Problems with Problem Solving Instruction--Keep It Brief!

Often as teachers it is hard for us to watch our students struggle, or easy for us to give away too much of the answer in hints during problem solving exercises. Unfortunately, giving too much help to students during problem solving endeavors reduces their own confidence and can make them dependent on being told how to solve problems, rather than developing the critical problem solving skills themselves.

So what's the solution to your problem solving problems? Asking brief questions!

When your student appears stuck or asks for help, ask brief diagnostic questions, like "What do you think the next step is?" or "What's your end goal, again?" or "Tell me what considerations you've already made and what's missing?"

Asking these kinds of question tests students' understanding of the problem and their thinking strategies. Most of the time, students will realize their own error once they are asked to think of the process, and the rest of the time, students can be guided back to the right path by more questions about content, like, "What did we learn about last week? How would that apply?" and so on.

In this way, our instruction is still helpful without crippling our students' ability to think critically on their own!

A teaching tip written by: Kate Carnevale, FSU Graduate Student

Submitted by: Lisa Liseno, Florida State University