Student Activity Guide

Social Emotional Learning Routine

Team-building activities, challenge courses, and games are common methods for teaching Social and Emotional Learning (SEL), but outdoor science experiences are rich with many more opportunities for SEL! Almost any outdoor experience—such as a science investigation, moving across challenging terrain, a discussion about environmental issues, nature observation activities, or a habitat restoration project—poses opportunities to develop SEL skills. This routine offers a structure to support students in developing SEL competencies as they participate in any environmental education experience.

Social Emotional Learning Routine has three parts. First, students discuss the skills they will need during your chosen activity (e.g., problem-solving for designing an investigation, self-awareness for crossing a creek, perspective-taking in a discussion, etc.), then identify whether these skills fall in their comfort zone or at their “growth edge.” Part 2 is a brief check-in midway through the chosen activity. Part 3 takes place after students participate in your chosen activity, as they reflect on SEL and the learning experience.

Students will...

- Think about skills or behaviors that help groups work well together.
- Reflect on the strengths and assets they bring to a group.
- Discuss specific SEL competencies they will need to participate in the chosen activity.
- Practice SEL competencies in the context of an activity in your program.
- Reflect on the learning process, their skill development, and where else they might apply their skills.

Grade Level:
Grades 4–8. Adaptable for younger or older students.

Timing:
20–25 minutes before your chosen activity, 5 minutes for midpoint check-in, 10–15 minutes of reflection at the end of your chosen activity or field experience.

Materials:
See page 3 of the Materials and Preparation section for details.

Setting:
Anywhere the group can circle, discuss, and focus.

Equity, Inclusion, and Cultural Relevance (informed by Youth Outside):
This activity has been designed to support an equitable, inclusive, and culturally relevant teaching and learning experience. Read more on page 16.

This activity connects to the CASEL Core SEL Competencies framework [https://casel.org/core-competencies/]. See the Instructor Support section for more information about specific connections to CASEL competencies.
# Social Emotional Learning

## ACTIVITY OVERVIEW

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<th>Social Emotional Learning</th>
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<td>Part 1: BEFORE your chosen activity</td>
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</tr>
<tr>
<td></td>
<td>Students Choose a Skill</td>
<td>Invitations, Exploration</td>
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</tr>
<tr>
<td>Part 2: IN THE MIDDLE of your chosen activity</td>
<td>Midway check-in</td>
<td>Exploration, Concept Invention</td>
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</tr>
<tr>
<td>Part 3: AFTER your chosen activity</td>
<td>Reflection</td>
<td>Application, Reflection</td>
<td>10–15 minutes</td>
</tr>
<tr>
<td>TOTAL:</td>
<td></td>
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<td>35–45 minutes, in three parts</td>
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### Read the Instructor Support section.
Beginning on page 13, you’ll find more information about pedagogy, student misconceptions, science background, and standards.

### Leading the initial discussion inside.
If you think it will help your group focus, consider leading the Part 1 conversation indoors or at another central location before heading to the area where your chosen activity will take place.

### Key SEL skills and chosen activity.
Throughout this activity write-up, we’ll use the term key SEL skills to refer to the SEL competencies you identify for students to work on and the term chosen activity to refer to the learning experience in which students will practice those key SEL skills. (e.g., a science investigation, a nature exploration, etc.).

### Check-in throughout your chosen activity.
Look for opportunities to remind students to work on the key SEL skills throughout your chosen activity and other learning experiences, especially if there is a particular skill that connects directly to a part of an activity (e.g., Okay, during this discussion I really want you to focus on the skill of Thinking Together. Remember, that means we want to share our own ideas and make space for others to speak, and we want to build on one another’s thinking.).

### Field card.
At the end of this activity write-up, you’ll find a condensed, pocket-sized version to use in the field.
MATERIALS

For the instructor
- 1 sheet of paper or cardstock
- whiteboard and marker

For each student (optional)
- journal
- pencil

PREPARATION

1. Gather materials:
   - a sheet of paper or cardstock (to use as a sign) with your key SEL skills written on it.
   - journals and pencils for student reflection
   - whiteboard and marker (to draw a diagram of comfort zone, growth edge, and Yikes! zone)

2. Decide what chosen activity (or set of activities) you will use for this routine. Social Emotional Learning Routine is a before, during, and after conversation meant to support students in developing key SEL skills throughout a chosen activity in your program. This could be a science investigation, a habitat restoration or community project, a nature exploration activity, a physical challenge (such as crossing a creek), or a discussion about local environmental issues. This routine can also frame an entire teaching day or a series of activities.

3. Use the Planning Chart (on page 5) to pick 1–3 specific key SEL skills suggested for the type of chosen activity you will focus on with your students. Write those in kid-friendly language on your sheet of paper or cardstock. While engaging in a science investigation, a discussion, or any of the activities listed above, students will be using many different SEL competencies at once—from identifying problems to teamwork, building self-confidence to goal-setting, and stress management to impulse control. However, asking students to think about getting better at all those skills at the same time would be overwhelming! Pick just 1–3 key SEL skills to introduce during this routine. This allows students to focus on just a few things at a time and makes students more likely to recognize opportunities to work on these key SEL skills during an activity or a series of activities within their learning experience.

Considerations for choosing skills:
- Choose key SEL skills that are appropriate for your students. Take the developmental needs and dynamics of your group of students and individual students into account as you choose key SEL skills to highlight. Different groups of students will arrive with different assets and existing skills. Some groups may have more room to grow with communication and relationship-building; others may benefit more from focusing on impulse control and organizational skills. Consult Highlight social and emotional skills during science learning. In many outdoor science and environmental education programs, Social Emotional Learning is centered around experiences such as ropes courses, challenge games, or moving across physically demanding terrain. While SEL during a salient experience such as a ropes course can be compelling, it’s also important that students practice SEL skills in the context of situations in which they commonly find themselves, such as group work, discussions with peers, and science or academic learning experiences. When SEL takes place in contexts that directly resemble students’ daily life experiences, it supports them to continue to apply their SEL skills. We encourage organizations to integrate SEL into every part of their programs and to use Social Emotional Learning Routine to frame a science or academic learning experiences such as investigations, discussions about environmental issues, or nature observations. This approach is supported by researchers and leading organizations focused on SEL who say students should practice SEL skills as they are learning academic content.
Examples of how to incorporate SEL into science learning experiences. Even though the challenges and opportunities for growth may not be as immediately obvious as those on a ropes course, science or academic learning experiences offer many opportunities for students to practice their existing social skills and develop new SEL competencies. In a science investigation, for example, students may need to keep gear organized, stick to a procedure, and manage frustration, which relate to the Collaborative for Academic, Social, and Emotional Learning (CASEL) competency of Self-Management. In any activity that includes discussion, students can practice communicating their own ideas, listening to others, and being aware of how much they are participating in the group, which relate to the CASEL competencies of Self-Awareness, Social-Awareness, and Relationship Skills. Exploring, observing, and learning about nature with peers is an opportunity for students to practice skills of collaboration and strengthens students’ positive identities as learners. For many people, being a part of any social group includes navigating challenges of how we fit in, using communication skills to engage with other members of the group, and practicing empathy.

Using Social Emotional Learning Routine around these academic learning experiences is a way to scaffold some of these key skills that will support students in meeting these challenges and being successful as learners. This routine also supports effective SEL by making growth opportunities visible to students and guiding them to identify specific skills they can work on throughout your program.

With their regular teacher, if possible (if you are not their regular teacher). Consider the number of key SEL skills that will be best for your group to focus on as well. A group of students may be ready to think about and practice 2-3 key SEL skills during an activity, while another group may benefit from a slower pace and from focusing on only one key SEL skill at a time.

- **Multiple opportunities to practice skills.** Research shows that effective social emotional learning experiences for students are sequenced, with multiple opportunities for students to practice or build on skills. (See the Instructor Support section for more opportunities.) Keep sequencing in mind as you choose skills for students to focus on, and try to choose skills that students will have the chance to apply in other situations in your program. For example, you might choose to highlight a skill such as Thinking Together if discussions are a big part of your program, or you might choose to highlight a skill such as Be Curious if it is a common thread in all your activities.

**Examples of activities with associated key SEL skills:**

- **When we design this science investigation, we’re going to need to:**
  Work as a Team, Stay Organized, and Share Equipment (or Think Together, Be Curious, and Stick With Challenges).

- **When we cross this creek, we will need to:**
  Pay Attention to Our Feelings and Ask for Help When We Need It (or Pay Attention to Ourselves, Move Slowly, and Offer Support to Others).

- **During this discussion, we will need to:**
  Be Open to Others’ Perspectives and Communicate Our Own Ideas (or Share Our Own Ideas and Make Space for Others to Speak).

- **As we explore and study nature, we will need to**
  Think Together, Be Curious, and Stick With Challenges

**Planning chart:**

The table on the next page includes types of outdoor education activities and some specific Collaborative for Academic, Social, and Emotional Learning (CASEL) competencies that students might develop while engaging in those activities. This isn’t a complete list of all the key SEL skills students could develop during these activities, but it is carefully curated to connect to the CASEL framework and to list skills such as creative thinking, supporting others, problem-solving, perspective-taking, and a resilient attitude that go beyond skills that are traditional hallmarks of success in academics, such as memorizing facts or listening quietly. If the CASEL competency is phrased in a way we think might be less accessible/useful for students, alternative suggestions are offered in italics. Use this table to choose the key SEL skills for students to practice in your chosen activity. Choose words to describe the key SEL skills that you think will be most appropriate and accessible for your audience.
<table>
<thead>
<tr>
<th>Example of type of activity</th>
<th>Possible CASEL competency connections</th>
</tr>
</thead>
</table>
| Explore and learn about nature (as in a BEETLES-focused exploration or other activity) | Communication, Social Engagement, Relationship-Building, Teamwork *(Think Together)*  
Evaluating, Reflecting, Analyzing Situations *(Be Curious, Think Like a Scientist)* |
| Design a science investigation                                   | Communication, Teamwork, Relationship-Building *(Think Together)*  
Organizational Skills, Goal-Setting *(Plan Ahead, Stay Organized, Share Equipment)*  
Stress Management *(Stress Management)*  
Identifying Problems, Analyzing Situations *(Think Like a Scientist, Be Curious)* |
| Habitat restoration or community project                         | Impulse Control, Teamwork *(Share Equipment, Teamwork)*  
Organizational Skills *(Plan Ahead, Stay Organized, Share Equipment)*  
Self-Discipline, Goal-Setting *(Stay Focused)* |
| Physically challenging experience, such as crossing a creek or climbing a steep hill | Identifying Emotions, Accurate Self-Perception *(Be Aware of Your Emotions, Ask for Help)*  
Communication, Relationship-Building, Teamwork *(Communication, Teamwork, Offering Support to Others)*  
Self-Motivation, Self-Confidence, Self-Efficacy *(Stick With Challenges, Self-Confidence)* |
| Discussion                                                       | Perspective-Taking, Empathy, Respect for Others, Appreciating Diversity, Relationship-Building *(Think Together, Listen to Others, Be Open to New Perspectives)*  
Impulse Control, Communication *(Share Your Own Ideas, Give Others Time to Speak)*  
Evaluating, Reflecting *(Be Curious, Think Critically)* |
| Work within our community to solve environmental problems        | Perspective-Taking, Empathy, Respect for Others, Appreciating Diversity, Relationship-Building *(Think Together, Listen to Others, Be Open to New Perspectives)*  
Evaluating, Reflecting *(Be Curious, Think Critically)* |

4. **OPTIONAL:** Read the Instructor Support section (beginning on page 13) to learn more about how CASEL key competencies can be developed through outdoor science experiences.
Part 1

Thinking About Skills

1. **Share: It can be challenging to be in a group**! Share that there’s a lot of social dynamics going on in any group, and it can be challenging to figure out how to fit in while taking care of yourself and others.

2. **Ask students to Think-Pair-Share about a group they have been a part of that worked well together** and what people did to make the group work well together. This could be their family, a sports team, a music group, a group of friends, etc. Give students 30–60 seconds to think quietly about the question (Think), followed by time to briefly discuss the question with a partner (Pair).

3. **Invite a few students to share their ideas with the whole group (Share)** and ask follow-up questions such as:
   - What do you think made that group work well together?
   - What are some things people did or skills they contributed to help that group work well together?
   - How did it feel to be part of a group that worked well together? How does it feel to be part of a group that isn’t working well together?

4. **Share that students will take a moment to think about the kinds of skills they’ll need to work together well as a group**. Offer the idea that the things students shared about that help make groups work well together (e.g. listening, having a positive attitude) are skills. Share that today they will have an opportunity to improve their social emotional skills!

5. **Share the specific activity or group challenge in which your students will take part**:
   - We’re going to: [Describe your chosen activity, such as designing a science investigation, doing some habitat restoration, exploring and studying nature, hiking up a steep hill, crossing a creek, having discussions about environmental issues, or working within the community on an environmental problem].

6. **Share what students will do during your chosen activity (or activities)**:
   - During this activity, we will (describe one of the following, or make up your own):
     - (crossing a creek): Make sure the whole group gets across the creek safely.
     - (science investigation): Make observations, ask scientific questions, figure out how to investigate our questions, and gather and analyze data.
     - (restoration project): Work in small teams to plant willow trees along this creek.
     - (nature exploration activity): Observe different parts of this ecosystem and try to learn about and figure out how different parts of nature work.

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**Think-Pair-Share.** In this discussion routine, students briefly think quietly about the topic and then discuss it in pairs. The instructor then invites a few students to share with the whole group. This routine supports student participation and helps break up a dynamic of whole-group discussion in which only a few students participate. Many learners benefit from some quiet processing time before sharing their thoughts, and pair discussion offers an opportunity for every learner to articulate their ideas.

**An adjustment for older audiences.** If you’re teaching adults or high school students, you could lead a less structured conversation. Ask: “What is your experience like in groups? What is challenging about being a part of a group for you? How do you tend to interact?” Then, share that during the activity, participants can intentionally build skills that give them more flexibility in how they relate to and show up in groups.

**Using the activity write-up.** This activity write-up includes a lot of examples of the kinds of chosen activities into which you might choose to integrate SEL, as well as key SEL skills you might discuss with students. Use the language that matches your goals best. Alternatively, record your own notes about what to share, using the examples provided for guidance.
7. **Share that students can look for opportunities to work on skills that are newer or more challenging to them in any situation:**

   In a new situation such as our activity today or any experience at all, we can try to learn or develop new skills and ways of being in the world.

8. **On your whiteboard, draw a circle and write “comfort zone” inside the circle and “growth edge” as a label that points to the perimeter of the circle. Share:**

   One way to think about growing and developing new skills is getting to your growth edge. We often learn the most when we’re practicing skills that are just outside of what’s comfortable for us.

9. **Share that it can be helpful and interesting to think about what’s in your comfort zone and what’s at your growth edge.**

10. **Invite students to briefly Think-Pair-Share about one activity or skill that is in their comfort zone, and one that is on their growth edge.** Let students know that they can share about any skills or activities, not just those they would use in an outdoor science experience.

11. **Share that everyone’s growth edge might be different based on their past experiences or what is already comfortable to them.** Also share that working on new skills is one way to make our comfort zones bigger.

   Everyone’s growth edges and comfort zones are different. Some skills might be a growth edge for you, while other skills may be things you are already comfortable with.

   For example, Speaking Up and Sharing Your Ideas might be comfortable for you, while Pausing for Others to Speak is at your growth edge. For someone else, the opposite may be true.

   We can work on growing skills that are not yet in our comfort zones.

   The more time you spend at your growth edge, or just outside your comfort zone, the bigger your comfort zone gets, and the more skills and ways of being in the world you can develop!

*Many versions of comfort zones. There are many different ways to talk about comfort zones. Some use different terms, such as stretch zone, to describe this concept. We’re offering one approach here, but you could use another term if your students are more familiar with it.*
12. On your diagram, draw a second circle around the first circle. Write “Yikes!” on the diagram outside the second circle. Share that this represents when things are beyond your growth edge and feel very scary and challenging.

- It can be harder to learn a new skill or way of being if it’s waaay outside our comfort zone.
- When we’re trying to build new skills, we try to stay at our growth edge without going into the Yikes! zone—things that are very scary or challenging.

13. Share that the group will think about the skills they will need to be successful in your chosen activity and how comfortable students are with those skills.

- We’re now going to think about the skills we will need to be successful in our activity today and how comfortable we are with those skills.
- I’ll name a skill, and we’ll share about what it means. Then, you’ll think for yourself: Is this skill in my comfort zone? At my growth edge? Or in my Yikes! zone?

14. As you describe the procedure, demonstrate where students will stand or move to during the activity: in the center of the circle if it’s in their comfort zone, on the edge of the circle if it’s at their growth edge, and outside the circle if it’s in their Yikes! zone. Quickly demonstrate this.

15. Practice the procedure. Give an example of an activity (e.g., sharing in the group, looking at bugs up close) and then ask all students to stand or move inside the circle if this activity is in their comfort zone, on the edge of the circle if it’s at their growth edge, or outside the circle if it’s in their Yikes! zone. Conduct this practice round quickly.

16. Share your first key SEL skill and then lead a brief whole-group discussion about why students think that skill will be important and/or what it will look like to put it into practice. Ask students to move back into a circular formation for discussion. Add to student thinking as needed, offering any specific tools or guidelines that might support them to engage and participate. For example:
We’re going to need to Think Together today. That means we’ll need the subskills of sharing our own ideas and listening to others’ ideas. It also means we’ll be trying to figure things out and make discoveries as a group.

Why is this useful and important for us today, or what it might look like to put this into practice?

What will it look like to use this skill? What will it sound like?

Students might say: We’ll learn more if we hear more ideas and perspectives. We can figure things out together because we all have different ideas and skills and experiences. We can take turns talking so we all can hear each other’s ideas. etc.

17. Recap what you and your students shared and then ask students to move to show where your first key SEL skill (e.g., Thinking Together) falls for them—in their comfort zone, at their growth edge, or in their Yikes! zone.

18. OPTIONAL: If it seems valuable for your group, give students the opportunity to Think-Pair-Share about why they chose to stand or move to where they are. (This will take a bit more time.)

19. Invite students to notice how different people are more comfortable or less comfortable with the key SEL skill and to notice patterns within the group.

Take a look around to see where people are with this skill. Different people are developing different kinds of skills, and this is great.

Generally, is the group more comfortable or less comfortable with this skill?

If this is a growth edge for you, who is in the comfort zone that you could turn to for support?

If you’re in your comfort zone, how could you support others with this skill?

20. Repeat Steps 16–19 with your other key SEL skills (highlighting a key SEL skill, asking students for examples of why the skill is important and what it will look like to put it into practice, and asking them to move to a part of the circle representing how comfortable they are). Adjust timing and be responsive to students’ engagement. You don’t have to go through this procedure for every skill. If students seem engaged in the conversation, offer more opportunities for large-group sharing or pair talk. If students seem disengaged or are struggling to share ideas, move on to Thinking About Strengths.

Thinking About Strengths

1. Ask students to think about strengths or positive assets they bring to a group. Share that the group is a team and that everyone has a role to play. Share that groups are made up of individuals and the way that

Be open to co-creation and student thinking. Students might have ideas about what it might look like to put skills into practice that you haven’t thought of. Welcome different ideas and perspectives. Social and emotional competencies exist within a cultural context and may look different for different individuals. Make space for students to share from their lived experiences. When you add to student thinking, avoid shutting down their ideas or implying that using a skill can only look a certain way (e.g., listen politely). Instead, pose an idea such as listen actively and then say: “There are different ways to listen actively. What are some ideas of what this could look like?” If you would like to learn more about creating an inclusive learning experience, see pages 17-18 of the Instructor Support section.

Continued conversation. If students are interested, continue this conversation or activity later (e.g., during lunch or during another break). Ask students to share: What activities or things in your daily lives are in your comfort zone? What is less comfortable? What skills do you want to grow? Are there similarities or patterns in the group?

Optional: Name tags to write skills. Bring name tags and encourage students to write a skill (e.g., Having a Resilient Attitude) on a name tag if they feel that a specific SEL skill is in their comfort zone and that they are willing to support others with that skill.
Each person participates can affect group dynamics positively, negatively, or both.

2. **Offer a few examples of skills or strengths students might bring and share that all these roles are important and will help the group work together and learn.**
   - Maybe you’re really energetic, and you want to take on the role of finding really cool, interesting stuff in nature for us to check out as a group!
   - Maybe you have a gift with positive humor, and you can look for moments to keep us laughing and lighthearted.
   - Maybe you tend to look out for others’ needs, and you want to check in with the group throughout the day to make sure everyone is taken care of.
   - Maybe you are a creative thinker, and you will help the group by bringing up interesting ideas or solutions to challenges.

3. **Invite students to Think-Pair-Share about a strength they have that can help the group throughout the learning experience.** Offer students the opportunity to share their strengths with the whole group, with the option to pass. Let students know it’s okay if words are repeated. After each student shares, respond consistently (e.g., say, “Thank you” or have the group do a silent applause).
   - We are all learning and growing with different skills, and we can work as a team by using our strengths to help the group, by offering support to someone who wants to develop a skill at their growth edge, and by asking for support when we need it.

**Students Choose a Skill**

1. **Share that any new situation is an opportunity to grow and develop new skills.**

2. **Invite students to choose and share with the whole group one new skill or way of being that is at their growth edge that they want to focus on or work on throughout their chosen activity.** Offer students the opportunity to pass, if they want.
   - Here are the skills we’ll be using today in our activity. [Hold up your SEL skills sign]. Choose one of these skills you want to focus on today.
   - We want to use all these skills throughout our activity, but sometimes it can be helpful to choose one thing to focus on.
   - You don’t need to go way out of your comfort zone to work on a skill. Pay attention to how you’re doing and try to push yourself just a little bit. For example, if speaking out in the group is more challenging for you, you don’t need to speak out all the time! Try just sharing a couple of times.

3. **Pump up students for your next activity or series of activities and remind them to practice the chosen focus skills you highlighted earlier.** For
example: Let’s go do our science investigation! I’ll carry this sign to remind us of the skills we will all try to work on.

4. Lead your chosen activity (or activities) as planned, carry a sign showing the skills that students will focus on, and offer reminders for students to practice those skills. If there are specific opportunities for one or more skills, remind students to practice those skills. If the whole group needs support around a specific skill, you might pause and offer some ideas.

5. As negative and positive social dynamics come up throughout the day, bring them up with students and frame them as opportunities to continue to work on their social emotional skills. Pay attention to the social dynamics of the group throughout the learning experience. Intervene if students are interacting in negative ways and highlight when they are interacting in positive ways.

Part 2
Midway Check-In

1. At a point in the experience where it makes sense, pause the group for a moment of reflection on the group dynamics and the skills students are working on. Ask students to reflect quietly or to Turn & Share:

   🎥 How is the group doing at working together?

   🎥 How are you as an individual doing at using one or more of the skills the group is focused on?

Part 3
Reflection

(Lead this AFTER your chosen activity or at the very end of a teaching day or program).

1. While holding up your sign showing your key SEL skills, invite students to reflect on and discuss a few of the following questions in a Thought Swap (formerly known as Walk & Talk), a Turn & Share, or a closing circle. It’s important for students to reflect on their growth as part of their learning. The reflection can also help you get a sense of how the activity impacted students. Giving students the opportunity to share about or record their reflections makes their thinking visible to you, offering an assessment opportunity. Don’t use all the questions listed below. Questions that end with double asterisks(**) are those that lead students to reflect on the specific skills they were practicing. If it will work for your students, mix in written or quiet reflection with pair talk or a large-group discussion. For each question you offer, model answering or thinking through a response yourself. This will help support students in engaging with the prompt.
**What skills did you feel like you got better at during this activity?**

**What did you do to get better at those skills?**

**What were some opportunities you had to practice or get better at [name one of your chosen focus skills]? What did it look like to use that skill?**

**Were there opportunities when you could have practiced that skill more? What would you do differently next time?**

**What are some other instances in life where you could use this skill? How might it be different or similar to this?**

**What were some times during the activity that you were at your growth edge? What did you learn during that time? What was it like for you?**

**What were some ways you think the group did well with _____ skill? What did it look like?**

**What were some times that you brought your strength to the group? How did it feel to bring that to the group? What did you notice about others when you brought your strength to the group?**

**What were some moments you were proud of today?**

2. **Encourage students to keep looking for opportunities to grow and improve their skills.** Share that choosing a skill to work on during an experience and then thinking afterward about how it went is a way to get better at things. Offer the idea that if students are in a group that isn’t focused on social and emotional growth, they can still do this on their own anytime or discuss it with a friend!

   **We can keep looking for opportunities to grow in experiences throughout our lives.**

   **Before any experience, we can ask ourselves: What is a strength or skill that is already in my comfort zone that will help me succeed in this situation?**

   **We can also ask ourselves: What is one skill at my growth edge that I could work on in this experience?**

   **We can discuss these ideas with our friends or reflect on them by ourselves, even if we are not in a group focused on social and emotional growth.**

3. **OPTIONAL: Lead a short appreciation or gratitude circle to close.** If students will share their appreciation for one another, structure this in a way to make sure that each student is shared about—such as prompting students to share an appreciation for their partners they worked with throughout the activity, the person on their left, etc.

   **OPTIONAL: At the very end of your program or field experience, invite students to think about how their comfort zone has grown. Are there things they are more comfortable doing now than they were before?**
Instructor Support

Teaching Knowledge

What is Social and Emotional Learning (SEL)? According to the Collaborative for Academic, Social, and Emotional Learning (CASEL): “Social and emotional learning (SEL) is the process through which children and adults understand and manage emotions, set and achieve positive goals, feel and show empathy for others, establish and maintain positive relationships, and make responsible decisions.”

Why focus on SEL? Social interactions and emotional experiences are present in any learning context. These social and emotional experiences impact students’ sense of self, identity, and worldview—whether we call students’ attention to this or not and whether this is conscious to students or not. In any experience, students are using their existing social skills and are practicing ways of being in the world. When we intentionally call attention to the opportunities for SEL in a learning experience and scaffold some key competencies, students can practice throughout that learning experience, we can accelerate students’ social and emotional growth. Tending to students’ social and emotional needs also supports their participation in academic and other seminal learning experiences. Environmental education and outdoor science organizations can promote effective SEL through using careful planning to intentionally interweave opportunities for SEL throughout all program experiences.

Research on Effective SEL

- “By integrating social-emotional learning (SEL) into the fabric of the school day, educators can support students in honing their existing skills and mindsets to help them succeed in school and in the broader world.” —TransformEd
- “[Effective SEL happens] when students are asked to practice these skills as they learn academic content and in interactions with peers and adults.” —Aspen Institute Social Emotional and Academic Development Commission
- “SEL can be more than just a 30-minute lesson. A systemic approach to SEL intentionally cultivates a caring, participatory, and equitable learning environment and evidence-based practices that actively involve all students in their social, emotional, and academic growth. This approach infuses social and emotional learning into every part of students’ daily lives—across all of their classrooms, during all times of the school day, and when they are in their homes and communities.” —Collaborative for Academic and Social Emotional Learning (CASEL)

Integrating SEL into the Fabric of Outdoor Science and Environmental Education Experiences

How can we integrate SEL into the fabric of outdoor science and environmental education experiences and give students opportunities to develop SEL skills as they engage in learning at our programs? Stand-alone activities focused on SEL, such as team-building games or challenge courses,
offer opportunities to develop Social and Emotional competencies. However, to match the integrated approach that leading organizations are calling for, students need to consciously practice SEL skills during all program activities—whether they are engaging in habitat restoration, observing nature, designing a science investigation, participating in a group discussion, offering community service, or crossing a creek. We recommend using Social Emotional Learning Routine to frame science and academic learning experiences and other seminal activities of your program—not just challenge courses or physically challenging experiences. Think about the SEL opportunities that already exist within your key lessons and seminal learning experiences. Then use this activity to leverage the SEL opportunities within those experiences.

Social Emotional Learning Routine is also a way to move from a passive approach of teaching SEL to an active, intentional one. Students may engage in challenging activities or exercise new or existing SEL skills (e.g., communication or frustration tolerance) during the course of these activities; in a passive approach, students go through these challenging or new experiences and glean whatever growth they happen to get. In an active approach, we can guide students to view these experiences as opportunities to develop SEL skills, and we can offer time for them to reflect on their progress with these skills. An active approach makes SEL opportunities visible to your students, supports students in consciously practicing SEL skills throughout your program, and can accelerate students’ SEL growth. Social Emotional Learning Routine takes an active approach by offering a simple framework to engage students in identifying and practicing SEL competencies during any academic activity or other learning experience you offer in your program.

Opportunities for Social Emotional Learning in Outdoor Science and Environmental Education Programs

Outdoor science and environmental programs can offer some unique opportunities for SEL that may be different from what students typically have access to in the classroom. The outdoors is a context-rich environment for science learning. Being able to engage with interesting natural phenomena makes the outdoors a dynamic place for students to engage in critical thinking—which relates directly to the CASEL competencies such as Identifying Problems, Analyzing Solutions, Evaluating, and Reflecting. If students participate in experiences such as habitat restoration or community work, they are often doing so in a real-world context that also offers opportunities for engaging in competencies such as Solving Problems and Ethical Responsibility, which are related to Responsible Decision-Making. Outdoor science and environmental education programming often occurs in a physical setting that is new to students; this offers an opportunity for students to practice skills related to Self-Management, such as Impulse Control, Stress Management, Self-Discipline, and Organizational Skills. Participating in a learning experience in a new physical setting, or engaging with new instructors, can also be an opportunity for students to see themselves and each other in a new light and to highlight and develop a range of skills that may be different or complementary to skills emphasized in the classroom. The impact of this can encourage students’ Self-Awareness and build their positive identities as learners, supporting Accurate Self-Perception, Recognizing Strengths, Self-Confidence, and Self-Efficacy.
Additionally, spending time in nature is increasingly shown to have a positive impact on individuals’ mental and physical health and can lead to effects such as lowering stress levels and reducing depression and anxiety. The simple experience of just being outside, which is foundational to outdoor science and environmental education programs, can increase students’ overall social and emotional well being.

Opportunities for Social Emotional Learning in Other BEETLES Activities and Nature Exploration Activities

BEETLES activities are designed to be student-centered and nature-centered, which means that students have ample opportunities to engage in discussion with one another and with the instructor in order to refine and understand their ideas. It also means that students are applying critical thinking skills and engaging directly with nature as well as using science practices in order to learn about nature and figure out how things work. BEETLES activities offer students many opportunities to put SEL competencies into practice. For example, as students:

- participate in discussions, monitor their participation, and decide how and when to contribute, they develop Self-Management and Self-Awareness (specifically Impulse Control, Identifying Emotions, and Self-Confidence).
- make observations and ask questions, learn from their direct experiences, and build understanding of new concepts and ideas, they develop critical thinking skills, build positive identities as learners, and build on their perceived strengths. In the process, they are building the SEL competency of Self-Awareness (specifically Self-Confidence and Self-Efficacy).
- develop a connection with nature and a sense of belonging within nature through their observations and experiences, they build the SEL competencies of Self-Awareness and Social Awareness (specifically Empathy, Respect for Others, and Accurate Self-Perception).
- work with peers and adults to explore, talk about, engage with, and learn about nature, they build Relationship Skills (specifically Communication, Social Engagement, and Teamwork).
- interact directly with nature and are encouraged to be mindful of their impact on organisms, landscapes, and human communities, they build Self-Management and Responsible Decision-Making (specifically Impulse Control, Self-Discipline, and Responsibility).
- use practices of science to learn; reflect on how their learning behaviors mirror those of scientists; and gain a more inclusive, accessible definition of what science is and who can do science, they build Self-Awareness (specifically Self-Confidence and Accurate Self-Perception).
• navigate physical challenges that arise from learning in an outdoor context, they build **Self-Management** and **Responsible Decision-Making** (specifically **Impulse Control**, **Self-Discipline**, and **Responsibility**).

• apply science practices within the context of a project such as a science investigation or collaborative habitat restoration project, they can build **Self-Management** (specifically **Self-Motivation**, **Goal-Setting**, and **Organizational Skills**).

• hear one anothers’ lived experiences and consider new perspectives, they develop **Social Awareness** (specifically **Empathy**, **Perspective-Taking**, **Respect for Others**, and **Appreciating Diversity**).

All these opportunities for SEL will be more effective if students also reflect actively on how they are calling on these skills throughout a learning experience.

**Supporting Equitable, Inclusive, and Culturally Relevant Learning Experiences**

Social and Emotional Learning is inherently tied to equity, inclusion, and cultural relevance. The way we present SEL skills to students can either reinforce a dominant culture and the status quo or disrupt it by providing more equitable voice to students, offering opportunities to build positive cultural identities, highlighting more inclusive ways of being in the world, and offering scaffolding around inclusive and equitable communication skills.

BEETLES design principles [http://beetlesproject.org/about/how-do-we-approach-teaching/] ensure that each activity is student-centered, which enables all learners to access, participate, and engage in the learning experience. How does student-centered teaching help support equitable and inclusive learning experiences?

Discussion is a key aspect of student-centered teaching practices. Through discussion, learners make connections to prior knowledge, share their lived experiences, listen to different perspectives, and have time to process the material. Productive discussions, in which many voices are heard and the group builds off one another’s ideas, create an experience in which students see themselves and one another as sources of expertise. This ensures that instructors don’t fall back on positioning themselves as the only source of accurate or important information. Participating in discussions also supports students to develop cognitive rigor and the ability to take on more advanced learning tasks. Discussions also make students’ thinking and ideas visible to the instructor. When instructors value, appreciate, better understand, and connect to students’ lived experiences, they create a more inclusive and culturally relevant learning space. Finally, multiple opportunities for discussion provide time and space for neurodiversity—making space for students to process information in different ways. Using teaching strategies such as **Turn & Share** or **Thought Swap** (formerly known as **Walk & Talk**) that are part of every BEETLES student activity can help ensure that students have these kinds of opportunities for discussion.
Specifically, **Social Emotional Learning Routine** supports an equitable and inclusive learning experience by:

- offering students multiple opportunities to connect to and share their lived experiences, and for students and the instructor to listen to and learn from these experiences and perspectives.
- inviting students to position their lived experiences as a valued source of expertise that supports the group’s success.
- offering a common language for discussing and sharing about Social and Emotional Learning.
- offering scaffolding that guides students to consider the impacts of their actions on members of the group and on the group as a whole.
- offering guidance to the instructor around how to avoid reinforcing dominant cultural norms (e.g., saying *Listen politely*) and instead how to invite students to co-create definitions of skills and social competencies that emerge from the group (e.g., *There are lots of ways to listen actively. What can this look like?*).
- inviting students to share about the strengths and assets they bring to a group and intentionally providing examples of strengths that go beyond traditionally valued traits in academics.
- scaffolding specific social and emotional competencies that can increase students’ capacity to manage stress and depression and support students to be active participants in learning experiences.
- offering an opportunity for peers to see themselves and one another in a new light and to develop positive identity through being outdoors and learning in a new setting.

Overall, these factors contribute to creating a student-centered approach to Social and Emotional Learning in which the framing of SEL competencies calls on students’ lived experiences and is, thereby, more likely to affirm their cultural identities. The approach to this activity balances student-centered discussions around SEL skills, with guidance to the instructor on how to build on students’ ideas and guide the group toward definitions of SEL skills that make space for a broad range of expressions and ideas (instead of definitions of SEL skills that reinforce dominant cultural norms).

Using student-centered learning approaches is just one piece of the work we can do to create equitable, inclusive, and culturally relevant learning experiences. Instructors must also work to become more aware of their own unconscious biases and triggers around culture, identity, and race that impact their interactions with students and affect their students’ sense of inclusion.

**TEACHING NOTES**

Resources on SEL and equity. There are many great resources on connections between SEL and equity and inclusion. Here are some resources and organizations to consult for additional information:

- National Equity Project: Social Emotional Learning & Equity [https://nationalequityproject.org/about/social-emotional-learning-equity]
- CASEL Equity Elaborations: Equity Connections to SEL Competencies [https://drc.casel.org/sel-as-a-lever-for-equity/equity-connections-to-sel-competencies/]

Resources on unconscious bias. There are many great resources on understanding and shifting unconscious bias. Here are a few that we have looked to consistently to work on our own unconscious bias and to better understand how it can affect teaching and learning in the outdoors:

- White Fragility by Robin DiAngelo
- Culturally Responsive Teaching and the Brain by Zaretta Hammond
- Youth Outside [http://www.youthoutside.org/] 
- The Avarna Group [https://theavarnagroup.com/]
- Center for Diversity & the Environment [https://www.cdeinspires.org/]
Activity Connections

Several BEETLES activities can help students build specific Social and Emotional Learning competencies.

*I Notice, I Wonder, It Reminds Me Of* offers observation tools for exploring nature and also includes an optional extension that guides students to use the prompts *I Notice, I Wonder, It Reminds Me Of* as a mindfulness tool, scaffolding skills of Identifying Emotions, Self-Awareness, Self-Management, and Social Awareness. This activity is particularly useful if you want students to focus on these kinds of SEL competencies.

*Group Agreements for Science Discussions* offers specific tools related to Communication and Social Awareness, breaking down these larger skills into practical strategies students can build on and practice throughout discussions in the program. This activity is particularly useful if you want students to focus on these kinds of SEL competencies.

*Mind Pie* is an assessment routine that guides students to (anonymously) identify which kinds of activities, skills, and content areas they are comfortable with and which ones they are working on or are new to. If your students seem hesitant to identify skills that they want to work on publicly in the group, this routine can be used to encourage students to reflect on their intended areas of growth in a more low-stakes way and provides the instructor an at-a-glance summary of where the group as a whole is in their comfort with specific SEL skills.

Any BEETLES activity can be used as the chosen activity in which students practice key SEL skills identified in this routine.

**Learning Cycle:** In combination with another activity or series of activities, *Social Emotional Learning Routine* completes a full learning cycle. Within a longer series of activities, *Social Emotional Learning Routine* functions primarily as an Invitation and Reflection.
Social Emotional Learning

Part 1: Thinking About Skills
1. Share: It can be challenging to be in a group!
2. Ask students to Think-Pair-Share about a group they have been a part of that worked well together and what people did to make the group work well together.
3. Invite a few students to share their ideas with the whole group and ask follow up questions such as:
   - What do you think made that group work well together?
   - What are some things people did or skills they contributed to help that group work well together?
   - How did it feel to be part of a group that worked well together? How does it feel to be part of a group that isn’t working well together?
4. Share that students will take a moment now to think about the kinds of skills they’ll need to work together well as a group.
5. Share the specific activity or group challenge in which your students will take part:
   - We’re going to: [Describe your chosen activity, e.g., designing a science investigation.]
6. Share what students will do during your chosen activity (or activities): For example:
   - (science investigation): During this activity, we will make observations, ask scientific questions, figure out how to investigate our questions, and gather and analyze data.
7. Share that students can look for opportunities to work on skills that are newer or more challenging to them in any situation.
8. On your whiteboard, draw a circle and write “comfort zone” inside and “growth edge” as a label that points to the perimeter of the circle. Share:
   - One way to think about growing and developing new skills is getting to your growth edge. We often learn the most when we’re practicing skills that are just outside of what’s comfortable for us.
9. Share that it can be helpful and interesting to think about what’s in your comfort zone and what’s at your growth edge.
10. Invite students to briefly Think-Pair-Share about one activity or skill that is in their comfort zone, and one that is on their growth edge.
11. Share that everyone’s growth edge might be different based on their past experiences or what is already comfortable to them.
   - Everyone’s growth edges and comfort zones are different. Some skills might be a growth edge for you, while other skills may be things you are already comfortable with.
   - For example, Speaking Up and Sharing Your Ideas might be comfortable for you, while Pausing for Others to Speak is at your growth edge. For someone else, the opposite may be true.
12. On your diagram, draw a second circle around the first circle.
   - Write “Yikes!” on the diagram outside the second circle.
13. Share that the group will think about the skills they will need to be successful in your chosen activity and how comfortable students are with those skills.
   - We’re now going to think about the skills we will need to be successful in our activity today and how comfortable we are with those skills.
   - We’ll share about a skill, and we’ll share about what it means. Then, you’ll think for yourself. Is this skill in your comfort zone? At your growth edge? Or in your Yikes! zone?
14. As you describe the procedure, demonstrate where students will stand or move to during the activity: in the center of the circle if it’s in their comfort zone, on the edge of the circle if it’s at their growth edge, and outside the circle if it’s in their Yikes! zone.
15. Practice the procedure. Give an example of an activity and then ask all students to stand or move.
16. Share your first key SEL skill and then lead a brief whole-group discussion about why students think that skill will be important and/or what it will look like to put it into practice. For example:
   - We’re going to need to Think Together today. That means we’ll need the subskills of sharing our own ideas and listening to others’ ideas. It also means we’ll be trying to figure things out and make discoveries as a group.
   - Why is this useful and important for us today, or what it might look like to put this into practice?
   - What will it look like to use this skill? What will it sound like?
17. Recap what you and your students shared then ask students to move to show where your first key SEL skill (e.g., Thinking Together) falls for them—in their comfort zone, at their growth edge, or in their Yikes! zone.
18. OPTIONAL: If it seems valuable for your group, give students the opportunity to Think-Pair-Share about why they chose to stand or move where they are. (This will take more time.)
19. Invite students to notice how different people are more comfortable or less comfortable with the key SEL skill and to notice patterns within the group.
   - Take a look around to see where people are with this skill. Different people are developing different kinds of skills, and this is great.

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FIELD CARD
Cut out along outer lines and fold along the centerline. This makes a handy reference card that will fit in your pocket.

Thinking About Strengths
1. Ask students to think about strengths or positive assets they bring to a group. Share that the group is a team and that everyone has a role to play.
   - Maybe you’re really energetic, and you want to take on the role of finding really cool, interesting stuff in nature for us to check out as a group!
   - Maybe you are a creative thinker, and you will help the group by bringing up interesting ideas or solutions to challenges.
2. Offer a few examples of skills or strengths students might bring and share that all these roles are important and will help the group work together and learn.
3. Invite students to Think-Pair-Share about a strength they have that can help the group throughout the learning experience.
   - We are all learning and growing with different skills, and we can work as a team by using our strengths to help the group, by offering support to someone who wants to develop a skill at their growth edge, and by asking for support when we need it.

Students Choose a Skill
1. Share that any new situation is an opportunity to grow and develop new skills.
2. Invite students to choose and share with the whole group one new skill or way of being that is at their growth edge that they want to focus on or work on throughout their chosen activity.
   - Here are the skills we’ll be using today in our activity. [Hold up SEL skills sign]. Choose one of these skills you want to focus on today.
   - We want to use all these skills throughout our activity, but sometimes it can be helpful to choose one thing to focus on.
   - You don’t need to go waay out of your comfort zone to work on a skill. Pay attention to how you’re doing and try to push yourself just a little bit.
3. Pump up students for your next activity or series of activities and remind them to practice the chosen focus skills you highlighted earlier.
4. Lead your chosen activity (or activities) as planned, carry a sign showing the skills students will focus on, and offer reminders for students to practice those skills.
5. As negative and positive social dynamics come up throughout the day, bring them up with students and frame them as opportunities to continue to work on their social emotional skills.

Part 2: Midway Check-In
1. At a point in the experience where it makes sense, pause the group for a moment of reflection on the group dynamics and the skills they are working on.
   - How is the group doing at working together? How are you as an individual doing at using one or more of the skills the group is focused on?

Part 3: Reflection
(Lead this AFTER your chosen activity or at the very end of a teaching day or program.)
1. While holding up your sign showing your key SEL skills, invite students to reflect on and discuss a few of the following questions in a Thought Swap (formerly known as Walk & Talk), a Turn & Share, or a closing circle. Questions that end with double asterisks (**) are those that lead students to reflect on the specific skills they were practicing.
   - What skills did you feel like you got better at during this activity??
   - What did you do to get better at those skills??
   - What were some opportunities you had to practice or get better at [name one of your chosen focus skills] skill? What did it look like to use it?***
   - Were there opportunities when you could have practiced that skill more? What would you do differently next time??
   - What are some other places in life where you could use this skill? How might it be different or similar to this??
   - What were some times during the activity that you were at your growth edge? What did you learn during that time? What was it like for you?
   - What were some ways you think the group did well with ___ skill? What did it look like?
   - What were some times that you brought your strength to the group? How did it feel to bring that to the group? What did you notice about others when you brought your strength to the group?
   - What were some moments you were proud of today?
2. Encourage students to keep looking for opportunities to grow and improve their skills.
3. OPTIONAL: Lead a short appreciation or gratitude circle to close.
4. OPTIONAL: At the very end of your program or field experience, invite students to think about how their comfort zone has grown. Are there things they are more comfortable doing now than they were before?
ABOUT BEETLES™

BEETLES™ (Better Environmental Education Teaching, Learning, and Expertise Sharing) provides environmental education programs nationally with research-based approaches and tools to continually improve their programs.

www.beetlesproject.org

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Special Acknowledgements: The development and publication of this activity was made possible by support from the Grow Outside: A Social Emotional Learning Toolkit for Residential Environmental Learning Centers; NatureBridge; and funding from the S. D. Bechtel, Jr. Foundation. http://grow-outside.org/

We want to acknowledge Youth Outside (youthoutside.org) in supporting us to develop more equitable, inclusive, and culturally relevant instructional materials. To learn more about our collaboration with Youth Outside, see: http://beetlesproject.org/beetles-collaboration-youth-outside/.

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The following programs contributed to the development of these materials by field testing and providing invaluable feedback. For a complete list of contributors and additional partners, please see beetlesproject.org/about/partners/

California: YMCA Camp Campbell, Rancho El Chorro Outdoor School, Blue Sky Meadow of Los Angeles County Outdoor Science School, YMCA Point Bonita, Walker Creek Ranch, Santa Cruz County Outdoor Science School, Foothill Horizons Outdoor School, Exploring New Horizons Outdoor Schools, Sierra Nevada Journeys, San Joaquin Outdoor Education, YMCA Camp Arroyo, Shady Creek Outdoor School, San Mateo Outdoor Education, Walden West Outdoor School, Westminster Woods.

Other locations: Balarat Outdoor Education, CO; Barrier Island Environmental Education Center, SC; Chincoteague Bay Field Station, VA; Eagle Bluff Environmental Learning Center, MN; Great Smoky Mountains Institute at Tremont, TN; Wellfleet Bay Wildlife Sanctuary Mass Audubon, MA; Mountain Trail Outdoor School, NC; NatureBridge (CA, WA, VA); Nature’s Classroom (CT, MA, ME, NH, NY, RI); North Cascades Institute Mountain School, WA; NorthBay, MD; Outdoor Education Center at Camp Olympia, TX; The Ecology School, ME; UWSP Treehaven, WI; Wolf Ridge Environmental Learning Center, MN; YMCA Camp Mason Outdoor Center, NJ; and YMCA Erdman, HI.

Photos: Pages 1 and 2 by Kevin Beals. Icons: Backpack by Rémy Médard; Growth by Arthur Shlain; Cut by Nathan Thomson; Outside by Petr Holusa; Park by Antar Walker; Time by Wayne Middleton; & Diversity by Cara Foster all from The Noun Project.

Funding from 2012-2019 for BEETLES publications such as this one has been generously provided by the S.D. Bechtel, Jr. Foundation, The Dean Witter Foundation, Pisces Foundation, the Mary A. Crocker Trust.

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