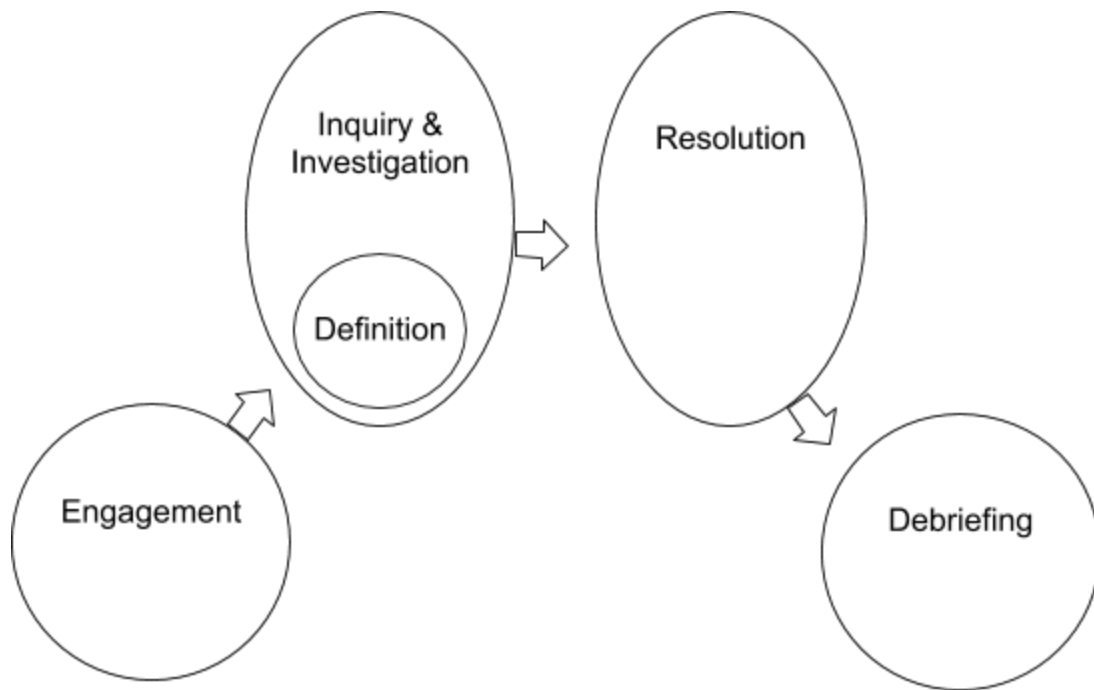


## ***The Flow of the Problem***

Adapted from Shelagh Gallagher's Book Problem-Based Learning in Your Classroom



<b>Problem Engagement</b>	<b>Inquiry &amp; Investigation</b>	<b>Problem Definition</b>	<b>Problem Resolution</b>	<b>Problem Debriefing</b>
<p>Phase 1:</p> <p>Students are introduced to the problem by an opening scenario. The Learning Issues Board will be completed by the students. At the end of the phase, students will be ready to engage in research.</p>	<p>Phase 2:</p> <p>Students investigate and gather answers to their questions from the learning board. Students will need to have access to a variety of resources for this phase. Once their research is complete, they will analyze their data, making connections with their problem.</p>	<p>Phase 3:</p> <p>Students will have a clear understanding of the real nature of the problem. They will prepare a definition of their problem, including constraints of their options and the issues which need to be resolved.</p>	<p>Phase 4:</p> <p>Students develop their solution options to their problem. If they do not have a solution, at the very least, how to improve their problem. They will need to sort through all of their options and eliminate the options that are not useful.</p>	<p>Phase 5:</p> <p>Students have resolved their problem. Students will reflect on the content they have learned, what happened to lead them down their certain pathway, identify useful strategies and complications they encountered.</p>

## ***PBL Preparation Checklist***

Adapted from Shelagh Gallagher's Book Problem-Based Learning in Your Classroom

- Select or create an appropriate problem.
- Understand the problem; find the questions students will ask.
- Test drive the problem, if possible.
- Sketch out a Coaching Plan for the first few days. Anticipate some activities and resources you'll need.
- Collaborate with the media specialist to create a special selection of resource books or a webquest to help guide students' research.
- Work with other disciplines to get ideas to increase the success of the PBL.
- If a field trip is planned, call the site and discuss the unit with them. Caution them to avoid giving the answer to your specific problem.
- Prepare the opening scenario.
- Prepare copies of the Learning Issues Board and necessary Problem Log Assignments for the first day.
- Gather some printed resources so students can begin their research immediately.

## ***Essential PBL Elements***

Adapted from Shelagh Gallagher's Book Problem-Based Learning in Your Classroom  
and [www.pbli.org](http://www.pbli.org)

- ★ Students must have the responsibility for their own learning.
- ★ The problem simulations must be ill-structured and allow for free inquiry.
- ★ Learning should be integrated from a wide range of disciplines or subjects.
- ★ The activities carried out in the problem-based learning must be those valued in the real world.
- ★ Collaboration is essential.
- ★ What students learn during their self-directed learning must be applied back to the problem.
- ★ A closing reflection of what has been learned from their work with the problem and a discussion of what concepts and principles have been learned is essential.
- ★ Self- and peer assessment should be carried out at the completion of each problem.
- ★ Student examinations must measure student progress toward the goals of problem-based learning.
- ★ Problem-based learning must be based in the curriculum.