Incorporate Authentic Problem Solving

Students often wonder how what they are learning in class will be useful later in life—and sometimes that connection can be hard to explain. Giving students a sense of the real-world problems can be a powerful experience. Researchers have found that “students who have experience applying scientific inquiry and reasoning to real-world problems in the classroom will have an edge when faced with these types of questions as adults.”

Give students exposure to real-world problems by tapping into the resources in your community and online. Bring in speakers or conduct virtual sessions in which students can hear from mathematicians and scientists about the problems they are currently working on as well as examples of past processes and solutions. There are many videos detailing the types of problems people in the field are trying to solve on YouTube and TedTalks. Once students understand the types of problems in the field, you can even have them create their own problems and use the Internet, including online communities, to create solutions.

Use the following resources to get started incorporating authentic problems in the classroom:

- Khan Academy partnered with Pixar to provide more real-world problems for students to solve.
- Use past Design Learning Challenge ideas, in which students try to solve problems related to their own communities.
- See what girls and young women from around the world submitted to Technocation—a technology and design challenge.

OCT 17, 2017