FACTORs THaT INFLUENCE PERFORMANCE IN A PROBLEM-BASeD LEARNING TUTORIAL

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ABSTRACT

Introduction: Problem-based learning (PBL) is an educational approach that reflects a resourceful way of thinking about teaching and learning. PBL is a student group-focused pedagogy that uses an inquiry-based tutorial approach to learning. PBL is characterised by small group that uses tutorials rather than lectures as opposed to a didactic, lecture-based curriculum and it is commonly used in medicine and the health sciences in combination with traditional learning methodologies, as it helps students to develop the higher order thinking skills required to be successful in the medical profession.

Aims: This study has two aims. First, it examines the influence of four demographic characteristics (gender, age, educational level, home language) of the students in the MBBS medical program at Bond University, Queensland, on their perceptions of PBL, verbal interaction in PBL and academic achievement. Secondly, the results of the Bond University study was utilised to assess the feasibility of using a hybrid PBL approach that combine PBL and didactic teaching to a multicultural Middle Eastern Dental Hygiene program in Kuwait. In order to meet these aims, two measurement instruments and one data collection method, were used. The study was divided into two parts: Part A (survey) and Part B (utterance analysis).

Methods: In Part A, a questionnaire was developed to canvas Bond University medical students’ perceptions of PBL. The questionnaire canvassed Year 1-3 students cross-sectionally and longitudinally. In Part B, a validated instrument was used to record the instances of students’ learning-oriented utterances. Students’ end of year (phase) assessment results were collected and correlated with their learning-oriented utterances.

Results and Discussion: This study found that PBL is accepted as a learning experience regardless of students’ demographic characteristics or backgrounds. Although the demographic characteristics of students in the present study did not impact significantly on their acceptance of PBL as a learning experience, one demographic factor (age) was found to impact on students’ perceptions of and
performances during PBL tutorials. To this end, younger students (16-20 years old group) perceived PBL positively more than did older students. Year of study was identified as another factor that could influence students’ views and learning-oriented utterances during PBL tutorials. First year students scored higher in two of the inventory subscales: group process and tutor practice. Moreover, Year 1 students engaged critically but constructively by asking higher order questions more than did their second year counterparts. The correlation between student and tutor learning-oriented utterances was both weak in magnitude (less than 1) and direction (negative sign). No evidence of association was found between the students’ verbal interaction and their academic achievement. The proposition that students with different demographic factors perceived PBL differently was proven incorrect in the present study.

**Conclusion:** The inclination toward a more tutor-directive style might be due to the lower levels of prior knowledge and lower confidence of younger students. Tutors with content knowledge can, however, have a positive and negative impact on students’ contribution. The findings of the current study of a diverse group of medical students suggest that hybrid PBL approach might be appropriate as an educational approach for the Dental Hygiene program (College of Health Sciences, Kuwait).
DECLARATION

This thesis is submitted to Bond University in fulfilment of the requirements of the degree of Doctor of Philosophy.

This thesis represents my own original work towards this research degree and contains no material which has been previously submitted for a degree or diploma at this University or any other institution, except where due acknowledgment is made.

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# TABLE OF CONTENTS

ABSTRACT ......................................................................................................................... III

DECLARATION ..................................................................................................................... V

ACKNOWLEDGEMENTS ..................................................................................................... VI

TABLE OF CONTENTS ...................................................................................................... VIII

LIST OF TABLES ................................................................................................................ XII

LIST OF FIGURES .............................................................................................................. XV

## CHAPTER 1 RATIONALE ................................................................................................. 1

1.1. Introduction .................................................................................................................... 2

1.2. Rationale for the study ................................................................................................. 3

1.2.1. Educational theories underpinning PBL ................................................................. 5

1.2.2. Andragogy ................................................................................................................ 8

1.2.3 Students’ demographic characteristics and PBL .................................................... 10

1.2.3.1. Questionnaire: Evaluating perceptions ......................................................... 11

1.2.3.2. Measuring learning-oriented utterances .................................................... 11

1.2.3.3. Impact of students’ verbal interaction in PBL tutorials on their end of year grades .11

1.3. Problem-based learning (PBL) .................................................................................. 12

1.4. Curriculum reform in the Dental Hygiene Program, College of Health Sciences (CHS),
    Public Authority for Applied Education and Training (PAAET), Kuwait ...................... 17

1.5. Institutional context: Bond University, Faculty of Health Sciences and Medicine’s PBL
    program .............................................................................................................................. 18

1.6. How this research project fits ..................................................................................... 21

1.7. Overview of the study design ...................................................................................... 22

1.8. Hypothesis and research questions .......................................................................... 23

1.9. Organisation of the thesis ......................................................................................... 24

1.10. Concluding comments ............................................................................................... 25

## CHAPTER 2 LITERATURE REVIEW .............................................................................. 27

2.1. Introduction .................................................................................................................. 28

2.2. PBL philosophy .......................................................................................................... 28
CHAPTER 3  PART A .................................................................................................................. 49

3.1. Introduction ..................................................................................................................... 50

3.2. Methods .......................................................................................................................... 52
  3.2.1. Questionnaire development ....................................................................................... 52
  3.2.2. Reliability ................................................................................................................ 54
  3.2.3. Questionnaire validation ........................................................................................... 56
    3.2.3.1. Skills Development (SD), Group Process (GP), Learning Process (LP) Instrument validation ........................................................................................................... 58
  3.2.3.2. Tutor Practice (TP) instrument validation ............................................................. 61
  3.2.4. Participants and data collection ................................................................................ 62
  3.2.5. Categorisation of variables, descriptive statistics and statistical analysis models ....64

3.3. Results ............................................................................................................................ 65
  3.3.1. Cross-sectional study ............................................................................................... 66
  3.3.2. Summary and interpretation: Cross-sectional study ............................................... 75
  3.3.3. Longitudinal study ................................................................................................... 76
  3.3.4. Summary and interpretation of the longitudinal study ......................................... 84


CHAPTER 3  PART B ..................................................................................................................
CHAPTER 4 PART B ................................................................................................................. 95

4.1. Introduction .................................................................................................................. 96
    4.1.1. Hypotheses .............................................................................................................. 99
    4.1.2. Research Questions ............................................................................................... 99

4.2. Methods .......................................................................................................................... 100
    4.2.1. Part (I): Instrument used to quantify utterances .................................................. 101
        4.2.1.1. Recruitment of participants ............................................................................. 102
        4.2.1.2. Data collection ............................................................................................... 103
        4.2.1.3. Calibration of the scoring ............................................................................... 104
        4.2.1.4. Data analysis ................................................................................................. 104
        4.2.1.5. Statistical analysis ......................................................................................... 105
    4.2.2. Part (II): Correlation between utterances and end of year (phase) grade .......... 105
        4.2.2.1. Participant demographics .............................................................................. 106
        4.2.2.2. Statistical analysis ......................................................................................... 106

4.3. Results ............................................................................................................................ 106
    4.3.1. Influence of demographics on participation ....................................................... 108
    4.3.2. Description of the field notes recorded when watching the videotaped PBL tutorials ... 111
    4.3.3. Correlation of utterances with final grades .......................................................... 126
    4.3.4. Results summary ................................................................................................. 128

4.4. Discussion ....................................................................................................................... 131
    4.4.1. Overview ............................................................................................................... 131
    4.4.2. Gender and participation ..................................................................................... 131
    4.4.3. Age and participation ........................................................................................... 133
    4.4.4. Prior education and years of study impact on participation ............................... 134
    4.4.5. Language background and participation ............................................................ 136
    4.4.6. Influence of tutor intervention on student learning-oriented utterances ............ 138
    4.4.7. The correlation between participation and end of year assessments results ...... 140
    4.4.8. Analysis of the descriptive field notes of the Day 1 PBL process ...................... 141
LIST OF TABLES

Table 1.1: The four phases of the Bond University MBBS Program........................................20
Table 1.2: The process and skills of PBL tutorials during a week in the Bond Medical Program ........................................................................................................................................................................21
Table 2.1: Advantages and disadvantages of PBL (Wood, 2003; 2008) ..................................40
Table 2.2: Bond University graduate attributes .......................................................................47
Table 3.1: Final version of the questionnaire, comprising four subscales ...............................53
Table 3.2: Cronbach’s alpha coefficient of items and constructs of items for the questionnaire 56
Table 3.3: Skills Development-Group Process-Learning Preference (SD-GP-LP) loadings from the Principal Factor Analysis ..................................................................................................................59
Table 3.4: Inter-factor correlation resulting from the confirmatory factor analysis ..................60
Table 3.5: The EFA and CFA for the Tutor Practice construct ..................................................61
Table 3.6: Sample size and attributes of Bond medical students in the cross-sectional and longitudinal study ..........................................................................................................................................................63
Table 3.7: Mean and Standard Error (SE) of Year 1-3 student perceptions of PBL in the cross-sectional study in terms of their skills development (SD), group process (GP), learning preference (LP) and tutor practice (TP) ..........................................................................................................................................................67
Table 3.7a: Mean and Standard Error (SE) of Year 1-3, male and female student perceptions of PBL in the cross-sectional study in terms of their skills development (SD), group process (GP), learning preference (LP) and tutor practice (TP) according to students’ gender ..................................................................................................................................................80
Table 3.7b: Mean and Standard Error (SE) of Year 1-3, 16-20 years and 20+ years student perceptions of PBL in the cross-sectional study in terms of their skills development (SD), group process (GP), learning preference (LP) and tutor practice (TP) according to students’ gender ..................................................................................................................................................81
Table 3.7c: Mean and Standard Error (SE) of Year 1-3, school-leavers and graduate student perceptions of PBL in the cross-sectional study in terms of their skills development (SD), group process (GP), learning preference (LP) and tutor practice (TP) according to students’ education level ..............................................................................................................................................82
Table 3.7d: Mean and Standard Error (SE) of Year 1-3, English and non-English student perceptions of PBL in the cross-sectional study in terms of their skills development (SD), group process (GP), learning preference (LP) and tutor practice (TP) according to students’ language ............................................................................................................................................83
Table 3.8: Crude effects for the bivariate analysis of demographics on the SD, GP, LP and TP subscales ........................................................................................................................................................................72
Table 3.9: Adjusted effects resulting from the multivariable general linear model .......................74
Table 3.10: Estimated Marginal Means (EMMs) derived from the multivariable models of the adjusted effects in Table 3.9 ....................................................................................................................................................75
Table 3.11: Mean and Standard Error (SE) of Year 1 (2007), Year 2 (2008), Year 3 (2009) 
student perceptions of PBL in longitudinal study of a single cohort as they progress in their studies in terms of their skills development (SD), group process (GP), learning preference (LP) and tutor practice (TP) ........................................................................ 77

Table 3.11a: Mean and Standard Error (SE) of Year 1 (2007), Year 2 (2008), Year 3 (2009) 
student perceptions of PBL in longitudinal study of a single cohort as they progress in their studies in terms of their skills development (SD), group process (GP), learning preference (LP) and tutor practice (TP) .......................................................... 90

Table 3.11b: Mean and Standard Error (SE) of Year 1 (2007), Year 2 (2008), Year 3 (2009) 
student perceptions of PBL in longitudinal study of a single cohort as they progress in their studies in terms of their skills development (SD), group process (GP), learning preference (LP) and tutor practice (TP) ........................................................................ 91

Table 3.11c: Mean and Standard Error (SE) of Year 1 (2007), Year 2 (2008), Year 3 (2009) 
student perceptions of PBL in longitudinal study of a single cohort as they progress in their studies in terms of their skills development (SD), group process (GP), learning preference (LP) and tutor practice (TP) ........................................................................ 92

Table 3.11d: Mean and Standard Error (SE) of Year 1 (2007), Year 2 (2008), Year 3 (2009) 
student perceptions of PBL in longitudinal study of a single cohort as they progress in their studies in terms of their skills development (SD), group process (GP), learning preference (LP) and tutor practice (TP) ........................................................................ 93

Table 3.12: Comparison between the crude effects derived from the one-way general linear 
models of the years of the study in the cohorts used in the longitudinal study (Year 

Table 3.13: Adjusted effects resulting from multivariable general linear (MV) models of SD, 
GP, LP and TP based on the first entry cohort (those entering first year in 2007, 
longitudinal cohort) .................................................................................. 83

Table 3.14: Estimated marginal means (EMMs) for the longitudinal cohort resulting from the 
multivariable (MV) (adjusted effects) models .......................................................... 83

Table 4.1: Learning-orientated interactions (Visschers-Pleijers, 2006; Visschers-Pleijers et al., 
2003; 2006) ............................................................................................................. 101

Table 4.2: Demographic representation of Year 1 (two groups) and Year 2 (three groups) 
students who agreed to participate (n = 38) ........................................................................ 103

Table 4.3: Participants’ demographics, Mean of learning-oriented utterances and the end of 
year (phase) grades ........................................................................................................... 107

Table 4.4: Descriptive and statistical analysis of the aggregated students and tutor learning-
oriented utterances in all groups .................................................................................. 109

Table 4.4a: Descriptive and statistical analysis of the aggregated students and tutor learning-
oriented utterances in all groups according to students’ gender .................................. 113

Table 4.4b: Descriptive and statistical analysis of the aggregated students and tutor learning-
oriented utterances in all groups according to students' age ............................................. 113

Table 4.4c: Descriptive and statistical analysis of the aggregated students and tutor learning-
oriented utterances in all groups according to students' education level ......................... 114

Table 4.4d: Descriptive and statistical analysis of the aggregated students and tutor learning-
oriented utterances in all groups according to students' language .......................114

Table 4.5: Group mean for student and tutor learning-oriented utterances by group and students' grades ..................................................................................................................116

Table 4.6: Pearson’s correlation coefficients for individual and aggregated (total) utterances for students and tutors and student grades ......................................................................................118

Table 4.7: Crude individual effects derived from the bivariate models of the various demographic characteristics on the EQ, CR and HC learning-oriented utterances.120

Table 4.8: Adjusted individual effects of the demographic characteristics on EQ, CR and HC 121

Table 4.9: Estimated Marginal Means (EMMs): EQ, CR derived from the multivariable model of the adjusted effects ..................................................................................................................123

Table 4.10: Average proportion of utterances of the three learning-oriented interactions (EC, CR or HC) for each of the groups and student characteristics .................................................124

Table 4.11: Learning-Oriented Utterances: Crude and adjusted effects of aggregated utterance results .............................................................................................................................................125

Table 4.12: Estimated Marginal Means (EMMs) of utterances resulting from both multivariable models .............................................................................................................................................125

Table 4.13: Crude and adjusted effects of students’ grades .........................................................127

Table 4.14: Estimated Marginal Means (EMMs) of students’ grades ........................................128
LIST OF FIGURES

Figure 1.1: A problem-based learning approach (Wetzel, 2008) ..................................................14
Figure 1.2: Expected outcomes of problem-based learning.........................................................15
Figure 1.3: Study design for Part A and Part B ..............................................................................23
Figure 3.1: Non-graphical solutions to Scree Test - Parallel Analysis (PA) .....................................58
Figure 3.2: SD-GP-LP measurement model loadings structure .......................................................60
Figure 3.3: Tutor Practice (TP) measurement model loading structure .......................................61