

# EASEL Lab

The [Ecological Approaches to Social Emotional Learning \(EASEL\) Laboratory](#), led by Stephanie Jones of the Harvard Graduate School of Education, explores the effects of high-quality social-emotional interventions on the development and achievement of children, youth, teachers, parents, and communities. Our projects aim to advance the field of SEL through research, practice, and policy. The EASEL Lab also effects change through field-building projects, which work to strengthen the links between SEL evidence, policy, and practice by facilitating greater clarity, transparency, and precision in the field.

- **Stephanie M. Jones**, Director of the EASEL Lab and Gerald S. Lesser Professor of Child Development and Education, Harvard Graduate School of Education
- **Rebecca Bailey**, Associate Director, EASEL Lab
- **Sonya Temko**, Research Manager, EASEL Lab
- **Emily Stolz**, Research Assistant, EASEL Lab
- **Chelsea Rubin**, Training Specialist, EASEL Lab
- **Bryan Nelson**, Senior Project Coordinator, EASEL Lab

## Partnerships

SEL Kernels for Ukraine were created through a partnership between [EASEL Lab](#), the [LEGO Foundation](#), and the [Ministry of Education and Science of Ukraine](#). This work was made possible by the LEGO Foundation.

## What is SEL?

Social and emotional learning (SEL) has often been used as an umbrella term to represent a wide array of non-academic skills that individuals need to set goals, manage behavior, build relationships, and process and remember information. These skills and competencies develop across our lives and are essential to success in school, work, home, and community. Generally speaking, this set of skills can be organized into three interrelated areas: cognitive, social, and emotional. Importantly, these skills and competencies develop and are in dynamic interaction with attitudes, beliefs, and mindsets as well as character and values, all of which are fundamentally tied to characteristics of settings.

## What are Kernels?

SEL Kernels are short, flexible, easy-to-use strategies and routines that build social and emotional skills. Each Kernel is designed to target a specific skill or competency, such as emotion knowledge, perspective-taking, or conflict resolution. Kernels take 5-15 minutes to implement and can be taught quickly by classroom teachers or other adults. Kernels are stand-alone strategies; they do not require extensive training or preparation to use, and they do not follow a predetermined scope and sequence.

Teachers choose the Kernels that work best for their own students and classroom needs and can make adaptations to increase both their relevance and ease/difficulty level over time. Teachers can integrate concepts from literacy, numeracy, and other subject areas – as well as from everyday life events – into Kernels in order to build academic skills alongside social and emotional skills. Kernels are designed to be low-cost and require few to no materials, making them ideal for low-resource, turbulent environments.

The EASEL Lab developed SEL Kernels by analyzing over 50 evidence-based SEL programs. Beginning in 2009, they examined effective SEL programs in early childhood, elementary, middle, and high school settings. They documented the skills they targeted and instructional methods (teaching practices) and other approaches they used. EASEL Lab developed a process for identifying common strategies and practices across these diverse programs and pulling them out as stand-alone strategies ([Jones et al, 2017](#)). Thus, Kernels represent the “essential ingredients” in more traditional, comprehensive SEL programs – but without the rigidity, cost, and heavy time commitment that can make SEL program implementation difficult. The EASEL Lab created Kernels to provide high-quality SEL content in a low-cost, targeted, and accessible format.

Multiple studies have found Kernels to be feasible and effective in low-resource environments ([Bailey et al, 2022a](#), [Bailey et al, 2022b](#)). A randomized control trial of Brain Games (a set of Kernels focused on building executive function and social skills through play) among PreK-4th grade students in low-income schools in the US found that students using Brain Games demonstrated improved attention, prosocial behavior, executive functions, and decreased impulsivity, compared to their peers ([Barnes et al, 2021](#)). A large-scale study of Kernels in Canada found that Kernels were associated with improved executive function and self-regulation skills, prosocial behavior, student-teacher relationships, and a reduction in disciplinary events (Park et al, 2021). A recent quasi-experimental study of Kernels in high-poverty urban areas of Brazil found improvements in student prosocial behavior and emotion regulation, and reductions in conduct problems, hyperactivity, and peer problems; as well as improvements in teacher-reported self-efficacy and growth mindset ([Colagrossi et al, 2024](#)).

## Why Are They Important?

Research shows that evidence-based Kernels of practice, or low-lift, flexible, adaptable strategies, that can be easily integrated into everyday classroom routines could add value or be more efficient than a comprehensive SEL curriculum. Here’s why:

### **Kernels offer teachers choice and flexibility.**

- In contrast to comprehensive and scripted programs, Kernels provide a less intensive, flexible approach to SEL that enables teachers to select only those

strategies or activities that best fit the needs and goals of their students, thereby increasing use and sustainability over time.

### **Kernels are highly customizable.**

- Teachers and other staff can select and adapt Kernels based on local needs, increasing the likelihood that SEL strategies are targeted to the specific learning goals or real-life events of students and classrooms, and integrated into the standard practices of the setting in a sustained manner.

### **Kernels are free and easy to use.**

- By avoiding logistical burdens typically associated with more comprehensive interventions, Kernels are ideal for settings with limited resources or high teacher turnover and burn-out.
- Kernels are intentionally designed to be low-cost and easy to use, requiring minimal time, resources, and training to implement.

### **Kernels can be used across a wide variety of educational contexts, adding to their impact and value.**

- Kernels can be used effectively in formal and informal education, as well as at home and in community settings (e.g., summer camps, youth centers, etc.).
- A Kernels approach enables communities to promote social and emotional development in a cohesive and complementary way across multiple settings, thereby maximizing exposure and impact.

### **Kernels help cultivate children's social, emotional, and behavioral skills - all keys to their success.**

- Children who effectively manage their thinking, attention, and behavior are also more likely to have better grades and higher standardized test scores.
- Students with strong social skills are more likely to make and sustain positive relationships with teachers, participate in classroom activities, and be engaged in learning.
- Research indicates that classrooms function better and students learn more when children have the skills to manage negative emotions, focus attention, persist in the face of difficulty, and navigate relationships with peers and adults.
- Social and emotional skills also serve as important protective factors in the face of negative life events or chronic stressors, and support general wellbeing, such as job and financial security as well as physical and mental health through adulthood.
- High quality SEL programming has been shown to improve outcomes for all students, with the largest gains among students who face the highest number of risks.

# Getting Started

SEL Kernels are a low-cost and flexible way to integrate SEL into the daily routines and activities of schooling. They can be used by teachers, or any other school adult, with the students in their care. There are Kernels on this site designed for use with students, and there are Kernels for teachers to use to build their own social and emotional skills and wellbeing.

Learn about the different skill areas targeted by Kernels in the SEL Kernels for [Ukraine: Domains and Skills Overview](#).

## Implementing Kernels

During the 2023-2024 school year, SEL Kernels were piloted in 51 classrooms in five regions across Ukraine. Pilot teachers shared feedback and advice for other teachers using Kernels in their classrooms. To learn more about their advice, download the [Tips from Pilot Teachers for Implementing Kernels](#).

## Choosing Kernels

When deciding which Kernels to use, consider your students' skills and interests. Pick Kernels that align with what you are noticing in your classroom. For example, if students are struggling with building friendships, try Cooperation Kernels that target relationship building, such as Question Quest. If they are finding it hard to focus, pick Cognitive Skills Kernels, such as Abracadabra. For additional ideas for getting started in your classroom see [Roadmaps for Kernels](#). Each Roadmap is focused on a common classroom situation, including creating a positive classroom community, talking about emotions, navigating difficult moments, initiating communication between peers, and building relationships. Kernels are organized into three stages that are labeled **Learn**, **Grow**, **Expand**. Choose Kernels that match your students' abilities and watch how they build skills over time:

- **Learn** Kernels are a great place to start. These Kernels work well for younger students or those who are just starting Kernels.
- **Grow** Kernels build on the **Learn** Kernels and are more complex. These Kernels include more complex steps or more challenging concepts and activities and may be more engaging for older students or those familiar with **Learn** Kernels.
- **Expand** Kernels are the most complex Kernels in the set. These Kernels include more challenging activities such as role-play or independent practice. Choose Kernels that match your students' abilities and watch how they build skills over time.

If you need more support selecting Kernels to use in your first week, use this “Getting Started” calendar that has suggestions for one Kernel per day for the first week.

Monday	Tuesday	Wednesday	Thursday	Friday
Belly Breathing	Our Body’s Clues	Sharing Our Interests	Masha Says	Rules for Our Cool Community

## Play Kernels in 3 Steps

Each Kernel has three steps:

- In step 1, introduce the target skill for the activity. By introducing the skill, you make the skill explicit, an essential component to building skills of all kinds.
- In step 2, complete the activity with your students to practice using the skill. You can find strategies to adapt the activity based on the age of your students in the “Ideas for Adaptation and Elaboration” section of the Kernel card. These ideas can also be used to adapt the Kernel so students can play it in many ways.
- In step 3, children reflect on the skills practiced during step 2. During the reflection questions, talk with students about how hard or easy it was to play and why, which strategies they used to play, and how they might use the skill in other parts of their lives. Through reflection, students are practicing metacognitive strategies and are learning to apply the skill in new ways. Example reflection questions are listed on each card.

## Keep Track of Kernels

After using a Kernel with your students, document what you played using the [Kernels Tracker](#). Tracking the Kernels you play gives you helpful information you can use to plan which Kernels to use in the future.

There are many ways you can track Kernels use. For more ideas on using the Kernels Tracker, download [Tips for Using the Kernels Tracker](#).

## Repeat and Adapt Kernels

Kernels work best when used daily. With repetition, children understand the structure of the activities and have more opportunities to practice the targeted skills, and they can share ideas for how they would like to play in the future—continuing to grow and develop their skills in new ways over time. Use a variety of Kernels and reuse Kernels that align with your goals and your students’ needs and interests. You may find that some Kernels are easy to repeat frequently – these Kernels may become classroom routines. By using some Kernels routinely and interspersing new Kernels along the way, students will have many opportunities to build social and emotional skills!

In addition to repeating Kernels, adapt them to keep students interested and their skills growing. For ideas of ways to adapt Kernels, consider reading [More Ways to Play](#), which offers ideas for adaptation based on the principles of the Lego Foundation's Learning through Play framework.