Re-seeing and Re-shaping is the practice of making visible the informal STEM learning terrain—the institutions, people, resources, and opportunities that host and structure youth engagement in ISL—as they currently exist, while simultaneously noticing the rich assets youth bring for re-shaping the terrain in powerful ways.

This guide provides:
- One example of how to enact the Core Equitable Practice (CEP) of Re-seeing and Re-shaping, as described in the Re-seeing and Re-shaping Insights 2.2 document.
- Examples of how youth may seek to re-see and re-shape, drawing on our partner educators’ implementation of informal STEM programs.
- Ways to notice these bids and readily respond to them in ways that value youth for who they are and what they bring to the learning environment.

Questions for Group Discussion
- How have youth had opportunities to re-see and re-shape in my/our program because of who they are, what they have experienced and/or what they know? How have youth been denied such opportunities?
- How have I/we responded to such bids? Which new learning outcomes, if any, emerged from my/our response to bids for re-seeing and re-shaping?

Things to Keep In Mind
- Youth bids can require multiple responses at once. For example, youth bids to re-see and re-shape the terrain of ISL (informal STEM learning) can also require the core equitable practice of reclaiming.
- This tool can be used alongside the Equity Compass tool to enhance discussions on youth bid goals and outcomes.

Why do youth make bids? Youth often actively seek to do the following:
- To disrupt the ways in which everyday knowledge and practice of STEM and schooling position students as deficient, or without power and authority.
- To amplify their already-present brilliant and agentic acts of everyday knowing and practice and to have their transformative potential made visible.
- To be rightfully present and legitimately belong as fully human in ISL.
Disrupting: Youths disrupting the host-guest binary

After a youth action council meeting for co-designing a new conference room in his city’s science center, when Trey’s family arrived to pick him up, Trey urged them to follow him and gave them a tour of the new room he participated in redesigning.

Along the way, he acted as a docent, disrupting the implicit norm positioning him just as a welcomed guest to the science center. He explained the rooms, exhibits, and programs of the Science Center. When they arrived, he shared the story of naming the room and the future design plans. He refined his vision of the room by discussing with his family members how he wanted to celebrate community members’ lives with STEM on the walls, ceiling, window, and signage.

Bid: Presenting a new shift in roles
Response: Noticing the bid and allowing it to happen uninterrupted
Re-seeing and Re-shaping: Youth try out and embody new roles in STEM spaces

Amplifying: Wanting to continue working on design ideas across ISL spaces

Community center STEM club youth member Lulu was introduced by her educators to a youth action council (YAC) meeting at a science center. In the meeting, members participated in co-designing a new conference room. At her community center STEM club later that week, Lulu continued working on the design idea she had suggested in the YAC meeting. She shared with her peers what she experienced during YAC and what and how she wanted to complete her co-design work for the next YAC meeting.

Maria, the community center educator who also worked with the science center YAC, recognized how Lulu wanted to continue building connections across the science center and the community center. Maria provided Lulu with space and materials at the community center so that she could prototype her YAC design ideas into drawings and building models.

Bid: Seeking to move expertise and materials across spaces
Response: Noticing bid, supporting youth desire for stronger connections
Re-seeing and Re-shaping: Youth develops expertise across spaces

Rightfully Present: Wanting to navigate and expand opportunities to learn across different programs

Steffany, an educator in charge of facilitating a volunteering club, visited the community STEM club room to announce the start of the volunteering club’s meeting for the next hour in the room next door. Michelangelo asked Steffany if he could join in their volunteering group.

Steffany recognized this as a bid to be welcomed but not necessarily a commitment. So she publicly welcomed his idea but suggested that he could ask peers what the leadership group was like, what members do and were responsible for, what types of volunteering happened there, and how many days and for how long they were required to meet. Once he had done this, he could decide if he wanted to join them and then find her to share his decision. Instead of pushing him to make every connection possible, she encouraged Michaelangelo to explore what groups matched his interests, assuring him that she would support him either way.

Bid: Asking for a program invitation
Response: Offering a welcome to join while encouraging youth to learn more before committing
Re-seeing and Re-shaping: With unconditional support offered, youth can choose to accept invites or not without pressure

Reflecting:
- Which example of youth bids resonates with your experience?
- Share and add youth bids for re-seeing and re-shaping that you have experienced.
- How might you respond to re-see and re-shape in your space?