

When accomplished STEM teachers **support students making connections across models, arguments, and ideas**, they may do one or more of the following:

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| ___ Name models, arguments, and ideas as typical or common (T70) |
| ___ Pose questions, puzzling events, tasks, and activities that have multiple entry points (T98) Δ |
| ___ Pose questions, puzzling events, tasks, and activities that have multiple solutions, explanations or justifications (T100) Δ |
| ___ Provide models, arguments, and ideas to compare and contrast (e.g., provide examples and non-examples for simultaneous consideration) (T139) |
| ___ Invite and expect all students to ask questions about each others' ideas (T78) ⚡ Δ * |
| ___ Invite and expect all students to evaluate their ideas by comparing them to the ideas of others (T79) |
| ___ Redirect questions of other students' thinking back to students to consider and answer (T88) |
| ___ Ask students to clarify and expand on their thinking and the thinking of others (T104) |
| ___ Consistently clarify and expand on student thinking (T93) |
| ___ Ensure all students have multiple opportunities to share, critique, and revise ideas (T111) ⚡ * |
| ___ Ensure that a variety of shared ideas are represented physically in ways that remain visible/accessible to all students (T126) |
| ___ Present multiple pieces of student thinking in order to engage students in discussions about similarities and differences between/among them (T113) Δ |
| ___ Provide consistent, diverse opportunities for students to process information in multiple formats (T116) |
| ___ Support students discussing similarities and differences among ideas/thinking (T129) |
| ___ Work to facilitate students taking up and building on each others' ideas (T131) |
| ___ Make connections among student ideas (T97) |

In these classrooms we expect to see a diverse range of students...

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| ___ Answering others' questions (S30) |
| ___ Articulating if they agree or disagree with a presented/shared claim (S20) |
| ___ Asking questions of the teacher and other students to push their peers' understandings (S12) ⚡ |
| ___ Critically analyzing and assessing the validity and reasonableness of others' models, arguments, and ideas (S25) Δ |
| ___ Identifying the similarities or differences among presented/shared ideas (S29) |
| ___ Spontaneously asking questions about and building on each others' ideas (S37) Δ * |
| ___ Use feedback about their thinking and progress to revise their ideas and understandings (S61) ⚡ |



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| Evidence Checklist | Core Practice: Develop distinct classroom community and culture |
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When accomplished STEM teachers
support students making connections across models, arguments, and ideas,
they may do one or more of the following:

| ALWAYS | | STRATEGICALLY | |
|---|---|--|---|
| <i>More Straightforward:</i> | <i>More Challenging:</i> | <i>More Straightforward:</i> | <i>More Challenging:</i> |
| <p>___ Ask students to clarify and expand on their thinking and the thinking of others (T104)</p> <p>___ Ensure that a variety of shared ideas are represented physically in ways that remain visible/accessible to all students (T126)</p> | <p>___ Pose questions, puzzling events, tasks, and activities that have multiple entry points (T98) Δ</p> <p>___ Pose questions, puzzling events, tasks, and activities that have multiple solutions, explanations or justifications (T100) Δ</p> <p>___ Provide consistent, diverse opportunities for students to process information in multiple formats (T116)</p> <p>___ Ensure all students have multiple opportunities to share, critique, and revise ideas (T111) ★ *</p> <p>___ Consistently clarify and expand on student thinking (T93)</p> | <p>___ Provide models, arguments, and ideas to compare and contrast (e.g., provide examples and non-examples for simultaneous consideration) (T139)</p> <p>___ Present multiple pieces of student thinking in order to engage students in discussions about similarities and differences between/among them (T113) Δ</p> <p>___ Redirect questions of other students' thinking back to students to consider and answer (T88)</p> <p>___ Name models, arguments, and ideas as typical or common (T70)</p> | <p>___ Invite and expect all students to ask questions about each others' ideas (T78) ★ Δ *</p> <p>___ Invite and expect all students to evaluate their ideas by comparing them to the ideas of others (T79)</p> <p>___ Support students discussing similarities and differences among ideas/thinking (T129)</p> <p>___ Make connections among student ideas (T97)</p> <p>___ Work to facilitate students taking up and building on each others' ideas (T131)</p> |

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| ___ Spontaneously asking questions about and building on each others' ideas (S37) Δ * |
| ___ Use feedback about their thinking and progress to revise their ideas and understandings (S61) ★ |

