

When accomplished STEM teachers **collect and use diverse evidence of student learning** they may do one or more of the following:

<input type="checkbox"/> Anticipate and validate different approaches to a task (T83)
<input type="checkbox"/> Pose questions, puzzling events, tasks, and activities that have multiple solutions, explanations or justifications (T100) Δ
<input type="checkbox"/> Ask questions that will help students go deeper in their explanation (T9)
<input type="checkbox"/> Make and test conjectures about students' current understanding (T22)
<input type="checkbox"/> Explicitly encourage movement/development along a trajectory of mastery for a particular concept (T49)
<input type="checkbox"/> Take all student ideas and contributions seriously (T82) ⚡*
<input type="checkbox"/> Consistently make student thinking visible (T94) Δ
<input type="checkbox"/> Create and protect space for incorrect or incomplete ideas to be examined and discussed (T106)*
<input type="checkbox"/> Create and protect space for students to articulate, justify, evaluate, and revise their ideas (T107) ⚡ Δ*
<input type="checkbox"/> Create and protect space for students to restate, clarify, and evaluate others' ideas (T109)
<input type="checkbox"/> Create or facilitate students' creating public records of ideas (T110) Δ
<input type="checkbox"/> Follow along (listen) closely and actively to conversations between/among students (T95)
<input type="checkbox"/> Follow along (listen) closely and actively to student explanations (T96)
<input type="checkbox"/> Present multiple pieces of student thinking in order to engage students in discussions about similarities and differences between/among them (T113) Δ
<input type="checkbox"/> Record student ideas verbatim as shared (T102)
<input type="checkbox"/> Use typical or common student ideas strategically (T130)
<input type="checkbox"/> Assess students' understanding in multiple formats (verbally, in writing, publicly, non-verbally) during lesson (T14)
<input type="checkbox"/> Circle back to students who made errors or held misconceptions to assess how their thinking has changed (T20) ⚡*
<input type="checkbox"/> Use errors and misconceptions as formative assessment (T19)
<input type="checkbox"/> Name instances in which one or more students reached a new understanding or a-ha by persevering (T59)

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

<input type="checkbox"/> Naming or trying to name things they understand and do not understand (S52) ⚡ Δ*
<input type="checkbox"/> Providing all or a majority of the new information and ideas that emerge (S35)

\_\_\_ Taking obvious pride in their work (S60)

**Evidence Checklist**

**Core Practice: Plan for Engagement with Important STEM Ideas**

When accomplished STEM teachers **collect and use diverse evidence of student learning** they may do one or more of the following:

ALWAYS		STRATEGICALLY	
More Straightforward:	More Challenging:	More Straightforward:	More Challenging:
___ Consistently make student thinking visible (T94) $\Delta$ ___ Record student ideas verbatim as shared (T102) ___ Follow along (listen) closely and actively to student explanations (T96) ___ Follow along (listen) closely and actively to conversations between/among students (T95) ___ Assess students' understanding in multiple formats (verbally, in writing, publicly, non-verbally) during lesson (T14)	___ Pose questions, puzzling events, tasks, and activities that have multiple solutions, explanations or justifications (T100) $\Delta$ ___ Anticipate and validate different approaches to a task (T83) ___ Take all student ideas and contributions seriously (T82) $\star$ * ___ Create or facilitate students' creating public records of ideas (T110) $\Delta$ ___ Use errors and misconceptions as formative assessment (T19)	___ Present multiple pieces of student thinking in order to engage students in discussions about similarities and differences between/among them (T113) $\Delta$ ___ Name instances in which one or more students reached a new understanding or a-ha by persevering (T59) ___ Circle back to students who made errors or held misconceptions to assess how their thinking has changed (T20) $\star$ *	___ Create and protect space for students to articulate, justify, evaluate, and revise their ideas (T107) $\star$ $\Delta$ * ___ Create and protect space for students to restate, clarify, and evaluate others' ideas (T109) ___ Create and protect space for incorrect or incomplete ideas to be examined and discussed (T106)* ___ Ask questions that will help students go deeper in their explanation (T9) ___ Use typical or common student ideas strategically (T130) ___ Make and test conjectures about students' current understanding (T22) ___ Explicitly encourage movement/ development along a trajectory of mastery for a particular concept

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

\_\_\_ Naming or trying to name things they understand and do not understand (S52)  $\star$   $\Delta$  \*

\_\_\_ Providing all or a majority of the new information and ideas that emerge (S35)