

Problem-based Learning Project

TDG PBL Project Team
Department of Mathematics, Science,
Social Sciences & Technology
26 June 2008



The Education University
of Hong Kong Library

For private study or research only.
Not for publication or further reproduction.

Aims


- To encourage teaching staff to utilize PBL as a means to enhance students' acquisition of knowledge and higher order thinking skills.
- To provide opportunities for professional development among staff regarding the use of PBL to achieve maximum teaching and learning effectiveness in their own disciplines.
- To provide adequate resources to support the design and evaluation of PBL strategies by teaching staff that cater for the needs and characteristics of their modules and disciplines.
- To provide a platform for teaching staff of different divisions within the department to share their experiences in implementing a common learning approach, hence facilitating scholarly exchange and professional development.



What is PBL?

- Learning approach that is problem-driven, student self-directed and authentic
- Underpinned by constructivism, meta-cognition, generic skills development, contextual learning, collaborative learning, and life-wide learning
- Students would identify learning issues in the context of an authentic problem, which leads to further development of knowledge, concepts or skills, and ultimately, resolution of the problem





How could PBL be applied to the context of MSST, and how will it work?



The Education University
of Hong Kong Library

For private study or research only.
Not for publication or further reproduction.

Features of MSST courses

- Multi-disciplinary
- Modules of different nature
- Time constraints
- Students were used to teacher-directed approaches



Project Development – a stage-approach

1. Induction seminar (Dr. Michael Keppell)
2. Planning meetings
3. Pilot trial (2nd term, 2006/7)
4. Internal sharing
5. Main trial (1st & 2nd terms, 2007/8)
6. Evaluation meeting
7. Dissemination seminar



Implementation -

- Programmes – from CE(ECE) to MEd
- Modules – more than 10
- Teaching staff – 13
- Disciplines
 - Mathematics
 - Science
 - Social studies
 - Health education
 - IT
 - Environmental studies

GS methods

Liberal Studies



The Education University
of Hong Kong Library

For private study or research only.
Not for publication or further reproduction.

Evaluation

- Student questionnaire
- Student interview
- Teacher interview
- Team sharing & evaluation meeting



The Education University
of Hong Kong Library

For private study or research only.
Not for publication or further reproduction.

Themes for sharing

- Setting of Learning Objectives
- Motivating students to learn
- Designing problem scenarios
- Using resources
- Time management
- Assessing learning outcomes
- Adapting PBL

