

**Using Online Discussion Sequences to  
Change Student Thinking**

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**Let's get started!**

Take a minute to read "The Case of the Perplexed Professor" on the blue handout and be prepared to answer some questions about it.

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**Work on your own.**

Which sequence would you recommend to Professor DeLuke?

**Mark your answer on your handout.**

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**Work in small groups.**

Which sequence would you recommend to Professor DeLuke?

**Share your individual choices and come to consensus on a group answer. Be prepared to share and explain your choice.**

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**Let's see your choices.**

Which sequence would you recommend to Professor DeLuke?

**Find the card (A, B, or C) that represents your group's choice. When I count to 3, hold up your card.**

- What experiences or knowledge did you draw on to make your choice?
- What were the strengths of each plan?
- What were the potential drawbacks of each plan?

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**How are these sequences structured?**

- Professor Adams and Professor Chung's plans focus students on abstract concepts first and then ask them to apply those concepts to a concrete task (analyzing a specific case).
- Professor Battista's plan focuses students on a concrete task first (analyzing a specific case) and then asks them to work with the abstract concepts.

*How do these approaches align with what we know about learning?*

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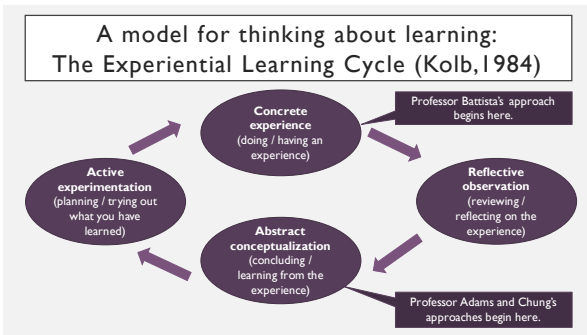
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What is useful about Professor Battista's approach?

It requires students to start doing the thinking that the final project requires (using concepts to conduct a case study analysis) right away.

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We are often drawn to starting with abstract concepts because

we believe that students must have foundational knowledge (*know everything*) before they are ready to attempt real work.

But our students aren't blank slates! They already know things.

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When we start by asking them to use what they already know to complete a concrete task, we

- prepare students for the **higher-order thinking** our assignments require (because they immediately begin attempting that thinking);
- prepare students to **change their thinking** in the ways we have targeted (because they immediately begin reflecting on their thinking); and
- let students experience the **excitement** of our disciplines (because they immediately begin doing real work—before they're "ready").

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"But what if a lot of what they already know is wrong?"

We often believe this:

"When students make mistakes, their mistaken thinking is reinforced—they will remember the mistake instead of the correction."

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What does research say about mistakes?

~~"When students make mistakes, their mistaken thinking is reinforced—they will remember the mistake instead of the correction."~~

Research suggests that mistakes don't interfere with students' learning; in fact, student learning is *helped* by making naïve mistakes before encountering new material—and then working to integrate new information into their understanding.

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Key Principle

Students must do work that requires them to *confront* what they already know/think/believe—and reflect on that thinking—so that they can effectively **change their thinking**.

*Note: Online discussions are particularly powerful for this because students' prior thinking is made **visible**.*

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Let's pause and begin to integrate what we've learned.  
(Abstract conceptualization)

Revisit your initial thinking about "The Case of the Perplexed Professor:"

Make some notes about any changes in your thinking that have occurred as a result of our discussion and the information on learning that was presented. You might want to use this framework to guide your writing:

"I used to think \_\_\_\_\_. Now I think \_\_\_\_\_."

*Note: You can do this even if your initial answer aligned with the research.*

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Would anyone like to share?

"I used to think \_\_\_\_\_. Now I think \_\_\_\_\_."

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We just completed most of a learning cycle.

- 1) **Concrete experience**  
Read a short case and choose which teacher's approach is best.
  - 2) **Observation and reflection**  
Explain the thinking behind your choice. Compare your choices with your colleagues.
  - 3) **Abstract conceptualization**  
Here's some information about how learning works. How does this integrate with and/or change your earlier thinking?
- Now we are ready to try out what you've learned and start putting these new ideas into practice (active experimentation).*

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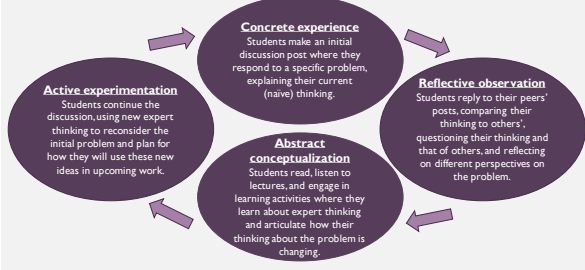
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How would this work with online discussions?




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Let's look at some examples.

Take a moment to read over the handout, which includes some examples of strategies for building sequences of online discussions that help change student thinking.

Any questions?

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Let's pause and begin to *apply* what we've learned.  
(Active experimentation)

Choose an approach from the handout that would work for a course you're teaching and begin to sketch out some ideas for how you might implement this approach. (You may choose to make adaptations—as long as the sequence begins with a concrete experience!)

Would anyone like to share an idea?

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