Conversations about Equity that Link Theory to Practice

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Linking Theory to Practice

This tool supports linking theories regarding equity and social justice to classroom practice. Each theory is summarized in a sentence and linked to relevant literature. Then, examples of what the theory might look like in practice and what actions the teacher can take are provided. This tool is intentionally incomplete. Through conversations, groups who are using this tool can generate more examples of what the theory can look like in their own practice and explore other theories that are of interest to them.

Reflection Questions

- Do I understand the equity/social justice goal described in the theory? How would I put it in my own words?
- To what extent do I agree that the equity/social justice goal is desirable? Why? Which parts of the goal resonate and which are unfamiliar or concerning? How might my own experiences be causing discomfort?
- In what contexts was this theory developed? How were the authors of the theory reflective of their own positions relative to the work?
- What can I do in the classroom to work towards this equity/social justice goal? What specific practices can I employ to work towards the goal? How can I gain insight into the implementation of my equity practices?
- What evidence of progress towards the goal can I look for in my own instruction? How can I collect evidence for this goal?
- What steps will I take if I do not find evidence that the goal is being achieved?

Equity Learning Goals

Funds of Knowledge: We can leverage our families' cultural and linguistic knowledge and histories for learning and doing science.

Equity Performance	What it Looks Like	What the Teacher is Doing
Funds of Knowledge	A student, possibly accompanied by a parent or community member, teaches the class about a cultural scientific connection to the lesson-level driving question or unit phenomenon.	Teacher has a role of learner and researcher seeking to understand the resources a child brings into the classroom which are connected to their cultural and linguistic backgrounds.

Place-based Knowledge: We can use what we know about our place and/or community to engage in science and make school science matter to us and to our community.

Equity Performance	What it Looks Like	What the Teacher is Doing
Place-based Knowledge	Students make connections to the local place to understand the phenomenon, define problems, and engage and sustain interest in science.	Teacher supports students in connecting the DQ to the local place. Teacher looks for various local examples of the phenomenon to invite students to explain

Critical Knowledge: We can be critical about science and how science is used and defined using the lens of social justice and social, historical and institutional factors.

Equity Performance	What it Looks Like	What the Teacher is Doing
Critical Knowledge	Students question what is presumed known, and explicitly take into consideration that science and culture have shaped each other.	Teacher supports students with divergent theories, and solicits questioning of presumptions. The teacher invites students to take into account the historical, social and institutional factors that have created modern scientific thought, and explicitly looks for bias in science questions, design and findings.

Sustaining Culture: We can use science, engineering and technology to collect and strengthen all our voices, and promote equity.

Equity Performance	What it Looks Like	What the Teacher is Doing
Sustaining Culture	Students are competent in multiple layers of cultures and languages to promote science ideas and practices and make use of the various available resources to communicate ideas, explain phenomena and solve problems. (i.e., looking across a range of artifacts throughout a unit or course.)	Teacher works with students to identify and draw from and merge or hybridize (if it makes sense) collective experiences, cultures, languages and experiences to solve a problem and design solutions that work toward social justices in communities (i.e., language of science, translanguage, youth culture, technology).

Social Justice: We can explain that there are structures of inequity in science systems and identify strategies to challenge them or work around them to achieve our goals.

Equity Performance	What it Looks Like	What the Teacher is Doing
Social Justice	Students identify social, historic and epistemic injustices within a system (their own or otherwise), and call out or develop a plan to circumvent or disrupt the inequity.	The teacher helps students question and talk about inequities and supports strategies that people (in the class or otherwise) can employ to disrupt the inequity. The teacher promotes critical reflection of the solution.

Social and Emotional Learning (SEL) Goals

Identity development during challenges: We can learn to be comfortable with the challenges of handling uncertainty when engaging with content, and of collaborating with others.

Equity Performance	What it Looks Like	What the Teacher is Doing
Identity Development During Challenges	Students may be hesitant, but take risks, collaborate with others, and try new ways of engaging with content.	Teachers supports students with multiple opportunities to engage and persist at gathering evidence to test ideas, solving problems, suggesting how something works, and revising/refining their explanations with new evidence.

(Epistemic) Agency: We can take initiative to foster our own learning, and seek explanations about our own important questions in science.

Equity Performance	What it Looks Like	What the Teacher is Doing
(Epistemic) Agency	Students appraise their own and others' knowledge (in reflective speech or writing) and are intentional in extending learning and evaluating all ideas for shared knowledge building.	Teacher supports students in revising and reflecting on what they know, and acting on feedback. Teacher moves away from the "right answer" and takes a sense-making stance toward students' thinking.

Development of Interest: We bring what we are interested in and then build, refine and change these interests over time. We can develop new interests because of new experiences.

Equity Performance	What it Looks Like	What the Teacher is Doing
Development of Interest	Students are engaged, curious and wonder about phenomena, and can identify a (possibly new) area of interest based on the science inquiry.	Teacher facilitates valuing student interests as they come up and connects them to the phenomenon or problem. Teachers build in moments that encourage curiosity and wonder. Example: Teacher promotes interest in what other students wrote about a topic using the discourse move, "Help students apply their own thinking to an idea".

Belongingness: We ensure that everyone in our group is actively involved in the meaning-making, and that all contributions are valued. We act so that others in our class are emotionally safe.

Equity Performance	What it Looks Like	What the Teacher is Doing
Belongingness	Students are actively and collaboratively involved in the project, and contributions are valued. Each student sees their contributions reflected in the artifact. Interactions are respectful (even in moments of disagreement) and ideas are acknowledged and addressed through productive discourse.	Teacher is an active agent in all of this inclusion - and facilitates language of inclusion during all classroom activities to enable participation. The teacher plans for inclusion prior to teaching.