

THE MEASUREMENT OF YOUTH SOCIAL AND EMOTIONAL COMPETENCIES IN OST SETTINGS

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A substantial body of research has demonstrated that high-quality out-of-school time (OST) programming plays an important role in the development of social and emotional competencies, including positive academic, psychological, and behavioral outcomes in youth (Cooper, Valentine, Nye, & Lindsay, 1999; Darling, 2005; Fredricks & Eccles, 2006; “Helping Youth Succeed,” 2006; Lauer et al., 2006; Shernoff, 2010). Moreover, a meta-analysis of OST programs that intentionally focused on promoting social and emotional competencies found that it was possible to identify effective OST programs, and that youth who participated in these programs improved in three key areas: feelings and attitudes, indicators of behavioral adjustment, and school performance (Durlak & Weissberg, 2007). Where there is less clarity is how to measure these competencies: what should we measure, how

should we measure, and how do we use the data we collect to understand what's working in programs and what needs improvement?

In this chapter, we will share the lessons we have learned through partnering with OST program networks over the past decade to integrate social and emotional measurement and practices. We will discuss some of the best practices around measurement adoption and implementation that we have learned through our experiences with partners, and explore areas where we as a field need to learn and grow. We will use our work at The PEAR Institute—Partnerships in Education and Resilience—at McLean Hospital and Harvard Medical School to demonstrate how measures can be used for more than accountability checks or dry evaluations (both are important). To show how these principles apply to real-world practice, we share two case studies of OST program networks that have successfully used social and emotional measures to evaluate program effectiveness, continually improve program quality, and better understand the needs of the youth they serve: Sprockets, a network of OST and summer programs for youth in Saint Paul, Minnesota, and the Boston Summer Learning Project, a citywide network of summer learning programs launched by Boston After School & Beyond (BASB), Boston Public Schools (BPS), and the Boston Opportunity Agenda, in Boston, Massachusetts. In this chapter, we concentrate on citywide networks, because we find they have a commitment to central coordination, measurement, training, and policymaking, and provide a great diversity of program types (e.g., school-based, community-based, generic and specialized, arts, sports, STEM, and more).

APPLYING SOCIAL AND EMOTIONAL MEASUREMENT TO OST

We begin this section with an acknowledgment that there can be ambivalence around using measurement tools in OST. There is a souring around assessment and a fear that the data collected could be used punitively, which adds to the reluctance OST practitioners feel when considering bringing measurement tools into the OST environment (Allen & Noam, 2016). We share this concern but have not concluded that measurement alone is to blame, but rather its type, purpose, and use (or misuse in some cases). Today, everything is measured: the experience of eating a meal in a restaurant, the frequency of flights arriving and departing airports, and the health behaviors of children and adults, to name just a few areas of data collection. The public expects data analysis, prediction, and precision, and technology is allowing for individualized offerings of services and immediate feedback when searches are conducted. This development does not

halt in front of the schoolhouse or OST program. Data is here to stay and can have negative or positive impact or any point in between. We propose a different way of thinking about measurement and the use of data in OST that takes a more proactive, positive, and individualized approach. We will first discuss the criteria that are important when selecting an appropriate measurement for OST; second, we will discuss three applications of measurement in OST; and finally, in our case study section we will give more in-depth examples of what this sort of supportive, wraparound training and professional development looks like in practice.

Choosing Robust Tools

When considering which measures to incorporate, it is important that OST programs select robust tools that are aligned to their program and setting, give voice to the youth they serve, support their improvement and evaluation goals, and are grounded in a strong theory or framework of youth social and emotional development. It is important that programs, particularly programs that operate within greater networks or ecosystems within OST, come together around a shared theory or framework that supports the measures they select. A shared theory or framework behind a measure will give all programs a common language with which to share data and lessons learned. Measurement tools can include everything from youth self-report data, to facilitator surveys, to data collected from the families of youth in OST programming, to youth work samples, or observations of the program's quality made by trained evaluators. The measures selected should also be psychometrically strong (see text box for more information). The selected tools should also be flexible enough to use in a variety of settings. OST programs can be conducted anywhere, from a school, to a gym, to a nature center, and the tool selected needs to work in all those venues.

CHOOSING PSYCHOMETRICALLY STRONG TOOLS

It is important to ensure that the chosen tools measure what they are intended to measure (validity) and do so consistently (reliability). There are different types of validity, such as content, construct, concurrent, and predictive validity, and there are different types of reliability, such as internal consistency, test-retest, and interrater reliability. These psychometric properties are affected by many factors, such as difficulty level or length of assessment, so it is important to rigorously test measures through research and practice (for review, refer to Price, 2016).

Adopting a System for Quick and Accurate Reporting

It is important that the tool selected can be incorporated into a larger data system that allows quick, accurate reporting to reduce the burden on staff in both collecting and interpreting data. Collecting data using a youth social and emotional competency measure can be an effective first step for OST programs interested in having a clearer picture of the social and emotional capacities of its youth, but if the data collected aren't reported back to programs until the end of the year, or if the reported data are presented in an unwieldy, overwhelming way that is hard to interpret, they will be of little use to a program.

In addition to the need for rapid and clear reporting, a key factor in the selection of a data system is that it can integrate multiple points of data. For example, selecting a student self-report survey as an OST program's measurement tool will help programs better understand their youths' perspectives, but one source of data will only show one piece of the greater puzzle. In addition to the youth's self-report, it's important to consider the facilitator perspective, as well as the views of the family of the youth, and the observations of trained external program observers or evaluators. Youth work samples, interviews, observation videos, and attendance data can all play an important role in better understanding the strengths and challenges of an OST program and its youth.

Privacy and confidentiality are also important concerns when evaluating any data system that incorporates youth data. All data systems that are considered for use should have protections in place that allow only those who have permission to access the program's data. Strong data security and privacy protections are important—particularly when you consider connecting an OST program's data system to an external one, like a school's student information system. These connections can lead to a greater understanding of youth's social and emotional capacities in a variety of settings and can lead to more targeted support for young people who could benefit from it.

Proactively Using Data

Beyond selecting measurements and a data system to support them, OST programs should proactively use data as a check on their current systems around social and emotional competency building and act on the evidence the data provides to make the adjustments that are needed in meeting the needs of the youth in their program. Fostering proactive use of data starts with training and professional development around the tools and data system. Training includes understanding the administration and results of the tools themselves, but should also focus on the model or framework that underlies the measure to create a common language within and across OST programs.

Applying Measurement to OST

There are at least three ways measurement can be used in the ongoing support of OST programming: (a) as an opportunity to know every child at the beginning of the program and to better customize OST programming to meet the needs of all youth; (b) as an assessment for continuous program improvement, to inform the selection of staff professional development opportunities, and as an assessment of the quality of the programming in general; (c) and as part of a formal evaluation that brings together community members around a common language and to understand the program's impact.¹ In Table 14.1, we describe the three applications of social and emotional measures, their purpose, and the audience for each method. These applications are not presented as à la carte offerings, but as the three essential applications that all OST programs using measurements of social and emotional competencies should employ when planning to collect data. Interestingly, the very same tools can often be used to accomplish the three areas of application we describe in Table 14.1.

KNOWING EVERY CHILD

As noted previously, research on OST programs has found that many young people who attend high-quality programs experience benefits from participating in those programs, but what does it take to create and maintain a high-quality program? A review of OST studies conducted by the American Youth Policy Forum (AYPF) found that quality OST programs

TABLE 14.1 The Three Applications of Measurement in OST

Application	Purpose	Audience
Know every child	To collect data directly from youth via self-report measures to better understand the social and emotional strengths and challenges youth face to better align program curricula and facilitator style to meet the social and emotional needs of youth in the program.	OST program facilitators and staff, youth, teaching partners, families
Continuous improvement	To identify areas where facilitators or staff may benefit from additional professional development and understand strengths and weaknesses of curricula.	OST program directors and staff, families, partners
Understand impact	To determine whether the investments made in the program are generating the intended youth outcomes and identify areas of improvement in the future	Programs, funders, evaluators, researchers, community leaders, families, partners

were dependent on quality staff who developed positive relationships with youth, provided challenging activities, and facilitated youth engagement (“Helping Youth Succeed,” 2006). When practitioners have a deep understanding of the tools they are using and the theory behind those tools, they will be able to know every child in their program when the child first enters the program. By using a measurement of youth social and emotional skills that focuses on youth’s self-reported strengths and challenges, a facilitator can gain insight into what will motivate the youth to remain engaged and feel connected to the program. Using the measurement can help foster a shared language around social and emotional skills or learning that OST staff can use to communicate both with each other and with the youth they serve.

CONTINUOUS IMPROVEMENT

When we begin working with OST programs interested in incorporating measurement into their program improvement work, we encourage them to go beyond thinking of measurement as only an end-of-the-year evaluation activity. Instead, we believe that in addition to evaluation, continuous improvement is a key use of measurement. This program improvement work is a continuous cycle that can happen while the program is underway, starting with planning, informed by action, checked by data collected during the program, and adjusted during the program to meet youth needs. This process is visualized in our continuous improvement model (see Figure 14.1).

In our two decades of working within OST, we have found that the programs that adopt this approach to continuous improvement engage in the following activities: They choose robust tools, adopt a system for quick and accurate reporting, and proactively use data to know every child, foster continuous improvement, and inform policy and funders.

UNDERSTAND IMPACT

One of the most clear-cut ways to understand an OST program’s impact is to use measurement tools to inform a formal evaluation of the program. Before selecting a tool, or a suite of tools, it is important to define how the program intends to measure its impact, and to ensure the tool or tools selected will be able to meet the needs of those goals by providing accurate and informative measurements. Funders, evaluators, researchers, and larger OST networks are always interested in better understanding how investment in OST programming can lead to improved youth outcomes. Is funding being invested in the right strategies and do program facilitators and staff have the right

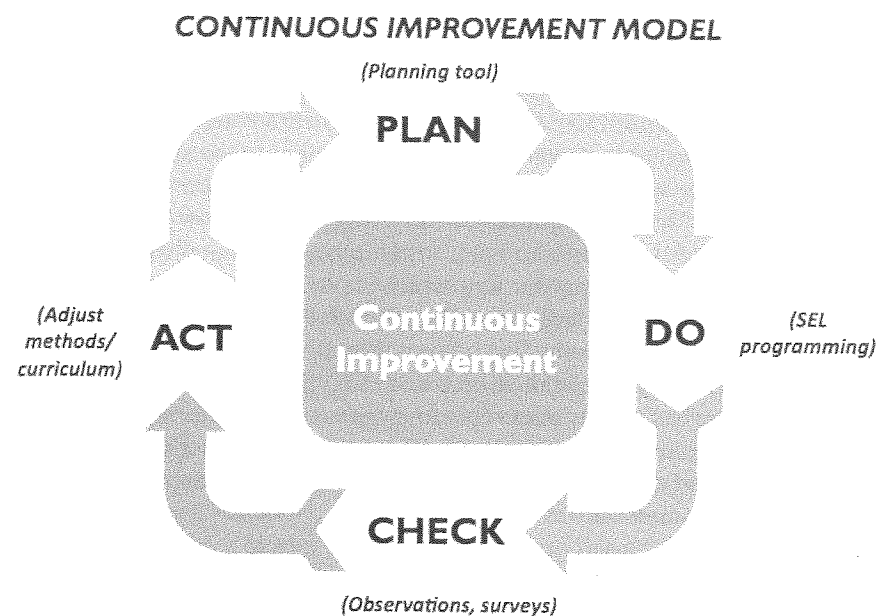


Figure 14.1 Continuous improvement model.

professional development and training opportunities to provide youth with high-quality experiences? Are the programs successfully meeting the needs of the youth they serve, and do they show improvements in social and emotional competencies, program engagement, and academic outcomes?

The benefit of conducting program evaluations is clear, and measures of youth social and emotional competencies are one of many assessment tools that can help OST programs better understand whether they’re meeting the goals they set out for themselves at the beginning of the program. For an example of a national evaluation of OST state networks that includes a look at social and emotional competencies (also referred to as 21st century skills), see Allen, Noam, et al., 2017. Beyond measuring the direct impact of participating in an OST program, these measures can also help identify high levels of student need or gaps in program services that could be addressed with additional funding and support.

SPROCKETS AND THE BOSTON SUMMER LEARNING COMMUNITY

Just as we recommend that OST facilitators and staff tailor their program to the needs of their participants, we will share our similar tailored approach to our collaborations with the two OST network partnerships we present

in this chapter: Sprockets, in Saint Paul, Minnesota, and the Boston Summer Learning Community (BSLC), in Boston, Massachusetts, which is a collaborative effort between The PEAR Institute and BASB. We have selected these two OST program networks to highlight their strong commitment to building youth social and emotional competencies and to share how they were able to successfully incorporate measurement into their work to evaluate their own efforts, to continuously improve, and to know every child at the beginning of the program. Each organization has deep strengths and has faced challenges along the way, which we will explore in this section. Both organizations were trained in The PEAR Institute's model of social and emotional development, the clover model, at the beginning of our work together, and used our measurement tool, the Holistic Student Assessment (HSA), as well as our data reporting system and professional development, coaching, and training services. This section will briefly describe the clover model and the HSA before further exploring how each organization adapted them to meet the needs of its network.

A Youth Development Foundation: The Clover Model

Starting with a strong model or framework around youth development will help ground any assessment tools or measures an OST program selects in a deeper understanding of youth's social and emotional needs and will help program staff adopt a common language around social and emotional capacities that will improve the program's ability to meet youth needs in this area. There are many models to choose from in this area; one of the more popular ones is the collaborative for academic, social, and emotional learning (CASEL) model, referenced earlier in this book. This section will share the clover model, a model that was designed to be simple and flexible enough to work with a variety of models and frameworks.

The clover model was created by Dr. Gil G. Noam at The PEAR Institute in response to a need he saw for a simple model of youth development that takes a more integrative approach than the linear, stepwise theory of youth development that was popular with stage theorists like Erik Erikson (Erikson, 1950). After two decades of comparative research, including research on various developmental and personality models that incorporate attachment, functionalist, and social-cognitive development theory from Bowlby, Erikson, and Piaget, the clover model was formed (Bowlby, 1969; Erikson, 1950; Piaget, 1954). For a summary of this comparative research, see Noam, Malti, and Karcher (2013). The clover model is also referred to as a developmental process theory (DPT), and comes out of Noam's clinical and developmental theory work. It was designed to function as a compass for educators, youth workers, and families to use in creating a shared language

around social and emotional development and learning. The model draws from many research areas and theories as well as classroom and clinical observations to form a clear, unified framework that informs both measurement and program improvement.

The clover model focuses on four domains of development: active engagement, assertiveness, belonging, and reflection (see Figure 14.2). Active engagement represents the time in a young person's life when they have a desire to physically engage with the world through their bodies; assertiveness represents their development of voice and the desire for choice and self-determination; belonging represents their desire to build strong relationships with peers and adults; and reflection represents the desire to explore and make meaning of the world and the self.

The clover model focuses on what Noam has identified as the minimum elements required to describe human social and emotional development, through decades of interviews with youth and longitudinal research (Noam, Powers, Kilkenny, & Beedy, 1990). Each domain is visualized as a distinct "leaf" of a clover, but in practice these leaves overlap like a Venn diagram. While a young person may shift focus from one clover domain to another over the course of development, all domains are present to some degree for youth at all times.

The clover model was first field-tested in the OST world through the Responsive Advocacy for Life and Learning in Youth (RALLY) afterschool program. The RALLY program focused on creating educational environments that helped OST staff build therapeutic elements into their relationship with youth without requiring the hiring of additional therapists. By taking a translational approach, in which research is directly applied to practice and both are informed and strengthened, The PEAR Institute was able to create measurements and coaching and training programs that were informed by the clover model, just as the model itself was informed

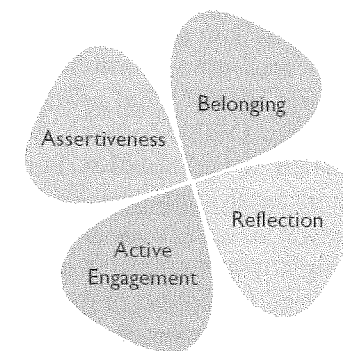


Figure 14.2 The clover model.

by years of practice. The lessons learned piloting the clover model in the RALLY OST program have also been adapted into The PEAR Institute's training and coaching services, which we will describe in the examples of our work with Boston and St. Paul.

The Holistic Student Assessment

The HSA is an evidence-based, student self-report tool that functions as a universal screen to measure social and emotional resilience in youth (Malti & Noam, 2008, 2009, 2016; Noam & Triggs, 2016; see Table 14.2 for a list of the HSA scales and sample items). It is based on the clover model, and interconnects adolescent psychopathology with social and emotional development and resiliencies (Noam, 1996). In keeping with the clover model, the HSA was designed to measure key dimensions of strength and challenge to complement existing assessments of youth risk factors popular in education at the time the tool was developed. The four domains of clover that are represented in the resiliencies section of the HSA measure areas of social and emotional competencies, but can also represent risks of behavioral and emotional problems (Noam et al., 2013). While challenges and risk factors are captured in this measure, the focus of the HSA's interpretation is a strengths-focused one that is designed to help educators identify ways to promote youth's strengths, prevent additional risk, and help educators identify youth who may need additional intervention and individualized support. It is designed this way intentionally because Noam's research has found that holistic measures that address both risk and resiliency can be more effective in engaging students in high-quality, developmentally strengthening educational experiences than measures that only consider risk (Malti & Noam, 2009).

The HSA was piloted in the RALLY program alongside the clover model to ensure it connected effectively to practice (Malti & Noam, 2008). The HSA has also undergone several years of validation research and has become a widely used measure, administered nearly 60,000 times across 22 U.S. states and in 10 countries (Malti, Zuffianò, & Noam, 2017; Noam & Goldstein, 1998; Noam, Malti, & Guhn, 2012). For a more technical dive into the HSA's design and application, see Allen, Thomas, Triggs, and Noam (2017).

When considering using any measure, it is important to ensure it will work well with other measures. In support of the HSA, The PEAR Institute has developed several companion survey variations, including a retrospective student version to measure change throughout the year, a facilitator survey, and a version of the HSA for families of youth. The HSA has also

TABLE 14.2 The 14 Scales of the HSA

Dimension	Scale	Definition	Sample Item
Intra- and Interpersonal Resiliencies	Action Orientation	Engagement in physical and hands-on activities.	I like being physically active and moving my body.
	Assertiveness	Confidence in putting oneself forward and standing up for what one believes.	I defend myself against unfair rules.
	Empathy	Recognition of others' feelings and experiences.	I like to help people with their problems.
	Reflection	Inner thought processes and self-awareness, and internal responsiveness toward broader societal issues.	I try to understand the world I live in.
	Emotional Control	Self-regulation of distress and management of anger.	I react to things so quickly I get in trouble.
	Trust	Perception of other people as helpful and trustworthy.	I trust other people.
	Optimism	Enthusiasm for and hopefulness about one's life.	I have more good times than bad times.
Relationships With Others	Relationships With Peers	Positive and supportive social connections with friends and classmates.	I have friends I can trust.
	Relationships With Adults	Positive connections and attitudes toward interactions with adults.	There are adults I look up to and admire.
Learning and School Engagement	Learning Interest	Desire to learn and acquire new knowledge.	I like to learn new things.
	Critical Thinking	Examination of information, exploration of ideas, and independent thought.	I try to look at a situation in different ways.
	Perseverance	Persistence in work and problem solving despite obstacles.	I keep going with work even when it takes longer than I thought it would.
	Academic Motivation	Incentive to succeed in school, without necessarily including general interest in learning.	I want to be a good student.
	School Bonding	Positive personal connections and the sense of belonging in one's school.	I feel like people understand me at my school.

been used in conjunction with non-PEAR measures and models, as we will describe in our section about our work in Boston and St. Paul.

Data Reporting Systems and Interpretation

Through years of working directly with practitioners to develop the clover model and the HSA, we have learned that the presentation and interpretation of the data is the key to effectively integrating measurement tools into OST programming. HSA data are typically collected at the beginning of the program and are reported back to facilitators within 1 week of their collection so that the data can play an essential role in helping facilitators and staff know every child at the beginning of the program.

In addition to a swift return of the data, The PEAR Institute provides interpretation training and support to each program it works with to ensure the data will be clearly understood and can be used for immediate action within the program. The interpretation sessions include time spent framing the HSA around the clover model and encouraging practitioners to use the data to get to know the youth in their program. It encourages practitioners to stay strengths-focused while interpreting the data and to strive to help youth build balance rather than eliminate behaviors. This approach helps build positive, meaningful relationships. It also helps facilitators and staff to intentionally plan intervention strategies for the youth identified by the HSA as needing higher levels of support.

It is important for any program looking to adopt new measures or models to select ones flexible enough to adapt to the unique needs of the program, while remaining robust enough to maintain quality, so they can be used for bigger-picture norming work across programs as well as long-term evaluations. The clover model and HSA are simply examples of this greater principle. Now that we've laid out the approaches and tools The PEAR Institute uses to support OST programs, we will describe two applications of our work in Boston and St. Paul.

Our Work With Sprockets—Saint Paul

Beginning in 2015, the social and emotional learning (SEL) pilot project is a multi-year collaboration between Sprockets and The PEAR Institute to support the social and emotional development of youth. Sprockets, a network of afterschool and summer programs for youth in Saint Paul, Minnesota, was formed as a collaboration of community organizations, the City of Saint Paul, and Saint Paul Public Schools, and was designed to make Saint Paul a model for community-wide learning. This project includes

professionals from youth-serving organizations and schools across the Twin Cities area in a multi-year process of professional learning to increase local SEL capacity. Sprockets exemplifies an OST network that successfully employed an SEL measurement to know every child, continuously improve, and understand its impact, and it serves as a model for other OST programs interested in incorporating SEL more deeply into their work.

The first step in Sprockets' SEL implementation efforts was conducting deep planning around the creation of a cohort of afterschool providers, school districts, and intermediary organizations from St. Paul, Minneapolis; Brooklyn Heights; and Brooklyn Center to work with The PEAR Institute. With a cohort in place, Sprockets was able to take actionable steps toward helping programs deepen their knowledge of SEL through semi-annual, multi-day conferences and monthly cohort meetings. Sprockets programs also began using the HSA to collect youth data that cohort members applied in a variety of ways—for example, as a check on areas where youth had social and emotional strengths and challenges, as a way to explain program impact to the schools they partner with, and in reports to funders on the progress of their programs. These efforts contributed to an increased fluency around SEL within the cohort, and members shared their vast knowledge and experience with each other. In Year 2 of the project, the focus was on putting what the cohort learned into action by building the capacity of the network to support the work locally. Two cohorts were developed to support this effort: the Professional Development and Implementation Cohort, designed to support the implementation of the HSA and clover model; and a Train-the-Trainer Cohort, to prepare local members to become clover facilitators and HSA coaches.

In addition to Sprockets' initiatives around SEL-focused professional development and training, OST programs within the Sprockets network were able to use HSA data to deepen relationships with youth. For example, CLUES, a youth program for Latino/a teens in St. Paul, used the HSA to better support its mentoring program. Mentors and teens, together with CLUES program director and SEL pilot cohort member Tanya Zwald, explored the teens' HSA results as a gateway to learning about the unique strengths, struggles, and dreams of each young person. Zwald shared with us an example of the impact that using HSA data with a young person can have to strengthen a mentoring relationship:

"I truly think that his mentor came in wondering if it made sense to continue together . . . and left feeling more connected than he'd ever expected and excited to dig deeper," explained Zwald. "It was so cool to see this young man own and explain who he is, and provide us with an opportunity to build him up and encourage him with ideas for growth. The mentor now has better tools to support and interact with him, and seemed so excited to try them

out . . . and I think the student felt more empowered to be his true self and confident to stretch himself.”

In that example from the field, an SEL measure was used to “know every child,” providing insight into a young person’s experience and helping the mentor improve the relationship and select more targeted strategies to improve engagement. In a similar way, our work with Sprockets and the feedback they have shared with us has helped us to gain greater insight into our work as we continue on our own journey of continuous improvement. For example, during both years of the project, the cohort has engaged in deep learning and discussion about cultural responsiveness in SEL. Demonstrating the vast knowledge of the highly diverse Twin Cities area, the cohort has helped give shape to discussions about cultural and linguistic inclusion for HSA and clover trainings nationwide. The result of this collaborative project has been symbiotic, informing The PEAR Institute’s work from Boston to Texas and beyond, and has created a strong professional learning community with a deep understanding of how to support social and emotional competencies in youth.

Our Work With the Boston Summer Learning Community

In 2010, The PEAR Institute was invited to join the launch of the BSLC by BASB and BPS in partnership with Boston Opportunity Agenda. The BSLC is a diverse citywide network of summer learning programs that are aligned around the shared goals of closing the opportunity gap for youth in Boston, implementing shared measures across programs, and learning from each other to improve program quality. Over time the community has grown; according to BASB’s preliminary report for the 2016 BSLC, the network has served more than 10,000 students through 127 program partners (“The State of Summer,” 2016).

The PEAR Institute has provided social and emotional measurements and training support for the BSLC since its inception. Each year, The PEAR Institute administers the HSA to participating programs (the process typically includes two administrations: a pre-survey and a retrospective survey, the HSA-Retrospective). The HSA data collected were combined with other SEL measures to create the Program Report for Improvement & System Measurement (PRISM) that is delivered to programs in the fall. The PRISM is an example of how a measurement tool can be combined with other measures to give programs a bigger picture of “where their program is” in terms of quality, youth engagement, and facilitator strengths and challenges. The PRISM shows a program’s specific results across all measurement tools and compares them to the summer cohort as a whole. The PEAR Institute

worked closely with BASB to integrate HSA data into the PRISM reporting system so BSLC programs would have a way to review all their data in one place and easily see the importance of considering converging data sources while formulating program improvement strategies.

In addition to data collection and reporting, The PEAR Institute offers on-site coaching services to programs that opt in to the service. This additional coaching support is tailored to the needs of the program and can cover a wide variety of topics. Past coaching services include SEL framework overviews, deeper dives into the program’s data, targeted recommendations for youth in need of additional support, research on trauma, action planning, and the piloting of an SEL-focused classroom observation tool. As the needs of the BSLC have evolved over the years, so have the services and support The PEAR Institute provides for the community. Just as the programs focus on continuous improvement, so must the measures and services designed to support these programs. The PEAR Institute’s work with the BSLC over the past 7 years has reaffirmed the importance of flexible measurement approaches that OST networks and programs can apply as they see fit to understand the social and emotional competencies of their youth, continually improve, and evaluate impact.

Challenges of Using Measurement in OST

It is important to address some of the challenges that often come up when discussing measuring social and emotional competencies both in general and specifically within OST programming. First, there is the ongoing debate in the field about whether it’s possible to accurately measure youth social and emotional competencies, and if so, how. Even researchers who champion teaching social and emotional competencies caution that currently developed measures of social and emotional competencies should not be used for educational accountability due to their limitations and imperfections (Duckworth & Yeager, 2015). While OST programs face different pressures around accountability than schools experience, it is understandable that skepticism remains around how—or whether—to use this type of measurement.

Even the language in this field is cloudy. While the term *social and emotional learning* (SEL) has a measure of popularity in the field, there is not a complete consensus around this terminology. At The PEAR Institute, we believe one of the complications of the term SEL is a misinterpretation of the term that underscores a mistaken belief that youth’s social and emotional growth can be addressed with curriculum alone. Our approach is to put the developmental perspective back into the center of the process. By understanding a child’s developmental strengths and challenges, educators can

be more strategic about which skills should be focused on and how those skills should be approached to lead to the best outcomes. For that reason, in our work we have deliberately chosen to use the term *social-emotional development* (SED), but we see ourselves as part of the larger SEL movement and have refrained from using that terminology throughout this chapter for the sake of consistency within the book.

Even if social and emotional competencies are measurable, is it the best use of an OST program's limited time and resources? The data collection process can be time consuming, particularly for programs with short windows of time to work with youth, and can bring a test-like atmosphere to a program that is consciously working to provide a different experience from the typical school day. To better understand the feelings of OST professionals around data collection, The PEAR Institute conducted the *2016 STEM Learning Ecosystem Leadership Survey on Evaluation and Assessment* (Allen & Noam, 2016). While OST facilitators and staff generally agreed that some level of evaluation and assessment was important to inform program quality, they identified six major challenges: a lack of necessary infrastructure, like a common data system; limited resources, including staff time and funding; a need for common assessments; negative associations with high-stakes testing; stringent data sharing/privacy policies; and disconnects among partners (Allen & Noam, 2016). When considering the question of how social and emotional competency measurement can be effectively used in OST programs, it is important to keep these identified challenges in mind, and not to view them as purely deterrents to measurement, but as inspiration to inform our best thinking around how to create data collection tools and interpretation systems designed to be the most useful for practice.

CONCLUSION

In this chapter, we shared our experiences working with two OST networks to improve their programming and build stronger relationships with the youth they serve. Through these two examples, we have shown that incorporating measurement that focuses on youth social and emotional competencies is possible, but building these types of systems takes time. If you are working to build a system within your own OST program or network of programs, it's important to remember the work described in this chapter took between 2 and 7 years to establish. Though time consuming, it is heartening to see that it is possible for large communities of programs to adopt common measurement tools and use the data to make informed decisions about resource allocation and targeted professional development. We recommend that OST programs do not start from scratch. There are

approaches that programs can borrow, try, or modify from others, such as the work we have described in this chapter.

The key to this work is innovation. Research informs only part of the work, and collecting feedback from the field is critical. We have improved our measurements through feedback from our deep partnerships, and they have helped us to design measurement tools and trainings that are better suited for informal/nonformal OST programs. We need to bring the same level of inquiry and reflection to our evaluation and assessment strategies that we hope educators will instill in our children during their OST activities.

NOTE

1. Of course, there is an additional extension of the evaluation process, which entails research, the pursuit of specific hypotheses, and rigorous designs that expand our knowledge and are published in peer-reviewed journals. This last element is not of primary concern for this chapter, though it is an important part of The PEAR Institute's work and the psychometric validation of its tools.

REFERENCES

- Allen, P. J., & Noam, G. G. (2016). *STEM learning ecosystems: Evaluation and assessment findings* (Report). Belmont, MA: The PEAR Institute: Partnerships in Education and Resilience. Retrieved from http://stemecosystems.org/wp-content/uploads/2017/01/STEMEcosystems_Final_120616.pdf
- Allen, P. J., Noam, G. G., Little, T. D., Fukuda, E., Gorrall, B. K., & Waggenspack, B. A. (2017). *Afterschool & STEM system building evaluation 2016*. Belmont, MA: The PEAR Institute: Partnerships in Education and Resilience. Available at <https://www.thepearinstitute.org/afterschool-stem-evaluation-2016>
- Allen, P. J., Thomas, K., Triggs, B., & Noam, G. G. (2017). *The Holistic Student Assessment (HSA) technical report*. Belmont, MA: The PEAR Institute: Partnerships in Education and Resilience.
- Bowlby, J. (1969). *Attachment*. New York, NY: Basic Books.
- Cooper, H., Valentine, J. C., Nye, B., & Lindsay, J. J. (1999). Relationships between five after-school activities and academic achievement. *Journal of Educational Psychology, 91*, 369–378.
- Darling, N. (2005). Participation in extracurricular activities and adolescent adjustment: Cross-sectional and longitudinal findings. *Journal of Youth and Adolescence, 34*, 493–505.
- Duckworth, A. L., & Yeager, D. S. (2015). Measurement matters: Assessing personal qualities other than cognitive ability for educational purposes. *Educational Researcher, 44*(4), 237–251. <https://doi.org/10.3102/0013189X15584327>

- Durlak, J. A., & Weissberg, R. P. (2007). *The impact of afterschool programs that promote personal and social skills* (CASEL Report). Chicago, IL: Collaborative for Academic, Social, and Emotional Learning. Retrieved from <https://casel.org/wp-content/uploads/2016/08/PDF-1-the-impact-of-after-school-programs-that-promote-personal-and-social-skills-executive-summary.pdf>
- Erikson, E. H. (1950). *Childhood and society*. New York, NY: Norton.
- Fredricks, J. A., & Eccles, J. S. (2006). Is extracurricular participation associated with beneficial outcomes? Concurrent and longitudinal relations. *Developmental Psychology, 42*, 698–713.
- Helping Youth Succeed Through Out-of-School Time Programs. (2006, January). Retrieved from the American Youth Policy Forum website: <http://www.aypf.org/publications/HelpingYouthOST2006.pdf>
- Lauer, P. A., Akiba, M., Wilkerson, S. B., Apthorp, H. S., Snow, D., & Martin-Glenn, M. L. (2006). Out-of-school-time programs: A meta-analysis of effects for at-risk students. *Review of Educational Research, 76*(2), 275–313. doi.org/10.3102/00346543076002275
- Malti, T., & Noam, G. G. (Eds.). (2008). Where youth development meets mental health and education: The RALLY approach. *New Directions for Youth Development, 120*. San Francisco, CA: Jossey-Boss.
- Malti, T., & Noam, G. G. (2009). A developmental approach to the prevention of adolescent's aggressive behavior and the promotion of resilience. *International Journal of Developmental Science, 3*(3), 235–246. <https://doi.org/10.3233/DEV-2009-3303>
- Malti, T., & Noam, G. G. (2016). Social-emotional development: From theory to practice. *European Journal of Developmental Psychology, 13*(6), 652–665. <https://doi.org/10.1080/17405629.2016.1196178>
- Malti, T., Zuffianò, A., & Noam, G. G. (2017). Knowing every child: Validation of the Holistic Student Assessment (HSA) as a measure of social-emotional development. *Prevention Science, 19*(3), 306–317. <https://doi.org/10.1007/s11121-017-0794-0>
- Noam, G. G. (1996). High-risk youth: Transforming our understanding of human development. *Human Development, 39*(1), 1–17. <https://doi.org/10.1159/000278376>
- Noam, G. G., & Goldstein, L. S. (1998). *The resilience inventory*. Unpublished protocol.
- Noam, G. G., Malti, T., & Guhn, M. (2012). From clinical-developmental theory to assessment: The Holistic Student Assessment tool. *International Journal of Conflict and Violence, 6*(2), 201–213. <https://doi.org/10.4119/UNIBI/ijcv.276>
- Noam, G. G., Malti, T., & Karcher, M. J. (2013). Mentoring relationships in developmental perspective. In D. L. DuBois & M. J. Karcher (Eds.), *The handbook of youth mentoring* (2nd ed., pp. 99–115). Los Angeles, CA: SAGE.
- Noam, G. G., Powers, S. I., Kilkenny, R., & Beedy, J. (1990). The interpersonal self in life-span developmental perspective: Theory, measurement, and longitudinal case analyses. In P. B. Baltes, D. L. Featherman, & R. M. Lerner (Eds.), *Life-span development and behavior* (Vol. 10, pp. 59–104). Hillsdale, NJ: Erlbaum.
- Noam, G. G., & Triggs, B. (2016). Positive developments during the transition to adulthood. In R. A. Scott & S. M. Kosslyn (Eds.), *Emerging trends in the social*

- and behavioral sciences* (pp. 1–15). Hoboken, NJ: John Wiley & Sons. Retrieved from <http://doi.wiley.com/10.1002/9781118900772.etrds0416>
- Piaget, J. (1954). *The construction of reality in the child*. New York, NY: Basic Books.
- Price, L. (2016). *Psychometric methods: Theory into practice* (1st ed.). New York, NY: Guilford Press.
- Shernoff, D. J. (2010). Engagement in after-school programs as a predictor of social competence and academic performance. *American Journal of Community Psychology, 45*(3–4), 325–337. <https://doi.org/10.1007/s10464-010-9314-0>
- The State of Summer: Preliminary Findings From the 2016 Boston Summer Learning Community. (2016, Fall). Retrieved from the Boston After School & Beyond website: <http://bostonbeyond.org/wp-content/uploads/2016/11/Summer-2016-Data-Report.pdf>