



REFLECTION & FEEDBACK

Use the following questions and tips to guide staffs' reflection and planning of STEAM practices.

ENGAGING ENVIRONMENTS

FOR CENTER BASED OR GROUP CARE SUPERVISORS:

- What open-ended materials do you have indoors or outdoors that allow for creativity and problem solving? You might use blocks, ramps, tubes, or boxes. What materials can you add to expand children's explorations, based on their current interests and cultural backgrounds?
- How can you use the outdoors to engage children in explorations of natural or living objects (plants, insects, trees, rocks)? Even an asphalt playground offers opportunities (finding and examining cement/asphalt rocks). So do walks around the community.
- What objects, books, or tools (such as magnifying glasses) can you add to your environment?
- What cultural items, tools, regalia, pictures do you have in your classroom that can engage the children in STEAM-based conversations?

FOR HOME BASED SUPERVISORS:

- How do you encourage families to use materials in the home to encourage their child's creativity and problem solving?
- How are you supporting families as they identify and use safe outdoor spaces at home and in their communities?
- What household materials can you suggest to families?
- How do you encourage families to engage in cultural activities at home and in the community?

Tip: Children can use any material to explore STEAM. It doesn't have to be a typical "science" material like a beaker or test tube. Their cultures and worlds are your science lab.

NURTURING, RESPONSIVE, & EFFECTIVE INTERACTIONS

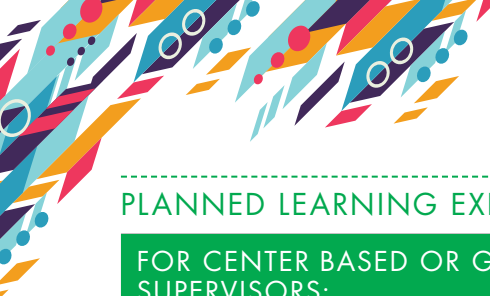
FOR CENTER BASED OR GROUP CARE SUPERVISORS:

- What STEAM words (e.g., observe, predict, test) do you use with children? What new words do you think you can introduce to children?
- Think about a moment when children were engaged with materials. What did you do? How did you expand their thinking? What worked?
- Think of a time a child had a question that you did not know the answer to. What did you do? Is there anything you could have done differently to figure out the answer together? How are you encouraging families to find out answers to their child's questions together?
- How do you work to create a culture of inquiry with children? Do you communicate and interact with them in a way that encourages and supports curiosity? Do children feel safe exploring and telling you about things they have observed or discovered?
- How do you engage families and elders in the classroom (i.e., storytelling, sewing, and sharing skills or crafts-like building canoes, etc.)?

FOR HOME BASED SUPERVISORS:

- How can you share STEAM words with families and, as needed, build their comfort level in using them during play with their child and during daily routines like bath time, cooking, gathering, and cleaning?
- Reflect on a home visit where you watched a parent have a STEAM conversation with their child. How did you encourage and build on the parent's interaction? Can you think of a time you were at a community event and saw an opportunity to have a STEAM conversation (i.e., gathering berries, fishing, potlatch)?
- How do you build confidence in the parents you work with so that they feel comfortable promoting inquiry in their child?

Tip: You don't have to be the expert or have all the answers. In fact, research shows that it's better for children's learning if you explore with them or let them lead in the exploration! Activities should encourage exploration and curiosity rather than gathering facts.



PLANNED LEARNING EXPERIENCES / ACTIVITIES

FOR CENTER BASED OR GROUP CARE SUPERVISORS:	FOR HOME BASED SUPERVISORS:
<ul style="list-style-type: none"> ▪ How do you use everyday experiences to promote STEAM language and skills (e.g., morning circle time, story time, centers, lunch, playground time...)? ▪ Think about your current curriculum unit, theme, or topic of interest (e.g., animals, community gatherings, fishing, healthy foods, all about my family). <ul style="list-style-type: none"> ▪ How do you invite children to share what they already know about this topic? ▪ How do you give them opportunities to ask questions related to this topic? ▪ How do you encourage children to observe and investigate questions related to this topic? ▪ What vocabulary do you plan to introduce to children as part of this investigation? ▪ How do you incorporate their tribal languages into these activities? ▪ What concepts do you want them to learn during the inquiry? 	<ul style="list-style-type: none"> ▪ How do you help families use STEAM language in family routines, daily events, and cultural activities? ▪ How does your current home-based curriculum build in opportunities for STEAM with families? How can you enhance these activities during socializations? ▪ How can you help families see the natural way children learn from cultural activities such as gathering berries, cooking native food, storytelling with elders, etc.?

Tip: Ask families what ideas or knowledge are important to their family or culture and plan activities to explore them more. Provide families with an activity guide to continue their child’s engagement and interest in the activity at home.

RESOURCE:

Making It Work: A Guide for Implementing Cultural Learning Experiences in American Indian and Alaska Native Early Learning Settings can be a very helpful tool to connect culture and language to your curriculum. Click on the link to access the guide:

<https://eclkc.ohs.acf.hhs.gov/sites/default/files/pdf/no-search/making-it-work-2017.pdf>