

Handout 4: Driving Questions and Products

Directions: Use the following questions to reflect on your understanding of and professional experiences with project-based learning and driving questions.

Core Principles

According to the research of Bransford and colleagues (2000), a key feature of effective teaching is that it taps into learners' pre-existing understanding of the content to be taught and offers them opportunities to build on or challenge their initial understandings. This premise is supported by three core principles of learning that speak to how individuals learn:

1. Learners enter the classroom with *preconceptions* about how the world operates. Initial learning experiences that *authentically engage* learners help them to *grasp knowledge introduced* rather than revert to their preconceptions.
2. To achieve competence in an area of inquiry, learners must develop a foundation of factual knowledge that is integrated into their own personal understandings and experiences and organized in a way that they can retrieve and apply it.
3. Learners become more independent and engage in more complex learning tasks when they are able to define their own learning experiences through goal setting and self-monitoring of their progress toward accomplishing their goals.

Seven Essentials of PBL Activity

In this activity, you will answer the question, "How do Larmer and Mergendoller's (2010) seven essentials of project-based learning (PBL) align with the guiding research on how people learn?" Connect the seven essentials listed in the table below with the core principles of learning by highlighting the key words in each of the three principles that seem most pertinent to the essentials. Then, place the numbers of all principles that seem to align with the seven essentials in the row to the right of each essential. Finally, note at least one social or personal competency (from [Tennessee's K-12 Social and Personal Competencies Resource Guide](#)) that a learner would likely *need or demonstrate* in a PBL experience. An example is provided in the table that follows.

Seven Essentials of PBL	Core Principle(s)	Social/Personal Competency
Learners' need to know	1	Self-awareness
Driving question		
Choice and voice		
21st century skills (or social and personal competencies)		
Inquiry and innovation		
Feedback and revision		
Public presentation of a product		

Create Driving Questions

Steps to Create a Driving Question

Use the following three steps to create a driving question:

- First, think about the two criteria that every good project needs: (1) the project should be of personal interest to students, and (2) it should be educationally purposeful.
- Next, decide upon the core content that you want students to learn.
- Finally, infuse the content from the first and second steps to develop a provocative, open-ended question—either concrete or abstract—that captures the essence of the project in compelling yet simple language.

Sample Driving Questions:

Review the following sample driving questions:

- Can we create a lunch menu for storybook animals (herbivores, carnivores, and omnivores) that live in the forest?
- How does probability relate to games?
- What might we do to get government officials to take action to protect both the right of American citizens to bear arms and the rights of American citizens whose lives are disproportionately threatened by gun violence?
- How can we highlight the importance of technology to saving lives?
- How can we develop a public service announcement for TV that shows why the Constitution remains important, even in the 21st century?

Create Your Own Driving Question

Now create a driving question that you will use with your students in an upcoming lesson or unit.

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