

When accomplished STEM teachers **analyze, choose, and modify tasks for specific learning goals** they may do one or more of the following:

<input type="checkbox"/> Pose questions, puzzling events, tasks, and activities that have multiple entry points (T98) Δ
<input type="checkbox"/> Pose questions, puzzling events, tasks, and activities that have multiple methods for making sense of or solving them (T99) ⚡ Δ*
<input type="checkbox"/> Pose questions, puzzling events, tasks, and activities that have multiple solutions, explanations or justifications (T100) Δ
<input type="checkbox"/> Provide consistent, diverse opportunities for students to provide, justify, confirm, or revise conclusions (T117)
<input type="checkbox"/> Pose questions, puzzling events, tasks, and activities that are "groupworthy" (i.e. require/benefit from many minds working together) (T133)
<input type="checkbox"/> Provide models, arguments, and ideas to compare and contrast (e.g., provide examples and non-examples for simultaneous consideration) (T139)
<input type="checkbox"/> Provide rich data (e.g., a natural, puzzling event) (T134) Δ
<input type="checkbox"/> Use organizational routines or activity structures with respect to specific tasks (T145)
<input type="checkbox"/> Explicitly emphasize and value conceptual understanding and reasoning (T46)
<input type="checkbox"/> Provide just enough information, encouragement or questions to keep students thinking (e.g., praise-prompt-leave interaction) (T87)
<input type="checkbox"/> Provide scientific or mathematical expertise, background, or vocabulary only when no other student can do so (T81) Δ
<input type="checkbox"/> Scaffold and support students without decreasing cognitive demand (T92)
<input type="checkbox"/> Draw on knowledge of students' previous work and thinking (T125)
<input type="checkbox"/> Ensure that a variety of shared ideas are represented physically in ways that remain visible/accessible to all students (T126)
<input type="checkbox"/> Provide consistent, diverse opportunities for students to consider the reasonableness of their explanations (T114)
<input type="checkbox"/> Provide consistent, diverse opportunities for students to draw conclusions (T115) Δ
<input type="checkbox"/> Provide consistent, diverse opportunities to offer evidence-based explanations (T118)
<input type="checkbox"/> Use color strategically when collecting student thinking (T123)
<input type="checkbox"/> Adjust the cognitive demand of a task to meet the needs of a particular group of students (T147)
<input type="checkbox"/> Deviate from a plan based on evidence of student understanding (T150)

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

<input type="checkbox"/> Defining and clarifying the task(s) at hand for themselves or others (S3) ⚡
<input type="checkbox"/> Demonstrating genuine curiosity in new ideas (S46)
<input type="checkbox"/> Naming, reflecting on, and/or revising learning goals (S53) Δ
<input type="checkbox"/> Planning and carrying out investigations or solution strategies (S7)
<input type="checkbox"/> Supporting each other to name, reflect on, and/or revise learning goals (S59)

When accomplished STEM teachers **analyze, choose, and modify tasks for specific learning goals** they may do one or more of the following:

ALWAYS		STRATEGICALLY	
More Straightforward:	More Challenging:	More Straightforward:	More Challenging:
<p>___ Use organizational routines or activity structures with respect to specific tasks (T145)</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 methods for making sense of or solving them (T99) ⚡ Δ *</p> <p>___ Pose questions, puzzling events, tasks, and activities that have multiple solutions, explanations or justifications (T100) Δ</p> <p>___ Provide scientific or mathematical expertise, background, or vocabulary only when no other student can do so (T81) Δ</p> <p>___ Provide just enough information, encouragement or questions to keep students thinking (e.g., praise-prompt-leave interaction) (T87)</p> <p>___ Scaffold and support students without decreasing cognitive demand (T92)</p> <p>___ Draw on knowledge of students' previous work and thinking (T125)</p> <p>___ Deviate from a plan based on evidence of student understanding (T150)</p>	<p>___ Provide models, arguments, and ideas to compare and contrast (e.g., provide examples and non-examples for simultaneous consideration) (T139)</p> <p>___ Explicitly emphasize and value conceptual understanding and reasoning (T46)</p> <p>___ Use color strategically when collecting student thinking (T123)</p>	<p>___ Provide rich data (e.g., a natural, puzzling event) (T134) Δ</p> <p>___ Pose questions, puzzling events, tasks, and activities that are "groupworthy" (i.e. require/benefit from many minds working together) (T133)</p> <p>___ Provide consistent, diverse opportunities for students to draw conclusions (T115) Δ</p> <p>___ Provide consistent, diverse opportunities for students to provide, justify, confirm, or revise conclusions (T117)</p> <p>___ Provide consistent, diverse opportunities for students to consider the reasonableness of their explanations (T114)</p> <p>___ Provide consistent, diverse opportunities to offer evidence-based explanations (T118)</p> <p>___ Adjust the cognitive demand of a task to meet the needs of a particular group of students (T147)</p>

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