Building a repertoire of literacy support practices

Lindsay Berk & Mark Windschitl

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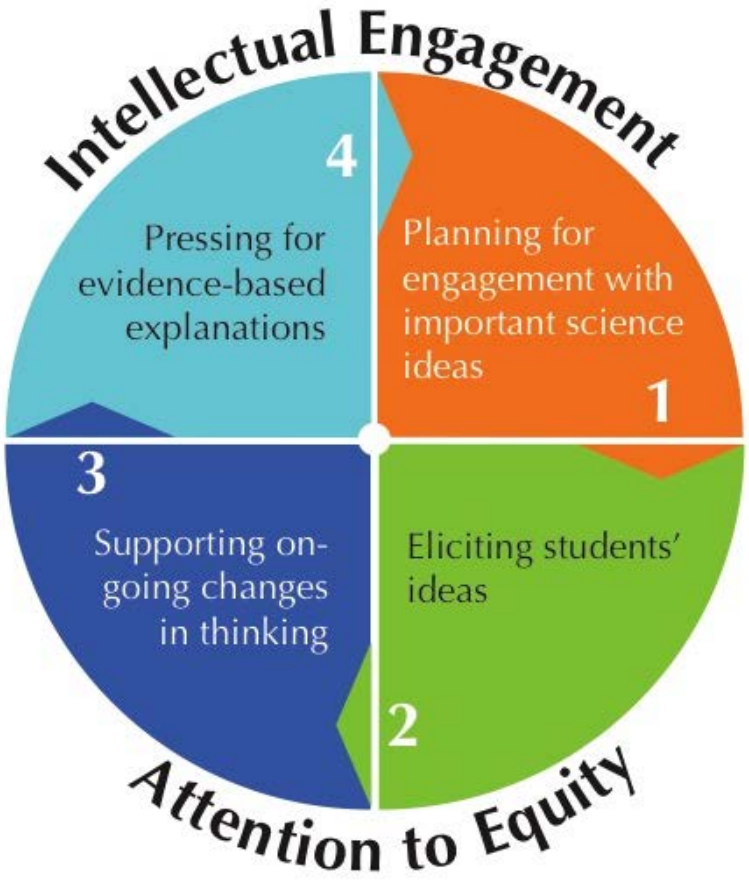

The bigger picture: What do students need in order to participate in knowledge production?

- **Relevant and compelling contexts** for seeking out and evaluating new information
- **Skills with variety of public representations** that make their ideas visible and show how new information is being made sense of
- **Scaffolds and specialized routines** for reading texts, preparing to write about explanations and evidence
- **Time and opportunity** for all learners to participate in the on-going refinement of ideas.

1 Planning for engagement with important science ideas

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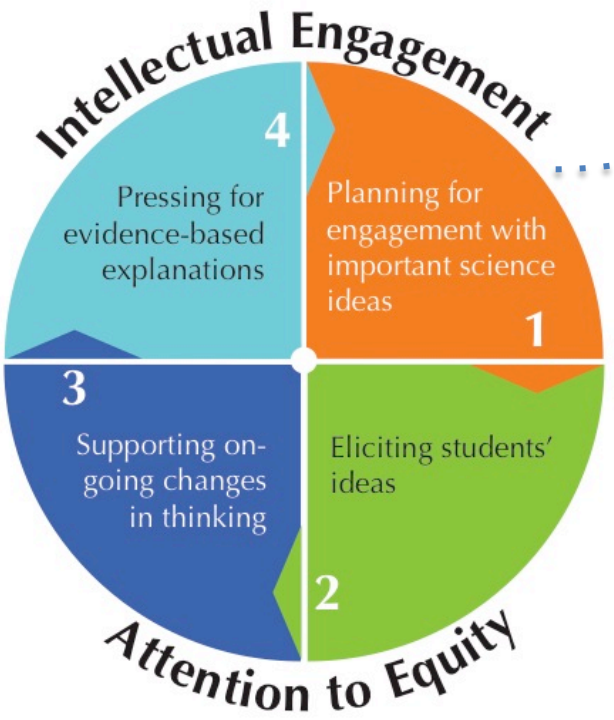

Relevant and compelling phenomena – complex to explain

2 Eliciting students' ideas and adapting instruction

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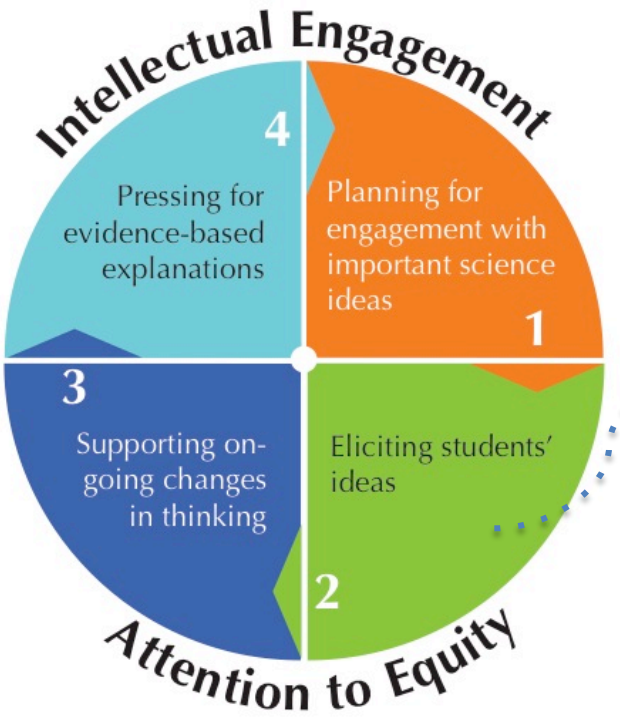
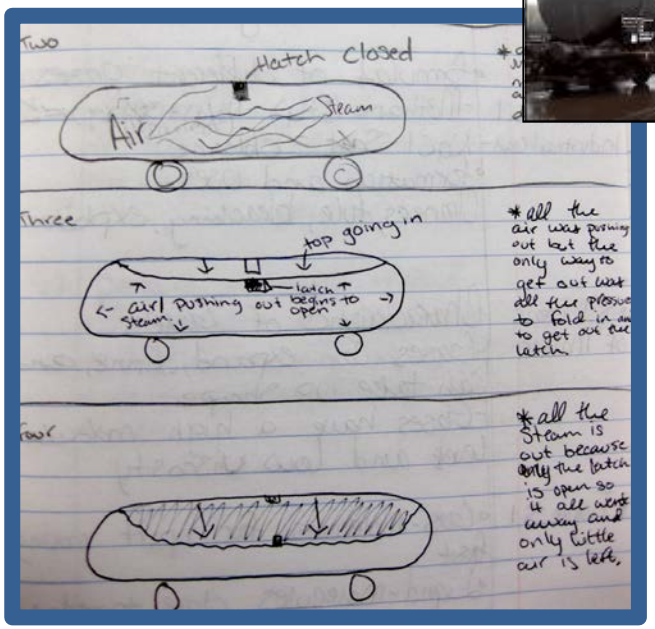
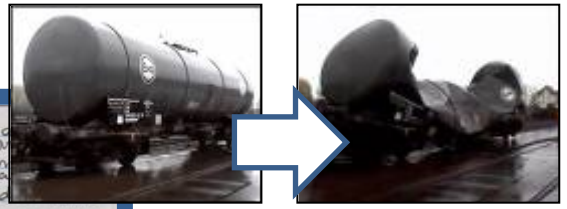
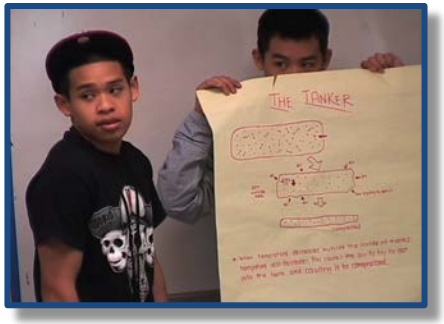


Helping students communicate in forms distinctive to science (and making thinking visible)







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Eliciting students' ideas and adapting instruction

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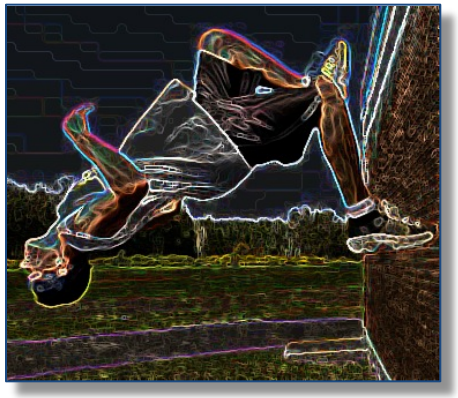

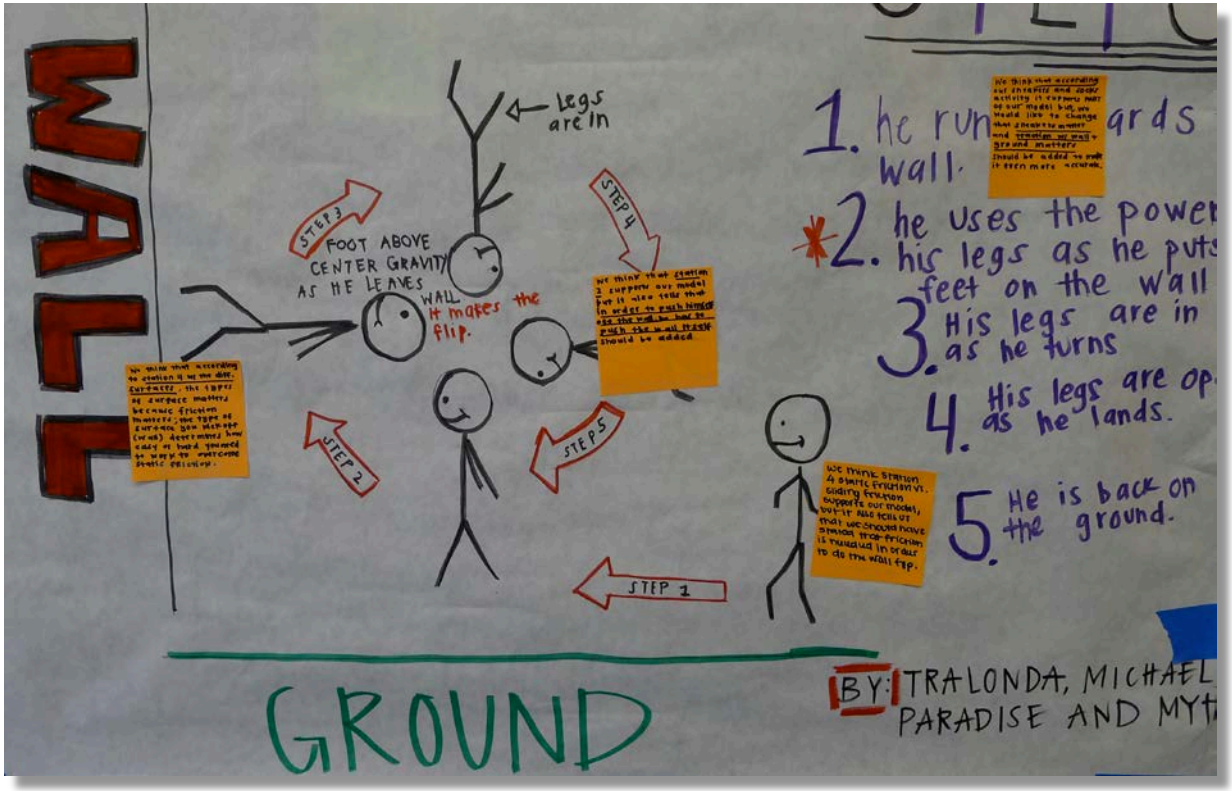

3 Supporting on-going changes in thinking

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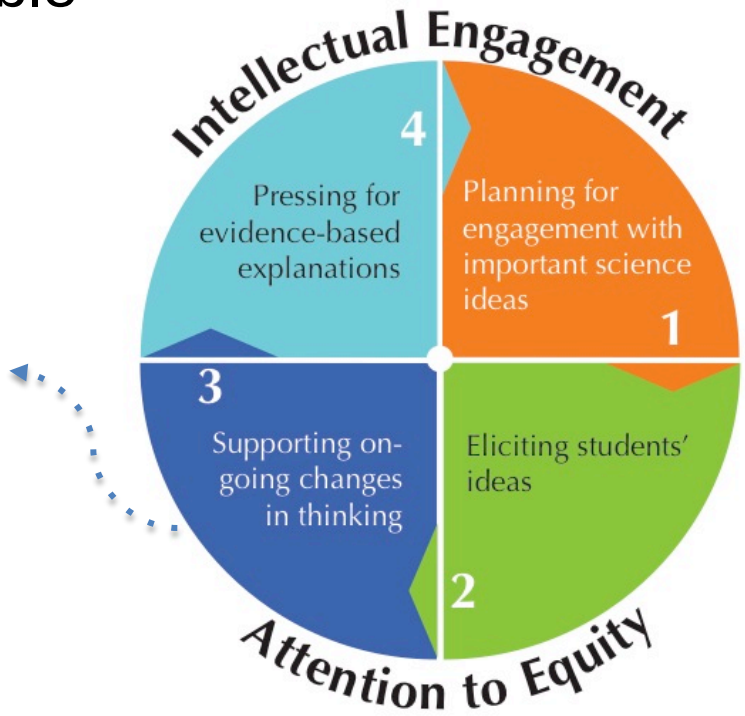
Scaffolded reading experiences—"Dear science colleagues, this is do-able"

Pre-reading

During reading

Post reading



3 Supporting on-going changes in thinking

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After reading, activity, investigations—
returning to models and explanations

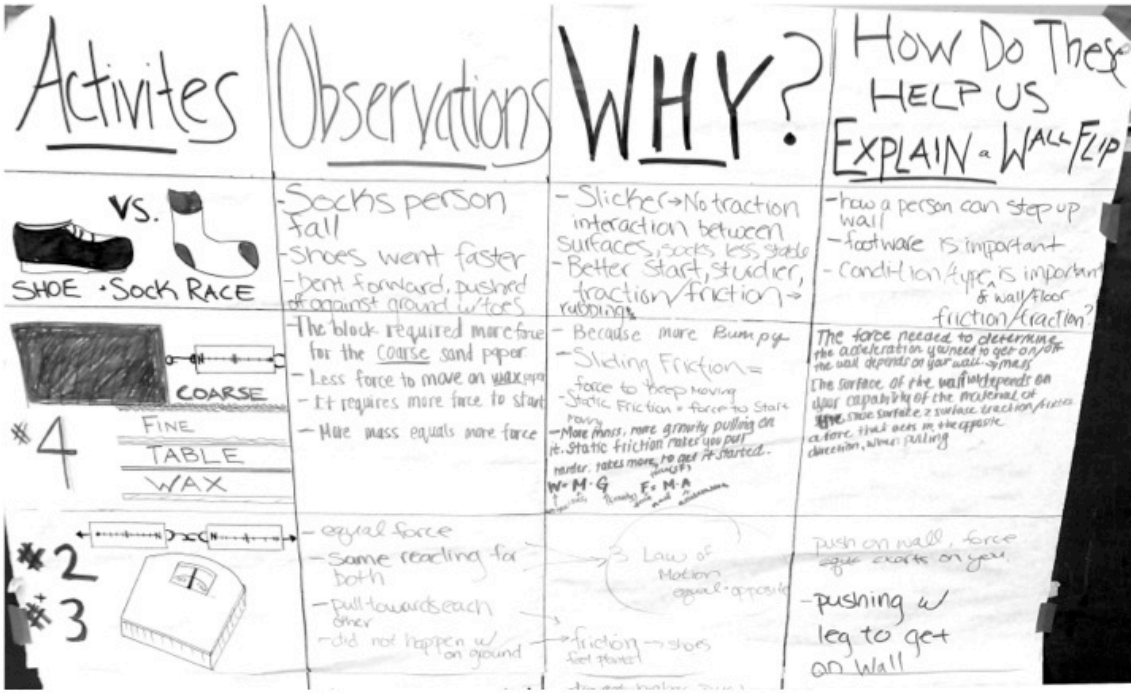
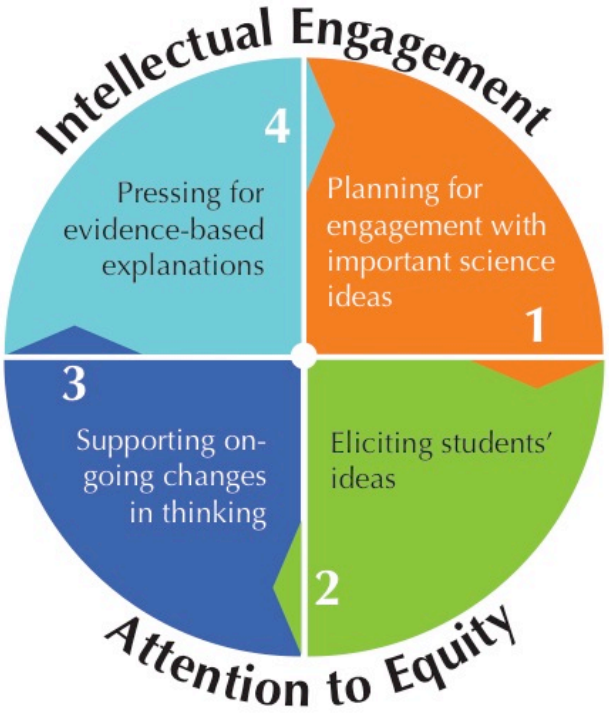
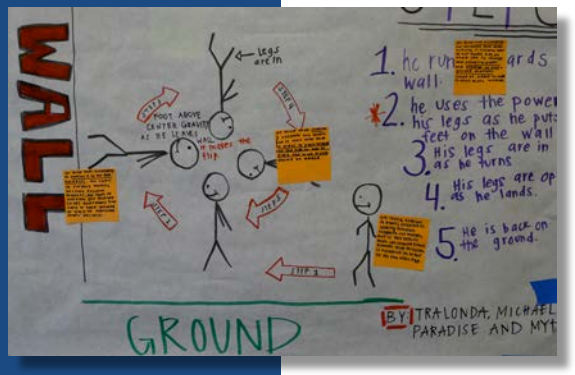
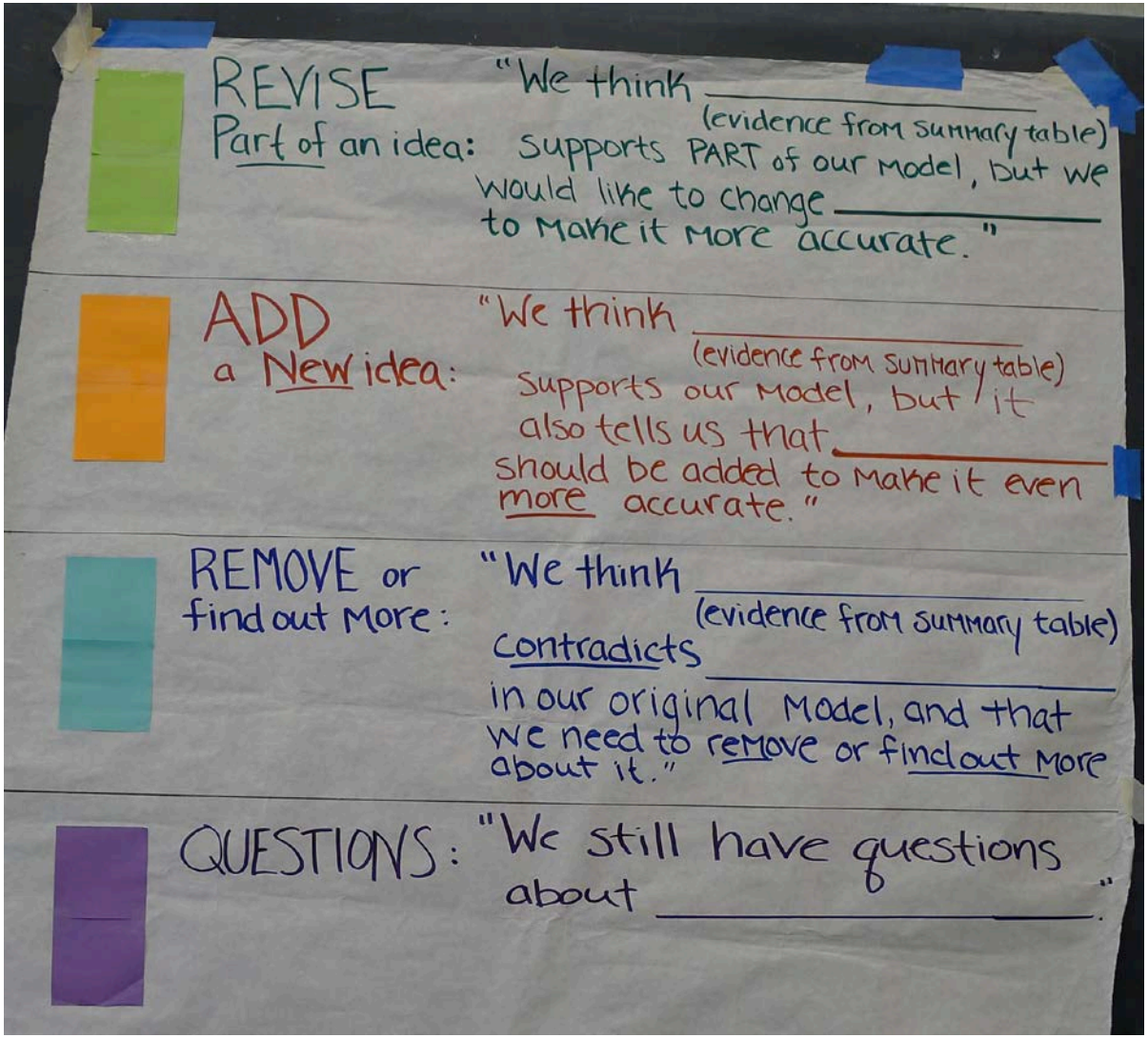


Figure 6c. Students' summary table to make sense of and coordinate D2 activities



Scaffolding writing about model revisions





Slowing down, providing time to think and compose feedback to peers

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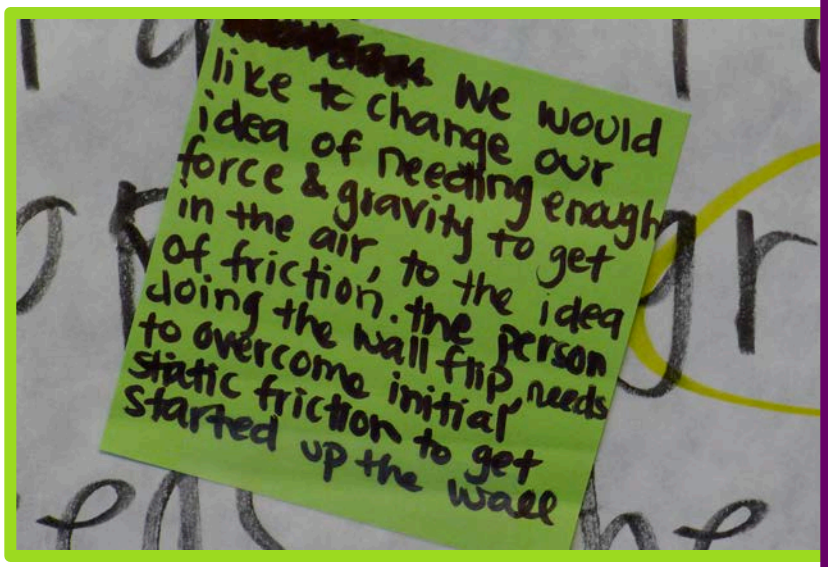

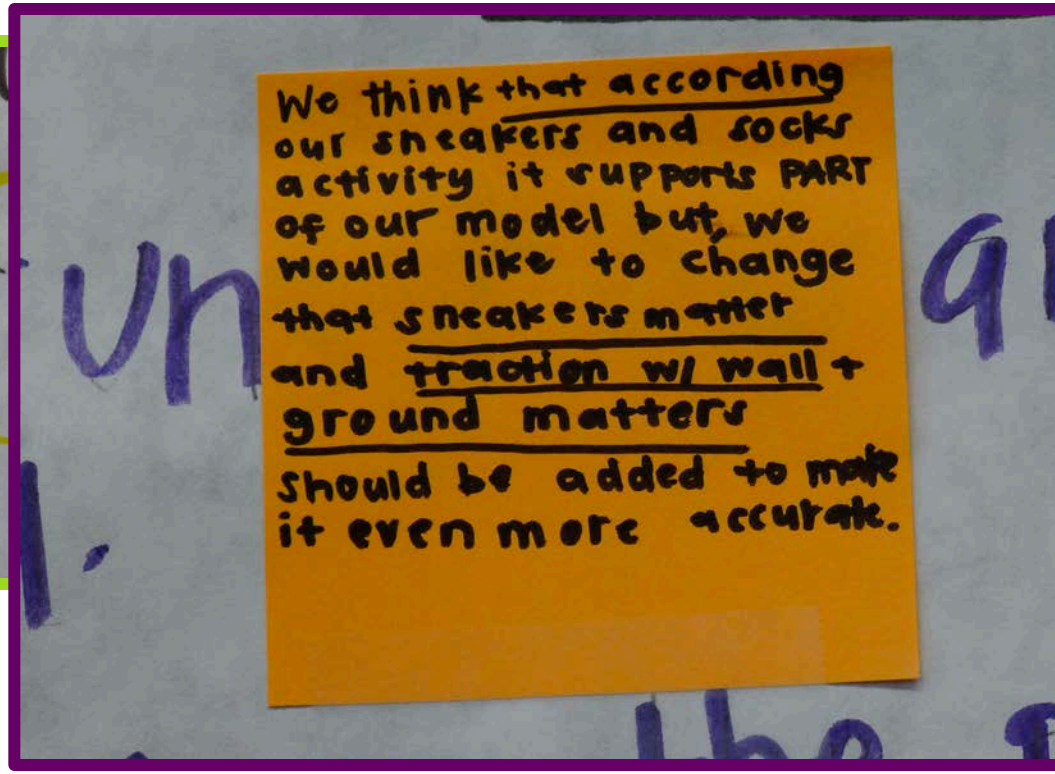

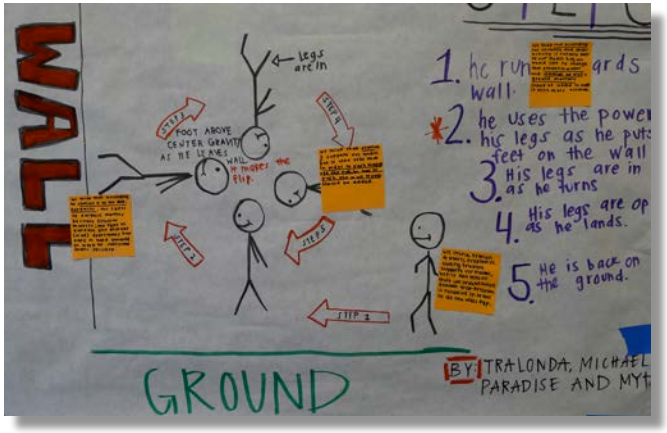

4 Pressing for evidence-based explanations

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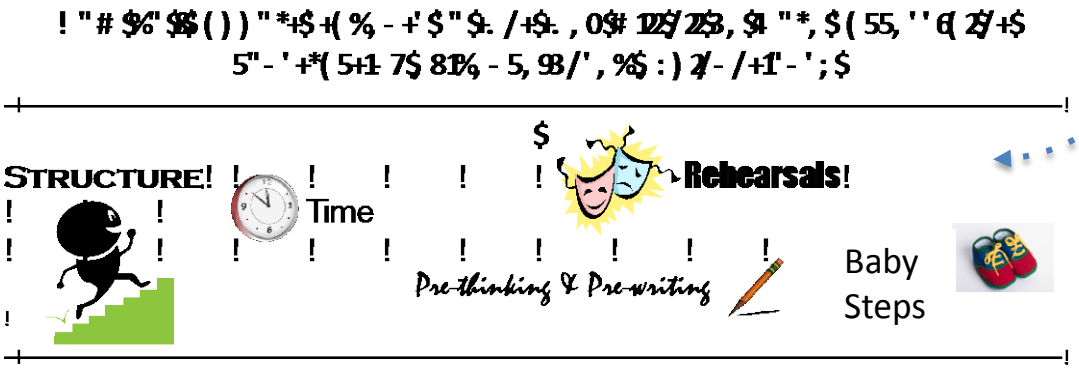
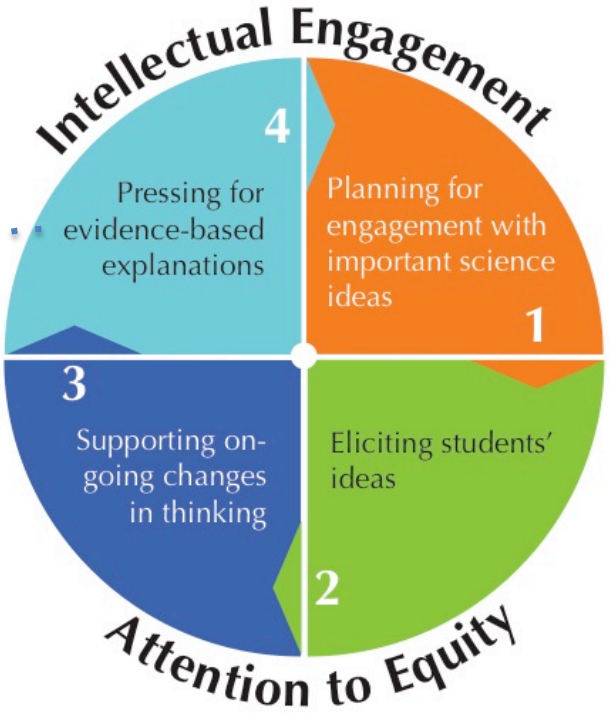
Scaffolds for writing about causal and evidence-based explanations—drawing in multiple ideas and activities to fashion arguments





Supportive structures to encourage explanatory writing