## Guide to Talk Moves

**Shifting Narratives** involves expanding what counts as STEM, who does STEM, and how STEM can be done by honoring the agency and assets of youth and adults. Shafting the narratives of who can belong in STEM helps youth "see" themselves in STEM in both the present and the future.

**What are talk moves?** Talk moves are the pedagogical moves that educators make to facilitate and scaffold engagement in ISL among youth without being the one doing all the talking or decision-making.

*This guide highlights pedagogical moves to create and sustain an equitable learning community. It serves as one example of how to enact the Core Equitable Practice (CEP) of Shifting Narratives, as described in the Shifting Narratives Insights 2.5 document.*

### Questions for Group Discussions

- How have I/we sought to shift narratives with youth in my/our program -- drawing from who youth are and what they bring -- their feelings, ideas, histories, hopes and fears?

- Have I/we been successful in shifting STEM narratives with some youth more than others?

- What makes me/us uncomfortable with shifting the narratives we implicitly tell in STEM spaces? Why?

- From my/our own experience, what talk moves have I/we used or experienced to shift narratives with youth?

- What are some ways shifting narratives talk moves might be combined with other practices (e.g., embracing humanity)?

- What talk moves have I/we already used? Which do I/we want to add? Which ones will be the most impactful to support narrative shifting? Which will be difficult?

- In the most recent lesson taught, how could I/we integrate these talk moves to transform who/what matters in STEM?

### Things to Keep in Mind

This tool has been designed with partner educators. Themes include collective critique, establishing new narratives, and institutionally supporting narrative shifts.

Some talk moves can work for multiple practices. For example, questions to shift narratives with youth may also work to critically be with youth

This tool can be used alongside the Equity Compass tool to enhance discussions on talk move goals and outcomes.

Some of these talk moves may look like ones you are used to seeing, such as revoicing. However, **we call attention to when and how these moves are used to desettle what/who matters in STEM and what expertise is and can look like.**

# The YESTEM Project

## Examples of Talk Moves

| | | |
|---|---|---|
| **Collectively critiquing currently dominant narratives about STEM** | Making observations together about STEM | "**How would you define/describe** [science, technology, engineering, math, or related subject]? What do you love about it? What do you dislike about it?"<br><br>"Who does STEM [or specific area of STEM work]? What is the purpose point of learning or doing that? Who could be affected by that?" |
| | Speaking back to societal narratives framing STEM practice in the real world | "**How have you seen or heard of** scientists or engineers or computer coders [or other STEM profession] represented in movies or TV or video games or magazines, or by your school teachers?"<br><br>"How does the world / others describe STEM [or insert sub-topic]? Do you agree/disagree? Why?" |
| **Establishing new STEM narratives based on youth and community histories, experiences, and goals** | Prompting youth to reflect on their desired identities in STEM | "**What do you wish the world knew about you** as a STEM thinker, maker, learner, and/or doer?"<br><br>"How would you change the world with STEM?" |
| | Asking youth to express their interests, goals, expertise externally | "Let's get to know each other better! Let's take turns sharing what I really love to do, and what I do well."<br><br>"Now let's explore **how what we do well already can help** us, others, or the bigger world when we use it with STEM tools, learning, or skills." |
| **Institutionally sustaining & expanding the impact of new, youth co-authored STEM narratives** | Engaging parents and guardians in supporting youths' connections to STEM activities and resources | To parent/guardian: "You may already know how much [their child] loves doing [topic/activity]. She was so focused on it today! I think **she might really enjoy** the [related event] this weekend." |
| | Presenting youth re-imaginings publicly | "Let's brainstorm **whom you'd want to see** at your presentation." |
| | Making time and space to re-think and re-design learning frameworks to better reflect re-imagined STEM narrativeas | "Let's re-organize the lessons in this unit to highlight how each one connects more to what you all shared that you like to do NOW, and what you might want to do in the future! Let's start with forces and motion. How could this lesson help Alex's goal to be a race car driver in the future? How could it help Nick's skateboarding this weekend?"<br><br>"**What STEM lessons are still missing**, that you would want to add this year, to help us with our current lives or our future lives? |