

















Guide to Talk Moves

Authority Sharing involves supporting youth to use their expertise to educate others, whether other youth or adult educators. Authority Sharing involves the stance that youth have powerful ideas and experiences that matter in learning and doing STEM.

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 through sharing, disrupting, and restructuring authority with, for, and by youth. This guide serves as one example of how to enact the Core Equitable Practice (CEP) of Authority Sharing, as described in the Authority Sharing Insights 2.8 document.

Questions for Group Discussions

- How have youth had opportunities to have authority in my/our program because of who they are, what they have experienced and/or what they know? How have youth been denied authority in ways that reproduce power asymmetry?
- Have some youth been granted greater authority because of who they are and how their experiences and cultural knowledge may more clearly map onto science?
- What makes me/us uncomfortable with sharing, disrupting, redistributing, and restructuring authority? Why?
- From my/our own experience, what talk moves have I/we used or experienced to support authority sharing, disrupting, redistributing, and restructuring?
- What are some ways authority sharing talk moves might be combined with other practices in ISL (e.g., recognition)?
- What talk moves have I/we already used? Which do I/we want to add? Which ones will be the most impactful to share, disrupt, and restructure authority? 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 elevating youth voices, soliciting youth voices, being vulnerable, and responsiveness.

Some talk moves can work for multiple practices. For example, questions to explicitly recognize youth expertise may also work to promote youth authority.

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.



















Examples of Talk Moves

Elevating Youth Voice

Revoicing & Expanding Youth Relationships and Multiple Forms/Sources of Expertise "[Name] told a wonderful story about his grandmother teaching him to sew. **Do you want to share more** about the things she made?"

"Who can restate Shamille's idea in their own words about animals in a flood model?" ["When her cousin's house flooded, they had to get the cats out too."] "Shamille, **is that what you were thinking?**"

Valuing alternative approaches, and artifacts in-process

[When youth make different design decisions than the educator]: "Ariel! I like the way you cut it. That's much easier than the way I told you." "**Oh, that worked too!** How did you make that part?"

Creating space to pursue "off-task amazing" moments

During a fingerprinting activity, youth began a spontaneous role play with one stating they had found another's fingerprints connecting her to a crime. The accused youth protested that her prints were in the room because it was *her* room. Another youth jumped in saying she was a lawyer and the accuser needed to show stronger evidence. "Let's all continue with this role play. Who else do we need? A judge? Jury? What do we think about the evidence presented?"

Soliciting Youth Voice

Prompting Further Participation

"What do others think about the ideas we have so far about how we might use our robotic arms to help clean the room? What would you add or change to our list of ideas?"

Asking Youth to share reasoning, including on topics that do not immediately seem relevant or familiar

"Maddie, *can you say more* about that? *How* did your light up leash help the dog and dog walkers who tested it out?"

Create spaces for youth to lead by eliciting youth ideas via wait time, think/pair/share, etc.

"I want everyone to have a chance to think about their own ideas first and share them with a friend first."

Asking for and centering youth expertise

"Does anyone know how to sew?" "Would any of you help me lift my fingerprints?"

Vocalizing Vulnerability

Verbally acknowledging no one knows everything and we're meant to learn together [When an educator makes a mistake regarding a project] "Oops! I am so sorry. *I actually don't know* how to do that. *Let's find out together!*"

Responding in the moment

Changing the direction of lessons based on youth ideas/questions

[When youth bring new ideas]: "Oh! I didn't think about it like that but **that totally makes sense!** Thanks for that point. **Would you share your idea** how we can [reflect youth idea]?"