

Designing Effective Projects: Curriculum-Framing Questions Using Questions to Promote Learning

Moving from Passive to Active Learning

When Essential and Unit Questions are effectively integrated in project work, students do much more than simply recall facts; they must develop new understanding and apply it. According to the Maryland State Department of Education publication, *Better Thinking and Learning* (1991), teachers who ask higher-order questions promote learning. Because the answers to such questions can not be looked up in a book, students are forced to apply higher-order thinking skills such as comparison, synthesis, interpretation, and evaluation. Instead of the teacher imparting knowledge, students become active participants in the learning process. A shift from passive to active learning occurs as students begin to understand what they are doing and why.

For example, in a project on insects, students take on the role of an insect living in their own backyard; and their task is to convince a family member, who is deathly afraid of bugs, just how important they are to the ecosystem and that there is absolutely no reason to fear them. As they tackle this task, students must consider and answer the following Curriculum-Framing Questions:

Essential Question

- *How can something so small be capable of so much?*

Unit Questions

- *Why shouldn't we be afraid of bugs?*
- *If an insect could talk, what would it say to you?*

Content Questions

- *What makes an insect an insect?*
- *How do insects grow and change?*
- *In what ways are insects helpful and harmful?*

The Curriculum-Framing Questions are compelling, allowing for unique responses and creative approaches. While the content is not unique to an insect unit (insect anatomy, habitat, and life cycle changes), the open-ended questioning students urges students to interpret the facts themselves from their own vantage point and draw their own conclusions, promoting a deeper level of engagement and higher levels of thinking.

Resources

Jay McTighe. (1991). *Better thinking and learning*. Baltimore, MD: Maryland State Department of Education.