CONSIDER THE CONTEXT:

WHY AND HOW TO FACTOR ENVIRONMENT IN MEASURING SEL/SOFT SKILLS

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CONTENTS

ACRONYMS AND ABBREVIATIONS

3EA	Education in Emergencies, Evidence for Action
DEEP	Data and Evidence for Education Programs
HIC	High-income countries
LMIC	Low- and middle-income countries
LRHC	Learning to Read in a Healing Classroom
SEL	Social-emotional learning
SoLD	Science of learning and development
UBC	Un Buen Comienzo
USAID	United States Agency for International Development

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EXECUTIVE SUMMARY

For children and youth to grow into thriving adults, they must develop their social-emotional learning (SEL) and soft skills. USAID provides programming in both in-school and out-of-school contexts to help individuals foster these skills. However, a key aspect of developing SEL and soft skills, the learning environment, has been understudied in low-and middle-income country (LMIC) country contexts, potentially limiting the effectiveness of these and other programs. This brief presents evidence concerning the value of considering the learning environment in the development and measurement of SEL and soft skills in LMICs. In this brief, the term "environment" reflects a set of process features in the SEL learning environment (e.g., day-to-day educator-student and peer-peer relationships and interactions, social-emotional climate, daily routines, and safety) that have been identified in the literature as essential for fostering healthy SEL/soft skills development. When program implementers and educators attend to the environment, they can create the conditions needed to support SEL/soft skills development. This evidence brief aims to draw attention to an important limitation in our existing measurement approaches—failure to adequately consider the environment in order to understand individual strengths and weaknesses—and to cast a vision for the SEL/soft skill measurement field.

Research—primarily from the United States—demonstrates that culturally sensitive and responsive settings characterized by warmth and trust between educators and learners are associated with better academic and social-emotional outcomes. Although there is far less evidence demonstrating these associations in LMIC contexts, or conflict-affected contexts, existing research from these contexts indicates that safety, a sense of connectedness, and friendly and encouraging learning environments are important conditions for SEL and soft skills development. Several international organizations recognize that positive environments are essential for development (e.g., UNICEF 2019; USAID 2018; Yoshikawa et al. 2018), but the evidence base on these environments, what they look like, and how to foster them, is limited. Unless greater attention is paid to the environment in these contexts, improvements in SEL/soft skills from SEL/soft skills programming may be limited (Rao & Sun 2015).

Despite the general consensus that the environment plays a critical role in the development and measurement of SEL and soft skills, tools that measure either SEL or soft skills in a given context or tools that assess the SEL/soft skills environment remain limited. Existing measures tend to capture ***process features of the environment*** that have been linked with positive SEL/soft skills development, but have not included measures of individual skills in the learning environment context. The existing measures generally use self-reports and direct observations. A companion brief provides a set of recommended measures for evaluating the SEL/soft skill environment.

The environment can affect the reliability and validity of individual-level SEL/soft skills measurement approaches. Research indicates that the development of SEL and soft skills competencies is not linear, i.e., individuals exhibit or use different competencies in different places and at different times. Apparent "differences" in SEL/soft skills across contexts could simply reflect variations in the social expectations of various contexts and not actual behavior, something current SEL/soft skills measures commonly fail to consider. In fact, most measures are designed to generalize across a wide range of competencies in all settings at all times and thus may over- or under-estimate an individual's skills in a given setting or at a specific point in time (Osher et al. 2017). As such, assessment strategies that consider environmental experiences are critical for understanding and interpreting individual development. Ultimately, the goal is to be able to connect measurement of the environment with measurement of individual SEL/soft skills so that the individual measures better reflect the contexts in which these skills develop.

It is critical to consider not only how education and youth development programming can create safe, supportive, and enabling environments but also how to measure those environments. Yet, the side-by-side measurement of the environment with SEL/soft skills themselves is rare, likely because tools designed to simultaneously measure both the environment and skills are not yet readily available.

As such, this evidence brief provides two calls to action:

1. Begin measuring the SEL/soft skills environment across LMICs and conflict-affected contexts.
2. Develop a set of tools that effectively combines the measurement of a SEL/soft skill with the measurement of the environment in which that skill is observed.

INTRODUCTION

For children and youth to grow into thriving adults, they must develop their social-emotional learning (SEL) and soft skills (definitions below). USAID provides programming in both in-school and out-of-school contexts to help individuals foster these skills. However, a key aspect of developing SEL and soft skills, the connection between skill development and an individual's learning environment, has been understudied in low-and middle-income country (LMIC) country contexts, potentially limiting the effectiveness of programming to develop these skills. What evidence exists suggests this is a critical area, just as it is in high-income country (HIC) contexts. While some of the evidence from HIC contexts may be applicable in LMICs, substantial research needs to be conducted in LMICs in order to learn how the relationship between learning environment and skill development is shaped in these contexts and what can ultimately improve the quality of SEL/soft skills programming.

This paper 1) outlines the existing evidence on the relationship between learning environment and SEL/soft skills development in LMICs, 2) provides an overview of existing measurement approaches for looking at the environment in SEL/soft skills programming in LMICs, and 3) explores how the environment can affect the validity and reliability of existing approaches used in evaluating individual-level SEL/soft skills improvement. A companion brief provides recommendations for some learning environment measures that have been used in LMIC contexts; these measures focus on ***process features of the environment*** that have been linked with positive SEL/soft skills development.

USAID's existing standard indicators on SEL and soft skills focus on individual measurement. This exploration does not represent an attempt to abandon individual-level measurement or the work of solving the challenges that exist in both developing and measuring individual skills. Rather, this brief aims to draw attention to an important limitation in our existing measurement approaches and to cast a vision for the SEL/soft skill measurement field that can include both individual and environmental measures. Attending to both can allow the individual measures to better reflect the contexts in which these skills develop, ultimately strengthening programming to allow children and youth to foster these skills.

Social Emotional Learning and Soft Skills

As defined in USAID's Social and Emotional Learning and Soft Skills policy brief, the terms "social and emotional skills" and "soft skills" refer to a set of cognitive skills (e.g., attention focusing and shifting, impulse control, planning, and goal setting), social skills (e.g., perspective taking, prosocial behavior, and conflict resolution), and emotional skills (e.g., emotion knowledge, emotion regulation, and empathy) that shape how individuals interact with one another (USAID 2019). At USAID, programming sometimes uses both terms for overlapping cohorts of learners, but most commonly, the term **"social and emotional skills"** is used in the context of early childhood and early primary education programming and the term **"soft skills"** is used in the context of formal and informal education and cross-sectoral programming for older youth in the range of ages 10-29 (USAID n.d.). **"Social and emotional learning,"** or SEL, is the process by which individuals learn and apply cognitive, social, emotional, and soft skills needed to succeed in educational settings, work, and the community (Jones et al. 2019).

WHY CONSIDER THE ENVIRONMENT IN SEL/SOFT SKILLS MEASUREMENT?

Ample evidence suggests that children and youth actively construct knowledge based on their experiences, relationships, and social contexts. Across one's lifespan, the brain continues to grow and change in response to experiences and relationships (for a review, see Cantor et al. 2019). Different neural systems have "sensitive periods" of development during which the system may be particularly receptive to certain experiences or environments, although skill acquisition can occur at any stage of development (Bornstein 2014). These sensitive periods vary considerably as a result of individual experiences, which can lead to variability in rates and levels of skill development across individuals (Johnson et al. 2015). Furthermore, development of SEL and soft skill competencies is not linear, with different competencies being exhibited or used in different places at different times (Osher et al. 2017). For example, a student may control her impulses more in a formal learning environment than in a home or community setting. In this case, teacher reports of SEL/soft skills would likely indicate the student has high impulse control while parent reports might indicate the student has low impulse control. These apparent "differences" may simply reflect variations in the social expectations of the two contexts and not actual behavior, something current SEL/soft skills measures commonly fail to consider. Similarly, two environments can look entirely different but be equally supportive of SEL/soft skills. As such, assessment strategies that consider environmental experiences are critical for understanding and interpreting development.

What is the "environment"?

For the purposes of this report, the term "environment" reflects a set of process features in the SEL learning environment, including day-to-day educator-student and peer-peer relationships and interactions, overall social-emotional climate (e.g., educators' empathy, warmth, and support; positive affect), daily routines, and safety. These features have been identified in the literature as essential for fostering healthy SEL/soft skills development across childhood and adolescence. Although process features are the most commonly examined features of the SEL environment, the learning environment can also be described in terms of other attributes, such as:

- **Type of setting** (e.g., schools, homes, communities, workforce development programs)
- **Type of program/practice** (e.g., SEL curriculum or practice implemented)
- **Composition** of that setting (e.g., proportion of high SEL peers and lower SEL peers)
- **Structural features** (e.g., infrastructure, health/safety, class/group size and ratio, educator characteristics)
- **Systems** (e.g., ministries of education, government regulations)

Terms such as the "enabling environment" (i.e., environments that encourage and recognize youth while providing a safe and supportive space for expression and growth) and "safe classrooms" (i.e., environments where children and youth feel free to be themselves and where the safety and well-being of learners, educators, and staff are promoted) have also commonly been used to describe SEL/soft skills-supportive environments (Britto, Yoshikawa, & Boller 2011; International Network for Education in Emergencies 2012; Soares et al. 2017).

Over the last several decades, researchers and practitioners in both HICs and LMICs (though more so in HICs) have begun to consider the broader environment in which skills develop, with particular attention to the emotional climate (e.g., educators' empathy, warmth, and support of learners; educators' responsivity to learners' needs; high positive affect and low negative affect) and to the relationships and interactions within those contexts. Research shows that the social-emotional climate of the learning environment can create the conditions necessary for SEL/soft skills development (Berg, Osher, Moroney, & Yoder 2017). Evidence also suggests that individual relationships (e.g., educator-student or peer-peer) are an essential element of healthy development across multiple domains, including social-emotional, academic, and health (Osher et al. 2020). A "whole child" approach to assessing development considers not just the individual but also the environment or contextual experiences of that individual (Darling-Hammond & Cook-Harvey 2018), a key element of Positive Youth Development (Alvarado et al. 2017). Although the whole child approach is important for all children and youth, it is likely particularly important for children and youth in LMICs and conflict-affected contexts because of the range of broader environmental factors, including increased stress, that can negatively affect development (Aber et al. 2016).

Without careful attention, the quality of environment, access to programs, and educational settings that target SEL skills does not ensure improvements in outcomes (Rao & Sun 2015). Such attention can contribute to more supportive programs and practices. Yet, most SEL/soft skills measures are designed to generalize across a wide range of competencies in all settings at all times and thus may over- or under-estimate an individual's skills in a given setting or at a specific point in time. Moreover, measurement of the environment remains relatively scarce in LMICs and conflict-affected contexts (UNESCO, UNICEF, Brookings Institution, and World Bank 2017). For example, in a recent OECD survey, fewer than half of participating countries reported monitoring interactions among children; few countries even reported monitoring simple tasks like whether children picked up a book to read or used learning materials such as worksheets, counting chips, etc. in daily lessons (OECD 2021). This is unfortunate, as individual-level assessments that are sensitive enough to be used for program evaluation (i.e., that take into consideration aspects of the environment) provide essential information to programs about their areas of strength and areas for improvement, thereby offering valuable insight into program impacts (Wolf et al. 2017). These facts, combined with the lack of consensus around the most salient SEL/soft skills domains and competencies and the limited number of psychometrically sound or culturally appropriate measures, has led to a need to consider not just the purposes of measurement but other factors that might contribute to the development of SEL/soft skills, including the broader environment (Berg et al. 2017; Halle & Darling-Churchill 2016).

OVERVIEW OF THIS EVIDENCE PAPER

This report consists of four sections. The first section describes the methodology used to produce this report. The second section offers some theoretical frameworks for understanding work on the environment. The third section summarizes existing research on the environment in both LMICs and HICs. The final section provides some recommendations for creating a SEL/soft skills-supportive environment and general strategies for measuring these environments.

A companion brief provides recommendations for a set of measures that have been used in diverse contexts to assess learning environments that are SEL/soft skills-supportive.

METHODOLOGY

To explore whether and to what extent the environment is considered in both the development and measurement of SEL and soft skills, the Data and Evidence for Education Programs (DEEP) team conducted an extensive literature review of recent/ongoing research from around the world on programs that aim to improve the SEL/soft skills environment, with a particular focus on those regions in which USAID programming occurs.

The DEEP team reviewed publicly available documents that described programs and practices that:

- Aimed to improve environmental quality, climate, and/or safety as a means to improve SEL/soft skills outcomes
- Measured at least one SEL/soft skills outcome, either alone or in combination with other learning outcomes

The team classified sources along two sets of criteria (Exhibit 1): one related to the environmental factors that were targeted or measured (i.e., whether they were SEL/soft skills-supportive) and one related to the quality of research on the program and/or practice as it relates to SEL/soft skills measurement.

Exhibit 1. Criteria for classification of sources ranging from weakest to strongest

EVIDENCE OF PROGRAM/PRACTICE AIMED AT IMPROVING THE ENVIRONMENT	RELIABILITY AND VALIDITY OF ENVIRONMENTAL MEASURE
• **None:** No clear evidence of SEL/soft skills features of the environment were targeted or assessed • **Limited:** Evidence that the program/practice targeted an aspect of the environment that could be linked with the SEL/soft skills context (e.g., class size, educator-student ratio, setting location) but no (or weak) assessments of that feature of the environment were made • **Some:** Evidence that at least one component of the program/practice aimed to directly improve the SEL/soft skills context (focused primarily on quality, climate, and safety) and an assessment was made of the environmental feature • **Extensive:** Evidence that the program/practice aimed to improve multiple aspects of the SEL/soft skills context (e.g., climate and relationships or safety and support) and each of those aspects of the environment was assessed	• **None:** No clear evidence of SEL/soft skills measurement in research/program evaluation • **Weak:** Reliability and validity of the SEL/soft skills measures were reported but are weak (e.g., poor reliability and/or little evidence of validity) and were not directly tied to the targeted environmental features (i.e., would not expect changes in skills due to program) • **Modest/Mixed:** Reliability and validity of the SEL/soft skills measures were reported but are modest (e.g., modest reliability and some evidence for validity), findings are mixed (e.g., some evidence of high reliability and some evidence of low reliability; mixed evidence for validity), and there is some link between the targeted environmental features and the measured SEL/soft skills outcomes • **Strong:** Reliability and validity of the measures were reported and are strong (e.g., high reliability across studies and at least some evidence of validity) and there is a clear link between the targeted environmental features and the measured SEL/soft skills outcomes

LIMITATIONS

The review, findings, and recommendations described below should be interpreted with the following limitations in mind. Although the DEEP team aimed to include research from LMICs on programs/practices that seek to improve the environment and measures that assess those environments, such work is currently quite limited. As a result, many of the recommendations derive from research conducted in HIC contexts. This makes it difficult to ascertain whether these programs or practices can be effectively implemented in LMICs and conflict-affected contexts. Nevertheless, recommendations were based on general practices that should be readily implemented in any context following adaptation to a given context. Furthermore, this report does not represent an exhaustive or systematic review of the literature; instead, the goal was to provide a summary of key findings related to the environment and SEL/soft skills, with particular attention to issues of measurement. Finally, although educators play an essential role in creating SEL/soft skills-supportive environments, measurement of educator skills and characteristics was beyond the scope of this report.

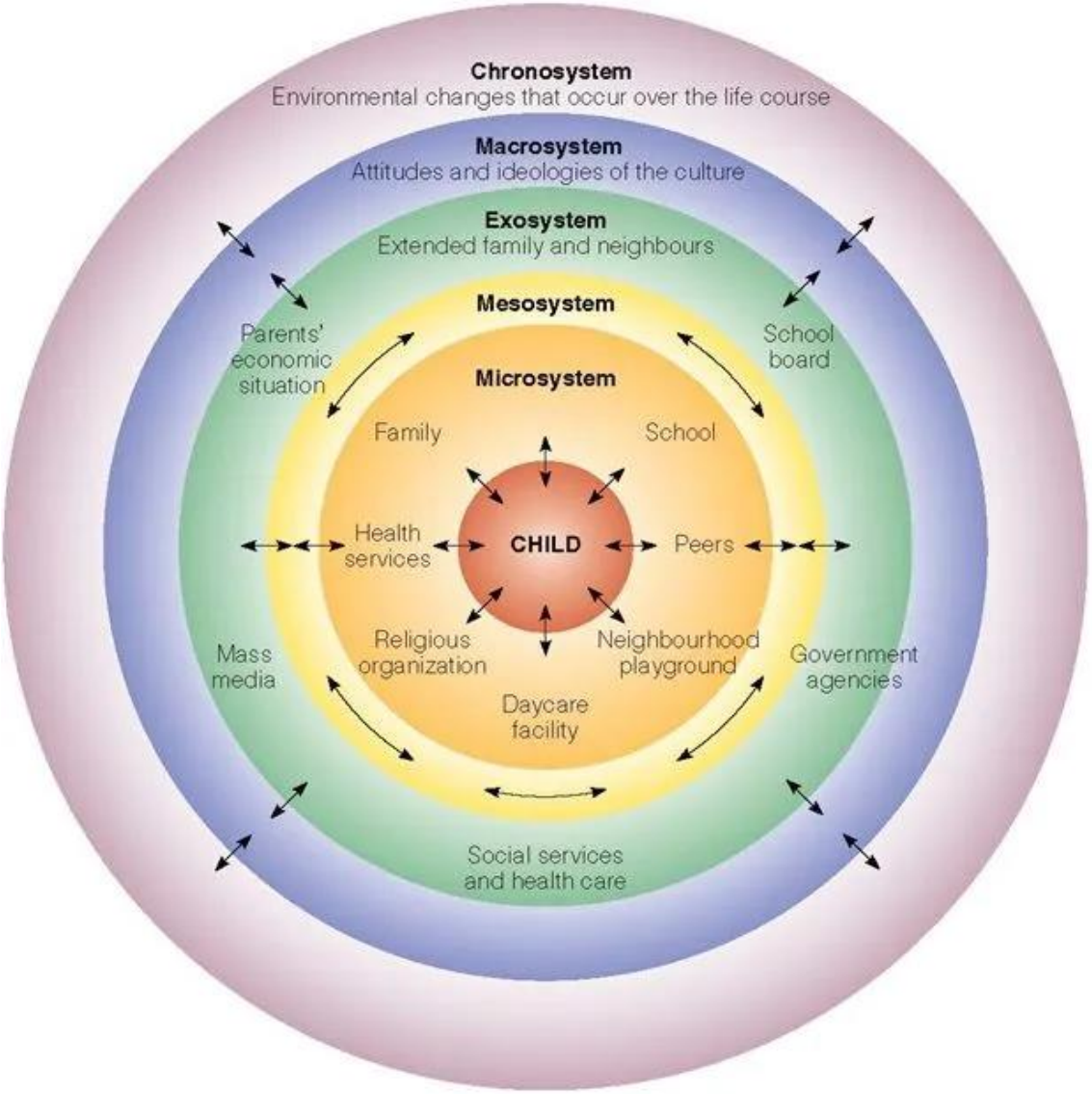
FINDINGS

THEORETICAL FRAMEWORKS GUIDING SEL/SOFT SKILLS PROGRAMMING

Several theoretical frameworks have consistently been used to guide and evaluate SEL/soft skills programming both in the United States and in LMICs and conflict-affected contexts. At the core of these frameworks is the developing child or youth. Surrounding that core, however, are essential environmental factors and interpersonal interactions that shape individual development. Every environmental factor, interpersonal interaction, or combination of the two is unique to each individual, illustrating the complexity and variability of human development (Fischer and Bidell 2006). These frameworks provide clear evidence that SEL/soft skills programming is firmly embedded in the notion that environment matters; they offer a useful schema for thinking about the value of examining (and measuring) SEL/soft skills in context.

The Bioecological Contexts and Developmental Systems frameworks suggest that individuals develop in a set of nested ecologies or environments (e.g., family, school, neighborhood, community, social media) and that development is a result of increasingly complex interactions within and across these environments (Bateson 2015; Lerner and Callina 2013; Morris and Bronfenbrenner 2006; Overton 2015). These frameworks also emphasize the fact that interactions are unique to each individual and vary across time and location (Bornstein 2017). Exhibit 2 provides a visual illustration of the Bioecological Contexts framework. At the center is the individual child or youth and their SEL or soft skills; immediately surrounding the individual are the environments closest to the child or youth (e.g., family, peers, learning environments), followed by those environments that do not directly affect the child/youth but may affect educational policies or SEL/soft skills programming (e.g., government agencies, health care), which then shape development. Also represented in this visual is the "mesosystem," which simply reflects the interactions that occur between elements of the environment that are close to the child or youth (i.e., the microsystem) and elements that are further away from the child or youth (i.e., the exosystem).

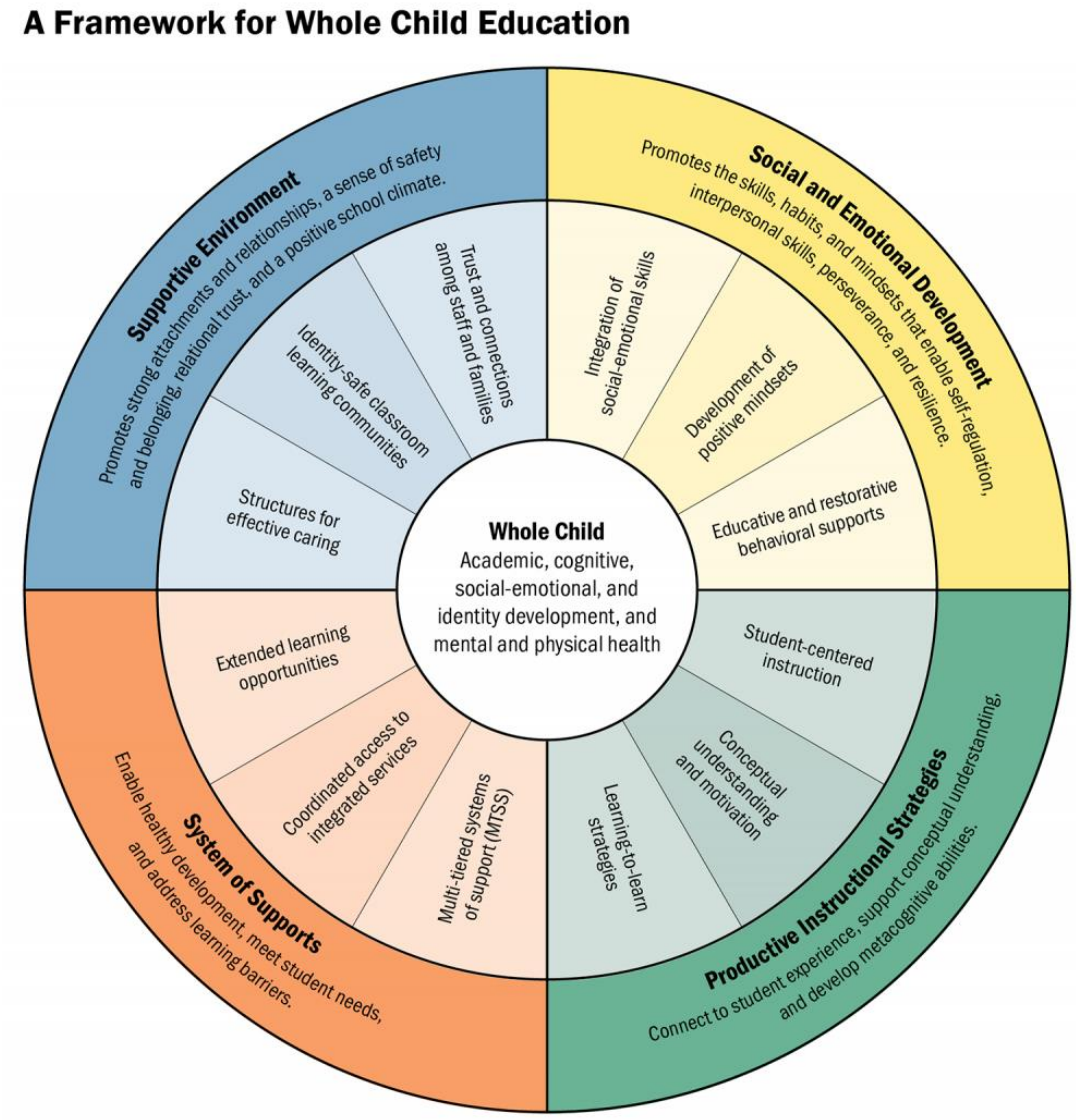
Exhibit 2. Bronfenbrenner's Ecological Contexts Model (1977)



Source: Guy-Evans, O. (2020). "Bronfenbrenner's Ecological Systems Theory." Simply Psychology. *https://www.simplypsychology.org/Bronfenbrenner.html*

The Science of Learning and Development (SoLD) framework further emphasizes that development is malleable and is shaped by interactions with and among environmental factors and the relationships that children and youth experience (Cantor et al. 2019). The SoLD framework employs a whole child framework to understand development, and as such, considers not just the environment but also instructional strategies and systems of support. The SoLD framework includes three primary features of environments that are SEL/soft skills-supportive: a caring, culturally responsive learning environment, structures that allow for continuity in relationships, consistency in practice, and regular, predictable routines, and relational trust and respect (Darling-Hammond et al. 2020). Exhibit 3 provides an illustration of the SoLD framework.

Exhibit 3. The Science of Learning and Development Framework (Darling-Hammond et al. 2020)



Source: Darling-Hammond, L., Flook, L., Cook-Harvey, C., Barron, B., & Osher, D. "Implications for educational practice of the science of learning and development." Applied Developmental Science 24, no. 2 (2020): 97-140.
https://www.tandfonline.com/doi/10.1080/10888691.2018.1537791

EVIDENCE OF THE ROLE OF THE ENVIRONMENT IN SEL/SOFT SKILLS DEVELOPMENT IN LMICS

Growing evidence suggests that a positive environment can support physical, psychological, cognitive, social, and emotional development in children and youth and help set them on a positive trajectory (for a review, see Berg et al. 2017). In contrast, negative or unsupportive environments can hinder development (Bouguen et al. 2013). For example, research—primarily from the United States—demonstrates that settings characterized by warmth and trust between educators and learners are associated with better academic and social-emotional outcomes (Cantor et al. 2019; Merritt et al. 2012;

Osher et al. 2018). Furthermore, positive adult-child (or adult-youth) relationships that are culturally sensitive and responsive can support a range of developmental outcomes, including healthy identity and social-emotional development and academic achievement (Hammond 2014; Steele and Cohn-Vargas 2013). Emotionally supportive learning environments are also associated with better mental health and academic outcomes (Merrit et al. 2012; Suldo et al. 2009). Predictable routines and behavioral expectations as well as cooperative peer relations are associated with greater motivation and engagement in learning (Cameron, Connor, Morrison, and Jewkes 2008; Sciaraffa, Zeanah, and Zeanah 2018).

Additional Factors Related to Positive Environments

Although not the focus of this report, there is also ample evidence demonstrating that SEL/soft skills programs and curricula support positive development in the United States (for a review, see Durlak, Weissberg, Dymnicki, Taylor, and Schellinger 2011) and that teacher professional development programs focusing on social-emotional well-being can improve the SEL/soft skills environment (Allen et al. 2013). For example, using a program developed in the United States, researchers found that educator training around classroom behavior management adapted for the Jamaican context resulted in small to modest reductions in children's conduct problems (Baker-Henningham, Scott, Jones, and Walker 2012).

Despite the robust body of evidence supporting the role of the environment in the development of positive SEL/soft skills competencies in the United States, there is only limited evidence demonstrating these associations in LMICs or conflict-affected contexts (e.g., Aber et al. 2017; Brunzell et al. 2015; Jordans, Pigott, and Tol 2016). Those studies that do exist are typically observational (rather than experimental) in nature and most commonly focus on improving teacher practices that promote SEL/soft skills (e.g., Davidson and Hobbs 2013), increasing interactions between different ethnic/racial or cultural groups (e.g., Bar-Tal and Rosen 2009), or treating children and youth at risk for psychosocial and mental health problems (Jordans et al. 2009). A majority of the studies also target only one domain of child/youth functioning rather than multiple interacting domains of development, and many do not measure SEL/soft skills. Broadly, findings across studies provide some evidence that safety, a sense of connectedness, and friendly and encouraging learning environments are important conditions for SEL and soft skills development. Nevertheless, considerably more research is needed in LMICs and conflict-affected contexts that measures not only the environment—and specifically SEL/soft skill supportive environments—but SEL/soft skills within that context.

Presented below are four programs illustrating how various environments can support positive development across multiple domains for children and youth, particularly those who experience extensive environmental risk. These programs were selected for inclusion in this report either because their efficacy has been supported by experimental evidence or because they show considerable promise for improving developmental contexts. All programs highlighted below either measured SEL/soft skills outcomes following program implementation or measured SEL/soft skills-supportive environmental indicators as part of their programming. It is worth noting, however, that there is a much broader range of programming that targets the quality of the environment without attention to SEL/soft skills, but these were not included in this review because it is the combination of targeting the environment and

measuring SEL/soft skills that is likely to lead to a deeper understanding of the role that environment plays in current SEL/soft skills measurement challenges.

EXAMPLE 1

Program: Healing Classrooms Learning to Read in a Healing Classroom (LRHC) and Learning Mathematics in a Healing Classroom (LMHC)	**Implementers:** International Rescue Committee
Location/s: Primarily, Democratic Republic of the Congo, Niger, Lebanon	**Environmental Target:** Educators
Description: Healing Classrooms is based on the premise that changes in the quality of the learning environment can lead to subsequent changes in academic and social-emotional competencies (Aber et al. 2017; Torrente et al. 2015). Through the use of integrated teacher resource materials, which promote the development of safe, emotionally supportive, and predictable student-centered classrooms, as well as collaborative teacher-learning circles, which include weekly grade-level meetings, monthly school-level meetings, and quarterly school cluster meetings designed to create an environment where educators can share information and where they feel valued and supported, the program aimed to improve the climate and culture of schools, increase educators' motivation and performance, and promote student well-being and academic success (Aber et al. 2017). Practices for accomplishing this included addressing each student by name, using positive discipline, using small group activities to foster peer interactions, and creating a regular classroom routine, among others (Aber et al. 2017).	
Evaluation or Research Approach: A multi-year, cluster-randomized trial with a waitlist control group was employed to evaluate the impact of Healing Classrooms on educator and student outcomes. Student participants were third, fourth, and fifth graders.	
Evidence and Impact: Findings from the DRC, Lebanon, and Niger suggest that the Healing Classrooms program promotes students' sense of control and belonging, feelings of self-worth, peer relationships, and personal attachments (IRC 2018). Further, the LRHC program led to improvements in students' perceptions of their educators and schools as being caring and supportive (Torrente et al. 2015). Although the program did not have a significant impact on students' overall well-being, an analysis by different subgroups suggested that older and language majority students in the program experienced decreases in victimization and mental health problems relative to younger, language minority students (Torrente et al. 2015). There is also evidence that Healing Classrooms can improve student literacy and numeracy (Tucciarone 2021). Finally, evidence from the DRC indicates that educators experienced significant increases in job satisfaction and increases in motivation for the experienced lead educators (Wolf et al. 2015).	
Challenges to Consider: Reliance on student self-report measures to assess many of the outcomes and perceptions of the environment may have limited estimates of the impacts of the program; a variety of assessment approaches, including observation, should be considered. Qualitative data could provide important explanations for unexpected findings but these data were not collected for this study.	
References: • https://www.cambridge.org/core/services/aop-cambridge-core/content/view/60172D9E82B56CD90063C3176FF18AEB/S0954579416001139a.pdf/promoti	

ng_childrens_learning_and_development_in_conflictaffected_countries_testing_change_process_in_the_democratic_republic_of_the_congo.pdf
- https://www.edu-links.org/resources/creating-healing-classrooms
- https://inee.org/system/files/resources/IRC_Creating_Healing_Classrooms_-_Tools_0.pdf

EXAMPLE 2

Program/Practice: *Un Buen Comienzo* (A Good Start)	**Implementers:** Mesa Técnica Interinstitucional (a board comprised of Chilean policymakers, early education leaders and teachers)
Location/s: Chile	**Environmental Target:** Educators (Pre-kindergarten and kindergarten)
Description: The *Un Buen Comienzo* (UBC) program provided professional development to pre-kindergarten and kindergarten educators in Chile, with the goal of improving classroom quality and subsequently enhancing children's social-emotional, health, language, and literacy outcomes (Yoshikawa et al. 2015). Specifically, educators underwent intensive training (in the form of workshops and in-classroom coaching) in approaches to establishing a positive classroom climate and behavior management strategies as well as individual case management for children with specific needs (language and literacy and health service training was also provided but is not the focus of this review). Classroom quality was assessed using the Classroom Assessment Scoring System (CLASS; Pianta, La Paro, and Hamre 2008), which assesses classroom emotional climate, instructional support, and classroom organization.	
Evaluation or Research Approach: A multi-year, cluster-randomized control trial in 64 schools (1,876 students) in Santiago, Chile. Schools were randomly assigned to a full UBC intervention or to a reduced services control. Findings are based on pre-test, end of pre-kindergarten, and end of kindergarten assessments.	
Evidence and Impact: Findings indicate modest to large effects of the program on emotional and instructional support and classroom organization after the first year. Following Year 2, both emotional support and classroom organization improved significantly (albeit modestly) (Yoshikawa et al. 2015). The study did not note any effects on child outcomes. The authors concluded that although professional development can improve the quality of the classroom environment, additional intensive approaches are needed to improve child outcomes in Chile. Additional work by Levya and colleagues (2015) demonstrated both construct and predictive validity of the CLASS. This represented the first time the CLASS was used in a Latin American context and the finding further establishes the cross-cultural value of this tool for assessing classroom quality.	
Challenges to Consider: Existing resistance to curricula that prescribe a set dosage of instruction may explain the lack of impact the program had on child outcomes; this further demonstrates the importance of understanding contextual challenges before implementing a program or practice.	
References: • https://www.researchgate.net/profile/Lorenzo-Moreno-2/publication/266900542_Un_Buen_Comienzo_Cluster_Randomized_Controlled_Trial_of_Early_Education_and_Health_Intervention_in_Preschools_in_Santiago_Chile/links/556c4c3208aefcb861d643fa/Un-Buen-Comienzo-Cluster-Randomized-Controlled-Trial-of-Early-Education-and-Health-Intervention-in-Preschools-in-Santiago-Chile.pdf	

- Leyva, D., Weiland, C., Barata, M., Yoshikawa, H., Snow, C., Treviño, E., & Rolla, A. (2015). Teacher–child interactions in Chile and their associations with prekindergarten outcomes. Child development, 86(3), 781-799.

EXAMPLE 3

Program/Practice: SEL and School Climate	**Implementers:** USAID/Tanzania's Tusome Pamoja Project, implemented by RTI International
Location/s: Tanzania	**Environmental Target:** Teachers/Educators (and Ward Education Officers)
Description: The SEL and School Climate project used a national co-curricular program (*Journeys* – Randolph, Burkholder, and Sempa 2019) designed to create safe schools and classrooms and to enhance SEL in an effort to reduce violence in schools and promote learning in primary schools (Randolph, Edwards, and Norman 2019). The program is based on four pillars thought to foster safe schools: school climate (e.g., positive discipline, educator-student relationships, peer-peer relationships), school culture (e.g., egalitarian attitudes, trust), social classrooms (e.g., group and pair work, dialogue and interaction), and SEL (Norman 2020). Three of the four pillars target the environment as a means to improve SEL, while only one focuses on directly teaching SEL skills. Broadly, the program aimed to create safe, supportive, and inclusive learning environments through pair/group work that helped students feel supported and educators feel in control, thereby creating a greater sense of unity in the learning environment and improving overall school climate by enhancing student-educator relationships and developing positive discipline plans.	
Evaluation or Research Approach: This is currently a descriptive study with no evaluation or rigorous research findings to date.	
Evidence and Impact: Findings suggest that 92 percent of educators were very confident in their ability to conduct group activities and 89 percent were very confident in developing positive relationships with their students following the program (89 percent were very confident). Over 60 percent of teachers reported applying what they had learned in the program to their classrooms (Norman 2020). Following this initial work, the team concluded that educators were eager to change their classroom environments by shifting their pedagogical practices and improving the classroom culture to better support their students' social-emotional and academic development (Norman 2020).	
References: • https://shared.rti.org/content/co-creation-teaching-activities-during-covid-19 • https://shared.rti.org/content/journeys-activity-handbook-teachers-and-school-staff	

EXAMPLE 4

Program/Practice: Learn Safe in Bo	**Implementers:** Education in Emergencies, Evidence for Action (3EA) partnership between International Rescue Committee and New York University Global TIES for Children
Location/s: Sierra Leone	**Environmental Target:** Educators and refugee children
Description: Using a low-intensity intervention designed to enhance teacher practices around social-emotional learning and offer remedial tutoring around literacy, researchers explored what factors supported and hindered the implementation of the program in a resource-limited context. The broader study involved 24 primary schools (with 241 teachers and 5,700 students) in Sierra Leone, with head teachers, teachers, and learning coaches being the focus of this particular project (3EA May 2021). The primary purpose of this particular study was to understand how an observational tool designed to measure the environment functions in this context and what factors facilitate (or hinder) the implementation of a professional development program. Similar work has also been conducted in Lebanon and Niger.	
Evaluation or Research Approach: For the work in Sierra Leone, the focus was on implementation of the Learn Safe program and thus was primarily qualitative, although correlational quantitative data were also collected. Researchers employed observational tools (Teacher Classroom Observation), interviews (with teachers and learning coaches), and both observer and teacher logs about implementation activities (e.g., number and type of SEL activities used and student attendance).	
Evidence and Impact: Findings from this work suggest that observational measurement tools of teachers, rather than self-report or simple checklists, are essential for assessing what, how often, and at what level program components are being implemented. Researchers also noted that there is a strong need for early and ongoing professional development to strengthen and/or maintain quality practices that support SEL and literacy development. Both teachers and learning coaches indicated they would like more time for professional development sessions so they can take in all of the information provided and practice it.	
Challenges to Consider: High rates of teacher turnover reduced the impact of the professional development training. Attention to contextual challenges (e.g., whether or not educators are paid for the extra time they spend in training), however, is necessary when developing these programs. Both teacher and student absenteeism likely minimized the implementation quality and program impact and should be taken into consideration when designing the program.	
References: • https://steinhardt.nyu.edu/ihdsc/global-ties/research/primary-and-middle-education/education-emergencies-evidence-action-3ea • https://steinhardt.nyu.edu/sites/default/files/2021-07/3EA_Sierra-Leone_2021.06.24.pdf • https://steinhardt.nyu.edu/sites/default/files/2021-07/%5Baccessible%5D%203EA_Global%20Policy%20Brief_2021.07.15.pdf	

CREATING AND MEASURING SEL/SOFT SKILLS - SUPPORTIVE ENVIRONMENTS

It is more important than ever to consider not only how we can create safe, supportive, and enabling environments but also how we can measure those environments. Indeed, attention to the environment promotes a focus on the conditions needed to support SEL/soft skills development rather than on individual strengths and weaknesses (Gayl 2017). As described above, there is a considerable amount of evidence from HIC contexts illustrating the role the environment plays in the development of SEL/soft skills, but evidence from LMICs and conflict-affected contexts is much more limited. This is particularly the case when considering rigorous research studies that measure both the SEL/soft skills environment and the skills themselves. Although the focus of this report was primarily on LMICs and conflict-affected contexts, the limited existing research precludes recommendations based solely on these contexts. As such, the section below describes essential features of SEL/soft skills-supportive environments, strategies for creating those environments, and general approaches to assessing these environments, including recommendations for adapting measures to different contexts that derive from research in both HICs and LMICs.

ESSENTIAL FEATURES IN SEL/SOFT SKILLS-SUPPORTIVE ENVIRONMENTS

A recent science of learning and development synthesis (Darling-Hammond et al. 2020) identified a set of features that are needed to create SEL/soft skills-supportive environments. In particular, environments should:

- Be designed to foster and support positive attachment relationships
- Be physically and psychologically safe learning communities (especially for children and youth exposed to numerous environmental risks)
- Promote relational trust and cultural competence among educators, staff, and families
- Offer predictable routines and consistency in practice

Similarly, members of the YouthPower Action team identified a set of guiding principles for fostering soft skills in both formal and non-formal education programs, including promoting strong relationships, creating a safe, caring, supportive, and enriching program environment, and promoting the integration of learning contexts (e.g., home, schools, communities, workplaces) (Soares et al. 2017).

Additional evidence suggests that in order to create a SEL/soft skills-supportive environment, educators should:

- Emphasize competencies in children and youth that build cultural competence and an awareness of privilege and bias (Berg et al. 2017)
- Intentionally plan opportunities during all lessons and activities (e.g., transitions, independent work, introductions/welcome) to increase the emotional climate of their learning environment, not just the emotional skills of individual children or youth (Brunzell et al. 2015)
- Give children and youth regular opportunities to practice and apply SEL and soft skills in a variety of situations (UNICEF 2012)
- Explicitly teach and model positive SEL/soft skills and a resilient mindset (Brunzell et al. 2015; Soares et al. 2017)

MEASURING SEL/SOFT SKILLS-SUPPORTIVE ENVIRONMENTS

Despite the general consensus that the environment plays a critical role in the development and measurement of SEL and soft skills, tools that measure either SEL or soft skills in a given context or tools that assess the SEL/soft skills environment remain limited. In general, the most common approaches to measuring the environment include self-report, direct observations, and document review. Data are commonly scored via checklists, Likert scales, or time sampling approaches (Early Learning Partnership 2016). As researchers, evaluators, program staff, and practitioners identify their purpose for measuring the environment, they will also want to consider the level of the environment they want to assess. For example, for those interested in understanding how children and youth experience their environment, it may be appropriate to use a self-report measure of perceptions of the environment as safe and supportive. For those seeking to improve the environment, observational tools that carefully assess what is actually happening in the context may be more appropriate for assessing the environment. Such tools can identify areas of strength and areas for improvement. Still others may want to place students' behaviors or skills in the broader program context and thus a simple average of the behavior or skill across all participants in the program may be most appropriate. A companion brief provides a set of recommended measures for evaluating the SEL/soft skills environment that can be used to address some of these purposes for measuring the environment.

Exhibit 4 provides an overview of some of the most common advantages and disadvantages (and uses) of different approaches to measurement of the SEL/soft skills environment. This list—and the advantages and disadvantages—is by no means exhaustive but does offer some insight into the variety of ways the field has begun to assess the SEL/soft skills environment.

Exhibit 4. Common approaches to measuring the SEL/soft skills environment

ASSESSMENT TYPE (COMMON USES)	KEY ADVANTAGES	KEY DISADVANTAGES
Direct Observations *(Fidelity, environment/contexts, behavior, interactions)*	• Conducted in natural settings so allows for data collection when and where an activity is occurring • Flexible • Records actual behaviors (not reported behaviors) • Good for small samples	• Requires skilled observers • Time intensive • Observed behavior may change when observer is present • Observed behavior can only be generalized to similar environments • Expensive
Self-Report *(Attributes, behaviors, attitudes, opinions)*	• All assessments or measures are administered consistently • Low-cost • Easy to collect data from large samples	• Tend to ask broad questions about a behavior rather than specific questions • Prone to error/recall bias • Commonly fail to consider culture/contexts • Respondents may respond in the way they believe the researcher wants them to respond (i.e., social desirability) • Prone to missing data – items or questionnaires

ASSESSMENT TYPE (COMMON USES)	KEY ADVANTAGES	KEY DISADVANTAGES
Document Review	• Relies on documentary evidence typically from multiple sources • Can offer a powerful means to understand a given context and factors that drive implementation • Relatively cost-effective	• Documents may be incomplete • Documents can be biased • Documents can include so much information that it becomes difficult to ascertain what is relevant and what is not
Interviews *(Individual experiences, opinions, feelings, attitudes, knowledge)*	• Rich, in-depth information • High response rate • Individualized data about a program, practice, or educator • Allows for clarification of vague or unclear questions and/or responses	• Time intensive • Consistency of questions and format can be low across participants • Interpersonal skills are needed for successful interviews • Data analysis is more complex • Expensive
Focus Groups *(Group experiences, opinions, attitudes, ideas)*	• Efficient • Participants can build off one another in their responses • In-depth information • Relatively low-cost	• Unbalanced input due to dominant speakers • Interpersonal skills are needed for successful focus group conversations • Time consuming • Expensive

To assist in the process of selecting the type of assessment approach and identifying a specific measure to assess the quality of the environment, the Measuring Early Learning Quality and Outcomes *(*MELQO) initiative was designed to promote feasible and accurate assessments of children's learning and development across a wide range of contexts. MELQO is led by UNESCO, the World Bank, the Center for Universal Education at the Brookings Institute, and UNICEF and has recommended several considerations (see https://www.ecdmeasure.org/ for more details):

1) What is your **purpose** for measuring environment?
2) Was the tool designed for this context or will it require **adaptation**?
3) What is the **cost** of the assessment tool?
4) Is **training** required to administer the assessment tool? If so, what level? And what is the cost?
5) Can you use the same tool **repeatedly** across your program or study period?

Other questions to consider when selecting an environmental measure include: What is the minimum acceptable level of quality versus what is ideal? Does the tool reflect country priorities with respect to environment? How much training is needed for enumerators? (Early Learning Partnership 2016).

CONCLUSION

Research deriving from HICs provides compelling evidence for the value of measuring the SEL/soft skills environment. Findings from these studies clearly demonstrate that SEL/soft skills development varies across contexts and time. Yet, far less attention has been paid to measuring the environment in LMICs and conflict-affected contexts, despite recognition by international organizations that positive environments are essential for development (e.g., UNICEF 2019; USAID 2018; Yoshikawa et al. 2018). This lack of research is particularly surprising given that many programs and practices actually aim to improve the SEL/soft skills environment (e.g., through teacher professional development). Although there are a handful of examples of efforts to measure the environment in LMICs and conflict-affected contexts (highlighted in this report), additional rigorous research on the impact of these practices is needed. For example, qualitative assessments of the environment, including observations and educator interviews, may provide valuable insight into what is actually happening in the environment and how educators are implementing relevant programs and practices.

Even when the SEL/soft skills environment is measured, it is far less common to assess features of the SEL/soft skills environment that are tied to the SEL/soft skills being assessed in programming.[1] In fact, side-by-side measurement of the environment with SEL/soft skills themselves is rare. This is likely due, in part, to the fact that tools designed to simultaneously measure both the environment and skills are not yet readily available.

Thus, this evidence paper has two calls to action:

1) Begin measuring the SEL/soft skills environment across LMICs and conflict-affected contexts.
2) Develop a set of tools that effectively combines the measurement of a SEL/soft skill with the measurement of the environment in which that skill is observed.

[1] The companion brief includes some recommended measures for evaluating the SEL/soft skills environment that include process features of the environment that have been linked with positive SEL/soft skills development.

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