



Experts and Novices: Connections Make the Difference

Experts in a field create and maintain a complex mental network of important facts, concepts, and procedures related to their content area. Often, this is done unconsciously. Novice learners have difficulty making these connections.

What does this have to do with helping students? As the expert in your field, you can help novices connect important concepts through your teaching.

1. Make your thinking transparent for students.

When solving a problem or analyzing a scenario, share your first steps. How do you begin? What do you consider? How is this work related to previous work? What pitfalls do you know to look for and avoid?

2. Consider using a concept map with your students to illustrate key content connections.

As an unconsciously skilled expert, it will benefit you to create your own course concept map. This will help to remind you of the key concepts and organizing principles, which in turn will help you unpack them for your students. Use this visual in class to highlight connections for novice learners.

3. Devote some class time for student practice of important concepts.

Assigning challenging work while you are available to support students provides a means for urging students to think about a concept more deeply. It also enables you to highlight specific features or make connections explicit for students. Seeing students at work allows you to watch for common misconceptions; student errors are commonly anchored in inappropriate mental connections.

It isn't only what you know, but how you mentally organize information that makes a difference. Helping students make important connections is one way to help them master your course content.