

This newsletter is coming to you from [Deans for Impact](#) to support your work in the Learning by Scientific Design Network. Together, we'll continue exploring how we can support novice teachers to use learning-science informed practices in their teaching. This week, let's take a look at the common pitfalls novice teachers fall into when **eliciting effortful thinking** from students.

Effortful Thinking Common Pitfalls

Novice teachers fall into four common pitfalls when trying to elicit effortful thinking from students.



#1. Guess What's in My Head — Questions as a way to 'get through the lesson' or only 1-2 students doing the thinking. Moving on as soon as someone 'gets the answer' rather than doing deep thinking.



#2 One-Word-Answer Questions — 4 W's (Who, What, When, Where) but no Why or How questions. Or accepting shallow/simplistic answers to why and how questions. Can be a function of low expectations of student capabilities.



#3 Rounding Up Student Thinking — Teacher may answer their own questions, rephrase in such a way that cues the answer, or provide inadequate wait time so that all students are not able to think deeply and process their ideas.



#4 Questions Dress-Up — Asking questions that only seem effortful. These may skip overthinking (“What did you do next?” or “Who else noticed something?”) or ask recall questions disguised with higher-order verbs (“Create a list of words.”)

Vignette: Effortful Thinking Pitfall

A TESOL* teacher wants students to practice using scientific language as they discuss magnetism. She asks, "How can magnetic force be a push or a pull?"

Student: "Because of the poles!"

Teacher: "Yep! Exactly! Two opposite poles create a pull force; that's why we say opposites attract! But two of the same pole will push each other away."

*Teaching English to Speakers of Other Languages

Which pitfall did this novice teacher fall into? Click [HERE](#) to check your answer.