



*A Collaboration Providing STEM Professional Development
for Orange County's Expanded Learning Programs*

Orange County STEM Hub

Communities of Practice Created Resource

4 Strategies to Help Students Ask Questions

These strategies are designed to support Expanded Learning Staff support student's skill sets to think critically and ask questions.

1. Ask Open-Ended Questions

Ask questions that have multiple possible answers and further explanation.

i.e. "What did you notice about what you just saw in your experiment?", "What are ways you can adjust your project?", "Is there another way you can get the same result?", "Why do you think that happened?"

Open-Ended Questions That Inspire Scientific Thinking <https://www.learner.org/jnorth/tm/inquiry/disc.html>

2. Encourage Perseverance

STEM is a great avenue for students to learn 21st Century Skills; including perseverance. Like scientists and engineers, students will often not succeed the first time; they will need to try multiple times before finding the correct answer. Encourage students to ask questions to build these same skills in our students. They will not always know the right answer, or know exactly how to find it; but we help students learn how to ask the questions needed to find the answers on their own.

Encourage Students to Find Their Own Answers

Remind students that it is okay not to have the correct answer; it is okay to try to figure it out with others. Remember as a staff person, it is okay to not know the answer either.

Instead ask students, "what do you need to do when you don't know an answer?" Students may respond with the following: "ask another student (collaboration) or research it myself." Encourage this by asking the student to try out their idea and come back and report out to the group. If the question or idea is interesting to a large group of students, develop a lesson around that topic that allows for further investigation; that's a great way to incorporate youth voice within the program.

Use Positive Phrases That Encourage Additional Questioning

i.e. "That's a great question, can you look into that more for us?" or "Tell me more about that..."

Remember to Praise Students for Their Effort

It is good to see students who try and who persevere when they hit those obstacles; remember to acknowledge those efforts. For more information on creating a Growth Mindset, please visit

<https://www.mindsetworks.com/science/>.

3. Take Advantage of Transition Times

Transition times occur many times throughout the program; snack time, walking in line, taking bathroom breaks. Introduce activities that get students to start asking questions during these times as well.

i.e. To help them to just start asking questions play 20 Questions or Jeopardy. Or start asking questions about their surroundings: “Where does the water in the drinking fountain come from?”, “Why is physical fitness so important?”, or “Why are the tables constructed like they are?” Asking questions about what is happening around them is a great way to have student start asking these questions themselves.

4. Provide Examples of Questions Students Can Use Themselves

Students often times will be more comfortable to start asking questions if they have some help starting the question itself.

Have question starters available for them posted on the board or printed out at their tables. Help them start to put down their thoughts and form questions.

Sample Question Starters Include:

Why does this happen when we...

What do you think about...

What could (would) happen if...

What are other ways I can try to...

Additional Readings/Research Tips

5 Ways to Help Your Students Become Better Questioners – Edutopia Blog

<https://www.edutopia.org/blog/help-students-become-better-questioners-warren-berger>

Activities for Teaching Children to Ask and Answer Questions

<http://www.sandbox-learning.com/Default.asp?Page=181>

How can we teach kids to question?

<http://amorebeautifulquestion.com/can-teach-kids-question/>

For More Information

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This document was created through a Communities of Practice Meeting. These strategies are to support students’ abilities to asking questions about their own learning.