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

## Moving from Passive to Active Learning

When Essential and Unit Questions are integrated in project activities, students are challenged to develop and apply new understanding. According to the Maryland State Department of Education publication, *Better Thinking and Learning* (1991), teachers who ask higher-order questions promote active participation in the learning process. Because the answers to such questions cannot be looked up in a book, students must apply higher-order thinking skills such as comparison, prediction, and interpretation. With interesting, open-ended questions, students shift from passive to active learning, engage in what they are doing, and construct understanding about concepts and ideas.

For example, in a project on insects, students take on the role of an insect living in their own backyard. Their task is to convince a family member, who is deathly afraid of bugs, just how important insects 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?

These 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 urges students to interpret the facts from their own vantage point and draw their own conclusions, promoting a deeper level of engagement and higher levels of thinking.

### Resources

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