

When accomplished STEM teachers **recognize and respond to common patterns in student thinking** they may do one or more of the following:

<input type="checkbox"/> Name models, arguments, and ideas as typical or common (T70)
<input type="checkbox"/> Anticipate and validate different ideas and ways of expressing those ideas (T84) Δ
<input type="checkbox"/> Anticipate and validate myriad ways of making sense of, solving, explaining, and justifying ideas (T85) Δ
<input type="checkbox"/> Anticipate and create space for common errors and misconceptions to arise and be explored (T136) Δ
<input type="checkbox"/> Draw on knowledge of students' previous work and thinking (T125)
<input type="checkbox"/> Explicitly focus students' attention on common/typical models, arguments, explanations, and ideas (T127)
<input type="checkbox"/> Use typical or common student ideas strategically (T130)

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

<input type="checkbox"/> Actively using mistakes as learning opportunities (S8) 🔄*
<input type="checkbox"/> Identifying and analyzing mistakes and misconceptions (S28)
<input type="checkbox"/> Making connections between prior content/learning and current content/learning (i.e., demonstrating transfer) (S31)



Evidence Checklist	Core Practice: Use STEM Content Knowledge Strategically
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When accomplished STEM teachers **recognize and respond to common patterns in student thinking** they may do one or more of the following:

ALWAYS	STRATEGICALLY	
	<i>More Straightforward:</i>	<i>More Challenging:</i>
___ Draw on knowledge of students’ previous work and thinking (T125) ___ Anticipate and validate different ideas and ways of expressing those ideas (T84) Δ ___ Anticipate and validate myriad ways of making sense of, solving, explaining, and justifying ideas (T85) Δ ___ Anticipate and create space for common errors and misconceptions to arise and be explored (T136) Δ	___ Name models, arguments, and ideas as typical or common (T70) ___ Explicitly focus students' attention on common/typical models, arguments, explanations, and ideas (T127)	___ Use typical or common student ideas strategically (T130)

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