PROBLEM-BASED LEARNING

WHAT IS IT?

Problem-based learning (PBL) revolves around a central problem, situation or case study. This usually occurs through small group work where an authentic real-world problem serves as the focus of the group. Experiential learning is organised around the investigation and resolution of the problem where students become "engaged problem solvers". Students are encouraged to utilise their prior knowledge in the topic area, identify gaps and the conditions needed as they attempt to solve the problem, and in the process, become self-directed learners.

WHY USE IT?

- PBL is a student-centred approach involving authentic, loosely structured, unfamiliar and complex problems for students to solve.
- The problem becomes the vehicle for the development of problem solving skills, allowing students to exercise their ability to think critically; analyse and solve complex problems, as well as, to find, evaluate, and use appropriate learning resources. Through group work, students are developing skills to work cooperatively and communicate effectively.
- PBL engages students as the stakeholders in a real world problem situation. This allows students to form a personal connection with the problem at hand as they discover whatever it is they feel they need in order to arrive at a possible solution or conclusion to the problem.

WHAT COULD I USE?

- vUWS Group Tools, Journals, Wikis and Blogs for collaboration
- Mindmap apps and presentation tools like Prezi, PowerPoint for the products developed as a result of the PBL task
- Learning Studio or Collaborative Learning Spaces

CONSIDERATIONS

- In PBL, the instructor acts as a coach or guide, and supports students through the problem-solving process.
- Scaffold activities to support students in the development of their skills in problem solving, self-directed learning and teamwork/collaboration.
- PBL works best with small groups of students, between 6-10. Allow time for student collaboration and research to enable them to utilise prior knowledge and identify gaps in their knowledge.

HOW DO I DO IT?

1. Design a real, complex problem related to the concepts, theories or practices in the unit. Include multiple solutions to cause the students to ask questions, challenge assumptions and seek further information to solve the problem.
2. Hold brainstorming sessions or class discussions where issues associated with the problem are identified.
3. Give students time to collaborate and ensure that all students are involved in the problem-solving process.
4. Assess progress at regular intervals. For example, upon completing the research or inquiry phase of problem solving, groups may be required to write a report and present it to the rest of the class.
5. Facilitate peer feedback that is valuable to students' learning process and meaningful evaluation.

WANT TO KNOW MORE?

- 10 Tips For Effective Problem-Based Learning: The Ultimate Instructional Solution (Open Colleges)
- Effective teaching guide: Problem based learning (La Trobe University)
- Problem-Based Learning in the Student Centered Classroom (Jeffrey R. Utecht 2003)
- Duch, B. J., Groh, S. E., & Allen, D. E. (2001). *The power of problem-based learning: a practical 'how to' for teaching undergraduate courses in any discipline.* Sterling, VA: Stylus Publishing.
- Torp, L., & Sage, S. (2002). *Problems as Possibilities: Problem-Based Learning for K-16 Education* (2 ed.). Alexandria, WA: Association for Supervision and Curriculum Development.