

1997

## The relationship between lecturers' attitudes toward teaching, their teaching qualifications and student perceptions of their teaching performance

Ahmad R. Nasr

*University of Wollongong*

Follow this and additional works at: <https://ro.uow.edu.au/theses>

### University of Wollongong

#### Copyright Warning

You may print or download ONE copy of this document for the purpose of your own research or study. The University does not authorise you to copy, communicate or otherwise make available electronically to any other person any copyright material contained on this site.

You are reminded of the following: This work is copyright. Apart from any use permitted under the Copyright Act 1968, no part of this work may be reproduced by any process, nor may any other exclusive right be exercised, without the permission of the author. Copyright owners are entitled to take legal action against persons who infringe their copyright. A reproduction of material that is protected by copyright may be a copyright infringement. A court may impose penalties and award damages in relation to offences and infringements relating to copyright material.

Higher penalties may apply, and higher damages may be awarded, for offences and infringements involving the conversion of material into digital or electronic form.

Unless otherwise indicated, the views expressed in this thesis are those of the author and do not necessarily represent the views of the University of Wollongong.

### Recommended Citation

Nasr, Ahmad R., The relationship between lecturers' attitudes toward teaching, their teaching qualifications and student perceptions of their teaching performance, Doctor of Philosophy thesis, Graduate School of Education, University of Wollongong, 1997. <https://ro.uow.edu.au/theses/1878>

## **NOTE**

This online version of the thesis may have different page formatting and pagination from the paper copy held in the University of Wollongong Library.

## **UNIVERSITY OF WOLLONGONG**

### **COPYRIGHT WARNING**

You may print or download ONE copy of this document for the purpose of your own research or study. The University does not authorise you to copy, communicate or otherwise make available electronically to any other person any copyright material contained on this site. You are reminded of the following:

Copyright owners are entitled to take legal action against persons who infringe their copyright. A reproduction of material that is protected by copyright may be a copyright infringement. A court may impose penalties and award damages in relation to offences and infringements relating to copyright material. Higher penalties may apply, and higher damages may be awarded, for offences and infringements involving the conversion of material into digital or electronic form.

The Relationship Between Lecturers' Attitudes Toward Teaching,  
their Teaching Qualifications and Student Perceptions of their  
Teaching Performance

A thesis submitted in fulfilment of the requirements for the award of the  
degree of

Doctor of Philosophy

from

University of Wollongong

by

Ahmad R. Nasr, M.A. (Hons)

Graduate School of Education

1997

## Certificate

I certify that to the best of my knowledge the substance of this thesis has not already been submitted for any degree and is not being currently submitted for any other degree.

I certify that help received in preparing this thesis, and all sources used, have been acknowledged.

Ahmad R. Nasr

## Table of Contents (Overview)

Title	Page
Acknowledgments	i
Publications	ii
Table of Contents	iii
List of Tables	ix
List of Figures	xiv
List of Abbreviations	xv
Abstract	xvi
Chapter One: Introduction	1
Chapter Two: Theoretical Background	19
Chapter Three: Review of Literature	50
3a) Attitude Toward Effective Teaching and Teaching Performance	50
3b) Teaching Qualifications and Teaching Performance	79
3c) Other Lecturers' Attributes	112
3d) Examining Teaching Performance	139
Chapter Four: Method	167
4a Research Design	167
4b. Phase One: The Ex Post Facto Study	172
4c. Phase Two: Semi-Structured Interview	207
Chapter Five: Results	216
Chapter Six: Discussion	329
Bibliography	385
Appendices	415

## Acknowledgments

I acknowledge with appreciation the assistance of the following people during the course of this project: Associate Professor Philip de Lacey, Dr. Ted Booth and Dr. Max Gillett, my supervisors, for their valuable advice, critical thinking, support and encouragement. Professor Gannicott also commented critically on the statistical analysis and discussion.

Academic staff at the University of Wollongong who gave their time to undertake interviews, to complete the research questionnaires and give permission to access their student rating records, and also to university students for their time to complete more than 20,000 student rating questionnaires of the lecturers' teaching performance.

Staff at the Centre for Staff Development and Planning and Marketing Office at the University of Wollongong for their support in data gathering and their information. Ms. Anna Miller for her assistance with the text. Also the general staff of the Graduate School of Education for their support.

Isfahan University, Iran, for a full scholarship for this study, and also the University of Wollongong for enabling me to undertake this study and providing financial support in order to present a part of this study at two international conferences. AARE for my selection as a postgraduate student to receive a fellowship award, enabling my attendance at its 1996 international conference.

Finally I wish to thank my parents who provided an environment of spirituality and commitment. I wish also to express heartfelt thanks to my wife, Ehteram, and children, Azimeh and Amin for their patience throughout the course of this project.

## Publications

Several academic papers were derived from the present study and submitted for publication. Three were presented at international conferences and a fourth was resubmitted to an American journal '*Research in Higher Education*' after responding to the comments received from the two referees on the first and the second drafts.

- 1) Nasr, A. R., Gillett, M., Booth, E. (1996a). The relationship between university lecturers' qualifications in teaching and student ratings of their teaching performance. *International Consortium for Educational Development in Higher Education*. Finland: The University of Vasa.
- 2) Nasr, A. R. , Booth, E., Gillett, M. (1996b). Relationship between lecturers' attitude toward effective teaching and their teaching performance. *Australian Association for Research in Education*. Singapore Polytechnic.
- 3) Nasr, A. R., Booth, E., Gillett, M. (1996c). Relationship between lecturers' language background and their teaching performance. *Australian Association for Research in Education*. Singapore: Singapore Polytechnic.
- 4) Nasr, A. R., de Lacey, P., Booth, E., Gillett, M. (1997). The relationship between lecturers' attributes and their teaching performance. Manuscript was resubmitted to *Research in Higher Education*.

## Table of Contents

Title	Page
<b>CHAPTER ONE: INTRODUCTION</b>	
1.1 Background	1
1.2 Purpose of the Study	4
1.3 Rationale and Significance of the Study	5
1.4 Context of the Study	12
1.4.1 Tertiary Teaching Policy	13
1.4.2 Teaching Evaluation Policy	15
1.4.3 Staff Development Policy	16
1.5 Design of the Study	17
1.6 Outline of Chapters	18
<b>CHAPTER TWO: THEORETICAL BACKGROUND</b>	
2.1 Theories and Models of Teaching	19
2.2 Theories of Learning Relating to Teaching	26
2.3 Teaching Models of Dunkin and Biggs	33
2.4 Evaluation of Teaching And Learning	42
<b>CHAPTER THREE: REVIEW OF LITERATURE</b>	
3a) Lecturers' Attitudes Toward Effective Teaching	50
3a.1 Lecturers' Attitudes and their Actions	51
3a.2 Definitions of Effective Teaching	56
3a.3 Criteria of Effective Teaching	58
3a.4 Dimensions of Effective Teaching	66
3a.5 Methods of Teaching	70



<b>3b) Teaching Qualifications and Teaching Performance</b>	79
3b.1 Professional Approaches towards Acquiring Teaching Qualifications	79
3b.2 Institutional Policy on Teaching Qualifications	85
3b.3 Evidence Referring to Acquiring Teaching Qualifications	91
3b.4 Objectives and Ways of Acquiring Teaching Qualifications	95
3b.5 Other Issues Relating to Teaching Qualifications	104
<b>3c) Other Attributes of Lecturers</b>	112
3c.1 Language Background	112
3c.2 Gender	116
3c.3 Academic Ranks	120
3c.4 Academic Degrees	123
3c.5 Academic Discipline	125
3c.6 Teaching Experience	132
3c.7 Other attributes	136
<b>3d) Teaching Performance</b>	139
3d.1 Measurability of Teaching Performance	139
3d.2 Methods of Teaching Evaluation	141
3d.3 Purpose of Student Ratings	145
3d.4 Support for Student Ratings of Teaching Performance	148
3d.5 Concern About Student Ratings of Teaching Performance	150
3d.6 Scoring of Student Ratings	157
<b>Summary of Literature Review</b>	164

## CHAPTER FOUR: METHOD

<b>4a Research Design</b>	167
<b>4b. Phase One: The Ex-Post-Facto Study</b>	172
4b.1 Variables	173
4b.1.1 Independent Variables	173
4b.1.2 Dependent Variable	175
4b.2 Research Questions	177
4b.3 Population and Sample of Study	178
4b.4 Pilot Study	181
4b.5 Instruments	182
4b.5.1 Attitudes Toward Teaching	183
4b.5.2 Student Ratings Questionnaire	192
4b.6 Data Collection Procedures	199
4b.7 Data Entry	201
4b.7.1 Classification of Student Ratings Questionnaire	202
4b.7.2 Classification of Lecturers' Attitude Toward Teaching	203
4b.7.3 Classification of Background Information	203
4b.8 Data Analysis	204
<b>4c. Phase Two: Semi-Structured Interview</b>	207
4c.1 Research Questions	207
4c.2 Population and Sampling	209
4c.3 Pilot Study	211
4c.4 Data-Collection Procedures	212
4c.5 Data Analysis	214

## CHAPTER FIVE: RESULTS

5.1 Descriptive Analysis	217
5.1.1 Gender	217
5.1.2 Rank	219
5.1.3 Teaching Qualifications	221
5.1.4 Language Background	222
5.1.5 Academic Degrees	224
5.1.6 Faculty Membership	225
5.2 Attitude Toward Effective Teaching and Teaching Performance	228
5.2.1 Phase One	228
5.2.2 Phase Two	234
5.3 Teaching Qualifications and Teaching Performance	241
5.3.1 Phase One	241
5.3.2 Phase Two	247
5.4 Language Background and Teaching Performance	253
5.4.1 Phase One	253
5.4.2 Phase Two	255
5.5 Gender and Teaching Performance	265
5.5.1 Phase One	265
5.5.2 Phase Two	269
5.6 Academic Rank and Teaching Performance	273
5.6.1 Phase One	273
5.6.2 Phase Two	276
5.7 Level of Academic Degrees and Teaching Performance	280
5.7.1 Phase One	280
5.7.2 Phase Two	282

5.8 University or College Experience and Teaching Performance	287
5.8.1 Phase One	287
5.8.2 Phase Two	290
5.9 Academic Discipline and Teaching Performance	298
5.9.1 Phase One	298
5.9.2 Phase Two	304
5.10 Overview of Lecturer Attributes and Teaching Performance	310
5.10.1 Phase One	310
5.10.2 Phase Two	318
5. 11 Other Influential Attributes in Teaching Performance	323

## CHAPTER SIX: DISCUSSION

6.1 Summary of Results and Discussion of Findings on Research Questions	329
Question One: Attitude toward effective teaching and teaching performance	330
Question Two: Teaching qualifications and teaching performance	335
Question Three: Language background and teaching performance	341
Question Four: Gender and teaching performance	349
Question Five: Academic rank and teaching performance	351
Question Six: Level of academic degree and teaching performance	354
Question Seven: University or College teaching experience and teaching performance	356
Question Eight: Academic discipline and teaching performance	360
Question Nine: Lecturers' attributes and teaching performance	364
6.2 Limitations of the Study	368
6.3 Implications of the Study	372
6.4 Suggestions for Future Studies	376

APPENDICES

A	Initial approval from Ethics Committee	415
B	Final approval from Ethics Committee	417
C	Cover letter to research population	418
D	Consent form from research population	419
E	Request from experts for a content validity check of the attitude scale	420
F	Attitude toward teaching questionnaire	421
G	Student rating questionnaire	423
H	Typical student rating for one subject	429
I	Typical student rating for each lecturer	430
J	Typical calculation of lecturers' attitudes toward effective teaching	431
K	Letters to Deans and Heads of Department seeking support	433
L	First reminder and 'letter of thanks' to academics	434
M	Second reminder and 'letter of thanks' to academics	435
N	'Letter of thanks' for Deans and Heads of Departments	436
O	Final approval from Ethics Committee for undertaking interview	437
P	Table of the eight lecturers' attributes	438
Q	Academic Staff Development (ADS) covering letter to interviewees	439
R	Invitation letter to the interviewees	440
S	Consent form for undertaking the interview	441
T	Biographical questionnaire	442
U	Professional and biographical data of all participants in interview	443
V	One sample of interview transcription	444
W	Thanks to the participants and request for verification of the transcription	451

## LIST of TABLES

Table	Page	
3.1	Dimensions of Effective Teaching	68
3.2	Disciplinary Comparisons	129
4.1	Sample of Study and Response Rate of Different Groups of Involved Academic Staff	179
4.2	Comparison Between Overall Teaching Performance Mean Score of Sample and Total Population in Different Faculties of the University Between 1991-1993	181
4.3	Ten Representative Items from the 37-Item Lecturers' Attitudes Survey on the Five Dimensions of Effective Teaching	184
4.4	Cronbach Alpha and Correlation of the Score for Each Dimension with the Total Score of the Questionnaire From the Responses of 176 Academics	187
4.5	Correlation of the Score for Items with the Total Score of Each Dimensions and Questionnaire From the Responses of 176 Academics	189
4.6	Inter-correlations Between the Five Dimensions of the Teaching-Attitude Questionnaire from the Sample (N = 176)	190
4.7	Varimax Rotated Factor Matrix for the Teaching Attitude Survey from the Responses of 176 Academics	191
4.8	Correlation of Each Item Score with the Total Score of the Student Rating Questionnaire	195
4.9	Factor Loading of the Student Rating Questionnaire from the Responses of 1,934 Students	197
4.10	Response Rate of Different Groups of Academic Staff Participating in the Two Phases of the Study	210

5.15 ANOVA Summary for Non Significant Differences Between Lecturers in the Upper and Lower 27 Percent Attitude Toward Teaching and their Teaching Performance	233
5.16 ANOVA Summary and Means Table for Teaching Qualifications (Four Groups) and TP (N = 130)	241
5.17 ANOVA Summary and Means Table for Teaching Qualifications (Two Groups) and TP (N = 130)	243
5.18 ANOVA Summary for Academics With and Without Teaching Qualifications on Teaching Performance Items	243
5.19 ANOVA Summary for Academics With and Without Teaching Qualifications on Teaching Performance Items	245
5.20 ANOVA Summary and Mean Table for Lecturers' Language Background and their Teaching Performance (N = 130)	253
5.21 ANOVA Summary and Mean Table for Language Background and Teaching Performance in Each Item	254
5.22 ANOVA Summary and Mean Table for Teaching Performance of Female and Male Academic Staff	265
5.23 ANOVA Summary and Mean Table of TP Female and Male Academic Staff in Items with Significant Differences	266
5.24 ANOVA Summary and Mean Table for TP of Female and Male Academic Staff in Items with Non-significant Differences	267
5.25 ANOVA Summary and Mean Table of Teaching Performance for Academic Staff by Rank	273
5.26 Differences Between Teaching Performance Mean Score by Academic Rank	274
5.27 Differences Between Mean Teaching Performance Scores by Academic Rank for Items	275
5.28 ANOVA Summary and Mean Table for Teaching	

Performance of Academic Staff by Level of Academic Degree	281
5.29 Differences Between Teaching Performance Mean Score of Pairs by Level of Academic Degree	281
5.30 Differences Between Mean TP Scores of Pairs of Academic Degree in Items	282
5.31 ANOVA Summary and Mean Table for Years of Teaching Experience and Teaching Performance	289
5.32 Differences Between Years of Teaching Experience and Mean Teaching Performance Scores	290
5.33 ANOVA Summary and Mean Table for TP of Academic Staff in Five Groupings of Faculties	299
5.34 Differences Between Teaching Performance of Faculties	301
5.35 Differences Between Teaching Performance Mean Score of Academic Staff in Different Faculties	303
5.36 Correlation Matrix of the Variables (N = 126)	312
5.37 Intermediate Coefficients of Multiple Determination for Stages of the Multiple Regression toward Teaching Performance	315
5.38 Regression of Teaching Performance on the Eight Independent Variables (N = 126)	316
5.39 Lecturer's Ranking of Lecturers' Characteristics Influencing Teaching Performance (N= 25)	319
5.40 Lecturer's Personal Ranking of Influential Characteristics Influencing Teaching Performance (N= 25)	321
5.41 Influence of Lecturers' Characteristics on the Teaching Performance (Comparison Between General Views and Personal Experience)	322



## LIST OF FIGURES

Figure		Page
2.1	Conceptions of teaching	21
2.2	A diagrammatic representation of the relationship between theory and practice	26
2.3	A hypothetical learner-control continuum	32
2.4	A model for the study of classroom teaching	35
2.5	Presage, process and product applied to teaching	37
2.6	Three major emphases for defining good teaching	44
3.1	A continuum of teaching methods	74
3.2	The NVHM model for change	102
4.1	Integrated qualitative and quantitative data	171
5.1	Distribution and variation of mean scores of lecturers' attitude toward effective teaching and their teaching performance	229
5.2	Scattergram of five dimensions of teaching with mean score of teaching performance	230
5.3	Teaching performance mean scores of lecturers with 'upper' and 'lower' 27 percent attitudes toward effective teaching	235
5.4	Comparison between teaching performance mean score of academics with and without teaching qualifications	246
5.5	Teaching performance mean scores of lecturers in relation to their language background	256
5.6	Teaching performance mean scores of female and male academic staff	268
5.7	Distribution and variation of mean score of lecturers' teaching experience and their teaching performance	287
5.8	Years of teaching experience and teaching performance	288
5.9	Comparison between TP mean score of academic staff participated in the study and all of the university by Faculty grouping	300

## LIST OF ABBREVIATIONS

The following abbreviations were used in this study. Some were determined by the researcher, others are of organisations or from the literature:

AARE	Australian Association for Research in Education
ADS	Academic-Development Services
CSD	Centre for Staff Development
ESB	English-Speaking Background
ET	Effective Teaching
ICED	International Consortium for Educational Development
ITT	Introduction to Tertiary Teaching
ITS	Information Technology Services
HERDSA	Higher Education Research and Development Society of Australasia
LDS	Learning-Development Service
NESB	Non-English-Speaking-Background
PLSD	Fisher's Protected Least Significant Difference
SEDA	Staff and Educational Development Association
TP	Teaching Performance
TQ	Teaching Qualifications

## ABSTRACT

The present study, based on the Dunkin and Biddle (1974) and Biggs (1988; 1989) models of teaching, was designed to investigate the relationships between eight attributes of lecturers and the quality of lecturers' teaching performance, expressed as a function of student evaluations of teaching. The eight attributes were teaching qualifications, attitudes toward effective teaching, language background, gender, academic rank, level of academic degree, tertiary teaching experience and academic discipline. Among these, teaching qualifications and attitudes toward teaching were of principal interest.

The target group for the study comprised three fourths ( $N = 294$ ) of the full-time academic staff of the University of Wollongong in 1994, of whom 176 (60%) participated in the first phase of the study. In this phase, two surveys completed by academic staff and extant data from more than 20,000 student ratings, covering 548 subjects, were used to examine the essential relationships. Subsequently, in the second phase of the study in early 1997, a semi-structured interview was undertaken with 25 lecturers who had participated in the first phase to provide more insights into the influence of the eight lecturers' attributes on teaching performance.

Analysis of Variance (ANOVA) was employed to determine whether the lecturers' teaching performance differed significantly on the eight attributes. Then Multiple Linear Regression Analysis was employed to examine the combined and separate effects of the lecturers' attributes on teaching performance.

The inferential analyses in the first phase of the study indicated a significant correlation between the eight attributes and lecturers' teaching performance, accounting for 34 per cent of the variance. Of the eight attributes, language background, attitudes toward teaching, being at the rank of associate professor and being a member of Faculties of Arts and Creative Arts were the significant predictors for lecturers' teaching performance. Teaching qualifications was just short of statistical significance, ( $p < .06$ ).

In the second phase of the study the interviewees indicated that the following four attributes were the most influential on the teaching performance: having a positive attitude toward teaching, teaching experience, holding teaching qualifications and academic degree.

This study demonstrated a significant relationship between lecturers' attitudes toward effective teaching and their teaching performance. Lecturers who rated higher on the attitude scale, tended to rate highly on student ratings of their teaching. Having a positive attitude toward teaching was also nominated as the most influential attribute by academic staff. These findings suggest that, if lecturers' attitudes toward teaching are stimulated, there might be an enhancement of their teaching performance.

Another significant finding was that, where the first languages of the lecturers and students are different, lecturers may be able to enhance their teaching performance by improving their language and communication abilities. Universities may need to facilitate these developments through special pre-service and in-service interventions, and also perhaps a reconsideration of their staff selection criteria.