HOW TO CULTIVATE STUDENTS' PROBLEM-SOLVING SKILLS

Parents, teachers and other adults have developed a lot of skills and knowledge that can make it easy for us to solve problems. We've seen the situation before and the solution seems obvious to us. So we can get frustrated with young people who may be encountering the challenge for the first time. How do we help them tackle the problems themselves so that they develop the expertise they'll need to solve other problems in the future? Use these tips to help you think about how you support young people in solving challenges they encounter.

■ **Encourage "playing with" the problem.**

Encourage young people to throw out lots of ideas, make conjectures and consider many different possibilities — even some that are outlandish. Look at the problem from many perspectives. This flexible thinking is an important skill for forming better solutions than the first that come to mind.

■ **Guide the young person to break a big problem into its parts.**

Then focus on aspects of the problem that the young person doesn't understand or that seem like they have more potential to be solved.

■ **Ask the young person to work through the problem out loud.**

Not only does this help you coach the young person, but it also slows down the thinking process.

■ **Model and talk about the problem-solving process.**

Rather than focusing on getting the "right answer," talk through the steps you take and ask the young person to do the same so that it's easier to learn.

■ **Have the student work through the problem on her or his own.**

Give only as much assistance as you need to when the young person is really stuck. And when you do so, limit your guidance to questions or suggestions that will help the young person move through a specific issue without solving the whole problem for her or him.

■ **Ask open-ended questions.**

Instead of "Do you think that will fit in there?," you might ask a more open-ended question, such as "What do you think it will take to get everything to fit inside?" Ask follow-up questions that encourage the young person to articulate their problem-solving process. This not only helps you learn and guide, but it reinforces the skills.

■ **Give positive reinforcement.**

When a student overcomes an obstacle or masters a new problem-solving skill, give praise and be specific in highlighting what they have done or learned.