IDEA GROUP PUBLISHING **ITB11906**

701 E. Chocolate Avenue, Suite 200, Hershey PA 17033-1240, USA
Tel: 717/533-8845; Fax 717/533-8661; URL-http://www.idea-group.com

This chapter appears in the book, Technology and Problem-Based Learning
by Lorna Uden and Chris Beaumont © 2006, Idea Group Inc.

Chapter VII

The Tutorial Process

Introduction

The tutorial process is at the heart of PBL. In addition to the acquisition of knowledge and conceptual understanding relevant to the given problem, we believe the tutorial group also has positive cognitive and motivational effects on students' learning. There are variations of the PBL tutorial process, based on the Barrows' model. This chapter describes the tutorial process we used for our students.

Traditional vs. PBL Tutorial

The tutorial process in PBL is often confused with the case method of teaching (Barrows, 1992). It is important to distinguish between the two. Although the case method teacher does not directly give information to students, but challenges them to present their own thinking, he or she does provide students with information and direction. This is done by responding to students' ideas with counter examples, absurdities that would result from their ideas, or by providing new facts that will shape their thinking at a critical point. On the other hand, in the PBL tutorial, the case or situation generates the analytical process in which the students have to discover what they know and what they need to know in

order to deal with a given situation. Students in the study have to take responsibility to acquire and test the applicability of knowledge for understanding issues and determinants from a potential practice perspective (von Schilling, 1995). The tutorial process is a regular meeting of students and tutors to discuss a topic. In PBL, the tutorial process structures the discussion and it provides students with a framework for working through their tutorial topic, presented as a problem (Clarke, 2002).

According to Bertola and Murphy (1994), successful tutorials contain the following features:

- Clarifying the role of tutor;
- Clarifying expectations;
- Planning session;
- Providing clear tasks;
- Modelling the kind of behaviour that the tutor wants to encourage and observe in students;
- Providing a conducive environment;
- Keeping students' attention on the topic and its relation to the "big picture" of the unit;
- Listening effectively; and
- Focusing on the process as well as content.

However, the tutorial in PBL is different from that described by Bertola and Murphy (1994). The main difference is that in PBL there are no clear tasks. The tasks in PBL are typically open-ended and "messy" in order to provide suitable stimulus for higher-order learning. Although there are different versions of Barrows' tutorial process, the basic concept is the same. During the tutorial process, the students actively engage with a problem, formulate hypotheses, identify learning issues, evaluate, reformulate, and revise them.

Students work through the same phases of the PBL process for each problem. The tutorial process provides a framework for working on the problem and allows the tutor and students to independently and collectively monitor and manage student progress in working through the problem. All PBL processes involve a sequence of working steps. The PBL process at Maastricht University consists of the following seven steps:

1. Group clarifies the text of problem.
2. Students define the problem.

Related Content