

## **CONSIDER THE CONTEXT:**

RECOMMENDED MEASURES FOR FACTORING IN THE LEARNING ENVIRONMENT WHEN MEASURING SEL/SOFT SKILLS

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## INTRODUCTION

This document provides recommendations on existing measures of the learning environment that are relevant to social-emotional learning (SEL) and soft skills development. A companion evidence brief reviews existing evidence on why such measurement is important.

As noted in the evidence brief, measures that simultaneously assess the SEL/soft skills environment and SEL/soft skills themselves are not yet readily available. Existing research in this area, especially in low-and middle-income countries (LMICs) and conflict-affected contexts, tends not to assess the SEL/soft skills environment; when it does, it rarely ties features of the SEL/soft skills environment to the SEL/soft skills being assessed in programming. Because a considerable need for side-by-side measurement of the environment with SEL/soft skills themselves remains, the recommended measures that follow assess process features of the environment that have been linked with positive SEL/soft skills development, including day-to-day educator-student and peer-peer relationships and interactions, overall social-emotional climate, daily routines, and safety.

These measures (and others like them) could be used to begin to address the first call to action highlighted in the evidence report: **begin measuring the SEL/soft skills environment across LMICs and conflict-affected contexts**. Such rigorous research on the environment can then be used to inform the development of side-by-side environment and skills measures, the second call to action in the evidence report.

Measurement of the environment by no means eliminates existing challenges with individual-level SEL/soft skills measures. It does, however, offer valuable insight into why children or youth may exhibit high or low levels of SEL/soft skills or why they are demonstrating little progression over time. For example, if a youth transitions from a soft skills-supportive environment to an environment that is less supportive and there is a decline in their soft skill competencies, that decline may be partially explained by the change in the environment. Similarly, if a child's SEL skills are measured in a context where specific SEL skills are emphasized and then again in a context where those same SEL skills are not emphasized, the child may show different SEL abilities in each location. These disparate findings might suggest that the child is struggling to develop core SEL competencies. However, these findings might also indicate that the child is using the appropriate SEL skills in one context and not in another. Understanding the learning environment would provide insight into these differences.

#### USING LEARNING ENVIRONMENT MEASURES

Although measures that assess the environment and the individual learner side-by-side are not readily available, several approaches for integrating measures of the environment alongside measures of individual SEL or soft skills outcomes exist.

#### ENVIRONMENT MEASURES AT BASELINE TO INFORM PROGRAMMING

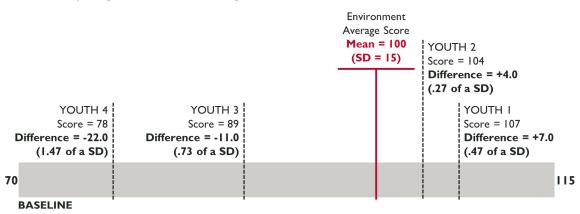
Data gathered on the environment can serve as an important baseline to inform program staff on areas of practice that need development or to help them to identify what steps should be taken to strengthen the SEL/soft skills learning environment. For example, if a child's individual-level SEL assessments suggest relatively low levels of competency and the measured environment is not particularly warm, supportive, or safe, it may be that the environment is not meeting the developmental needs of the child or youth. In

this case, programming may need to be adapted to target educator practices in a way that better supports positive SEL/soft skills development. Perhaps the environment is not a fit for the child or youth and their current skills. Similarly, if a youth's individual-level soft skills assessments suggest relatively low levels of competency but the measured environment is warm, supportive, or safe, it may be that programming that targets individual skills would better serve this youth.

#### ENVIRONMENT AS AVERAGE OF INDIVIDUAL SCORES

Assessing the learning environment with individual-level SEL/soft skills measures can provide a metric against which to assess the SEL/soft skills of individual children and youth. For example, evaluators could assess all children or youth in the learning environment using the same tool and then average the scores across children or youth. That average score provides information about the average level of competency across children or youth in the learning environment. Next, evaluators could compare individual child or youth scores against the average score for that learning environment, either very broadly (e.g., subtracting each child's score from the average to determine whether the child is higher or lower than the class average) or using a standard index (e.g., Child I is a half a standard deviation below the class average, while Child 2 is an entire standard deviation below the class average), as demonstrated in Exhibit I.





Typically, comparisons of similarly aged children or youth within a learning environment are done with difference scores, while comparisons across ages or learning environments are made using standardized units (e.g., standard deviations). In Exhibit I, assuming a SEL/soft skills average of 100 and a standard deviation of 15 across the learning environment, Youth 3 and Youth 4 might be identified as needing additional SEL/soft skills supports because they are well below the learning environment average, while Youth I and Youth 2 are at or above the environment average. It is important to note, however, that individuals who score above the learning environment average in settings with low SEL/soft skills average scores also likely need additional SEL/soft skills supports. In other words, doing better than average in a low SEL/soft skills environment is not sufficient.

Including program staff, educators, external evaluators, or anyone else assessing a SEL/soft skills program.

<sup>&</sup>lt;sup>2</sup> Note that the four youth highlighted in Exhibit I do not represent the whole of the hypothetical group of youths, therefore the mean of their 4 scores is not the environment mean.

This approach simply places each individual's score "in the context" of the learning environment, allowing evaluators to understand where a child or youth is relative to their peers in that learning environment.

## ENVIRONMENT MEASURES AT ENDLINE TO UNDERSTAND SKILL DEVELOPMENT OVER TIME

Just as data gathered on the environment at baseline can help identify areas of practice that need development or improvement, data gathered on the environment at the end of a program or intervention can also provide valuable information about changes in either the environment itself or in individuals' SEL/soft skills competencies relative to their peers. Measuring changes to the environment itself could be used to assess program outcomes for programs aimed at improving the environment or to assess the context for individuals' skill development (as at baseline). Measuring changes in individuals' SEL/soft skills competencies relative to their peers could also be used to assess a program's impact. In this case, evaluators should aim to identify individual score changes, changes in the average environment score, and changes in the standard deviation of that score. If the change in the environment score is positive, indicating an increase in the measured SEL/soft skills environment, comparable positive changes in individual measures of SEL/soft skills would be expected. In that scenario, a smaller standard deviation in individual SEL/soft skills, suggesting less variability around the mean, could indicate that a higher proportion of learners were exhibiting more positive SEL/soft skills competencies in the improved SEL/soft skills environment, as shown in Exhibit 2.

Environment Average Score Mean = 100 YOUTH 2 (SD = 15)Score = 104 Difference = +4.0(.27 of a SD) YOUTH 4 YOUTH 3 YOUTH I Score = 78 Score = 107 Score = 89 Difference = +7.0 Difference = -22.0 Difference = -II.0 (1.47 of a SD) (.73 of a SD) (.47 of a SD) 70 115 **BASELINE** 70 115 **ENDLINE** YOUTH 3 YOUTH I Score = 103 Score = 108 Difference = +4.0Difference = -1.0 (.1 of a SD) (.4 of a SD) YOUTH 4 YOUTH 2 Score = 106 Score = 101 Difference = -3.0 Difference = +2.0 (.3 of a SD) (.2 of a SD)

Environment Average Score Mean = 104 (SD = 10)

Exhibit 2: Changes in SEL/Soft Skills Environment and Individual Scores, Example 1

In contrast, an increase in the average SEL/soft skills environment coupled with greater variability in individual SEL/soft skills competencies (i.e. a wider standard deviation) could suggest that the SEL/soft skills environment is not adequately supportive of the development of SEL/soft skills competencies for all children and youth, as shown in Exhibit 3.

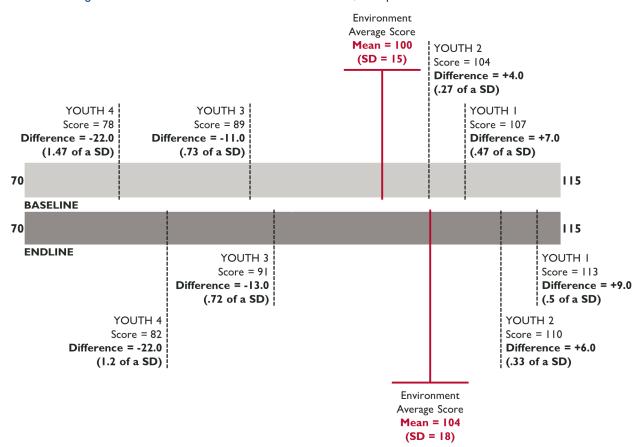


Exhibit 3: Changes in SEL/Soft Skills Environment and Individual Scores, Example 2

#### **MEASUREMENT TOOLS**

Each of the measures described below has moderate to high reliability in at least one context. However, not all of these measures have been adapted for use across multiple contexts and even fewer have been assessed for reliability and validity in LMIC or conflict-affected contexts. Moreover, each measure described here has been used primarily in formal classroom settings, so reliability and validity estimates reflect use in these settings. As with any individual-level assessment tool, environmental tools should also be adapted to the learning environment (e.g., formal classrooms, non-formal learning environments, and youth workforce development contexts) in which they will be used and then evaluated for their reliability and validity in that context before they are used to inform programming and practice.

## RECOMMENDED MEASURES

#### MEASURE I: CONDITIONS FOR LEARNING SURVEY

**Developer:** American Institutes for Research and UNICEF (2009)

**Description:** The American Institutes for Research *Conditions for Learning* survey was adapted by UNICEF and has been used to assess child and youth perceptions of the support they receive from schools and teachers in a variety of contexts. Specifically, a 4-point Likert scale (I=strongly disagree to 4=strongly agree), measures students' perceptions of how welcomed, included, engaged, and emotionally supported they feel. Three subscales were identified: I) the Safe, Inclusive and Respectful Climate subscale (II items), which assesses the level of support and care students receive and the extent to which they feel welcomed, respected, and safe; 2) the Challenging Student-Centered Learning Environment (9 items), which assesses the extent to which students feel encouraged to engage in the learning process; and 3) the Emotionally Supportive Climate (I0 items), which assesses the extent to which students feel cared about and listened to. The first and third subscales are most relevant for measuring the SEL/soft skills environment.

**Environmental Construct/s:** Supportive schools and teachers

**Assessment Type:** Student self-report

**Intensity of Administration:** Low intensity

Developmental Range: Ages 6 to 18

#### Sample Items:

Subscale I: "Teachers at your school are interested in what students like me have to say"; "The school is a welcoming and inviting place for families like mine"; "I feel safe at my school."

Subscale 2: "Teachers and school staff believe that all students can learn"; "Students are encouraged to work together in class."

Subscale 3: "Teachers at this school really care about students like me"; "Adults in the school are usually willing to give students extra help"; "My family knows what goes on inside this school."

Contexts: A wide range of U.S. and international contexts

#### **References:**

Godfrey, E. et al. "Cross-national measurement of school learning environments: Creating indicators for evaluating UNICEF's Child Friendly Schools Initiative" *Children and Youth Services Review* 34, no. 3 (March 2012): 546-557. https://www.sciencedirect.com/science/article/abs/pii/S019074091100380X

Osher, David, Kelly, D., Tolani-Brown, N., Shors, L., and Chen, C.S. "UNICEF Child friendly schools programming global evaluation final report." Prepared for UNICEF by the American Institutes for Research. New York, NY: UNICEF, 2009.

Osher, D., Kendziora, K., and Chinen, M. "Student connection research: Final narrative report to the Spencer Foundation." *Washington, DC: American Institutes for Research*, 2008. (https://www.air.org/sites/default/files/2021-06/Spencer\_final\_report\_3\_31\_08\_0.pdf)

# MEASURE 2: STUDENT LEARNING IN EMERGENCY CHECKLIST (SLEC-26)

**Developer:** Norwegian Refugee Council and the Arctic University of Tromso (2019) in collaboration with Inter-agency Network for Education in Emergencies, Education in Emergencies, Evidence for Action

**Description:** The SLEC-26 is designed to assess supports and barriers to learning and development in emergency contexts and is based on the premise that youth in these contexts commonly experience high levels of stress and trauma. Using a 5-point Likert scale (I=Never to 5=Always), children and youth indicate the extent to which each of 26 statements reflects their experiences or perceptions. A total of five subscales can be used: safety and adaptability (nine items), emotion regulation (four items), school support (three items), family support (three items), and current or future hope and well-being (seven items). Although a majority of items on this scale are related to SEL/soft skills development, the safety and adaptability, school support, and family support subscales are most appropriate for assessing the SEL/soft skills environment.

**Environmental Construct/s:** Primarily in emergency contexts

Assessment Type: Child or youth self-report

**Intensity of Administration:** Low intensity

Developmental Range: Ages 6 to 18

#### **Sample Items/Constructs:**

Safety and adaptability: "I feel that the teachers and school staff respect me"; "I feel safe at school"; "I feel safe at home."

School support: "Someone in the school staff (a teacher, principal, counselor) asks me how I am doing"; "I can talk to someone in the school staff (a teacher, principal, counselor) about my worries."

Parent support: "I can talk to my parents about my worries"; "My parents ask me how I am doing."

Contexts: Used in the United States and in low- and middle-income countries around the world

**References:** https://inee.org/resources/student-learning-emergency-checklist-slec

# MEASURE 3: MEASUREMENT OF THE EARLY LEARNING ENVIRONMENT (MELE)

**Developer:** Measuring Early Learning Quality and Outcomes (MELQO) initiative, led by UNESCO, the World Bank, the Center for Universal Education at the Brookings Institute, and UNICEF

**Description:** The MELE is used to measure the quality of early learning environments and gathers information on both structural (e.g., class size, ratio, organization) and process (e.g., learning activities, classroom interactions, safety) aspects. The measure consists of three elements, a classroom observation tool, teacher survey, and a director survey, which can be used separately or as a group. The classroom observation tool includes seven broad constructs related to learning and development, two of which are highly relevant for assessing the SEL/soft skills environment: interactions and inclusiveness. The interactions construct reflects the quality of the interactions between teachers and children and between peers. The inclusiveness construct reflects the extent to which the classroom can support the participation of all children. Observations are typically made using a 4-point scale, which reflects the level or frequency of each item (1 indicates lower engagement in the behavior while 4 indicates higher engagement). Teacher questions focus on factors like motivation and attitude as well as professional development; director questions focus on building safety and personnel. The classroom interaction and inclusiveness items from the observational scale and some of the items from the motivation and attitudes scale on the teacher surveys are most relevant for assessing the SEL/soft skills environment.

Environmental Construct/s: Relationships or interactions and general climate

**Assessment Type:** Direct observation or survey

Intensity of Administration: Moderate intensity

Developmental Range: Ages 3 to 6

#### **Sample Items/Constructs:**

Classroom interactions: "Do teachers discipline and maintain order without being overly negative?"; Do teachers patiently coach children?"; "How often do teachers smile or verbally praise?"

Inclusiveness: "Does the program show evidence of encouraging diverse enrollment?"

Motivation and attitude: Job satisfaction; perceptions of respect for teaching; efficacy.

**Contexts:** A wide range of international contexts

References: <a href="https://www.ecdmeasure.org/">https://www.ecdmeasure.org/</a>

# MEASURE 4: STALLINGS CLASSROOM SNAPSHOT INSTRUMENT (A.K.A. STANFORD RESEARCH INSTITUTE OBSERVATION SYSTEM)

**Developer:** Jane Stallings (1977); World Bank (2015)

**Description:** The Stallings instrument is designed to assess general efficiency and quality of the classroom, school, or school system. Observers take "snapshots"—a 15-second observation—at ten separate instances across a class period; using an observe and report process, the observer notes who was involved (teacher, student, or both), whether each activity occurred during the observation cycle, whether it involved an individual, a small group, a large group, or everyone in the setting, and what material, if any, was involved. A total of fourteen activities are coded and grouped into one of four categories: learning activities (six activities related to pedagogical practices), classroom management (four activities related to instruction and discipline), student off-task (three activities related to social interactions with students and others).

There is relatively little training required to administer the Stallings instrument and it has been used in LMIC contexts.

Environmental Construct/s: Relationships or interactions and general climate

**Assessment Type:** Direct observation or survey

Intensity of Administration: Low to moderate intensity

Developmental Range: Ages 3 to 6

#### **Sample Items/Constructs:**

Classroom management: One or more students are being reprimanded for poor behavior or are being disciplined; teachers and/or students are involved in activities such as passing out papers and changing activities.

Student off-task: Two or more students are talking or laughing about non-academic activities (when they should be attending to the lesson); teacher is socially interacting with students (during an academic lesson).

Teacher off-task: Teacher and another person are interacting but teacher is not engaged with students; teacher is out of the room.

Contexts: Used in the United States and in low- and middle-income countries around the world

**References:** <a href="https://documents1.worldbank.org/curated/en/790221467997639302/pdf/97904-WP-Box391498B-PUBLIC-WB-Stallings-web.pdf">https://documents1.worldbank.org/curated/en/790221467997639302/pdf/97904-WP-Box391498B-PUBLIC-WB-Stallings-web.pdf</a>

# MEASURE 5: CLASSROOM ASSESSMENT SCORING SYSTEM (CLASS)

**Developer:** Pianta, Le Paro, and Hamre (2008)

**Description:** The CLASS is designed to assess the overall quality of multiple dimensions of the learning environment, with a particular emphasis on the quality of teacher-student interactions. It has been used as an assessment tool to track classroom quality and as a professional development tool to help educators and staff improve their interactions with students. Using a 7-point rating scale (Low/does not meet expectations=1,2; Moderate/developing=3–5, High/proficient=6,7), observers make qualitative ratings about the extent to which each of 20 behaviors is observed in the classroom. Behaviors reflect either an emotional/behavioral dimension (classroom climate, behavior management, and developing student competencies) or an instructional/learning dimension (lesson strategy and delivery or assessment and evaluation). The CLASS requires a minimum of four 15-minute observation cycles for each setting. It is also costly and does require a considerable amount of training before it can be used. All three emotional/behavioral dimensions are particularly relevant for understanding the SEL/soft skills environment.

**Environmental Construct/s:** Emotional climate, behavior management, developing student competencies

**Assessment Type:** Direct observation

Intensity of Administration: High intensity

**Developmental Range:** Primarily ages 3 to 12 but there are a few adaptations for 13- and 14-year-olds as well

#### **Sample Items/Constructs:**

Emotional climate: Positive climate, negative climate, teacher sensitivity.

Behavior management: Rules and expectations, monitoring student behavior, classroom arrangements.

Developing student competencies: Communication, creativity, leadership and confidence, critical thinking.

**Contexts:** Primarily in the United States, although it has been adapted and used in a growing number of international contexts (e.g., Chile, Ecuador, Germany, China, Mexico)

#### **References:**

https://teachstone.com/class/

Pianta, R. C., La Paro, K. M., & Hamre, B. K. *Classroom Assessment Scoring System™: Manual K-3*. Baltimore: Paul H Brookes Publishing, 2008.