Critical Elements of Problem-Based Learning

➢ **Design a task and learning environment to reflect the level of complexity students should be able to function in at the end of learning.**

A class discussion, group dialogue, or an individual reading assignment should be used to frame the topic or subject of interest. By giving students some background information, they will be able to apply their new knowledge and previous experiences to the proposed task.

➢ **Support the learner in developing ownership for the overall problem, process, and solution. Create a learning environment to support and challenge learners’ thinking.**

Encourage students to apply their own personal experiences and previous knowledge to the new problem. Create a cognitive conflict that causes students to question their beliefs and to “dig deep” to find meaning and insight into the proposed issue. It is also imperative to recognize that you will most likely have a wide variety of learning styles in your classroom. Encourage students to use learning strategies and tactics that work best for them. Create a positive and welcoming learning environment by being approachable, open to new perspectives, and willing to adjust your instructional style to meet a wide range of learning styles.

➢ **Help students develop problem recognition skills.**

Problem-based learning narratives present students with specific information, a scenario, or a fact pattern. The students’ task is to recognize and identify problems that each example represents. It is imperative that students be able to complete this crucial step in the problem-based learning process. Problem recognition helps students to develop a valuable diagnostic skill.

➢ **Design an authentic task.**

An authentic task has the potential to foster meaningful, intellectual accomplishment and learning since authentic learning activities are directly related to students' real-life experiences. Students at every level commonly complain that they do not perceive the relevance of the academic learning tasks assigned. If the learning tasks are authentic, then students can make direct connections between the new material and their prior experiences. They can also apply the new material to their current practice and future activities.

Authentic questions and tasks:

- should have real-world relevance.
- are ill-defined and require the student to identify necessary tasks and subtasks needed to complete the activity.
- could be investigated over a sustained period of time.
- provide the opportunity for students to examine different perspectives and use a variety of resources.
- should provide the opportunity to collaborate.
- should provide the opportunity to reflect.
- can be integrated and applied across different subject areas and reach beyond domain-specific outcomes.
- should allow competing solutions and diverse outcomes.

➢ **Provide opportunity for support and reflection on the content and process.**

Allow students to reflect on their past experiences, new knowledge, and the solutions. This is a critical component of learning and determining what the next step is in implementing the new knowledge. Also, as the educator, you must provide your students with an adequate amount of challenge and support in order to foster learning and development.

Resource: [http://www.cotf.edu/ete/teacher/teacherout.html](http://www.cotf.edu/ete/teacher/teacherout.html)