

## 1 Essentials of Problem-Based/Problem-Focused Learning

Lecture IV

Fall 2008

## 2 General Principles

- Student-directed, rather than teacher-directed
- Promotes active learning
- Outcome depends upon questions asked
- Determine what is known and what is not known (e.g., detailed medical information, history, symptoms, diagnoses)
- Find out about what is not known using available resources (personal research)
- Process generalizes to new learning situations

## 3 Steps in PBL

- Tutor reads problem statement and performance product. Group starts with the problem statement
- Generate ideas/hypotheses about the problem
- Make inquiries of casebook or other material
- Facts uncovered, learning issues identified
- Re-examine, refine hypotheses
- Determination of learning issues, assignment to members
- Group members conduct research of learning issues outside of class
- Group reconvenes; each member presents what s/he has found out, describing useful resources
- Process continues until performance product is attained.
- Product is compared with curriculum objectives (instructors determine this) to evaluate success of group

## 4 Role of tutors

- Maintain an objective participant stance
- Challenge you on your responses
- Encourage you to say what's on your minds
- Encourage you to admit what you don't know
- Ensure that everyone's comments are regarded and respected
- Make sure that all comments are heard
- Provide structure/redirection when needed
- Encourage restatement/rethinking of the problem
- Maintain motivation toward solving problem

## 5 Role of the Student

- Treat all members of the group with respect
- Be punctual in attending all sessions
- Openly express his/her thoughts and ideas
- Clarify and question his/her own thoughts and contributions
- Offer feedback to group members and tutors
- Complete assignments thoroughly and on time
- Be sensitive to learning needs of other group members
- Interact with group members
- Take responsibility for the learning process

## 6 Two Special Roles

- Scribe: keeps notes regarding hypotheses, data, and learning issues
- PBL reader/instructor: responsible for accessing case book/material, and for answering student inquiries about material

## 7 Four Categories of Information

- Hypotheses: what diagnosis/problem solution might be
- Facts: information that is known (e.g., from case history)

- Learning issues: questions and areas of unknown information that need to be learned
- Directions: actions to be carried out in the future (i.e, between classes)

## 8 Evaluation

- Product: evaluated by tutors
- Tutor: students evaluate tutor as to:
  - Success in guiding the group
  - Success in probing students' knowledge/reasoning
  - Success in involving all students in the process
  - Success in managing the flow of information and the dynamics of the group
- Group: each group member evaluates every other group member as to:
  - Success in taking responsibility
  - Success in interaction
  - Success in acting in a self-directed manner