the things kids don't get in school"* and as something that children *"definitely, definitely need."*

Across the interviews, educators talked most about social skills, including relationship and teamwork skills as well as social awareness and empathy skills. This finding aligns a synthesis of SEL research conducted by AIR, which showed that social skills were the most common across multiple frameworks (Berg et al., 2017). There are many explanations for this emphasis. First, social skills may be salient to educators based on common situations that arise when working with children. Many educators described assisting with peer conflict as well as encouraging positive

social interactions among children and youth. Also, social skills may be easier to notice and to support compared to self-, emotional-, or cognitive skills. For example, social interactions occur on a daily basis and social concerns may seem more pressing than developing other skills.

The next most common skills that educators described supporting were self- and emotional- skills. In particular, educators talked about these skills when describing how they support SEL and when reacting to videos. This may be because educators talked often about helping children work through personal problems. Educators mentioned these skills far less without prompting from interviewers. Perhaps because these skills are not as easy to describe as social skills.

Cognitive skills were least endorsed by educators. This may be related to the nomenclature of "social-emotional learning," which does not include the word cognitive. Educators might have also talked about cognitive skills less throughout the interviews because neither video was explicitly related to a cognitive activity. Perhaps showing a video of an activity that required problem solving or initiative would have sparked more comments about this skill. Finally, more directors talked about cognitive skills than staff. This may be related different grant requirements directors were responsible for meeting related to STEM or "21st Century Skills," which often include cognitive skills such as critical thinking and problem solving.

Almost all educators talked about other SEL topics not grouped into the three categories described above. The three most common were 21st century skills, character skills, and life skills. All three are comprehensive frameworks that incorporate a variety of skills including intra- and inter-personal skills necessary for work and life (Berg et al., 2017). These other topics were similar to SEL in that they are umbrella terms related to the types of things children can learn outside of academic content. It may be that educators conflated SEL and the other term they mentioned.

Character has been a common phrase associated with OSL; for example, it is one of the "5 C's" of positive youth development. Also, life skills likely came up because at Madison Place has a long-standing Life Sills program they offer to attendees. The term, "21st century Skills" is a popular buzzword in education and in out-of-school time often related to STEM. Interestingly when staff and directors talked about 21st Century Skills, and specifically STEM, they typically did not mention how it related to SEL though research shows STEM is associated with SE skills, such as teamwork, critical thinking, and problem solving (Krishnamurthi, Bevan, Rinehart & Coulon, 2011). It may be that educators view these initiatives separate from one another rather something that can be integrated.

3.5.2 Catching SEL Moments

Experienced afterschool educators described, in detail, the practices they use to support SEL. Educators' discussion of SEL-supportive strategies related to how Blyth (2018) describes "catching" SEL more than explicitly teaching SE skills. Educators' description of "caught" strategies as both planned and spontaneous provide empirical evidence for how educators' expertise might inform the national conversation about SEL from the bottom-up.

First, many educators talked about how they plan program experiences related to the climate, activities, and relationships in order to catch SEL. Educators aimed to create a program culture that was safe and encouraged kindness and respect among children and youth. They did this by proactively putting routines in place to anticipate children's needs and to support SEL. Educators also talked about staffing supports that helped them to better encourage SEL. For example, many talked about the importance of having enough staff present at programs and many wanted more training related to SEL.

Educators also described planning activities so they could catch SEL teachable moments. Many shared examples of challenges that would inevitably arise during planned activities through which they could support SEL. For example, one staff talked about having a "repertoire of games" at her program. She and her colleagues offered particular games based on the skills they believed children needed to practice, such as handling frustration or working as a team.

Building relationships was another planned strategy that educators used to support SEL. Some even talked about this as one of their primary jobs. Educators were intentional about getting to know children, listening to them, and hanging out and having fun. They described that relationships provided a foundation upon which they could support learning. For example, if an educator and child had a strong relationship, that child was more likely to seek assistance from the educator when dealing with a social or emotional challenge. Fewer educators talked explicitly about how children learn SE skills through relationships. Recent neuro-developmental research suggests that the brain and body automatically recognize positive interactions; and, it is through adaptive social interactions that children's brains can be structured to enable development of SE skills (Porges, 2017). The idea that children learn SEL through relationships could be a useful focus of professional development. For example, the Simple Interactions approach (www.simpleinteractions.org) is a strengths-based PD that engages educators in reflective conversations about the positive interactions they have with children and youth (Li & Winters, 2019; Akiva et al., 2016). More broadly, the emphasis educators placed on relationships is a promising feature of this developmental context. Research shows that these are the "active ingredient" in a child's growth (Center for the Developing Child, 2004) and that relationships with non-familial adults are associated with positive development (Eccles, 1999).

Catching spontaneous SEL moments was a focus of almost every single educator in this study. Educators said that spontaneous strategies were "constantly taking place" and that they "probably do the spontaneous the best." Supporting SEL at the point of service may be the reason SEL and OSL are so well-aligned. OSL educators described how they would pause to reflect with children about the social or emotional situation at hand (e.g., a peer conflict or emotional meltdown) and they also provided coaching about SEL during these moments through responsive practices, such as asking questions (Smith et al., 2016). Spontaneous moments are also how educators can integrate SEL into daily practice, which research shows is essential for optimal SEL (e.g., Jones & Bouffard, 2012). In this study, educators mentioned the techniques or "bite-sized" practices they use based on a particular situation or child (Embry & Biglan, 2008; Jones et al., 2017). One implication of this work is that experienced afterschool educators can be leaders in the SEL movement (Pittman, 2018). Finding teachable moments takes expertise and can be challenging (Walker & Larson, 2012). In this sample of experienced afterschool educators, participants described, often in great detail, how they catch SEL in their everyday work with children. The strategies they use can be a focus of professional development and also a target for future research on how to integrate SEL.

3.5.3 Aligning the SEL Movement

Since the origins of afterschool programs, national conversations about education have shaped OSL goals and activities. In the past few decades educational trends have filtered down to OSL staff, as depicted in the down arrow in Figure 3.2, with a focus on skills, requirements, and measured outcomes (Halpern, 2006; Fusco, 2014). The requirements programs put into place are for various reasons and can be useful (e.g., to ensure quality programming). However, even with the best intentions, national conversations can feel disconnected from practice and more related to regulations by the time they get to staff. As one director described: *"Everything up top is easier when it's black and white... but what's hard is when you take this black and white, now it's a policy and it's a procedure and you give it to the people that are down on the ground. Well, now there's a million shades of gray" (Joe).* Indeed, some participants in this study described frustration with requirements and regulations imposed by executive leadership. And, in the case of compliance-oriented directors, program requirements sometimes affected their ability to support staff in ways they felt were optimal.

Social and emotional learning is a recent national conversation and this study provides some insight into how it is starting to play out in OSL programs. We are just beginning to see the SEL conversation trickle down to executive leadership and directors of OSL programs. For example, at North Oak three directors talked excitedly about how they just got funding for an SEL curriculum. Other educators mentioned they wanted to learn more about the topic. This study also indicates that both directors and staff similarly value planned and spontaneous strategies to support SEL. This is promising as directors implement SEL initiatives – perhaps they may do so by supporting and investing in the expertise of the staff at their programs.

Because the SEL movement is just beginning, there is an opportunity to align the national conversation through the upward arrow in Figure 3.2. Findings from this study show that experienced afterschool educators currently engage in the kinds of SEL-supportive practices that researchers find to be most effective (Jones & Bouffard, 2012; Jones et al., 2017; Aspen Institute, 2019); that is, they integrate SEL into their daily interactions with children by planning for and catching spontaneous SEL moments. These educators provide insight into how we can support SEL based on their experiences with children. If we can learn what educators already do to

effectively support SEL, we can use this to inform policies, grants, research, and the national conversation to encourage more SEL. In addition, findings from this study showed that some directors took a "buffering approach" by taking on administrative duties, coaching staff through challenges, and giving staff agency and flexibility. These practices allowed staff to focus on being present with children to build relationships and to catch social and emotional learning moments. The strategies buffering directors use may also offer a model of how to effectively support SEL at different levels of an organization.

3.6 Limitations

Though this study has many strengths, there are limitations. First, this sample is from five programs at two organization in one region of the United States. This allowed for rich descriptions of educator strategies but limits the generalizability of this study. Also, the use of a semi-structured interview protocol privileged educators' voices and perceptions. Future research that incorporates behavioral observation of educators' practices would strengthen findings from this study (Creswell, 2016). Also, the two videos used in the protocol may have biased educators' responses. Replicating the protocol with more or varied video scenarios would improve validity of these findings.

3.7 Conclusion

As the commissioners of *A Nation at Hope* describe, social and emotional learning is "the substance of education itself." It is deeply woven into educators' everyday moments with children and youth during organized activities and lessons as well as through informal conversations and unstructured time. How do we ensure that the national SEL conversation is equally informed educators' experiences with children as it is by research and policy? How do we balance outcomes and development, requirements and relationships, competencies and whole child growth? Social emotional learning is essential for children's wellbeing, learning, and future success and afterschool programs offer a promising context through which to support SEL and from which learn how to support SEL.

4.0 Conclusion and Implications

In this dissertation, I presented two studies aimed at understanding the everyday work of educators in out-of-school learning (OSL) contexts.¹⁶ In Study 1, I found that features of an active learning environment relate to museum educators' use of adaptive facilitation. Study 2 findings showed that experienced afterschool educators are adept at catching moments for social and emotional learning and also that directors' role and approach may influence how this happens on the ground. I conclude by summarizing three themes that emerged across both studies: 1) educators integrate learning into adult-child interactions, 2) out-of-school learning contexts offer strengths to the educational landscape, and 3) OSL educators play an essential role in supporting a child's learning and development. Finally, I offer implications for research, policy, and practice.

4.1 Educators Integrate Learning Into Adult-Child Interactions

Educators in both studies supported learning at the point of service defined as the moments when educator practices and a child's experience meet (Smith et al., 2010). At the point of service, adults and children interact in ways that support development; this includes having a reciprocal back-and-forth exchange and scaffolding and fading opportunities for learning (Bronfenbrenner, 1979; Li & Julian, 2012; Li & Winters, 2019, Vygotsky, 1978). Interactions are the building blocks of relationships and are the foundation for rich learning moments related to academic content or

¹⁶ Study 1 was described in Chapter 2 of this dissertation and Study 2 was described in Chapter 3.

social, emotional, and cognitive skills. This dissertation provides evidence that educators are continuously supporting learning during adult-child interactions. In the first study, educators' ability to notice and respond to learning moments was evident in the ways they facilitated active learning. And, in the second study, educators described that teachable moments were "constantly taking place" and that they "do the spontaneous the best" during their everyday interactions with children. In particular, educators described how they support learning during adult-child interactions in two primary ways – by being responsive and by using techniques (see Table 4.1).

	Study 1	Study 2
	Adaptive Facilitation	Spontaneous Practices
Area of Child Growth	Interest Exploration	Social-Emotional Learning
	Content Learning	
Responsivity	Questions	Questions
	Educator Sitting	Body Language
	Child Lead	Individualization
	Personal Connections	Relationships
	Co-Create	
Techniques for Learning	Notice	Taking a break
	Suggestion for challenge	Perspective-taking
	Analogy/metaphor	Leveraging peers
	Narration/ naming	Independent practice
	Materials	

Table 4.1	Educator	Technia	ues that	Emerged	in	Both	Studies
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Educators in both studies supported learning by being responsive to children and their individual needs in-the-moment. In Study 1, responsiveness through back-and-forth interactions (i.e., reciprocity) was especially prevalent during one-on-one interactions and conversations about personal connections to learning; educators also sat next to a child, let the child lead, or created a project with a child. These strategies allowed educators to get a sense of a child's needs and to signal an equal power balance in the interaction. In Study 2, educators talked about responding to children's individual needs during point-of-service interactions in support of SEL. They did this by getting to know children and also by paying attention to their body language. In both studies, the use of questions emerged as an important practice for being responsive. Responsiveness is a

practice that researchers find is essential for child growth and development because it can influence a young person's brain architecture and strengthen neural connections (Center for the Developing Child, 2015; Fisher et al., 2016). Educators' use of responsivity in these two studies indicate their support of child learning at the point of service.

Educators also described techniques they used to integrate learning during adult-child interactions. Some researchers have called techniques "bite-sized practices" that educators use to integrate learning supports into their everyday practice. In both studies, educators seemed to use these techniques as "tools in their toolbox" that they might pull out to fit a situation. In Study 1, educators used techniques to scaffold and fade supports related to the content of the activity or to spark child interest. To do this, educators prompted noticing, offered a suggestion for a challenge, used a metaphor or analogy, narrated and named vocabulary, and leveraged materials in support of learning. In the second study, educators described how they used techniques during spontaneous moments to support social and emotional learning. They described how they offered breaks, prompted perspective-taking, and empowered peers to support learning. The techniques educators used in both studies supported learning in the moment. Research shows that integrating these into daily practice can promote learning (Jones et al., 2017). Taken together, findings from this dissertation show OSL educators expertly integrate learning into their everyday interactions with children.

4.2 OSL Offers Strengths to the Educational Landscape

Both studies show how OSL educators used the strengths of their context to benefit children. In OSL settings, attendance is not mandatory and children and families "vote with their

feet" – that is, they will choose to attend a museum or afterschool program if they think it will be a fun or beneficial experience. OSL educators must be intentional about how they design their space and activities to be engaging and related to children's interests. This can lead to innovative learning experiences (Pittman, 2018). In Study 1, each of the 198 video clips featured an active learning experience through which children were engaged and excited to be playing with and testing out learning materials. And, in Study 2, educators planned fun activities specifically to integrate SEL into their everyday work with children. In both cases, learning happened in-themoment *with* the support of educators, rather than through passive reception of knowledge *from* educators as is often the case in other educational settings like K-12 schools. Explicit teaching (i.e., through lessons or curricula) is important and allows children to build knowledge. However, intentionally designing activities in order to catch learning moments can and should happen alongside explicit teaching to help children develop a rich, deep grasp of content and skills.

OSL educators' priority and skills for fostering positive adult-child interactions and relationships is another contribution of this context. Museum educators in Study 1 displayed an ability to connect with children, respond to children, and support children's learning in a matter of just seconds, often without having met the child before. All 23 afterschool educators in Study 2 described the importance of listening to children and getting to know who they are as people. As one director summarized, "we really, really, really put so much emphasis on relationships." Afterschool educators described long-term relationships as foundational to learning that happens in their programs. Prioritizing interactions and relationships, as well as the associated educator expertise, is something that could be useful for all learning contexts. Rather than focusing on materials, checklists, and other "stuff," as sometimes is the case, contexts across the educational

landscape should look first at supporting positive interactions and relationships between adults and children.

The OSL contexts in the two studies – museums and afterschool programs – might also inform one another. Educators in both contexts support children's learning in settings that can be unpredictable and that are constantly changing. Connecting educators in these, as well as other OSL contexts (e.g., libraries, parks, summer camps), could build a powerful community of practice. And, directors and executive leadership in both contexts might use insight from one another when developing programming. For example, some museums have longer-term visitor engagement opportunities (e.g., programs and camps). Afterschool educators could share with museums strategies for building relationships with children and youth over time. Afterschool programs could also learn from museums about how to design and facilitate engaging active learning experiences.

4.3 Educators Are Essential

Finally, these two studies show that educators are essential for supporting positive development in their daily work with children. Though the "stuff" (e.g., fun materials in a museum exhibit or a great outdoor space in an afterschool program) is important, it is the educator that matters most. The educators in both studies played a critical role for the children in their care. Without museum educators in Study 1, children might lose interest in the activity or plateau without the scaffolds that educators provided. And, without the afterschool educators in Study 2, social emotional challenges that arose (e.g., peer conflict, emotional meltdowns) might go

unresolved or have negative effects on children's wellbeing. Educators in both studies integrated techniques to support teachable moments and prioritized their interactions and relationships.

The work that OSL educators do is nuanced, complex, and requires expertise. Larson and Walker (2010) describe "dilemmas of practice" as the challenges that many educators in OSL settings may experience, such as sustaining children's motivation, mediating group dynamics, and adapting top-down policies to youth development needs. Compared to novices, expert OSL educators are able to generate more and a wider variety of detailed in-the-moment solutions based on specific situations (Walker & Larson, 2012). And, expert educators tend to keep young people at the center of decision making. Educators in both dissertation samples were quite experienced. They were captured on video clips or described their practice as being able to simultaneously incorporate many considerations, such as features in the environment or children's individual needs. For example, one educator described OSL setting as "controlled chaos" through which so much good happens. In their daily work, OSL educators planned for and caught moments of learning which impacted the children.

The findings from these studies show that educators everyday experience with children can and should inform research and policy (e.g., in the upward arrow of Figure 3.3). These two studies provide empirical evidence for what experienced OSL educators do well, which is to respond to children and to support learning and growth at the point of service. For example, they have developed techniques to do this and they intentionally plan engaging activities to do this. Through systematic research, we can learn about expert educator practices in order to empower educators across contexts.



Figure 4.1 Conceptual Depiction of the Flow of National Conversations about Education

4.4 Implications

4.4.1 Research

In answering the research questions in this dissertation, additional questions emerged. First, more research is needed to understand OSL educators – who they are and how they do what they do (Pittman, 2018; Vandell et al., 2015). As we see in this dissertation, OSL educators play an essential role in the programs in which they work. The two studies provide insight into how they interact with and support children in-the-moment. Additional analyses, that draw from both qualitative and quantitative methods, would add to our understanding of the strategies that expert educators use and also how to support related professional development. In particular, findings from Study 1 suggest a need for more research about how OSL educators' thinking, attitudes and beliefs, and background knowledge influences their interactions with children. And, future

research could build on findings from Study 2 through the use of observation or video coding of SEL-supportive strategies now that we have some insight into educators' self-described practices.

Another next step for research is to examine outcomes associated with the educator practices described in these two studies. Academic achievement is not an appropriate outcome measure for OSL settings (Halpern, 2006; Pittman, 2018). Rather, the strength of OSL relates to the intentional activities and relational practices that occur every day. These program features are more associated with child outcomes such as interest, engagement, motivation, social emotional learning, or long-term wellbeing. Researchers are beginning to develop methods that are robust, valid, and reliable to achieve this aim, especially as the SEL movement grows (Devaney & Moroney, 2018). Importantly, high-stakes should not be placed on these new measures as happened with academic achievement measures and we should look at these outcomes over time. Other important outcomes to investigate in the OSL setting are educators' practices and adult-child interactions and relationships. For example, performance studies found that the SEL-supportive practices as outlined by Smith et al. (2016) are also associated with practice standards on a validated Program Quality Assessment measure (Smith et al., 2012). Focusing on outcomes beyond academic achievement can help the OSL field communicate the value of this developmental context for children to policy makers, grant funders, and the public.

4.4.2 Policy

Findings from this dissertation, and especially Study 2, highlight the need to use educators' experience with children to inform policy requirements. Stakeholders in the boxes at the top of Figure 3.3 tend to push national conversations about education down to practitioners through requirements, checklists, and measured outcomes. This top-down approach can feel disconnected

from practice and even take educators' focus away from their time with children and youth. This dissertation is an example of how empirical evidence grounded in educators' expertise can offer insight from the ground up. For example, policies related to paid time for staff planning and training may allow educators to focus on intentionally creating and catching teachable moments.

Related specifically to SEL, there is an opportunity for the OSL field to lead this initiative. As Pittman (2018) states: "Let's offer up our stories and research about how and why we integrate SEL into the work we do with children and youth as a way not to promote our OST organizations, but to promote the spread of intentional youth work practice" (p. 312). While policies with black and white metrics may be easier to implement and assess, we also need policies that value the integration of SEL during educators' daily work with children – a prospect that has many more shades of gray. Findings from this dissertation offer evidence for how educators' experience might inform new metrics from the ground up.

4.4.3 Practice

Implications for practice and professional development emerged from this dissertation. First, educators in both studies used techniques, or "bite-sized" practices to support learning. Techniques may be a useful focus of PD because they are nameable and identifiable practices that educators use. Colleagues can share the types of techniques they find successful and learn from one another about how and when to use these practices. One example of this is a card game, Making Connections, that emerged from a research-practice partnership between museum educators and university researchers (McNamara et al., in preparation; Grabman et al., under review). This game allows educators to talk about how different techniques may be more or less appropriate depending on a learner type and learning goal. Second, both studies provide evidence of the complex and nuanced strategies that OSL educators use in their daily work with children. We can use educators' existing knowledge of practice – what they are already doing well – and make more of this happen. One powerful professional development approach, Simple Interactions, uses of adult-child interactions captured on video clips to prompt strengths-based conversations among colleagues. This PD encourages reflective practice and helps to build a community of practice that shares common language about how to support positive moments with children and youth.

4.5 Conclusion

Before writing this conclusion to my dissertation, I re-opened the personal statement I submitted when applying to graduate school. I talked about the learning that "occurred organically" as I watched children "negotiate with peers and interact with mixed ages" in the afterschool program I coordinated. This reminded me of my intuition as a practitioner that active learning, though sometimes hard to facilitate, was engaging for children and that social and emotional learning was happening all the time in afterschool programs. My desire for evidence to describe how and why the OSL settings were unique and important has led me to this milestone. My hope is that this research can be a step towards understanding the important work that OSL educators do every day. I believe we can learn from educators' expertise and empower educators' future practice ultimately in support of child learning and development. This will happen best through a balance of research, policy, and practice. As I look ahead to my future work in the field, my aim is to develop research in service of practice and use practice to guide my research. These dissertation studies are a first step towards that goal.

Appendix A Simple Interactions Tool

SIMPLE INTERACTIONS TOOL

An Instrument for Observing Adult-Child Interactions Across Developmental Settings



Appendix B Reciprocity Coding Chart





Appendix D Qualitative Descriptions of High and Low Adaptive Facilitation

Top Reciprocity Clip

Reciprocity: 4.30

Educator: 3 Activity: Construction Interaction Type: One on One Caregiver: Not Present Educator is working with one child on a woodworking activity. He offers tips for how to follow the lines of the wood. The child takes the lead on choosing what tool to try next and how he wants his piece of wood to look. The educator teaches vocabulary ("we call that course") and offers tips in the moment based on the child's actions (e.g., "you might try to hold the tool flat" and "wherever you move the tool, that's where it's going to cut the wood. So if you want to cut the wood inside the lines, you want to move the tool inside the lines"). The educator and child have a conversation about the child's grandfather that often does woodworking.

Top Opportunity to Grow Clip

Progression: 4.52

Educator: 4 Activity: Construction Interaction Type: One on One Caregiver: Present, Not interacting Educator is leading a whole-class lesson. He asks questions about a triangular wood piece he is holding (e.g., "what else do you notice about this piece?" and "What kinds of things can you do with it?") He calls on children to answer his questions and children talk one at a time. The educator then shows the class a new material – plastic squares with holes in them – and ask what they notice about the materials.

Bottom Reciprocity Clip

Reciprocity:1.70

Educator: 5 Activity: Sewing Interaction Type: Small Group Caregiver: not present Educator is sitting with two middle school age girls and a volunteer at a sewing table. The clip starts with the educator describing how to do a sewing project to the girls. She talks to a volunteer. She moves around materials and then starts her own sewing project but doesn't talk to anyone else at the table. Middle school girls sit cutting fabric but don't make progress towards project beyond that.

Bottom Opportunity to Grow Clip

Opportunity to grow: 1.04

Educator: 4 Activity: Mod/Demo Interaction Type: Small Group Caregiver: Present, Not interacting Educator circulates around the room grabbing a material for a child. Then, the educator welcomes a field trip group to the exhibit. He asks the whole group a question and makes a joke. The educator then describes each activity in the exhibit to the whole group for about two minutes.

Appendix E Qualitative Adaptive Facilitation Codebook

Code	# Clips	% High Adaptive Facilitation	Description Example	
Materials for learning	18	61%	Educator gives or retrieves a material a child needs for the project. Educator moves materials to make the learning objective easier.	Educator gives child a more complex circuit block
Sitting	18	72%	Educator is sitting at a table or ground near children.	Educator sits next to a child that is sewing a pillow.
Questions	17	76%	Educator asks a question.	"Do you know why that might be?"
Try it out/ pass off	17	53%	Educator prompts child to try something out. Either to try something independently (e.g., after showing him/her how to do something), or to try something new.	"Now you try"; "Give this a try"
Teaching information	14	86%	Educator describes the mechanics of an activity - how something works and why something works. Passing on information about the activity to the child.	"Pathways connect electricity."
Child lead	13	77%	Child asks a question, request help, or chooses an activity.	"How do you do this?"
Standing	13	38%	Educator is standing next to child/ren or walking around.	Educator circulates around the room
Watching child	13	54%	Educator watches a child without talking.	Educator looks on as a child tapes carboard together.
Small tip	11	64%	Educator gives a suggestion for how to do something more easily, efficiently, correctly.	"You might try to hold the tool flat"
Narration/ Naming	10	80%	Educator slowly describes what a child is doing using appropriate vocabulary. Or, educator explicitly defines a vocabulary term.	"You 'counter balance' it to find the right balance"
Suggestion for challenge	10	80%	Educator gives child a challenge or an idea for how to challenge him/herself	"How could you make the circuit work with a switch?"
Notice	8	76%	Educator prompts a child to notice something through a question, gesture, or statement	"Look at how it does this"; "what do you notice?
Personal connections	7	71%	Child or educator makes a personal connection to the activity. Could be related to prior experience or familiarity.	"My dad welds at home"; "I like your shirt"; "Have you ever used a needle to sew before?"
Analogy/ Metaphor	5	100%	Educator uses an analogy or metaphor in describing how something works.	"A circuit is like a circle"
Introduce activity	5	40%	Educator describes an activity when a child is unfamiliar or is just joining the group.	"We are using circuit blocks here."
Material organizing/ cleaning	5	20%	Educator cleans up materials on a table, reorganizes materials, puts materials in a separate part of the room; this is not directly related to teaching.	Educator untangles the wires at the circuit block table.
Co-create	4	75%	Child and educator work on the same project or activity together. Both contribute to the same project/activity.	"Where should we put this block next?"
Circulate	3	0%	Educator walks around the room talking to or looking at different group of children.	Educator checks in with children at different tables during a field trip visit.

Talking to another educator	3	0%	Educator talks to another educator in the room	Two educators discuss a new weaving technique they saw on YouTube.
Parallel play	2	50%	Educator is working on a similar project/ activity next to and separately from a child.	Educator is embroidering while the child is sewing a pillow.

Appendix F Study 2 Interview Protocol

Thank you for participating in this interview! There are no right or wrong answers. The interview will take about one hour. If you don't want to answer the questions, that's ok; it is your choice. If you DO decide to participate, you should know that you can skip any questions you don't want to answer, and you're also allowed to stop at any time. I will record your answers with a recorder, but you won't say your name. Only the researchers from Pitt will hear your answers and they won't know your name. Do you want to answer the questions?" This interview will be split into four parts: some introductory questions, a meme activity, a video activity, and then some questions about you.

Part 1: Introduction

- What is a typical day for you in your program?
 - Follow up: what age do you primarily work with?

Part 2: Meme Activity

Have you seen memes like this that lay out what people think certain professions do compared to what they actually do? We're going to make one for you! Take your time.



You can write/draw/doodle whatever you think goes best in each box.

What the community thinks I		
do.	What kids think I do.	What my boss thinks I do.
What parents thinks I do.	What I think I do	What I actually do.

PROMPTS for meme activity:

- What did you think the job would be like before you started?
- Do you think of yourself as an educator? Why or why not? OR When did you first consider yourself as an educator?
- Do you feel connected to the kids in your library/ afterschool program?
- Why do you think there are differences (or similarities) across the boxes?
- Do you think it's important for library staff/ afterschool educators to be connected with kids?
- What about people who don't specifically work with kids like security guards and administrators?

Part 3: Video Activity

Next, we are going to do another activity. I will show two short video clips of scenarios that include children interacting with adults. After each video I will ask some questions.

Video 1: Gardening

- 1. What do you notice about this clip?
- 2. Do you see any opportunity for learning in this clip?

Video 2: Hanging Out

- 1. What do you notice about this clip?
- 2. Do you see any opportunity for learning in this clip?

Part 4: Social-Emotional Learning

Educators and researchers have been talking about social and emotional learning.

• Brainstorm some strategies you use to support SEL in two categories: a) Intentional and b) Spontaneous? Take a few minutes then we'll talk about it. *[provide a sheet of paper interviewees to write intentional and spontaneous strategies]*

Now, let's watch the two videos again thinking about social and emotional learning

Video 1: Gardening

- 1. What possible responses would you consider to support the child's social-emotional learning in this situation? (Please brainstorm and list all possible responses that come to mind)
- 2. Of the possible responses you listed in #2, which would you choose, and why?

Video 2: Hanging Out

- 1. What possible responses would you consider to support the child's social-emotional learning in this situation? (Please brainstorm and list all possible responses that come to mind)
- 2. Of the possible responses you listed in #2, which would you choose, and why?

Part 5: Closing

- Tell me a little about your background:
 - How many years have you worked with children? In what capacity?
 - What kinds of professional development do you/ have you engaged in? Have you ever had training related to social and emotional learning?
- Anything else you think is important for me to know about?
Appendix G Study 2 Video Descriptions

Video 1: Gardening (1:32)

A group of elementary-age children are outside doing a gardening activity with one educator. Children are digging for roots in dirt of a garden bed. The clip begins with the educator kneeling by a girl who is crying because she claims a boy stole her shovel. The educator has the boy apologize to the girl that is crying. The teacher redirects a child that is walking away from the group and suggests the children take a "brain break." The clip transitions to a few minutes later. The same girl is still crying because she said the boy didn't give her shovel back. The educator says, "you have a shovel and he said he was sorry." The girl continues to cry. The educator asks the boy to give back the shovel and the girl stops crying. Another child says, "I really like this gardening work" and the educator affirms the child by saying, "I know. Gardening is cool, right?" The educator addresses the whole group and asks them to put their tools away.

Video 2: Hanging Out (1:16)

A group of middle school-age youth (6th grade) are sitting at tables. The educator has his back slightly turned away the youth because he is stapling papers. The educator asks one youth, "How was your day?" and "What made your day good?" The educator continues to prompt the youth until he answers details about his day (e.g., "I was hyper"). The educator asks another youth about his day and his friends jokingly say, "his girlfriend." The educator responds that the youth are too young for girlfriends and asks the one youth if he has a job. The educator and the youth have a short conversation about a job he is going to get at the barbershop. The other youth joke around about jobs they have.

Appendix H Study 2 Coding Scheme

Staff Practices				
Main Code/ Sub code	Description	Example		
Explicit SEL Content				
Explicit Teaching	Intentional efforts to explicitly teach about SEL; the main purpose of an activity or project is to teach about SEL.	"we actually are startingthe PATHS program"; "each night I run the boy's life skills program"		
Content sequence	A coordinated series of activities or lessons that are linked in order to scaffold SEL. Intentionally connected opportunities to practice skills in diverse contexts and with increasing complexity. Increased agency over time.	"they're learning those soft skills to have a discussion respectfully hopefully, that will lead to more deep questions as we go throughout the yearby the time they older, they're comfortable having conversations"		
	Fianned Strategies	"		
Planned Activities	Strategies educators use when reacting to a teachable SEL moment. SEL is extracted during another activity not explicitly related to SEL. An educator intentionally plans an activity or moment to provoke SEL.	there's going to be social learning taking place"		
Culture & Climate	 Educators cultivate a culture and climate in which all children feel valued and respected and a sense of belonging. Educators talk about creating a safe space. Educators organize consistent routines, activities, roles, procedures, expectations and norms to support a positive program climate. 	"I've really tried to pull out of all the kids examples of how they saw others being kind"		
Supports for staff	1. Many educators are present during direct work with children so that educators have time to support SEL. Educators are supported to grow professionally and reflect on practice. Educators have time to plan for their direct work with children.	"going back and evaluating the activity like I do, if that one wasn't a winner then I go back and I go, 'Nope'"; "Right now we're in the middle of the Social Emotional Learning Webinar Series the state's doing"		
Relationships	Educator aim to build positive and supportive relationships with children and youth.	<i>"if I am playing ping pong, I'm also probably talking to the kid about how their day was."</i>		
Spontaneous Strategies				
Spontaneous Techniques	Strategies educators use when reacting to a teachable SEL moment. SEL is extracted from personal experience <i>in-the-moment</i> as a situation arises. This can include techniques to support SEL.	"when it's a silly conflict like 'you two are playing and I'm not'we make them sit there and talk it out"		
Responsive practices	1. Practices through which educators listen and respond to youth. Educators aim to get to know children and youth. Educators engage in practices such as asking questions, active listening, coaching, modeling, scaffolding, and facilitation. Educators attend to body language to connect with young people. Educators attend to and respect individual differences.	"Every kid is different and needs us differently."		
SEL Skills				
Social Skills				

General Social Skills	Respondent mentions anything about social skills, in general.	"There's an activity that incorporates some type of life skills, social skills, and development, basically everything they don't teach them in school."	
Social awareness/ Empathy	Ability to take another person's perspective; Relating to and respecting others; Sensitivity to diverse perspectives and experiences; Kindness	"they get to socially interact with people they usually don't different age group or someone they're not really friends with"; "A lot of that is just being able to see that people can be different and that's okay."	
Relationship skills/ Teamwork	Communication and listening skills; Ability to negotiate conflict, seek and offer help, and share with others; Building and maintaining healthy relationships; Collaboration by coordinating actions with others	"Helping the boys to take turns"	
Self & Emotional Skills			
Self-awareness	Ability to recognize and identify one's own emotions, thoughts and values as well as one's own strengths; Child has accurate self- perception, confidence, and self-efficacy.	"'I was a little hyper in school,' I think he could've gone a little bit more in-depth with that, like, 'What prompted that?'"	
Self-management	Ability to control impulses, regulate behavior, manage emotions and manage stress; Child has self-discipline and can motivate oneself towards personal or academic goals; Child has organizational skills.	"Helping kids figure out what needs to be done, what they have in their backpack"	
Emotion Management	Ability to be aware and constructively handle positive or challenging emotions	"she could also learn how to handle that by saying, "Hey. That makes me angry."	
Cognitive Skills			
Problem Solving	Ability to plan, strategize, and implement complex tasks over time; Ability to identify and solve problems, use trial and error, and reflect on learning	"I feel like there could have definitely been a way for the kids to kind of try to figure out the problem on their own."	
Responsibility	Ability to reliably meet commitments and fulfill obligations; Internalizing accomplishments; getting homework done	"having them do homework because they're more independent, and I can sit in there and help one or two of them and then the rest of them are like nicely quiet working"	
Initiative	Capacities to take action, sustain motivation, and persevere through challenge toward an identified long-term goal	"Often they just don't want to you know, they're like, "I've never done that. What's that? I don't want to do this." And trying to convince them that, "You might like it."	
Other SEL			
Other SEL	When an interviewee talks about SEL-related topics that don't fit into the above categories	"We actually have a 21st-century skill book. And so, most of the time our 21st-century skills are STEM"	

Indicator Codes			
Main Code	Description		
Interviewee descriptor	Note interviewees role, work experience, demographics, education		
Program descriptor	Note description of broad program culture, structure		
SEL unprompted	Note when interviewee talks about SEL without prompting from interviewer		
Good quote	Note if a quote is particularly interesting		
Negative/ Needs	When talking about one of the staffing practices or SEL skills needs to be		
improvement	improved, learned, better. Negative.		
Response to Video 1	Educator comment in response to the first video.		
Response to Video 2	Educator comment in response to the second video.		

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