# FORMULATION OF AN EVALUATION INSTRUMENT AND FACILITATOR DEVELOPMENT PROGRAM FOR PROBLEM-BASED LEARNING

**Melanie Lack** 

A THESIS submitted to the Faculty of Health Sciences, University of the Witwatersrand, Johannesburg, in fulfilment of the requirements for the degree

**Doctor of Philosophy in Nursing** 

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# **DECLARATION**

I, Melanie Lack declare that this thesis is my own unaided work. It is being submitted
for the degree of Doctor of Philosophy in Nursing at the University of the
Witwatersrand, Johannesburg. It has not been submitted before for any degree or
examination at this or any other University.

Melanie Lack	
day of	20

# 'THE AUTHORITY OF THOSE WHO TEACH IS OFTEN AN OBSTACLE TO THOSE WHO LEARN'

(CICERO)

#### **ABSTRACT**

#### **PURPOSE**

The purpose of this four-phased study was to develop a standards based self-assessment tool and a curriculum for the development of PBL facilitators.

#### **BACKGROUND**

The success of a PBL approach to teaching and learning is determined by the facilitator who requires the knowledge and skills to function effectively.

#### **METHODS**

A quantitative research approach was used as the overarching design in this four-phased study. In Phase-One data were collected using a Delphi Survey and a panel of experts to identify items representing facilitator characteristics. An analytic hierarchy process was carried out on the relevant items referred to as constructs. The development of an evaluation instrument commenced. In Phase-Two a diagrammatic model was developed based on the information gathered in the previous phase. Phase-Three led to the development of performance standards and indicators relative to the constructs identified in Phase-One and included in the evaluation instrument. The standards based evaluation instrument referred to as the FE-SAT (facilitator evaluation self-assessment tool) was completed. In Phase-Four the content on the FE-SAT informed the development of a modular curriculum to be used in the development of PBL facilitators.

#### **MAIN FINDINGS**

Three constructs were identified with Educational Ethics receiving the highest weighting followed by Management and Interpersonal skills. Weighting provides information on how learning time could be allocated relative to that weighting. The Phase-Two study model illustrated the inter-relationship between each construct. It showed the positive and negative effects these constructs had on each other. The curriculum provides information for workshops together with a self-directed learning program.

#### RECOMMENDATIONS

The FE-SAT needs to be validated by the institution where the research was conducted and other institutions using PBL. Further research can be conducted to test the curriculum. A study can be repeated using a larger sample. The development of a stress scale for university students that is South African specific. The FE-SAT and curriculum can provide direction to induction and orientation programs.

#### **CONCLUSION**

This four-phased study led to the development of a standards' based evaluation instrument referred to as the FE-SAT for facilitator self-assessment. A curriculum was developed based on the content of the FE-SAT. Furthermore the curriculum provides content for workshops and short courses.

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#### **ABBREVIATIONS**

**CVI:** Content Validity Index

**EV** Eigen Vector

**FE-SAT** Facilitator Evaluation-Self Assessment Tool

**GM** Geometric Mean

**IPS** Interpersonal skills

Inter Personal Skills Ethics Management

**LLSM** Logarithmic least squares method

MSc Master of Science

MB.BCh Bachelor in Medicine Bachelor in Surgery

MCDA Multi criteria decision analysis

PhD Doctor of Philosophy

PBL Problem-Based Learning

**SJM** Subjective Judgement Model

VAS Visual Analogue Scale

WC Weight of Construct

WI Weight of Item

WS Weight of Ordinal Scale

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