

PROBLEM-BASED LEARNING IN INTRODUCTORY STATISTICS

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Quality Assurance Questionnaires administered to Mildura students after their course in Statistical Methods repeatedly reveal that most find that the course does not relate to their real lives. One reason they give is that the textbook is not Australian, so that exercises are largely irrelevant and the second criticism is that not enough use is made of modern technology. In September last year I encountered for the first time the Problem-Based Learning (PBL) Network in Australia and I attended the 4th International Conference on PBL in December. I resolved that in the 1st Semester of 1998 I would present Statistical Methods using PBL. Boud and Feletti (1991) claim that PBL is the most significant innovation in education for many years. It is a way of constructing and teaching courses using problems, rather than the exposition of disciplinary knowledge as the stimulus of students' activity. It has its modern origin in the health sciences in the 1950's and has been adopted as an approach to professional education in the fields of nursing, social work, architecture and engineering. PBL varies with the discipline, but common themes are that learning is self-directed, knowledge is made relevant by placing it in context and students develop inquiry, thinking and problem-solving skills by working in small groups. It has its theoretical base in modern constructivist views of learning. I have redesigned Statistical Methods so that topics will be introduced by presenting students with a relevant problem in an Australian context, a list of key words and resources (including Minitab). They will be encouraged to develop their own learning objectives, keep all the documentation of their problem-solving efforts to synthesise into a final written and oral report. Assessment will be by portfolio. An information session and three workshops will replace the traditional lectures and tutorials and my role will be as a facilitator rather than a lecturer. The results of this change in teaching method will be discussed in my talk.

REFERENCE

Boud, D. and Feletti, G. (Eds.) (1991). *The Challenge of Problem Based Learning*
London: Kogan Page.