When accomplished STEM teachers
develop models, analogies, and examples
they may do one or more of the following:

___ Model what a "good" justification, evaluation, or revision of a model, argument, or idea looks/sounds like (T39) ✪
___ Model what constitutes an evidence-based explanation in STEM disciplines (T40)
___ Use organizational routines or activity structures with respect to specific tasks (T145)
___ Call out their own mistakes and model their use as learning opportunities (T43)
___ Demonstrate and reinforce the use of shared knowledge and terms (e.g., ground a discussion in shared knowledge and terms) (T44)
___ Explicitly emphasize and value conceptual understanding and reasoning (T46)
___ Provide scientific or mathematical expertise, background, or vocabulary only when no other student can do so (T81) Δ
___ Create and protect space for students to construct and/or reconstruct their own understandings (T108) Δ
___ 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 draw conclusions (T115) Δ
___ Restate or summarize student ideas, as appropriate (T121)
___ Ask students to synthesize ideas (T105)

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

___ Analyzing and interpreting data effectively (S1)
___ Asking questions of the teacher and other students to clarify their own thinking (S11) ✪ Δ
___ Being willing to put ideas on the table regardless of whether they are correct or fleshed-out (S62) ✪ Δ *
___ Communicating information clearly (S2)
___ Demonstrating genuine curiosity in new ideas (S46)
___ Explaining others' models, arguments, and ideas (S27)
___ Making and defending all evaluative claims with mathematical or scientific evidence (S6) ✪

Evidence Checklist	Core Practice: *Use STEM Content Knowledge Strategically*

When accomplished STEM teachers
develop models, analogies, and examples
they may do one or more of the following:

ALWAYS		**STRATEGICALLY**	
More Straightforward:	*More Challenging:*	*More Straightforward:*	*More Challenging:*
___ Use organizational routines or activity structures with respect to specific tasks (T145) ___ Ask students to synthesize ideas (T105)	___ Provide scientific or mathematical expertise, background, or vocabulary only when no other student can do so (T81) Δ ___ Call out their own mistakes and model their use as learning opportunities (T43)	___ Model what constitutes an evidence-based explanation in STEM disciplines (T40) ___ Model what a "good" justification, evaluation, or revision of a model, argument, or idea looks/sounds like (T39) ✪ ___ Present multiple pieces of student thinking in order to engage students in discussions about similarities and differences between/among them (T113) Δ ___ Explicitly emphasize and value conceptual understanding and reasoning (T46) ___ Demonstrate and reinforce the use of shared knowledge and terms (e.g., ground a discussion in shared knowledge and terms) (T44)	___ Restate or summarize student ideas, as appropriate (T121) ___ Create and protect space for students to construct and/or reconstruct their own understandings (T108) Δ ___ Provide consistent, diverse opportunities for students to draw conclusions (T115) Δ

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___ Making and defending all evaluative claims with mathematical or scientific evidence (S6) ✪