## When accomplished STEM teachers

## facilitate productive small group work,

they may do one or more of the following:

Make clear how small group work will be assessed (T57)  Provide clear expectations for how every student is engaged in the small group's work (T61)  Provide language support structures (e.g., sentence stems, word lists, etc.) (T66)
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Pose questions, puzzling events, tasks, and activities that are "groupworthy" (i.e. require/benefit from many minds working together) (T133)  Set up and reinforce roles for individual group members (e.g., recorder, reporter) (T140)  Use a strategic, equitable, and explicit process for creating groups (T143)  Ask questions of designated reporters (T6)  Consistently gather information about the nature and content of small group work (T16)  Move among and interact with small groups in order to make sense of how students' ideas are developing (T13)  Identify the difference between productive struggle and sheer frustration, and intervene meaningfully in the atter (T35)  Pause small group work to name instances in which valued norms are being upheld appropriately (T73)  Intervene in small group work minimally and intentionally (e.g., to redirect student work or press on student thinking) (T86)  Spend equitable time with all groups (T122)
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Work with one group or student while also maintaining the engagement of the rest of the class (T132)
Ensure small group work is an appropriate activity structure for the focal task(s) (T137)
Interact with groups with a purpose and in relation to learning goals (T138) 🌣
Track student contributions (T18)
Provide group-specific feedback on the quality, nature, and/or structure of group work (T74)
Provide individual feedback to students on the ways they participate (or not) in small group work (T63)

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

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Asking questions of the teacher and other students to clarify their own thinking (S11) $oldsymbol{\odot}$ $\Delta$
Knowing when independent work is appropriate in small group work (S13)
Relying on each other instead of or before relying on the teacher (S16) $\Delta$
Respectfully interrupting each other (S17) $\Delta$
Spontaneously comparing and contrasting each others' ideas (S38) $\Delta$
Using language support structures (e.g., sentence stems, word lists, etc.) to start and participate in small group
conversation (S40) $\Delta^*$
Adjusting the physical environment or their place in it to better support their learning (e.g., moving their desk
closer to a peer) (S44)

**Core Practice:** Facilitate Productive STEM Discourse

When accomplished STEM teachers facilitate productive small group work, they may do one or more of the following:

ALWAYS		STRATEGICALLY	
More Straightforward:	More Challenging:	More Straightforward:	More Challenging:
Intervene in small group work minimally and intentionally (e.g., to redirect student work or press on student thinking) (T86)	— Use a strategic, equitable, and explicit process for creating groups (T143)	— Provide language support structures (e.g., sentence stems, word lists, etc.) (T66)	Ensure small group work is an appropriate activity structure for the focal task(s) (T137) Justify the importance of small group work as a powerful STEM learning strategy (T54) Set up and reinforce roles for individual group members (e.g., recorder, reporter) (T140) Identify the difference between productive struggle and sheer frustration, and intervene meaningfully in the latter (T35) Consistently gather information about the nature and content of small group work (T16)

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